Draft Decision on Proposed Revisions to the Access Arrangement for the Western Power Network

Submitted by Western Power

PUBLIC VERSION

2 May 2018

Economic Regulation Authority

WESTERN AUSTRALIA

Economic Regulation Authority

4th Floor Albert Facey House
469 Wellington Street, Perth

Mail to:
Perth BC, PO Box 8469
PERTH WA 6849

T: 08 6557 7900

F: 08 6557 7999

E: records@erawa.com.au

W: www.erawa.com.au

National Relay Service TTY: 13 36 77
(to assist people with hearing and voice impairment)

We can deliver this report in an alternative format for those with a vision impairment.

Contents

Tables

Figures

Invitation to make submissions

On 2 October 2017, Western Power submitted proposed revisions to its access arrangement for the Western Power network. The proposed revisions are for the fourth access arrangement period (**AA4**), the five year period from 1 July 2017 to 30 June 2022.

The role of the Economic Regulation Authority (**ERA**) is to determine whether Western Power's AA4 proposal complies with the requirements of the *Electricity Networks Access Code 2004* (**Access Code**). To make its decision, the ERA is guided by specific provisions of the Access Code regarding particular elements of the access arrangement, as well as the Access Code objective of promoting economically efficient investment in, and operation and use of, the network and services of the network, in order to promote competition in markets upstream and downstream of the network.

The ERA has published its draft decision to not approve Western Power's proposed revisions.

Interested parties are invited to make submissions on the ERA's draft decision by **4:00 pm (WST) Wednesday 30 May 2018.**

Submissions are preferred as documents uploaded to the ERA's website, in electronic form, via: www.erawa.com.au/consultation

Alternatively, submissions can be lodged via:

Email address:	publicsubmissions@erawa.com.au
Postal address:	PO Box 8469, PERTH BC WA 6849
Office address:	Level 4, Albert Facey House, 469 Wellington Street, Perth WA 6000

CONFIDENTIALITY

In general, all submissions from interested parties will be treated as being in the public domain and placed on the ERA's website. Where an interested party wishes to make a submission in confidence, it should clearly indicate the parts of the submission for which confidentiality is claimed, and specify in reasonable detail the basis for the claim. Any claim of confidentiality will be considered in accordance with the provisions of the Access Code, sections 14.12 to 14.15.

The publication of a submission on the ERA's website shall not be taken as indicating that the ERA has knowledge either actual or constructive of the contents of a particular submission and, in particular, whether the submission in whole or part contains information of a confidential nature and no duty of confidence will arise for the ERA.

General Enquiries
Natalie Warnock
Work: 08 6557 7933
Mobile: 0428 859 826
communications@erawa.com.au

DRAFT DECISION

Background

1. On 2 October 2017, Western Power submitted its proposed revisions to its access arrangement in accordance with the requirements of section 4.79 of the *Electricity Networks Access Code 2004* (**Access Code**).

2. The proposed revised access arrangement covers the fourth access arrangement period (**AA4**) spanning 1 July 2017 to 30 June 2022.

3. The proposed revised access arrangement and access arrangement information are available on the Economic Regulation Authority's (**ERA**) website.[1]

4. The ERA is required to consider the proposed revised access arrangement and make a decision to either approve or not approve the proposed revisions. The ERA must determine whether Western Power's proposed revised access arrangement:

    - meets the Access Code objective of promoting economically efficient investment in, and operation and use of, electricity networks and services of networks in Western Australia, in order to promote competition in markets upstream and downstream of the networks; and
    - complies with the specific requirements of the Access Code.

5. The ERA invited submissions from interested parties on Western Power's proposal by publishing a notice on 6 October 2017. The closing date for submissions was 20 November 2017.

6. To assist interested parties in understanding Western Power's proposal, the review process and some of the issues to be addressed by the ERA in determining whether or not to approve the proposal, the ERA published an issues paper on 31 October 2017. On 2 November 2017, the ERA held a public forum on Western Power's proposal and the ERA's issues paper.

7. Following requests from interested parties the ERA decided to extend the deadline for submissions to 11 December 2017. The extension gave parties an opportunity to consider additional supporting information that was provided by Western Power (and published by the ERA), including Western Power's revenue model, regulatory financial statements and a productivity report.

8. Submissions were received from 32 interested parties and published on the ERA's website. A list of interested parties who made a submission is included in Appendix 3.

9. Under section 4.12 of the Access Code, the ERA must consider any submissions made (before the submission closing date) on the proposed revised access arrangement and must make a draft decision, either:

    - to approve the proposed revised access arrangement; or

[1] See: https://www.erawa.com.au/electricity/electricity-access/western-power-network/access-arrangement/access-arrangement-period-2017-2022

- to not approve the proposed revised access arrangement, in which case the ERA must in its reasons provide details of the amendments required before the ERA will approve it.

10. Western Power's current access arrangement applies until a new proposed access arrangement is approved by the ERA.

Draft decision

11. The draft decision of the ERA is to not approve the proposed access arrangement revisions. The detailed reasons for this decision are outlined in this document.

12. The ERA requires 91 amendments to be made to the access arrangement before it will approve the access arrangement.

13. The required amendments are listed in Appendix 1. The required amendments are also included in the reasons to the draft decision at the point at which each relevant element of the proposed revision is considered.

14. The ERA invites submissions on this draft decision. The closing date for submissions is 30 May 2018.

15. Any submission made by Western Power may include a revised proposed access arrangement.

16. Under section 4.17 of the Access Code, the ERA will consider any submissions received on the draft decision and make a final decision to either approve or not approve Western Power's proposal (or revised proposal if submitted by Western Power).

REASONS

REGULATORY FRAMEWORK

17. Western Power's transmission and distribution network is a covered network under the *Electricity Networks Access Code 2004* (**Access Code**) and is required to have an approved access arrangement. The access arrangement sets out the terms and conditions, including prices, for third parties seeking access to the network.

18. Chapter 5 of the Access Code specifies the required content of an access arrangement.

19. Western Power's access arrangement must include:

    - a revisions submission date for submitting revisions to the access arrangement;
    - the method used to determine the total revenue Western Power can collect from customers;
    - one or more reference services;
    - the pricing method for each reference service;
    - service standard benchmarks for each reference service;
    - any adjustments that will be made to target revenue at the next access arrangement review;
    - any trigger events that would require a review to commence earlier than planned;
    - a standard access contract for each reference service;
    - an applications and queuing policy;
    - a contributions policy; and
    - a transfer and relocation policy.

20. Western Power is required to submit proposed revisions to the access arrangement and revised access arrangement information to the Economic Regulation Authority (**ERA**) by the revisions submission date specified in the access arrangement. The revisions submission date approved in the third access arrangement (**AA3**) decision was 31 March 2016. This was later amended to 31 December 2016, the latest date permitted under the Access Code, and subsequently the Access Code was amended to extend the deadline to 2 October 2017.

21. As set out in chapter 4 of the Access Code, the ERA is required to consider the proposed revised access arrangement and make a decision to either approve or not approve the proposed revisions. The ERA must determine whether the proposed revised access arrangement:

    - meets the Access Code objective of promoting economically efficient investment in, and operation and use of, electricity networks and services of networks in Western Australia, in order to promote competition in markets upstream and downstream of the networks; and
    - complies with the requirements set out in chapter 5.

22. If the ERA considers the Access Code objective and requirements of chapter 5 are satisfied it must approve the access arrangement. The ERA may not reject a proposed access arrangement on the grounds that another form of access arrangement might be better or more effectively satisfy the Access Code objective and the requirements set out in chapter 5.

23. If the ERA does not approve the access arrangement it must provide details of the amendments required for it to be approved.

24. The process the ERA must follow for the review is set out in chapter 4 of the Access Code and includes:

- making and publishing a draft decision for public consultation;
- making and publishing a final decision; and
- if the final decision is to "not approve" there are various outcomes that may apply:
  - Western Power may submit a revised access arrangement to comply with the ERA's final decision. In this case, the ERA must determine whether it is compliant[2] and make and publish a further final decision, either "approving" or "not approving":
    - If the ERA's further final decision is to "approve", the document submitted by Western Power becomes the revised access arrangement and takes effect from a date specified by the ERA, which must be at least 20 days after the decision is published.
    - If the ERA's further final decision is to "not approve", the ERA must draft, approve, publish and advertise its own access arrangement.
    - If Western Power does not submit a revised access arrangement following the final decision, the ERA must publish a further final decision to "not approve" and then draft, approve, publish and advertise its own access arrangement.

25. Specific stages of the review and approvals process must be completed in timeframes prescribed in the Access Code. Deadlines must initially be set on the prescribed timeframes. There are provisions for extensions of time. However, the ERA can only use these provisions if it determines:

- a longer time period of time is essential for due consideration of all the matters under consideration or satisfactory performance of the relevant obligation; and
- the ERA or the service provider, as applicable, has taken all reasonable steps to fully utilise the times and processes provided for in the initial deadline.

26. Before extending any deadline the ERA must publish a notice.

27. If the ERA exercises its powers to obtain information and documents under section 51 of the *Economic Regulation Authority Act 2003*, time ceases to run in respect of the relevant deadline until the information is received.

---

[2] Under section 4.23 of the Access Code, if the amended access arrangement either implements the final decision required amendments or, if it does not implement the required amendments, adequately addresses the matters which prompted the ERA to require the amendments, the ERA must approve the amended proposal.

28. The reasons for the ERA's draft decision are set out in the following order:

- Introduction to the access arrangement
- Revenue requirement
  - Form of price control
  - Target revenue
- Reference and non-reference services
- Pricing methods, Price List and Price List Information
- Service standard benchmarks
- Adjustments to target revenue at next review
- Trigger events
- Supplementary matters
- Electricity transfer access contract
- Applications and queuing policy
- Contributions policy
- Transfer and relocation policy

INTRODUCTION TO THE ACCESS ARRANGEMENT

Access Code requirements

29. Sections 5.29 and 5.31 of the *Electricity Networks Access Code 2004* (**Access Code**) require an access arrangement to specify:

- a revisions submission date that is at least six months before the target revisions commencement date; and
- a target revisions commencement date that must be five years after the start of the access arrangement period, unless a different date is proposed by the service provider and the different date is consistent with the Access Code objective.

Current access arrangement

30. Western Power's current access arrangement initially required Western Power to submit its proposed revisions for the fourth access arrangement period (**AA4**) by 1 March 2016, and AA4 was targeted to commence on 1 July 2017.

31. On 6 March 2014, the Minister for Energy launched a review of the electricity market and announced preferred options for development in March 2015. These options included transferring regulation of the Western Power network from the Western Australian regime to the National Electricity Law and relevant National Electricity Rules and also applying the relevant National Electricity Rules to regulate Western Power's metering services.

32. Western Power considered this created uncertainties around the regulatory framework and made it difficult to effectively plan its submission for AA4. It therefore applied to the Economic Regulation Authority (**ERA**) to defer its revisions submission date. In June 2015, the ERA approved a deferral of the revisions submission date from 1 March 2016 to 31 December 2016.

33. A package of Bills to transfer the regulation of Western Power's network to the national framework was introduced to State Parliament in June 2016. It was intended that the Bills would be passed by late November 2016 to allow Western Power to commence the regulatory process under the national regulatory framework in December 2016, and for the Australian Energy Regulator's determination to apply from 1 July 2018.

34. However, in November 2016 it became clear the Bills would not be passed. Consequently, Western Power continues to be subject to the State-based regulatory scheme. To provide Western Power with sufficient time to prepare its submission, the Minister amended the Access Code to extend Western Power's submission deadline to 2 October 2017. This is three months after AA4 was initially targeted to commence (i.e. 1 July 2017).

Western Power's proposal

35. Proposed revisions to the introduction section of the access arrangement include:

- a specified date of commencement of the proposed revisions of 1 July 2018 or a later date in accordance with section 4.26 of the Access Code;
- a proposed revisions submission date of 1 March 2021 and a target revisions commencement date of 1 July 2022; and
- removal of the distribution headworks methodology from the list of appendices to the access arrangement.

Submissions

36. Submissions from Alinta Energy (**Alinta**), CdL Advisory, Community Electricity and ERM Power included feedback on the target revisions commencement date and revisions submission date.

37. Alinta, CdL Advisory and ERM Power all refer to current uncertainties and the likelihood of further reforms. On that basis, they consider the next review should commence earlier and/or the period required for the review will need to be longer.

38. Alinta refers particularly to the State Government's proposals to introduce a constrained access model:[3]

> At this stage there is significant uncertainty as to what this means in practice – particularly with regards to current access rights and what a future connection contract may look like. As such, Alinta considers that it would be prudent to allow a longer than usual period to conduct the AA5 review processes and suggests at least 18 months should be allowed. This additional time will be required in order to allow current users, prospective access seekers, Western Power, and the ERA sufficient time to understand the implications appropriately.

39. ERM Power expresses similar views:[4]

> … given that there may be the possibility of a new regulatory environment, it might be appropriate for the first submissions to be made earlier. How early will depend on how prepared will the ERA be in making a determination in that changed environment. Without an understanding of the undertaking, it is difficult to comment on a timeframe other than a possible commencement before the end of 2020, but certainly no shorter than at least eighteen months. This timeframe is required to allow the market sufficient time to digest the implications of a potential new regulatory environment, the assessment criteria and process.

40. CdL Advisory considers the dates proposed are inappropriate given the "pace of technological disruption" and the "current National Electricity Market crisis and its potential flow on effects to Western Australia's electricity market and regulatory reform environment."[5]

41. Community Electricity also refers to the rapid changes in the energy sector and considers that including more "annual true-ups and resets" in the access arrangement would enable an:[6]

---

[3] Alinta Energy, *Alinta Energy Submission*, 11 December 2017, section 13.

[4] ERM Power, *Issues Paper on Proposed Revisions to Western Power Network Access Arrangement*, 11 December 2017, p. 2.

[5] CdL Advisory, *Proposed Revisions to the Western Power Network Access Arrangement*, 4 December 2017.

[6] Community Electricity, *Response to ERA Public Consultation*, 10 December 2017, p. 10.

> … an incremental approach to tariff reform and provide opportunity to contain and adapt to unforeseen and unknowable consequences.
>
> Annual review would also remove the bureaucratic burden of urgently assembling an Access Arrangement that honours the ritual of the Access Code rather than its spirit. We support Western Power's proposal to the effect that, (our words) government policy is a wildcard that must be implemented and could reasonably be expected to conflict with the Access Arrangement. Clearly the government should not permit delay of its policies while we await termination of a 5-year access arrangement.

Considerations of the ERA

42. The commencement date for AA4 will be confirmed in the ERA's final decision. This draft decision is based on Western Power's proposed commencement date of 1 July 2018.

43. Western Power has proposed a target revision commencement date for the next access arrangement (**AA5**) of 1 July 2022 and a revisions submission date of 1 March 2021, which is 16 months prior to the target revisions commencement date.

44. The Access Code requires the target revisions commencement date must be five years after the start of the access arrangement period, unless a different date is proposed by the service provider and the different date is consistent with the Access Code objective.

45. The access arrangement period is the period between the revisions commencement date and the next revisions commencement date. The revisions commencement date is the date on which revisions to an access arrangement which have been approved by the Authority commence. Western Power's proposed target revision commencement date is five years after AA4 was originally intended to commence on 1 July 2017.

46. Western Power's proposed access arrangement includes a target revenue proposal for the five years commencing from 1 July 2017. Although the delays in the regulatory process discussed above will result in the AA4 revised access arrangement taking effect after 1 July 2017, the approved target revenue will be adjusted to take account of any differences between the revenue approved by the ERA in the AA4 decision and the revenue actually earned by Western Power between 1 July 2017 and the date the AA4 revisions come into effect. On that basis, the ERA considers Western Power's proposed target revisions date is equivalent to a five year period.

47. The ERA considers the AA4 period should not be reduced to accommodate possible changes in the regulatory framework. If a significant change in the regulatory environment does occur, particularly any amendments to the Access Code, there are provisions in the Access Code allowing Western Power to apply for, or the ERA to require, a mid-period review of the access arrangement.[7] A mid-period review does not necessarily require a review of the entire access arrangement.

48. The ERA considers the Access Code provisions are sufficient to enable changes to the access arrangement if necessary. It is also preferable to shortening the access

[7] See section 4.38 for provisions enabling the ERA to require an amendment, section 4.41 requiring revisions if the Access Code is amended and section 4.41A allowing Western Power to propose a mid-period variation.

arrangement period, as reducing the access arrangement period also reduces the incentives for Western Power to out-perform its cost forecasts and achieve efficiencies that will ultimately be passed on to network users. A shorter regulatory period would also increase regulatory costs.

49. The Access Code specifies the revisions submission date must be at least six months prior to the target revision date. However, the minimum timescales prescribed in the Access Code result in the review taking at least nine months[8] and the extensions permitted under the Access Code increase the time permitted to around 18 months. If additional information is required from Western Power, the review could take even longer, as was the case for the first access arrangement (**AA1**).

50. Previous reviews have required the full time permitted under the Access Code with extensions. The average time was 18 months:

- AA1 was submitted on 24 August 2005 with the further final decision published on 26 April 2007 and the revisions commencing on 1 July 2007 (22 months in total).
- The second access arrangement (**AA2**) was submitted on 1 October 2008 with the further final decision published on 19 January 2010 and the revisions commencing on 1 March 2010 (17 months in total).
- The third access arrangement (**AA3**) was submitted on 30 September 2011 with the further final decision published on 29 November 2012 and the revisions commencing on 1 February 2013 (16 months in total).

51. The Australian Energy Regulator's review process commences approximately twenty four months prior to the target revision date.

52. Western Power's proposed date meets the minimum requirements of the Access Code. However, based on the ERA's and Australian Energy Regulator's experience of previous access arrangement reviews, the ERA considers 18 months is the minimum period required to ensure there is sufficient time for review, stakeholder consultation and finalisation of the decision prior to the targeted revisions commencement date.

Required Amendment 1

The revisions submission date must be amended to 1 January 2021.

[8] Including the one month prescribed minimum period for the revised access arrangement to come into effect following the ERA's decision.

TOTAL REVENUE REQUIREMENT

Introduction

53. In this section of the draft decision, the Economic Regulation Authority (**ERA**) addresses the form of the price control and the determination of target revenue.

54. The ERA's assessment of Western Power's proposed target revenue is set out below in the following order:

- Form of price control
- Forecast target revenue including:
  - Forecasts of demand for services
  - Forecast operating expenditure
  - Actual capital expenditure for the third access arrangement (**AA3**) and the value of the regulated capital base at the commencement of the fourth access arrangement period (**AA4**)
  - Forecast capital expenditure and the forecast value of the regulated capital base over the AA4 period
  - A return on the regulated capital base
  - An allowance for working capital
  - Cost of taxation liabilities
  - Costs of raising additional equity
  - Adjustments to target revenue for AA4 to reflect certain cost and revenue outcomes during AA3
  - Tariff equalisation contributions

55. In considering Western Power's proposed target revenue, the ERA has made assessments of the actual and forecast costs of Western Power for AA3 and AA4, including:

- an assessment of whether the forecast operating costs for AA4 meet the requirement of section 6.40 of the *Electricity Networks Access Code 2004* (**Access Code**) of including only those cost that would be incurred by a service provider efficiently minimising costs;
- an assessment of whether capital expenditure incurred in AA3 may be added to the capital base under section 6.51A of the Access Code, including an assessment of whether, and to what extent, the capital expenditure satisfies the new facilities investment test under section 6.52 of the Access Code; and
- an assessment of whether forecast capital expenditure for AA4 may be taken into account in determining target revenue (by including in the forecast regulated capital base), including an assessment of whether, and to what extent, the capital expenditure can reasonably be expected to satisfy the new facilities investment test under section 6.52 of the Access Code.

56. For the purposes of the approval of proposed revisions to the access arrangement, and pursuant to sections 6.41, 6.51 and 6.51A of the Access Code, the ERA has discretion whether to recognise costs in the total costs and target revenue that

underlie the price control. This includes forecast operating costs, actual capital expenditure during AA3 and forecast capital expenditure for AA4. Before recognising these costs in total costs and target revenue, the ERA must be satisfied the costs meet the tests of section 6.41, 6.51 and 6.51A of the Access Code. The responsibility rests with Western Power to demonstrate to the ERA that the costs satisfy these tests.

57. In making an assessment of costs the ERA has considered:

- Western Power's performance during the AA3 period, in particular:
  - significant under expenditure compared with the forecast costs approved by the ERA; and
  - good performance against service standards;
- reductions in Western Power's forecast expenditure for AA4 compared with actual expenditure during AA3; and
- efficiency of operating expenditure, including:
  - a comparison of Western Power's costs with other network service providers.

58. The ERA has obtained advice from GHD Advisory (**GHD**) and Geoff Brown and Associates (**GBA**) on relevant matters including:

- a review of Western Power's governance arrangements for controlling work programs and costs;
- a review of actual capital expenditure during AA3 (including a sample of capital projects and programs) claimed by Western Power to meet the new facilities investment test under section 6.52 of the Access Code;
- a review of Western Power's forecast operating expenditure for AA4, including benchmarking against other network service providers; and
- a review of forecast capital expenditure for AA4 (including a sample of capital projects and programs) claimed by Western Power to meet the new facilities investment test under section 6.52 of the Access Code.

Form of price control

Access Code requirements

59. The Access Code requires an access arrangement to include a "price control", which means the provisions in an access arrangement under section 5.1(d) and chapter 6 (of the Access Code) which determine target revenue. A note to this definition indicates that a price control can consist of direct or indirect limits, and is a limit on the *level* of tariffs through the control of overall revenue. This note also distinguishes between price control and pricing methods, with the latter dealing with the *structure* of tariffs.

60. The specific requirements and objectives for price control and determining target revenue are set out in sections 6.1 to 6.5 to the Access Code (these sections are reproduced below):

- Sections 6.1 and 6.2 state requirements for the form of price control, while sections 6.4 and 6.5 set out the objectives that must be met by the price control.
- Section 6.3 constrains the choice of price control for the first access arrangement period, which is not relevant to the proposed revised access arrangement.
- Section 6.4 sets out objectives for price control in relation to the setting of an amount of target revenue for the access arrangement period.
- Section 6.5 clarifies that the forward-looking and efficient costs of providing covered services is a target amount (and not a ceiling or a floor amount).

Form of Price control

6.1 Subject to section 6.3, an access arrangement may contain any form of price control provided it meets the objectives set out in section 6.4 and otherwise complies with this Chapter 6.

6.2 Without limiting the forms of price control that may be adopted, price control may set target revenue:

(a) by reference to the service provider's approved total costs; or

(b) by setting tariffs with reference to:

(i) tariffs in previous access arrangement periods; and

(ii) changes to costs and productivity growth in the electricity industry;

or

(c) using a combination of the methods described in sections 6.2(a) and 6.2(b).

Price control objectives

6.4 The price control in an access arrangement must have the objectives of:

(a) giving the service provider an opportunity to earn revenue ("target revenue") for the access arrangement period from the provision of covered services as follows:

(i) an amount that meets the forward-looking and efficient costs of providing covered services, including a return on investment commensurate with the commercial risks involved;

plus

(ii) for access arrangements other than the first access arrangement, an amount in excess of the revenue referred to in section 6.4(a)(i), to the extent necessary to reward the service provider for efficiency gains and innovation beyond the efficiency and innovation benchmarks in a previous access arrangement;

plus

(iiA) an amount (if any) determined under sections 6.5A to 6.5E;[9]

plus

(iii) an amount (if any) determined under section 6.6;[10]

[9] Section 6.5A to 6.5E – Recovery of deferred revenue.

[10] Section 6.6 – Target revenue may be adjusted for unforeseen events.

plus

(iv) an amount (if any) determined under section 6.9;[11]

plus

(v) an amount (if any) determined under an investment adjustment mechanism (see sections 6.13 to 6.18);

plus

(vi) an amount (if any) determined under section 6.37A;[12]

and

(b) enabling a user to predict the likely annual changes in target revenue during the access arrangement period; and

(c) avoiding price shocks (that is, sudden material tariff adjustments between succeeding years.

6.5 The amount determined in seeking to achieve the objective specified in section 6.4(a)(i) is a target, not a ceiling or a floor.

Current access arrangement

61. The current access arrangement applies a “revenue cap” form of price control. Under this form, reference tariffs are set on the basis of an amount of required revenue for a given year, plus corrections for under- or over-recovery of required revenue in prior periods.

62. The formula for calculating maximum target revenue each year when setting annual tariffs is set out in sections 5.6 and 5.7 of the current access arrangement.

63. The formula for calculating maximum target revenue includes a separate factor for any costs incurred by the distribution system as a result of any Tariff Equalisation Contribution (**TEC**) Western Power is required to pay in accordance with section 6.37A of the Access Code.

64. The revenue cap applies to all network access services that Western Power provides to transmit and distribute electricity, whether they are a reference or non-reference service, including:

- connection services;
- exit services;
- entry services;
- bi-directional services;
- metering services provided ancillary to the above services (that are defined as standard metering services in the model service level agreement); and
- streetlight maintenance.

65. Separate revenue caps have been determined for services provided by the transmission and distribution networks.

[11] Section 6.9 – Target revenue may be adjusted for technical rule changes.

[12] Section 6.37A – Tariff equalisation contributions may be added to target revenue.

66. The revenue cap for each service was determined using a building block approach incorporating the following costs:

- operating costs (non-capital costs);
- depreciation;
- return on the regulated capital base;
- return on working capital;
- taxation; and
- adjustments from the previous access arrangement period.

67. The regulated capital base is derived as follows:

opening capital base + forecast capital expenditure – depreciation – redundant assets = closing capital base

68. Services that are ancillary to the transmission and distribution of electricity, such as high load escorts, are not included in the revenue cap. Consequently, forecast operating costs attributed to such services are not included in target revenue.

69. Revenue for services defined as standard metering services are recovered in the revenue cap as reference services and all other services provided under the model service level agreement are non-revenue cap (non-reference) services.[13]

70. The current access arrangement specifies that charges for non-revenue cap services are:

- negotiated in good faith;
- consistent with the Access Code objective; and
- reasonable.

Western Power's proposal

71. For AA4, Western Power proposes to:

- retain the revenue cap form of price control and building block method to calculate target revenue;
- use a nominal post-tax weighted average cost of capital to calculate the return on the capital base;
- expand the revenue cap formula for the annual price list to include an adjustment for the annual update to the weighted average cost of capital; and
- set charges for non-revenue cap services on the same basis as for AA3.

[13] "Non-revenue cap services" is a defined term in the access arrangement and means *"non-reference services provided by Western Power by means of the Western Power Network other than non-reference services that are provided as revenue cap services"*.

Submissions

72. Submissions from the Australian Energy Council, Community Electricity, Emergent Energy, Perth Energy and Synergy included comments relevant to the price control. Details of these submissions are included under Considerations of the ERA.

Considerations of the ERA

Revenue cap services

73. In considering a proposed form of price control for the purposes of a decision to approve or not approve the proposed access arrangement revisions, the ERA must:

- assess whether the proposed price control is compliant with the requirements of section 6.2, the objectives of section 6.4, and otherwise complying with chapter 6; and
- regard the Access Code objective, which requires that the price control promote the economically efficient investment in and operation and use of, networks and services of networks in Western Australia in order to promote competition in markets upstream and downstream of the networks.

74. A revenue cap is explicitly contemplated in the note to section 6.2(a) of the Access Code as one of several forms of price control that may be adopted.

75. Submissions from Synergy and Emergent Energy highlighted the effect of demand risk on a revenue cap form of price control.

76. Synergy states it does not oppose a revenue cap form of price control for the transmission and distribution services, noting it is consistent with the approach adopted by the Australian Energy Regulator (**AER**). However, Synergy notes this form of price control means Western Power's customers face significant demand risk which places a strong onus on Western Power to:

> … apply best practice in forecasting demand for the purposes of its AA4 proposal, to substantiate its demand forecasts (including the methodology and assumptions used) and to provide its customers and stakeholders with reasonable opportunity to review and comment on its methodology, assumptions and forecasts.

77. Emergent Energy also raises concerns about the effect of changes in demand on revenue and pricing:

> As both peak demand and overall consumption falls (due to the introduction of disruptive competition), Western Power must not simply raise prices to fully recover their proposed revenue cap. The Authority should consider backward solving for a revenue cap, based on an appropriate tariff escalation regime which takes changes to the sector, and the risks associated with it, into consideration. If the Authority-derived revenue cap is less than that required for cost recovery, then some asset write down is necessary.[14]

78. Community Electricity and Perth Energy commented on the alternative options now available to customers which they may choose in preference to energy supplied by the network.

[14] Emergent Energy submission, p. 15.

79. Community Electricity submits:

> ….for the first time, customers may choose between 'grid' and 'non-grid' solutions. Previously, customers have had no choice but to accept Western Power's policy and fund its right to raise revenue to provide a return on investment and cover operational costs.
>
> Customer choice is the driver of the 'networks death spiral' whereby fixed network revenues are proportioned to decreasing consumption.
>
> …
>
> It is imperative that Western Power aligns its charges with the decisions and behaviours it wishes to promote, and adapts to the different revenues that these prices will cause.[15]

80. Perth Energy notes that:

> … downstream of the network Western Power is no longer a monopoly. Western Power now competes with behind the meter energy solutions, as a way to energise customer's facilities. …. The increasing costs faced by customers downstream of the network, coupled with the declining costs of behind the meter energy solutions such as solar and batteries will displace reliance on the electricity network.

81. As discussed further in the section on demand forecasting, Western Power has forecast a decline in energy consumption during the AA4 period. This is the first access arrangement for which Western Power has forecast reductions in demand.

82. As identified in Synergy's submission, Western Power's current price control puts all demand risk on users. Under Western Power's current price control, any changes in energy consumption or customer numbers compared with the access arrangement demand forecast affect charges to users during the access arrangement period as any under- (or over-) recovery of target revenue is passed through to users in the following year's charges. This can result in charges to users being significantly different from those projected at the time of an access arrangement decision.

83. For example, the ERA's final decision for AA3, published on 5 September 2012, anticipated average charges over the AA3 period would increase broadly in line with the Consumer Price Index (**CPI**).[16] However, Western Power's proposed 2013/14 Price List would have resulted in average charges increasing by 17.5 per cent more than CPI. Two and a half percentage points of this was due to an increase in the TEC. The remainder was due to differences in revenue and demand forecasts compared with the demand forecasts underpinning the AA3 final decision.

84. An amendment was made to Western Power's access arrangement which reduced the effect of this large increase.[17] However, due to energy volumes being lower than forecast in Western Power's AA3 submission, and the TEC being higher than forecast, average charges during AA3 increased by more than CPI as shown in Table 1 below.

---

[15] Community Electricity submission, page 2.

[16] See final decision notice published on 5 September 2012.

[17] See Mid-Period Variation – Revision to Revenue Caps to reflect revised recovery period of Deferred Revenue published on 4 June 2013 http://www.erawa.com.au/cproot/11386/2/20130604%20D106966%20-%20Decision%20to%20amend%20price%20control%20in%20Western%20Power%20s%20access%20arrangement%20AA3.pdf

Table 1 AA3 annual average increase in charges including forecast CPI (nominal)[18]

	Total	Transmission	Distribution	Forecast CPI[19]
2012/13	3.7%	-8.7%	7.2%	2.25%
2013/14	4.0%	-12.0%	5.3%	2.0%
2014/15	4.8%	-0.8%	6.9%	2.75%
2015/16	5.1%	-10.2%	10.3%	2.5%
2016/17	1.7%	-9.4%	4.8%	2.5%

85. As shown in Table 1 (above), the increase in average charges was greater than the forecast rate of inflation. The final year was lower than CPI only because Western Power did not take up its maximum allowable revenue. Western Power chose to defer $29.7 million[20] in the 2016/17 Price List. Without this deferral, average charges would have increased by 4.2 per cent. Under its pricing formula, Western Power will be able to recover the $29.7 million in future years.

86. Based on past experience, the ERA considers Western Power's current price control is not compliant with section 6.4(b) of the Access Code as it has not enabled users to predict the likely annual changes in target revenue during the access arrangement period, and has not been compliant with the requirements of section 6.4(c) to avoid price shocks.

87. Other matters which may be affected by the current price control are:

- Users have reported difficulties and delays when seeking to connect to the network.[21]
- Western Power has made little change to its cost allocations or tariff structures since the current regulatory framework commenced. Most users continue to be charged based on energy volumes.
- Under the current price control, users face distorted incentives to manage demand. Any steps they take to reduce demand will be reflected in future in higher charges. This may lead to users seeking non-network alternatives.

88. If Western Power was exposed to demand risk, which could be increases or reductions in demand compared to forecast, it would develop more efficient tariffs, encourage the connection of new customers and offer services that meet user requirements and benefit Western Power through increased revenue, reduced costs or a combination of both.

89. The ERA considers that amendments are required to Western Power's proposed price control in order to:

- enable users to predict the likely annual changes in target revenue during the access arrangement period (as required under section 6.4(b) of the Access Code); and

---

18 Extracted from annual price lists approved and published on the ERA website.

19 Western Power's annual price list updates include a forecast of CPI for the December following the date of the price list.

20 Western Power 2016/17 Price List Information Table 7.

21 See submissions from Emergent Energy and Change Energy.

- avoid price shocks, i.e. sudden material tariff adjustments between succeeding years (as required under section 6.4(c) of the Access Code).

90. The ERA considers this would be achieved by ensuring demand risk is faced by Western Power rather than users. This can be achieved by:

    - removing the correction factor for under or over-recovery of target revenue for prior periods from the price control formula; and
    - requiring the forecast revenue recovery from Western Power's proposed tariffs in each year's Price List to be based on customer numbers and volumes consistent with the demand forecast approved with the AA4 decision.

Required Amendment 2

Western Power must amend its proposed revised access arrangement to:

- Remove the correction factor for under or over-recovery of target revenue for prior periods from the price control formula; and
- Add a requirement that the forecast customer numbers, energy volumes and any other charging parameters for each reference service must be consistent with the demand forecast approved with the access arrangement decision.

Non-revenue cap services

91. Western Power considers the ERA is not required to approve tariffs or charges for non-revenue cap services.[22] It notes the forecast costs for providing these services are not included in the building blocks target revenue used to calculate the annual revenue caps for revenue cap services and that:

    > Where possible, for commonly requested non-revenue cap services, we set standard fees and charges in line with the charging criteria and publish them on our website. Prices for extended metering services are detailed in the metering code model service level agreement. For other non-revenue cap services, we will negotiate individually with customers consistent with the charging criteria.[23]

92. Synergy submits that, regardless of what form of price control is used for covered services not included in the revenue cap, the pricing for those services must be controlled so that Western Power's charges cannot exceed the relevant portion of target revenue for those covered services.

93. AGL and the Australian Energy Council raise concerns about controls over the pricing of metering services:

    > … AGL strongly disagrees with Western Power's proposal that advanced metering services, which fall within neither standard or extended metering services and appear likely to be enhanced technology services, will not be subject to a price cap and will

[22] Western Power, Access arrangement information: Access arrangement revisions for the fourth access arrangement period, 2 October 2017, p. 215, paragraph 881.

[23] Western Power, Access arrangement information: Access arrangement revisions for the fourth access arrangement period, 2 October 2017, p. 215, para 882.

> be determined by bilateral negotiation with the network operator. This service description needs to be clarified and priced accordingly. AGL considers this lack of clarity to be unacceptable for a regulated business and not reflective of similar services in the NEM.
>
> Eastern state networks have been required to separate out the metering charges within their tariff structures as capital and operating charges. This allows customers to clearly see the costs they are being charged for metering services as opposed to connection services, and allows greater transparency of this specific aspect of the regulated monopoly business.
>
> AGL has concerns that a regulated entity is able to impose uncapped charges onto a customer for a service which is presently a monopoly service. AGL has long maintained a position that regulated entities should only operate in regulated activities.
>
> Metering and meter reading services are fundamental to customer billing, not the efficient transportation of electricity. Further, as these proposed services are not ring fenced or competitive, they will undoubtedly be funded by regulated income. Therefore, AGL believes that these services should be based on clearly specified and regulated charging regimes.[24]

94. The Australian Energy Council comments on the absence of metering competition in Western Australia in contrast to the national electricity market. It considers:

> In the absence of such reform the ERA needs to strictly ensure that the metering services retailers require are delivered at an efficient cost.

95. Western Power's 2016/17 Cost and Revenue Allocation Method states that its non-revenue cap services include non-reference services such as:

- access applications;
- metering extended services;
- transmission line relocations; and
- other (e.g. high load escorts and temporary supplies and disconnections).

96. Charges for access applications are covered under the applications and queuing policy and charges for metering extended services are covered under the model service level agreement.[25] The ERA considers this provides adequate oversight of these costs. However, a clause should be added to the access arrangement to state this.

Required Amendment 3

A clause should be added to 5.12 of the proposed revised access arrangement stating that prices for access applications will be consistent with the applications and queuing policy and prices for extended metering services will be consistent with the model service level agreement.

97. The cost of transmission line relocations and other services such as high load escorts and temporary supplies will depend on the circumstances of the work

[24] AGL submission, p. 5.

[25] The ERA is currently considering amendments to the model service level agreement.

required. For this type of service, the current access arrangement requirement for non-revenue cap services (i.e. charges will be negotiated in good faith, consistent with the Access Code objective and reasonable) is sufficient to ensure charges are consistent with the Access Code requirements.

98. The ERA intends to update its access arrangement information guidelines to require Western Power to provide a breakdown of non-revenue cap services by category (i.e. access applications, metering, transmission line relocations and other) in its regulatory accounts for both revenue and operating expenditure. This will provide further information to confirm that charges are in line with the costs incurred for the relevant service.

Target revenue

Western Power's proposal

99. A breakdown of Western Power's proposed target revenue for AA4 is set out in Table 2 and Table 3 below.

Table 2 AA4 proposed target revenue for the transmission network ($ million real at June 2017)

	2017/18	2018/19	2019/20	2020/21	2021/22	Proposed AA4 Total	Approved AA3 Total
Operating costs	93.84	84.17	83.15	84.56	84.55	430.28	578.57
Depreciation	113.68	117.21	126.85	138.25	144.29	640.28	562.15
Accelerated depreciation (redundant assets)	-	-	-	-	-	-	-
Return on regulated asset base	137.09	139.37	143.46	148.66	152.06	720.65	592.44
Return on working capital	1.10	1.50	1.64	1.77	2.00	8.00	4.85
Taxation	-	-	-	-	8.28	8.28	59.05
Forward looking efficient cost	**345.71**	**342.25**	**355.10**	**373.23**	**391.19**	**1,807.49**	**1,797.05**
Investment adjustment mechanism	-33.58	-	-	-	-	-33.58	-52.50
Service standard adjustment mechanism	13.40	-	-	-	-	13.40	6.76
Unforeseen events	5.52	-	-	-	-	5.52	-
D-factor	-	-	-	-	-	-	-
Gain sharing mechanism	18.22	19.34	21.58	22.50	22.05	103.69	-
Deferred revenue recovery	4.75	4.75	4.75	4.75	4.75	23.77	20.99
K-factor	1.23	-	-	-	-	1.23	29.20
Total Revenue Building Blocks (unsmoothed)	**355.26**	**366.35**	**381.44**	**400.48**	**417.99**	**1,921.52**	**1,801.51**
% change in unsmoothed building blocks	**22.4%**[26]	**3.1%**	**4.1%**	**5.0%**	**4.4%**		

Note: Total columns in tables of this draft decision may not add up due to rounding.

[26] Based on 2016/17 revenue of $290.1 million.

Table 3 AA4 proposed target revenue for the distribution network ($ million real at June 2017)

	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total	AA3 Total
Operating costs	292.51	268.33	266.53	272.63	274.78	1,374.78	1,922.38
Depreciation	263.62	280.83	295.17	298.27	289.11	1,427.01	1,260.28
Accelerated depreciation (redundant assets)	-	-	-	-	-	-	4.31
Return on regulated asset base	255.42	266.18	276.65	288.13	293.95	1,380.34	929.24
Return on working capital	7.12	6.91	7.19	7.25	7.51	35.98	15.05
Taxation	48.14	56.33	60.84	58.04	56.02	279.36	207.86
Forward looking efficient cost	**866.82**	**878.58**	**906.38**	**924.31**	**921.38**	**4,497.46**	**4,339.12**
Investment adjustment mechanism	-5.89	-	-	-	-	-5.89	2.12
Service standard adjustment mechanism	241.70	-	-	-	-	241.70	27.03
Unforeseen events	14.19	-	-	-	-	14.19	-
D-factor	8.78	-	-	-	-	8.78	-
Gain sharing mechanism	36.39	37.51	34.83	13.32	46.89	168.93	-
Deferred revenue recovery	37.72	37.72	37.72	37.72	37.72	188.58	169.06
K-factor	36.56	-	-	-	-	36.56	54.15
Tariff Equalisation Contribution	164.31	169.40	154.28	147.11	148.42	783.52	984.88
Total Revenue Building Blocks (unsmoothed)	**1,400.57**	**1,123.20**	**1,133.20**	**1,122.45**	**1,154.41**	**5,933.83**	**5,576.37**
% change in unsmoothed building blocks	**13.4%**	**-19.8%**	**0.9%**	**-0.9%**	**2.8%**		

100. Consistent with previous access arrangements, the revenue requirement has been smoothed over the five-year period. Western Power describes the process it has followed as:

> We have translated the target revenue for revenue cap services into an average price path over the five years of the AA4 period.[27] The price path is determined by smoothing the revenue over the AA4 period in present value terms. This smoothed revenue profile may be affected by the following:
>
> - forecast energy consumption over the AA4 period
> - the average price path over the AA3 period
> - predictable changes in average price during the AA4 period.[28]

101. The maximum reference service revenue formula included in the current access arrangement includes a correction factor that takes account of any difference between forecast maximum reference service revenue and the actual revenue earned in that year. Sections 5.6.8 and 5.7.8 of the current access arrangement

[27] Noting that prices in 2017/18 are unchanged from 2016/17.

[28] Western Power, *Access arrangement information: Access arrangement revisions for the fourth access arrangement period*, 2 October 2017, p. 243.

state that the correction factor will also apply in the first year of the next access arrangement period to adjust for any difference between the forecast and actual revenue in relation to the financial years ending on 30 June 2017 and 30 June 2016, and in the second year of AA4 in relation to the financial year ending on 30 June 2017.

102. Western Power's proposal states: [29]

> Due to the one year delay in commencement of the AA4 revenue recovery, the revenue caps for 2017/18 are treated slightly differently. In the normal course of events, there would be a revised Price List and Price List Information produced for 2017/18, and these documents would outline the calculation of the revenue target for the year (using the formulae in the next section), including a calculation of the revenue adjustment factor (known as the k-factor). The versions of these documents (Appendix F.1 and F.2 to the proposed access arrangement) are the 2016/17 Price List reproduced, without any adjustments made for the k-factor. The 2016/17 Price List is adopted as the 2017/18 Price List absent a different Price List produced in April 2017 and approved by the ERA in May 2017 due to the delay to the AA4 process.
>
> The k-factor adjustment takes into account the actual and forecast revenues recovered in previous financial years and adjusts the revenue target to ensure Western Power is recovering the required revenue amounts exactly. That is, if previous year's prices had over-recovered revenue then that over-recovery would be given back to customers through a lower revenue requirement in the next year, vice versa for under-recoveries.
>
> To ensure the addition of this revenue adjustment doesn't result in lumpy price outcomes, the revenue model has been run with the k-factor for 2017/18 included as a building block. The revenue model also specifies revenue amounts for 2017/18 that reflect the most recently available revenue forecasts for the year, given that the 2016/17 [prices] will likely apply for the whole year. As the AA4 decision process continues, these numbers will be updated with more up-to-date forecasts.

103. Western Power has also proposed deferring some revenue for transmission (and taking up more revenue in distribution) to limit its forecast increase in transmission prices to 10 per cent (in nominal terms).

104. Table 4 and Table 5 below show Western Power's proposed smoothed revenue targets including the transmission revenue adjustment.

[29] Western Power, *Access arrangement information: Access arrangement revisions for the fourth access arrangement period*, 2 October 2017, p. 238.

Table 4 Western Power proposed smoothed target revenue for the transmission network ($ million real at June 2017)

	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total	AA4 Total at Present Value
Unsmoothed Revenue from Table 3 above	355.26	366.35	381.44	400.48	417.99	1,921.52	1,686.86
Revenue deferred[30]	-66.42	-54.37	-44.47	-38.40	-30.44	-234.10	-209.56
Proposed smoothed revenue	288.84	311.98	336.97	362.08	387.54	1,687.42	1,477.30
% change in smoothed revenue	-0.4%	8.0%	8.0%	7.5%	7.0%		
Less K-factor	(1.23)					(1.23)	
Target revenue TR	287.6	312.0	337.0	362.1	387.5	1,686.2	
Transmission Tx		8.47%	8.01%	7.45%	7.03%		

Table 5 Western Power proposed smoothed target revenue for the distribution network ($ million real at June 2017)

	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total	AA4 Total at Present Value
Unsmoothed Revenue from Table 4 above	1,400.57	1,123.20	1,133.20	1,122.45	1,154.41	**5,933.83**	**5,246.80**
Revenue brought forward	66.42	54.37	44.47	38.40	30.44	**234.10**	**209.56**
Adjusted unsmoothed revenue	1,466.98	1,177.57	1,177.67	1,160.86	1,184.85	**6,167.93**	**5,456.37**
Smoothed revenue	1,201.54	1,228.73	1,245.82	1,255.61	1,268.59	**6,200.28**	**5,456.37**
% change in smoothed revenue	-2.7%	2.3%	1.4%	0.8%	1.0%		
Less K-factor	(36.6)					**(36.6)**	
Less TEC	(164.3)	(169.4)	(154.3)	(147.1)	(148.4)	**(783.5)**	
Target revenue DR	1,007.7	1,059.3	1,091.5	1,108.5	1,120.1	**5,380.2**	
Distribution Dx		5.86%	3.04%	1.55%	1.05%		

105. The final two rows of each of the tables above show the target revenue and percentage change in target revenue values required for the price control formula. The K-factor adjustment and TEC are not included in these values.

106. Table 6, Table 7, and Table 8 below show the change in average charges based on Western Power's proposed smoothed target revenue and forecast energy volumes.

[30] The revenue deferred was calculated to result in a smoothed revenue profile based on a 10 per cent per annum increase in average charges.

Table 6 Western Power forecast change in average charges for the transmission network ($ real at June 2017)

	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Unsmoothed revenue ($ million)	290.1	335.3	366.4	381.4	400.5	418.0
Smoothed revenue ($ million)	290.1	288.84	311.98	336.97	362.08	387.54
Energy transported (MWh)	17,764	17,698	17,663	17,628	17,502	17,309
Average charge ($'000/MWh)	16.33	16.32	17.7	19.1	20.7	22.4
Annual % change		-.08%	8.23%	8.23%	8.23%	8.23%

Table 7 Western Power forecast change in average charges for the distribution network ($real at June 2017)

	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Unsmoothed revenue ($ million)						
Smoothed revenue ($ million)	1,235.0	1,201.54	1,228.73	1,245.82	1,255.61	1,268.59
Energy transported (MWh)	13,769	13,691	13,656	13,505	13,276	13083
Average charge ($'000/MWh)	89.70	87.8	90.0	92.2	94.6	97.0
Annual % change		-2.16%	2.52%	2.52%	2.52%	2.52%

Table 8 Western Power forecast change in average charge ($ real at June 2017)

	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Smoothed revenue ($ million)	1,525.2	1,490.4	1,540.7	1,582.8	1,617.7	1,656.1
Average charge ($'000/MWh)	106.0	104.1	107.7	111.4	115.3	119.4
Annual % change		-1.8%	3.4%	3.5%	3.5%	3.5%

Considerations of the ERA

107. The ERA's assessment of Western Power's determination of target revenue is documented in the following sections of this draft decision, addressing the following matters:

- forecasts of demand for services;
- forecast operating expenditure
- amounts of actual and forecast capital expenditure and values of the regulated capital base at the commencement of AA4 and a notional regulated capital base over the term of AA4;

- a return on the regulated capital base;
- a return on working capital;
- an allowance for taxation; and
- adjustments to target revenue for AA4 to reflect certain cost and revenue outcomes for AA3.

108. In considering Western Power's proposed target revenue, the ERA has made assessments of Western Power's actual and forecast costs for AA3 and AA4.

Target revenue

109. The ERA has determined values of target revenue taking into account determinations and required amendments of individual elements of target revenue as set out in this draft decision

110. The values of target revenue determined by the ERA are set out for the transmission and distribution networks in Table 9 and Table 10 below.

Table 9 ERA draft decision target revenue for the transmission network ($ million real at June 2017)

	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total	Western Power proposal
Operating costs	80.8	79.2	78.4	79.7	79.4	397.6	430.3
Depreciation	111.4	116.3	123.9	133.0	137.4	622.0	640.3
Accelerated depreciation (redundant assets)							
Return on regulated asset base	127.7	127.9	129.7	131.7	132.0	649.0	720.6
Return on working capital	1.1	1.6	1.8	2.0	2.4	8.9	8.0
Taxation	12.8	14.5	15.4	14.7	16.3	73.7	8.3
Forward looking efficient cost	**333.7**	**339.6**	**349.2**	**361.2**	**367.5**	**1,751.1**	**1,807.5**
Investment adjustment mechanism	(33.8)					(33.8)	(33.6)
Service standard adjustment mechanism	13.4					13.4	13.40
Unforeseen events	-					-	5.5
D-factor	-					-	-
Gain sharing mechanism	8.6	9.3	9.3	7.1	16.6	50.9	103.7
Deferred revenue recovery	4.5	4.5	4.5	4.5	4.5	22.7	23.8
K-factor	1.2					1.2	1.2
Total Revenue Building Blocks (unsmoothed)	**327.7**	**353.4**	**363.0**	**372.8**	**388.7**	**1,805.6**	**1,921.5**
% change in unsmoothed building blocks	**12.9%**	**7.8%**	**2.7%**	**2.7%**	**4.3%**		

Table 10 ERA draft decision target revenue for the distribution network ($ million real at June 2017)

	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total	Western Power proposal
Operating costs	263.8	258.7	256.0	260.2	259.2	1,297.9	1,374.8
Depreciation	256.0	275.5	286.9	287.0	276.0	1,381.4	1,427.0
Accelerated depreciation (redundant assets)							
Return on regulated asset base	236.5	245.4	254.2	264.0	269.3	1,269.4	1,380.3
Return on working capital	7.0	7.0	6.7	6.3	6.2	33.2	36.0
Taxation	52.5	52.9	48.1	39.4	37.7	230.6	279.4
Forward looking efficient cost	**815.8**	**839.6**	**851.8**	**857.0**	**848.5**	**4,212.6**	**4,497.5**
Investment adjustment mechanism	(8.3)					(8.3)	(5.9)
Service standard adjustment mechanism	241.0					241.0	241.7
Unforeseen events	-					-	14.2
D-factor	8.8					8.8	8.8
Gain sharing mechanism	27.4	29.3	29.3	22.5	52.7	161.2	168.9
Deferred revenue recovery	36.2	36.2	36.2	36.2	36.2	181.1	188.6
K-factor	36.5					36.5	36.6
Tariff Equalisation Contribution	164.0	168.7	153.4	146.0	147.0	779.0	783.5
Total Revenue Building Blocks (unsmoothed)	**1,321.3**	**1,073.8**	**1,070.7**	**1,061.7**	**1,084.3**	**5,611.9**	**5,933.8**
% change in unsmoothed building blocks	**7.0%**	**-18.7%**	**-0.3%**	**-0.8%**	**2.1%**		

111. As discussed above, Western Power proposes to defer revenue from the transmission service and bring forward an equal amount of revenue for the distribution service to reduce the increase in charges for the transmission service.

112. Stakeholder submissions include various views on this. Transmission only customers are concerned about large increases to tariffs. Other stakeholders comment on equity issues arising from transferring revenue between services.

113. Approximately 95 per cent of Western Power's revenue comes from customers charged for both transmission and distribution services. Based on the 2016/17 Price List Information, 58 customers are connected directly to the transmission network generating $78 million of revenue. They do not pay distribution charges.

114. The ERA considers that transferring revenue between services is inconsistent with the requirements of section 6.4 of the Access Code and the Access Code objective. There are alternatives to Western Power's proposal that are compliant with section 6.4 and do not result in price shocks to customer groups.

115. Table 11 and Table 12 below show the ERA's draft determination of target revenue smoothed in the same manner as Western Power's proposal, i.e. the net present value of the smoothed target revenue is equal to the unsmoothed target revenue and

the change in average charges, based on Western Power's forecast energy volumes, is equal in each year but without any reallocation of revenue between services. The forecast change in average charges is shown in Table 13, Table 14 and Table 15 below.

Table 11 Draft decision smoothed target revenue for the transmission network ($ million real at June 2017)

	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total	AA4 Total at Present Value
Unsmoothed Revenue	327.7	353.4	363.0	372.8	388.7	1,805.6	1,598.8
Smoothed revenue	286.0	320.9	360.1	402.0	447.0	1,816.0	1,598.8
Less K-factor	(1.2)					(1.2)	
Target Revenue (TRt)	284.8	320.9	360.1	402.0	447.0	1,814.7	
Transmission Tx		12.69%	12.21%	11.63%	11.19%		

Table 12 Draft decision smoothed target revenue for the distribution network ($ million real at June 2017)

	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total	AA4 Total at Present Value
Unsmoothed Revenue	1,321.3	1,073.8	1,070.7	1,061.7	1,084.3	5,611.9	5,002.5
Smoothed revenue	1,205.3	1,170.3	1,126.6	1,078.1	1,034.2	5,614.4	5,002.5
Less K-factor	(36.5)					(36.5)	
Less TEC	(164.0)	(168.7)	(153.4)	(146.0)	(147.0)	(779.0)	
Target revenue (DRt)	1,004.8	1,001.5	973.2	932.1	887.2	4,798.8	
Distribution Dx		-0.33%	-2.83%	-4.22%	-4.82%		

Table 13 Draft decision forecast change in average charges for the transmission network ($ real at June 2017)

	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Unsmoothed revenue ($ million)	290.1	327.7	353.4	363.0	372.8	388.7
Smoothed revenue ($ million)	290.1	286.0	320.9	360.1	402.0	447.0
Energy transported (MWh)	17,764	17,698	17,663	17,628	17,502	17,309
Average charge ($'000/MWh)	16.3	16.2	18.2	20.4	23.0	25.8
Annual % change		-1.05%	12.43%	12.43%	12.43%	12.43%

Table 14 Draft decision forecast change in average charges for the distribution network ($ real at June 2017)

	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Unsmoothed revenue ($ million)	1,235.0	1,321.3	1,073.8	1,070.7	1,061.7	1,084.3
Smoothed revenue ($ million)	1,235.0	1,205.3	1,170.3	1,126.6	1,078.1	1,034.2
Energy transported (MWh)	13,769	13,691	13,656	13,505	13,276	13,083
Average charge ($'000/MWh)	89.7	88.0	85.7	83.4	81.2	79.0
Annual % change		-1.86%	-2.65%	-2.65%	-2.65%	-2.65%

Table 15 Draft decision forecast change in total average charge ($ real at June 2017)

	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Total unsmoothed revenue ($ million)	1,525.2	1,649.0	1,427.2	1,433.7	1,434.5	1,473.0
Total smoothed revenue ($ million)	1,525.2	1,491.3	1,491.2	1,486.7	1,480.1	1,481.2
Total average charge ($'000/MWh)	106.0	104.2	103.9	103.9	104.2	104.9
Annual % change		-1.7%	-0.3%	0.0%	0.3%	0.7%

116. As can be seen in Table 13 above, the annual change in average transmission charges, without any reallocation to distribution, is 12.43 per cent compared with Western Power's proposed annual increases of 8.23 per cent. However, the change in the average total charge is approximately 3 percentage points less than Western Power's proposal (compare Table 15 and Table 8).

117. The difference between unsmoothed and smoothed revenue for 2021/22 is $8.2 million for the combined services but transmission smoothed revenue is $58.3 million (15 per cent) higher than unsmoothed revenue. This is the reverse of the AA3 smoothing profile, where the smoothed transmission revenue in the final year was lower than the unsmoothed revenue.

118. The ERA considers there are a range of revenue smoothing profiles that would meet the Access Code requirement to avoid price shocks, which Western Power should consider. The ERA requires Western Power to amend its target revenue to be consistent with the draft decision but should review the smoothed target revenue to reduce the likelihood of price shocks in the next access arrangement period.

119. Western Power must also ensure its proposed prices avoid price shocks for individual reference services. The ability to rebalance tariffs within the side constraint in the price control formula allows for this to be done.

Required Amendment 4

The proposed revised access arrangement values for TR_t and DR_t must be amended to reflect the ERA's draft decision of target revenue. Western Power should review its smoothing profile to avoid price shocks and ensure the final year reduces the likelihood of price shocks in the next access arrangement period.

Forecast demand for services

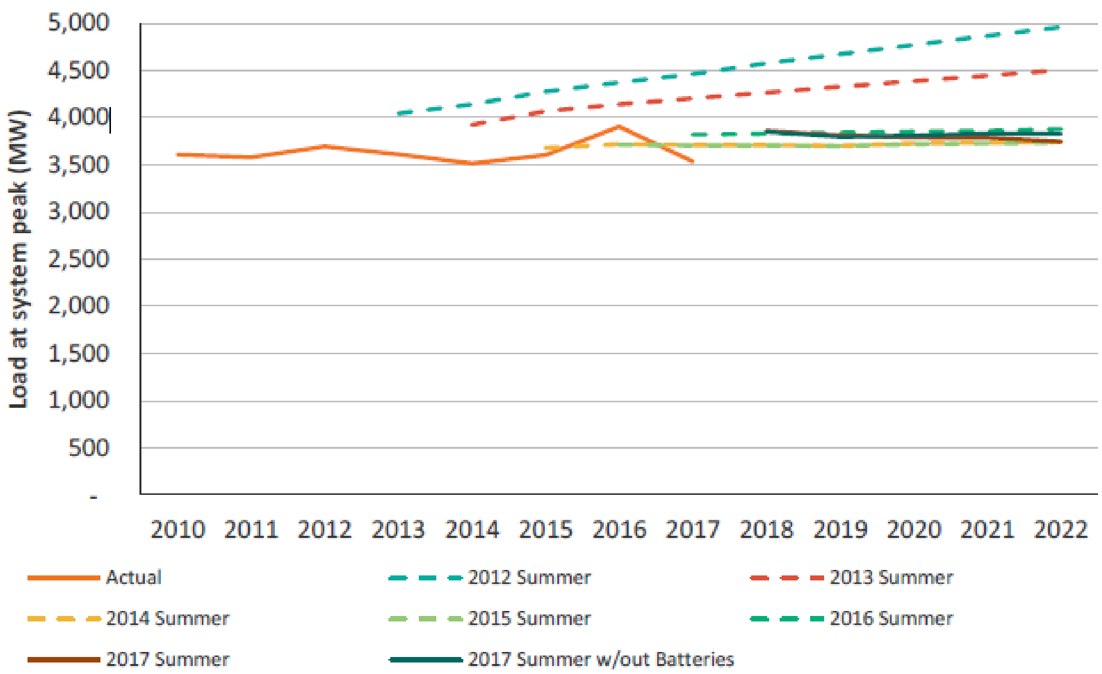
Western Power's forecast demand

120. For each year of AA4 Western Power is forecasting:

- 1.6 per cent increase in customer numbers;
- 0.6 per cent decline in network peak demand; and
- 0.4 per cent reduction in energy consumption.

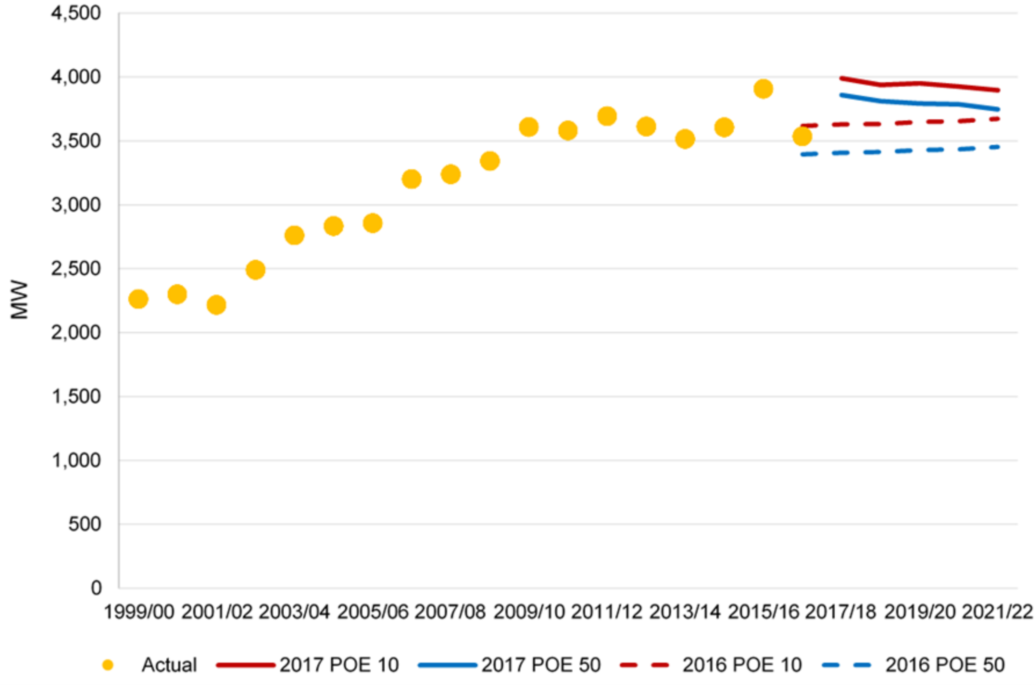
121. This is the first time Western Power has forecast a decline in peak demand and energy consumption. Figure 1, and Figure 2 below compare peak demand forecasts between 2012 and 2017.

Figure 1 Comparison of network peak demand forecasts 2012 to 2017



Source: Western Power Access Arrangement Information Attachment 7.3, 2 October 2017, Figure 2.3, p. 7.

Figure 2 Western Power actual and forecast POE 10 and POE 50 network maximum demand



Source: Western Power data and GHD analysis

122. As seen in Figure 1, peak demand forecasts reduced significantly between 2012 and 2014. The 2015 forecast was similar to the 2014 forecast and there was a small increase in the 2016 forecast.

123. As seen in Figure 2, the 2017 forecast predicts a higher peak demand for 2017/18, compared with the 2016 forecast, followed by a decline over the next four years. Despite the decline, the 2017 forecast peak demand by the end of the period is above the 2016 forecast.

124. Forecast energy consumption has also declined as can be seen in Figure 3 below.

Figure 3 Western Power actual and forecast energy consumption

125. Western Power has based its proposed capital expenditure on the 2016 forecast as the timing of its planning cycle meant the 2017 forecasts were not available when it developed its capital expenditure proposal. However, it has used the 2017 forecasts for its operating expenditure and network prices as this only required updates to values in models.

126. Western Power notes it has compared the 2017 forecasts to the 2016 forecasts at a high level to ensure that the network investment plans would not require significant changes. It considers:

> … the impact of any significant changes in demand should not materially impact the overall AA4 transmission capex forecast because:
>
> - for the transmission capex program there are few projects that are dependent on the load forecast
> - the bulk of the transmission spend is driven by optimised asset replacement, which is agnostic to changes in the load forecast
> - the majority of the transmission growth driven investment, that is influenced by changes in the load forecast, is planned for the end of the AA4 period/beginning of AA5 period.
>
> Though some transmission line augmentation projects and transmission network investment is driven by localised load growth, we do not expect the local growth forecasts to change between 2016 and 2017 to a degree that would alter the cost or timing of these projects. However, we will review these projects as part of the annual planning cycle and include any variations in our response to the ERA's draft decision.

127. Western Power notes the capacity expansion forecasts:

> … do not factor in the impact of forthcoming closures of some of Synergy's generation fleet. We are currently working with Synergy and customers to understand the impact

> on the network from the Synergy generation retirements, and to ascertain whether additional network augmentation may be required.
>
> We will update our transmission capacity expansion capex forecasts to reflect the generation retirements and Western Power's 2017 customer number and peak demand forecasts in our response to the ERA's draft decision.[31]

128. Although Western Power considers investment in the distribution network is typically more sensitive to load growth it notes:

> … an early assessment of the difference between the 2016 and 2017 demand forecasts (a ~four per cent reduction in the system peak) would result in only a small adjustment or deferral of load dependent distribution projects. Any necessary adjustments to the AA4 period distribution capex forecast will be assessed as part of our annual planning cycle, and will be factored into our response to the ERA's draft decision.

Submissions

129. Submissions from Alinta Energy (**Alinta**), the Australian Energy Council, Emergent Energy and Synergy all commented on Western Power's demand forecasts.

130. Two submissions commented on the level of detail provided on the demand forecasts. The Australian Energy Council questions whether Western Power has adequately publicly substantiated its demand forecasts. Synergy considers Western Power should provide far more detail about the models and assumptions it has used to develop its forecasts of customer connections, energy and peak demand, including releasing its forecasting models.

131. Synergy notes the revenue cap form of price control means Western Power's customers face significant demand risk:

> Synergy's view is this places a strong onus on WP to apply best practice in forecasting demand for the purposes of its AA4 proposal, to substantiate its demand forecasts (including the methodology and assumptions used) and to provide its customers and stakeholders with reasonable opportunity to review and comment on its methodology, assumptions and forecasts.

132. Synergy considers that insufficient information was provided for it to be able to properly assess or comment on the appropriateness of the forecasts. It contrasts this with the level of information provided by the Australian Energy Market Operator (**AEMO**) in support of its Wholesale Electricity Market (**WEM**) Electricity Statement of Opportunities which Synergy considers is also the "kind of information that is typically provided as part of access arrangement proposals by network service providers in the [National Electricity Market] NEM."

133. Based on the analysis it was able to undertake, Synergy provides the following comments:

- The forecast peak demand for 2018 appears very high:

> WP's 2017 summer POE50 peak demand forecast for 2018 is higher than all but one of the actual peak demands recorded over the eight years from 2010 to 2017 and WP's 2017 summer POE10 peak demand forecast for 2018 is higher than any of the actual peak demands recorded over those eight years. In simple terms, it would be expected that a POE50 forecast would be exceeded one year in two and a POE10 forecast

[31] Page 24 of Appendix 8.1 to the Western Power access arrangement information.

would be exceeded one year in ten. There may be a reasonable explanation for the 2018 forecasts seeming to be relatively high compared with actual peak demand; for instance, weather normalised actual peak demand may have reached higher levels or relevant drivers of peak demand may explain these apparently high forecasts. But, without a more detailed understanding of the methodology and assumptions used to forecast peak demand it is impossible for the Authority, Synergy or other stakeholders to assess whether these peak demand forecasts are reasonable.

- There should be more variation in the revisions to the distribution energy forecasts:

  WP's forecasts of energy supplied by the distribution network from 2015, 2016 and 2017 have been remarkably consistent. Comparing the three forecasts for 2018 and for 2021 Synergy finds the forecasts have varied by less than 0.5%. Over the three year period Synergy would have expected that revised forecasts of relevant drivers of energy – including economic activity, prices, housing commencements and the adoption of rooftop solar PV – would have resulted in more material revisions to these forecasts. In comparison, it appears to Synergy that AEMO's forecasts have been much more responsive to changing circumstances over time. But, without a more detailed understanding of the methodology and assumptions used to forecast energy it is impossible for the Authority, Synergy or other stakeholders to assess whether these energy forecasts are reasonable.

- Forecast electricity prices have not been taken account of in the demand forecasts:

  It is generally accepted in the forecasting literature in Australia (and elsewhere) that demand for electricity will respond to prices for electricity. Since WP's proposal involves, (in some instances - refer section 4.3.2 below), forecast changes in prices to customers over the period of AA4, Synergy considers these forecast changes in prices should be accounted for in WP's forecasts of energy and peak demand. However, it appears WP has used forecasts of future prices from the state budget.[61] Failing to take account of the effect of these forecast changes in prices on energy and peak demand will result in an inconsistency and will potentially affect the price path that customers face over the period of AA4.

134. Alinta and Emergent Energy note Western Power's forecast decline in demand, the uncertainties of the effect of solar photovoltaic (**PV**) systems and batteries on future demand and the possible under-utilisation of assets.

135. Alinta states:

> … we are continuing to see a decline in peak demand due to factors such as the increase in solar PV systems (in which Western Australia has a very high penetration rate), as such, a question remains as to the overall impact this will have on future peak demand and thus the need for expenditure on the network to meet peak growth. Alinta believes that the current Access Code and regulatory framework allows for the ERA and Western Power to take a cautious approach, given that should demand warrant expenditure to be bought forward, Western Power can utilise the NFIT provisions within the Access Code.
>
> The decline in peak demand could see an under-utilisation of particular assets across the SWIS. We would question whether some of the existing asset base should include write downs in value as a direct consequence of this.[32]

136. Emergent Energy notes:

> For the first time since the regulation of Western Power began, the sector is faced with a structural decline in growth. This is important to understand. The mismatch between

[32] Alinta Energy Submission, 11 December 2017, item 5.

> actual demand, and until very recently what was a forecast growth in demand, is unlikely to be due to one-off factors such as an economic 'bust' following a 'boom', or through poor demand forecasting. While it is true that economic growth is historically weak – and could indeed pick up again, this structural decline in demand is technology based. A combination of energy efficiency (translating to declining per-capita energy demand) and more importantly, distributed generation (principally solar PV, and soon, battery storage) means that even with modest population growth, demand is likely to decline for the foreseeable future. The magnitude of this decline is difficult to predict – as Western Power attest to in the AA4 supporting documentation (Attachment 7.3.5), which creates further risk of projected revenue being inadequate for cost recovery.[33]

137. Emergent Energy particularly notes the difficulties in forecasting solar PV:

> Of concern has been the poor ability of anybody in the energy sector to accurately predict the pace of the growth of solar PV. From the International Energy Agency, through to national energy regulators in Australia and down to the local AEMO (and IMO before it), recent history is littered with annual forward curves for solar uptake being revised upwards each year while annual demand forecasts are revised downward. It appears as though Western Power's forecasts in Attachment 7.3.5 may similarly be on the low side, especially for the uptake of commercial solar. Forecasting methodologies typically look at observable trends. What is difficult to observe early in a time-varying stochastic data-set is an exponential trend. The form of the exponential trend is that early on, it appears linear (and with a low growth trajectory at that). But in the short space of time that we have witnessed solar PV's penetration of particular markets, its uptake has had more of an exponential trajectory. While many external factors have impacted the rates of adoption in different jurisdictions and customer segments, such as regulatory or technical barriers being implemented or removed; or variable policy settings around feed-in tariffs or subsidies imposed, the fact that the underlying price of BTM solar has fallen so far means that adoption rates will likely transcend much of these external influences. Those familiar with the BTM solar sector anticipate that commercial customer adoption will be larger and occur at a greater pace than residential adoption, which has accounted for the vast majority of BTM solar to date. The large 'industrial' customer segment will likely follow suit.[34]

138. Emergent Energy acknowledges at this early stage it is difficult to predict rates of battery adoption, however, it considers there is a significant chance that battery uptake and higher behind the meter solar utilisation will be greater than forecast by Western Power. It provides analysis suggesting Western Power's forecast demand may be overstated by between 2.9 per cent and 12.6 per cent as a result of under forecasting the decline in distribution connected demand and notes:

> … there is already an acknowledgement that distribution demand is declining; and that there is a significant possibility for the forecast rate of decline to be on the low side, meaning distribution connected customers will not be consuming the quantity of grid provided energy required to meet revenue projections. And with distribution connected demand in structural decline, there is a case to be made that asset stranding is occurring; that it will take some time for the process of BTM solar and storage growth to run its course and demand growth to pick up again – if at all; and so at least some value of the distribution asset base should be written down over the course of AA4.[35]

[33] Emergent Energy submission, p. 4.

[34] Emergent Energy submission, p. 5.

[35] Emergent Energy submission, p.7.

Considerations of the ERA

139. Section 4.4(d) of the Access Code requires that the access arrangement information include information detailing and supporting the service provider's assumptions about system capacity and volumes.

140. Section 7.3(a) establishes an objective for the determination of reference tariffs (pricing methods) that the reference tariffs should recover the forward-looking efficient costs of providing reference services. Forecasts of demand for services are necessary to determine whether the reference tariffs proposed by a service provider meet this objective.

141. The ERA has also considered the advice provided by its technical consultant. GHD undertook a review of the basis of the 2017 demand forecast and concluded that it was sound and reasonable. It makes the following points:

- The starting point for the 2017 forecast implies a high temperature corrected growth rate in the first forecast year, given that the last two actual observations occurred during an extremely low temperature summer day (in 2016/17) and an extremely high temperature summer day (in 2015/16).
- The projection of historical load factor trends into the future is achieved by a consistent process, however, no overriding and intuitive explanation has been provided of the causes of those trends.
- As energy efficiency trends have not been considered separately, historical improvements which influenced demand growth are implicitly included in the forecasts. This is in contrast to the practice of other utilities which attempt to specifically factor in policies that are designed to increase future energy efficiency.
- Western Power has examined the potential impact of the growth of distributed battery storage at a network level only and not at individual locations, and has not considered any significant effects from electric vehicle charging in the next five years.
- Western Power has implemented a top down model to validate the existing bottom up approach for the first time in the 2017 forecasts, which GHD considers is a worthwhile quality control procedure, however, there is no published information about the degree of adjustment of the substation forecasts that may have been necessary to reconcile with the top down forecast.

142. GHD does not consider any of the above issues are likely to be the cause of any significant inaccuracy or bias in the demand forecast.

143. GHD also refers to the review undertaken by the National Institute of Economics & Industry Research in 2016 for Western Power, which gave a favourable report. The review suggested changes to further improve forecast accuracy, some of which were adopted for the 2017 demand forecast. The following suggested improvements have not yet been adopted:

- improving the solar systems modelling for both energy and maximum demand forecasts;
- segmenting demand into base load and temperature sensitive load; and
- estimating models based on interval specific maximum demand times where possible.

144. As identified in Synergy's submission, AEMO also prepares annual forecasts of demand and publishes them in its annual Electricity Statement of Opportunities. The ERA has considered how Western Power's forecasts compare with the latest demand forecast prepared by AEMO.

145. AEMO forecasts the maximum sent-out electricity entering the South West Interconnected System (**SWIS**), which includes all SWIS customers and all losses. The Western Power forecast only includes demand on the parts of the SWIS owned by Western Power, and excludes losses on the transmission network. Consequently, the AEMO forecasts will be higher than those produced by Western Power. However, comparing trends over time is still a useful exercise because the underlying factors will be similar.

146. Figure 4 and Figure 5 below compare the peak demand and energy consumption forecasts respectively.

Figure 4 Western Power actual and forecast network and AEMO SWIS maximum demand

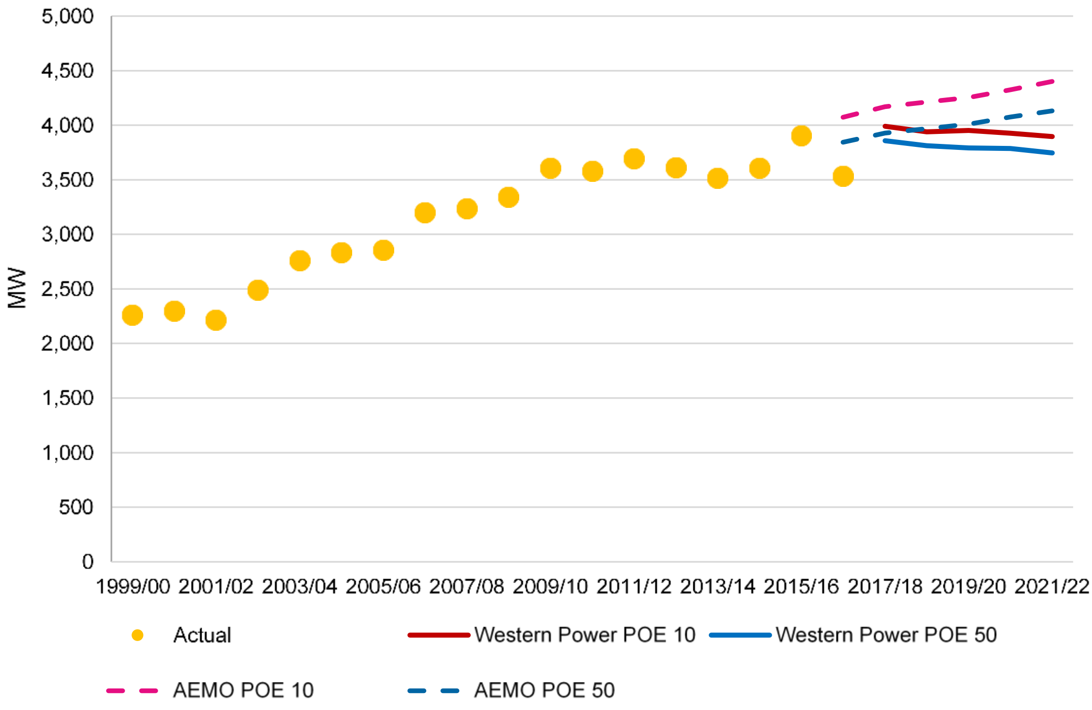
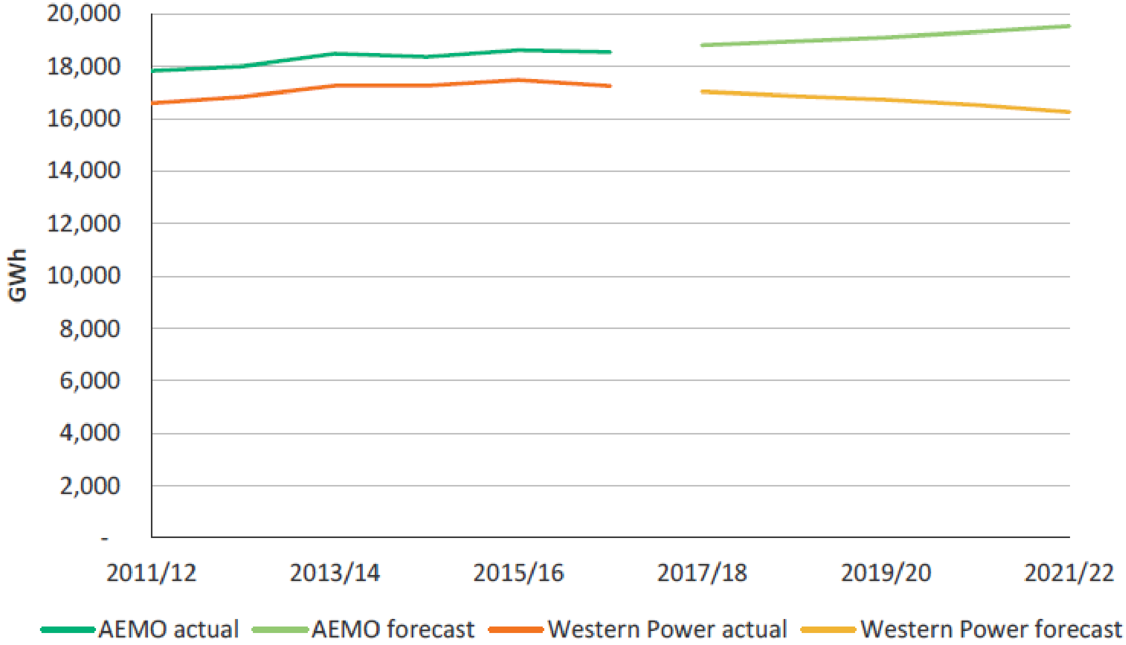


Figure 5 Comparison of Western Power and AEMO forecasts of total energy consumption



Source: Western Power Access Arrangement Information Attachment 7.3, 2 October 2017, Figure 4.2, p. 15.

147. In both cases, Western Power's forecasts are trending down while AEMO is forecasting increases.

148. As set out in the Table 16 (below) different modelling approaches have been used by AEMO which may have led to some differences. However, most significantly, Western Power has based its forecasts on more conservative assumptions of economic growth, numbers of customers and consumption (particularly in the case of residential consumption where it forecasts a reduction of 2.1 per cent per annum compared with AEMO assumed 0.3 per cent per annum growth).

Table 16 Differences in forecast methods, the AEMO and Western Power

Reason	AEMO	Western Power
Model Choice	Top down ordinary least squares structural models – typically good for identifying the cause of variation but have poor predictive capacity	Bottom up time series models with exogenous variables – less useful for identifying cause but much better predictive capacity Forecasting network exports and imports separately Top down reconciliation using generalised additive model spline structural models
Variable Selection	Excluded all negatively correlated inputs (price, energy efficiency)	Far greater consideration for price and energy efficiency
Technology	AEMO and WP took very similar views on PV, battery and Electric Vehicle uptake, although the assumptions on impact vary	
Block Loads (large new customers)	AEMO and WP took a very similar view on block loads	
Economic Growth	3.3% p.a. (10yr)	1.8% p.a. (5yr)
Population/Customers	WA tomorrow (ignores economic downturn)	Regression on customer numbers
Residential Consumption	0.3% p.a. (10yr)	-2.1% p.a. (5yr)
Non-Residential Consumption	0.8% p.a. (10yr)	0.1% p.a. (5yr)

Source: Western Power Access Arrangement Information Attachment 7.3, 2 October 2017, Table 2.3, p. 9.

149. The ERA has also considered Western Power's forecasting history. In previous access arrangement proposals, Western Power has generally over-forecast demand. Figure 6 and Figure 7 below compare the demand forecasts underpinning the approved target revenues for the first access arrangement period (**AA1**), AA2 and AA3 with actual demand for the transmission and distribution network respectively.

Figure 6 **Comparison of Western Power's access arrangement demand forecasts and actual demand for transmission**

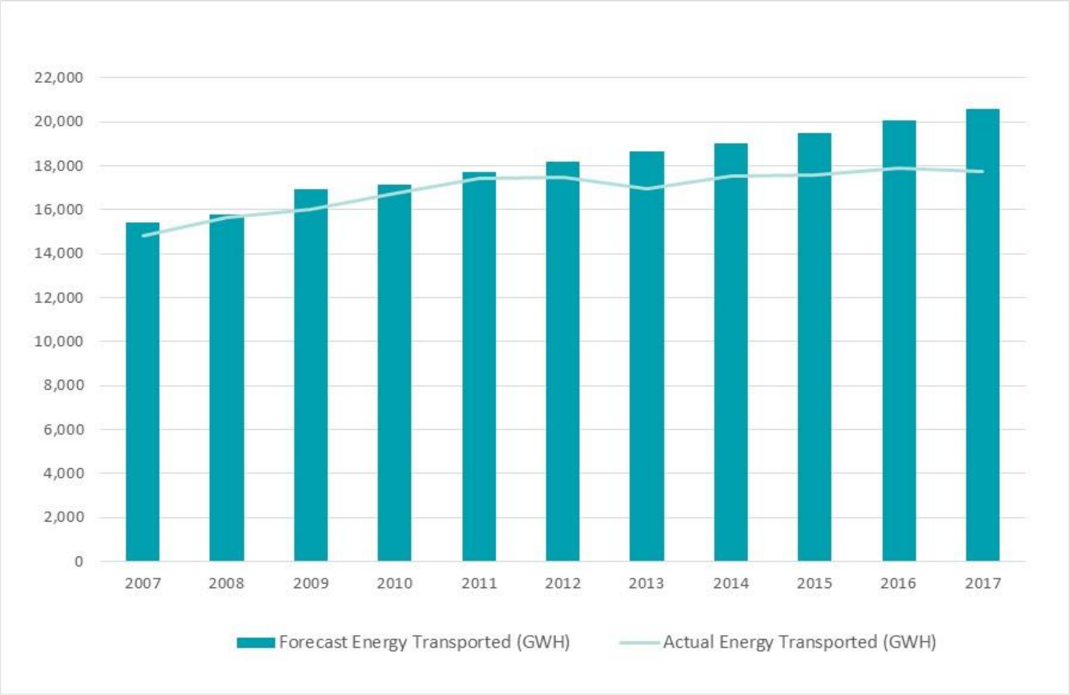
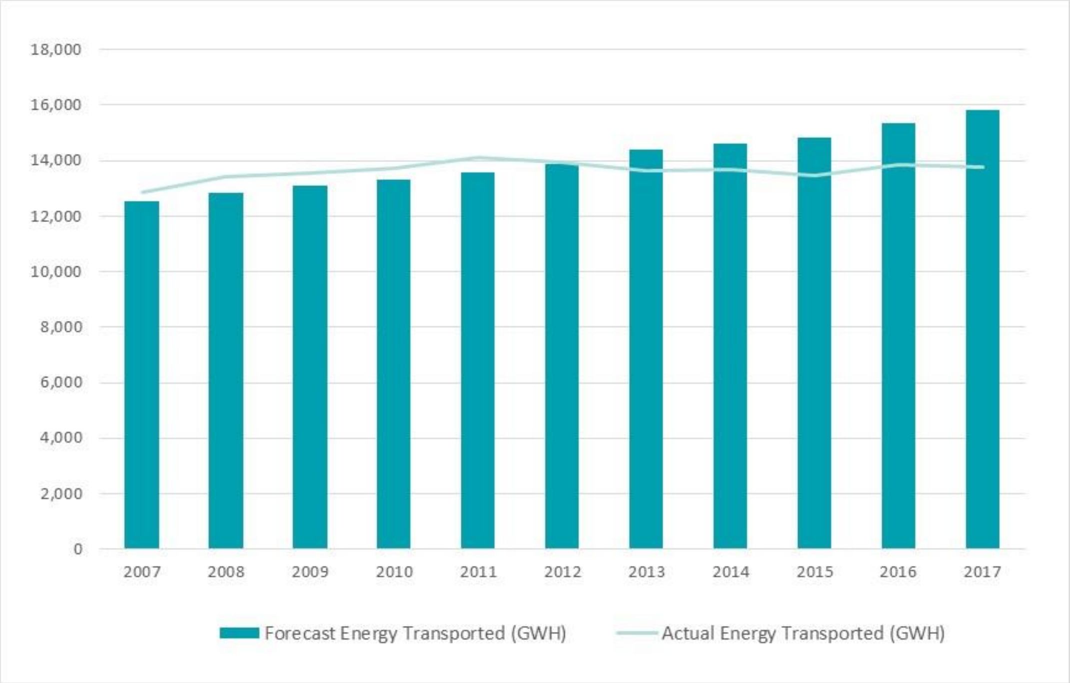


Figure 7 **Comparison of Western Power's access arrangement demand forecasts with actual demand for distribution**



150. The 2017 Probability of Exceedance 10% (**POE 10**) forecast peak demand for 2017/18 was 3,991 MW and the Probability of Exceedance 50% (**POE 50**) forecast peak demand was 3,849 MW. The highest peak demand reported so far for the 2017/2018 year occurred on 13 March 2018 at 17:25, and reached 3558 MW.

151. Western Power has developed a comprehensive approach to demand forecasting, including commissioning a third party review to test whether the method, process and assumptions it had used were reasonable, robust and fit for purpose. However, the ERA agrees with stakeholders that insufficient information was published with Western Power's proposal to enable stakeholders to fully evaluate the demand forecasts.

152. As identified by stakeholders, falling demand increases the risk of existing assets becoming under-utilised. It also suggests a more cautious approach is needed to determine future expenditure requirements. In addition, falling demand without a corresponding fall in costs will put pressure on bills.

Forecast operating expenditure

Access Code requirements

153. Section 6.40 of the Access Code provides for approved total costs and target revenue to include an amount for forecast non-capital costs (operating costs) for the access arrangement period:

> 6.40 Subject to section 6.41, the non-capital costs component of approved total costs for a covered network must include only those non-capital costs which would be incurred by a service provider efficiently minimising costs.

154. Efficiently minimising costs is defined in the Access Code as meaning the service provider incurs no more costs than would be incurred by a prudent service provider, acting efficiently in accordance with good electricity industry practice seeking to achieve the lowest sustainable cost of delivering services, and without reducing service standards below the service standard benchmarks set for each covered service in the access arrangement or contract for services.

155. Good electricity industry practice means the exercise of that degree of skill, diligence, prudence and foresight that a skilled and experienced person would reasonably and ordinarily exercise under comparable conditions and circumstances, consistent with applicable written laws and statutory instruments and applicable recognised codes, standards and guidelines.

156. Sections 6.41 and 6.42 of the Access Code provide for the non-capital costs component of approved total costs to include non-capital costs incurred for an "alternative option" for providing covered services, subject to certain conditions being met. An alternative option is an activity undertaken by Western Power for the purposes of providing a covered service as an alternative to investing in a major augmentation of the network, and may include such activities as demand-side management or generation either instead of, or in addition to, network augmentation:

> 6.41 Where, in order to maximise the net benefit after considering alternative options, a service provider pursues an alternative option in order to provide covered services, the non-capital costs component of approved total costs for a covered network may include non-capital costs incurred in relation to the alternative option ("alternative option non-capital costs") if:
>
> (a) the alternative option non-capital costs do not exceed the amount of alternative option non-capital costs that would be incurred by a service provider efficiently minimising costs; and
>
> (b) at least one of the following conditions is satisfied:

(i) the additional revenue for the alternative option is expected to at least recover the alternative option non-capital costs; or

(ii) the alternative option provides a net benefit in the covered network over a reasonable period of time that justifies higher reference tariffs; or

(iii) the alternative option is necessary to maintain the safety or reliability of the covered network or its ability to provide contracted covered services.

6.42 For the purposes of section 6.41(b)(i) "additional revenue" for an alternative option means:

(a) the present value (calculated at the rate of return over a reasonable period) of the increased tariff income reasonably anticipated to arise from the increased sale of covered services on the network to one or more users (where "increased sale of covered services" means sale of covered services which would not have occurred had the alternative option not been undertaken); minus

(b) the present value (calculated at the rate of return over the same period) of the best reasonable forecast of the increase in non-capital costs (other than alternative option non-capital costs) directly attributable to the increased sale of the covered services (being the covered services referred to in the expression "increased sale of covered services" in section 6.42(a)),

where the "rate of return" is a rate of return determined by the Authority in accordance with the Code objective and in a manner consistent with this Chapter 6, which may be the rate of return most recently approved by the Authority for use in the price control for the covered network under this Chapter 6.

Western Power's proposal

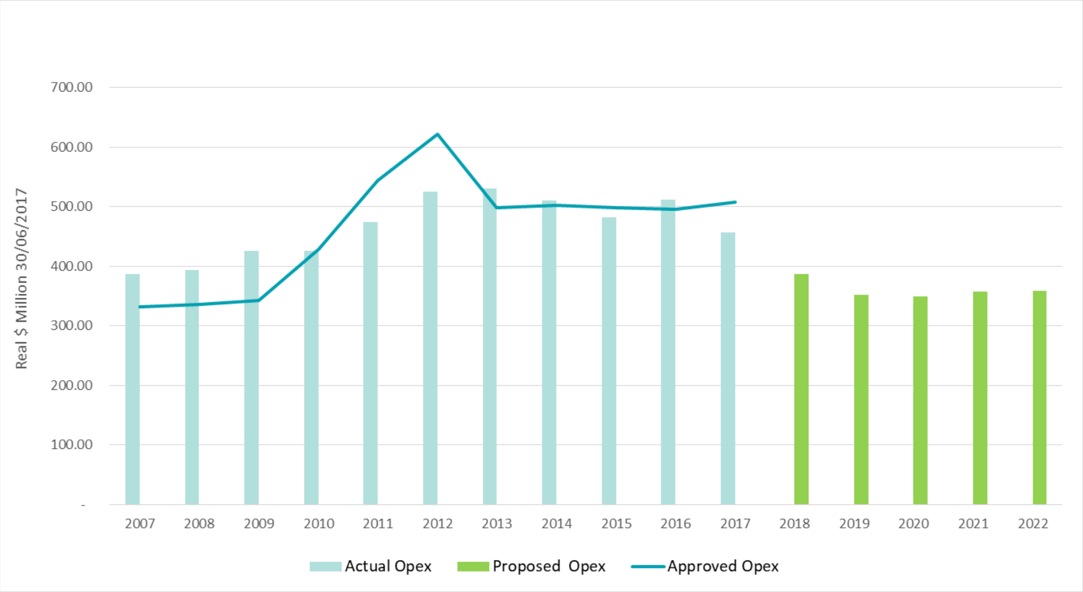
157. Western Power's proposed operating expenditure for AA4 is set out in Table 17 below.

Table 17 AA4 proposed operating expenditure (real $ million at June 2017)

	2016/17 Actual	2017/18	2018/19	2019/20	2020/21	2021/22
Transmission	60.3	63.0	61.7	60.8	62.2	61.9
Corporate	41.3	30.8	22.5	22.4	22.4	22.7
Total transmission	**101.6**	**93.8**	**84.2**	**83.2**	**84.6**	**84.6**
Distribution	224.9	208.0	206.7	205.4	211.3	212.9
Corporate	113.0	84.5	61.6	61.1	61.3	61.9
Total distribution	**337.9**	**292.5**	**268.3**	**266.5**	**272.6**	**274.8**
Total operating expenditure	**439.5**	**386.4**	**352.5**	**349.7**	**357.2**	**359.3**

158. Western Power is proposing $1,805.1 million operating expenditure for AA4, which is $695 million less than the costs approved for AA3. Figure 8 (below) compares the AA4 proposed operating expenditure with actual and approved expenditure since the network became regulated. Western Power's proposal is described in more detail under *Considerations of the ERA*.

Figure 8 **Western Power actual and proposed operating expenditure (real $ million at June 2017)**



Submissions

159. Submissions on Western Power's forecast operating costs are addressed under Considerations of the ERA.

Considerations of the ERA

160. Under section 6.40 of the Access Code, the ERA must be satisfied that the forecast operating costs for AA4 include only those costs that would be incurred by a service provider efficiently minimising costs.

161. Western Power states it has used the "base-step-trend" method to forecast operating expenditure. It has used the final year of AA3, 2016/17, to establish what it considers to be its efficient recurrent base operating expenditure. It has then forecast discrete step changes and changes in output and cost input trends over the period to forecast operating expenditure for each year of AA4. This is summarised in Table 18 (below).

Table 18 AA4 proposed operating expenditure (real $ million at June 2017)

Expenditure	2016/17 Actual[36]	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total
Recurrent network base costs	317.6	317.6	317.6	317.6	317.6	317.6	1,588.0
Step changes		(5.0)	(5.0)	(5.0)	(5.0)	(5.0)	(25.0)
Total recurrent network costs		**312.6**	**312.6**	**312.6**	**312.6**	**312.6**	**1,563.0**
Network growth escalation		2.9	5.9	9.4	12.6	15.7	46.6
Efficiency		(3.2)	(6.3)	(9.6)	(12.8)	(16.1)	(48.0)
Non-recurrent network costs	64.5[37]	32.5	1.2	0.2	0.0	0.5	34.4
Expensed indirect network costs	57.4	40.0	36.8	33.3	39.4	39.5	189.0
Labour cost escalation		1.4	2.4	3.7	5.4	7.1	20.0
Total	**439.5**	**386.4**	**352.5**	**349.7**	**357.2**	**359.3**	**1,805.1**

162. The process adopted by the ERA in considering the forecasts of operating expenditure has been to:

- assess the extent to which Western Power's proposed recurrent network base costs would be incurred by a service provider efficiently minimising costs, consistent with the requirements of section 6.40 of the Access Code; and
- assess whether Western Power has provided adequate justification that forecast trends and step changes in the level of operating expenditure over AA4 are consistent with those that would be incurred by a service provider efficiently minimising costs.

163. The ERA's technical consultant GHD provided advice on the efficiency of Western Power's proposed operating expenditure and undertook a benchmarking exercise using the AER's benchmarking models and data from the NEM network service providers.

Recurrent network base costs

164. The ERA has considered whether the actual operating costs for AA3 are consistent with a service provider efficiently minimising costs and therefore constitute a relevant cost base against which forecasts of non-capital costs for AA4 can be assessed.

165. The ERA has assessed the efficiency of Western Power's base year (2016/17) operating expenditure by:

- verifying records of actual operating expenditure for the AA3 period;
- reviewing the incentives for Western Power to minimise its operating expenditure;

36 Excluding non-revenue cap operating costs of $17 million.

37 Comprising $56 million for business transformation, $15 million for electricity market review costs and a $6 million credit for the write-back of a provision for the Mid-West energy project.

- reviewing the base year operating expenditure line items (at a high level) for reasonableness; and
- benchmarking against operating expenditure reported by other network service providers in Australia.

Verification of operating costs in AA3

166. In accordance with the ERA's Guidelines for Access Arrangement Information, Western Power has provided regulatory accounts that reconcile costs of regulated activities with a set of base accounts for the business. The reconciliation of claimed operating costs with recorded operating costs are shown in Table 19 below.

Table 19 Reconciliation of claimed operating expenditure for AA3 with recorded operating expenditure for Western Power (real $ million June 2017)

	Base account	Adjustments	Regulatory account	Claimed non-capital costs	AA3 forecast
Transmission 2012/13	123.2	4.6	127.8	127.8	114.7
Transmission 2013/14	118.5	3.8	122.3	122.3	113.8
Transmission 2014/15	116.7	3.8	120.5	120.5	114.2
Transmission 2015/16	123.0	3.5	126.5	126.5	116.5
Transmission 2016/17	102.8	2.8	105.6	105.6	119.3
Distribution 2012/13	394.0	9.1	403.1	403.1	384.1
Distribution 2013/14	380.5	7.7	388.2	388.2	387.9
Distribution 2014/15	353.0	8.4	361.4	361.4	383.5
Distribution 2015/16	376.8	8.5	385.3	385.3	378.5
Distribution 2016/17	344.0	7.1	351.1	351.1	388.4

167. The adjustments for all years of the AA3 period are for fleet depreciation. The adjustments are to align Western Power's statutory accounting disclosures with its regulatory accounting disclosures. To achieve this, the unregulated fleet depreciation is disclosed as operating expenditure costs in the regulatory financial statements and not depreciation and amortisation.

168. Western Power's regulatory accounts were audited for Western Power by the Office of the Auditor General. The ERA is satisfied that the regulatory accounts provide a true and correct indication of operating costs in the AA3 period.

Incentives to minimise operating expenditure

169. Western Power's regulatory framework provides incentives for it to minimise its operating expenditure and achieve efficiencies greater than those in the access arrangement decision.

170. During an access arrangement period, Western Power keeps the benefit of any under expenditure compared with the level of expenditure forecast in the access arrangement decision. The gain sharing mechanism provides further opportunities for Western Power to retain the benefit of any under expenditure into the next access arrangement period. Providing it meets all of its service standard benchmarks, the gain sharing mechanism ensures Western Power retains the benefit of any under expenditure for five years regardless of which year the under expenditure occurred.

171. These measures all contribute to giving Western Power an incentive to minimise its costs.

Analysis of base year network operating expenditure

172. Western Power has used the operating expenditure for 2016/17 as its base year for its AA4 forecasts. Western Power states that the actual level of expenditure in 2016/17 reflects the savings achieved through its business transformation program over the previous two years.

173. Western Power's actual operating expenditure for 2016/17, excluding non-revenue cap services, was $439.5 million. This is $60 million less than was forecast for AA3. Western Power has made the following adjustments to its 2016/17 actual costs to establish its AA4 recurrent network base costs of $317.6 million:

- removal of business transformation program costs of $56 million;
- removal of electricity market review costs of $15 million;
- reversal of the Mid-West energy project provision of $6 million; and
- removal of indirect costs of $57 million.

174. Western Power's recurrent network base costs break down as follows:

- $182 million of operating expenditure on the distribution network;
- $53 million of operating expenditure on the transmission network; and
- $83 million of corporate operating expenditure.

175. A line-by-line review of operating expenditure by regulatory category was undertaken by GHD. The review showed the actual costs for 2016/17 were lower or in line with previous year's actual expenditure and Western Power's forecasts for AA4 included further reductions.

176. However, an inconsistency was found between the Supervisory Control and Data Acquisition (**SCADA**) and communications operating expenditure and capital expenditure program. Western Power's proposed capital expenditure for AA4 includes $52.7 million for transmission and $32.2 million for distribution to replace ageing SCADA assets. This should lead to lower maintenance requirements for newer assets. However, Western Power has proposed base operating expenditure similar to actual expenditure during AA3.

177. In view of this capital expenditure, the ERA considers the proposed operating expenditure should be reduced by 50 per cent as the asset replacement program will replace at least 50 per cent of the existing SCADA and communication asset base. Consequently, as set out in Table 20 (below), the ERA requires base operating expenditure to be reduced by $4.1 million (for transmission) and $2.1

million (for distribution) per annum to ensure forecast expenditure is at the level that would be incurred by a service provider efficiently minimising costs.

Table 20 Draft decision recurrent network base costs (real $ million at June 2017)

Expenditure	2016/17 Actual[38]	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total
Proposed recurrent network base costs	317.6	317.6	317.6	317.6	317.6	317.6	1,588.0
Transmission SCADA	(4.1)	(4.1)	(4.1)	(4.1)	(4.1)	(4.1)	(20.5)
Distribution SCADA	(2.1)	(2.1)	(2.1)	(2.1)	(2.1)	(2.1)	(10.5)
Draft decision	**311.3**	**311.3**	**311.3**	**311.3**	**311.3**	**311.3**	**1,556.5**

Benchmarking analysis

178. The ERA engaged GHD to benchmark Western Power's 2016/17 operating expenditure against other service providers' costs utilising the AER's benchmarking methods and data.

179. Details of this study are set out in section 7 of GHD's report to the ERA. The main conclusions were:

- Western Power ranked ninth or 10th (out of 14) depending which model is used for distribution service providers and sixth (out of six) for transmission service providers.
- As a combined electricity network, Western Power ranked last out of six.
- The comparable networks were SA Power Networks (distribution) and ElectraNet (transmission).
- Based on the benchmarking rankings for Western Power, the efficient range for total annual operating expenditure compared to a hypothetical combined SA Power Networks/ElectraNet electricity entity is between $368 million and $379 million.

180. Western Power's actual costs for 2016/17 of $439.5 million are $60.5 million higher than the top of the range indicated by the benchmarking study. However, Western Power's proposed base operating expenditure for AA4 of $357.6 million (recurrent network base costs of $317.6 million plus indirect costs of $40 million) is below the predicted efficient cost.

181. The benchmarking results are limited by the quality and standardisation of data and method used. However, it provides evidence that Western Power's proposed base expenditure for AA4 is at the level that would be incurred by a service provider efficiently minimising its costs.

[38] Excluding non-revenue cap operating costs of $17 million.

Forecast changes in operating expenditure during AA4

182. Western Power's forecast changes in operating expenditure over the AA4 period have been considered in the following order:

- Step changes
- Network growth escalation
- Efficiency
- Non-recurrent network costs
- Indirect costs
- Labour cost escalation

Step changes

183. Western Power has proposed a $5 million annual step change reduction for efficiencies from the business transformation program that were not completed prior to the start of the AA4 period.

184. These efficiencies are:

- updating the vegetation management strategy through a risk-based approach and the use of alternative practices; and
- reducing unplanned overtime through improved systems and processes governing approval of overtime when responding to network faults.

185. In its review of metering capital expenditure, GHD identified that Western Power had over-estimated the number of replacement meters for non-compliant meters required for AA4. Consequently, metering operating expenditure should be reduced to reflect a more accurate forecast of the number of replacement meters required.

186. The ERA considers the proposed step change reduction should be increased by $2.2 million per annum to ensure forecast expenditure is at the level that would be incurred by a service provider efficiently minimising costs.

Table 21 Draft decision step changes (real $ million at June 2017)

Expenditure	2016/17 Actual[39]	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total
Proposed step changes	(5.0)	(5.0)	(5.0)	(5.0)	(5.0)	(5.0)	(25.0)
Metering	(2.2)	(2.2)	(2.2)	(2.2)	(2.2)	(2.2)	(11.0)
Draft decision	**(7.2)**	**(7.2)**	**(7.2)**	**(7.2)**	**(7.2)**	**(7.2)**	**(36.0)**

[39] Excluding non-revenue cap operating costs of $17 million.

Network growth escalation

187. Western Power has proposed that its recurrent operating expenditure forecasts for AA4 be adjusted for the forecast growth in the customer base and the physical size of the transmission and distribution networks.

188. For the AA4 period, Western Power expects minimal overall network growth but despite flat forecast peak demand, it has identified "pockets" of growth in some areas, which will drive its transmission network investment over the next 10 years.

189. Western Power's proposed scale escalation factors are set out in Table 22 below.

Table 22 Western Power proposed scale escalation factors

Expenditure	Weighting	2017/18	2018/19	2019/20	2020/21	2021/22
Distribution						
Customer numbers	67.6%	1.65%	1.73%	1.69%	1.66%	1.63%
Circuit length	10.7%	0.91%	0.91%	0.91%	0.91%	0.91%
Annual average growth in highest maximum demand	21.7%	0%	0%	0%	0%	0%
Distribution growth	**100%**	**1.21%**	**1.26%**	**1.24%**	**1.22%**	**1.20%**
Transmission						
Circuit length	28.7%	0.32%	0.33%	0.22%	0.33%	0.32%
Annual average growth in highest maximum demand	22.1%	0%	0%	0%	0%	0%
Energy volumes delivered	21.4%	0.3%	0%	2.89%	2.5%	0.0%
Annual average growth in entry and exit points	27.8%	-0.24%	-0.7%	-0.25%	-0.98%	0.00%
Transmission growth	**100%**	**0.09%**	**-0.11%**	**0.62%**	**0.35%**	**0.09%**

190. Western Power has also applied growth escalation to corporate costs. The ERA considers business support activities such as information technology, levies, fees and insurance are not proportional to any growth in service outputs that may result from changes in customer demand. Consequently, no growth escalation should be applied to corporate costs.

191. The variables proposed by Western Power are consistent with those used by the AER. However, the AER has updated the weightings for each variable based on more recent benchmarking analysis. If the AER network growth escalation method is to be used, it should reflect the most recent data from the AER, including the current weightings used by the AER.[40, 41]

[40] Economic Insights, Position Paper for Review of TNSP Economic Benchmarking, 9 August 2017, p. 31.

[41] Economic Insights, Economic Benchmarking Results for the Australian Energy Regulator's 2017 DNSP Benchmarking Report, 31 October 2017, section 1.1, p. 1.

192. Updating the weightings to be consistent with the most recent data from the AER would result in growth escalation as set out in Table 23.

Table 23 Western Power proposed scale escalation factors adjusted for AER revised weightings

Expenditure	Weighting	2017/18	2018/19	2019/20	2020/21	2021/22
Distribution						
Customer numbers	45.8%	1.65%	1.73%	1.69%	1.66%	1.63%
Circuit length	23.8%	0.91%	0.91%	0.91%	0.91%	0.91%
Annual average growth in highest maximum demand	30.4%	0%	0%	0%	0%	0%
Distribution growth	100%	0.97%	1.01%	0.99%	0.98%	0.97%
Transmission						
Circuit length	**38.0%**	**0.32%**	**0.33%**	**0.22%**	**0.33%**	**0.32%**
Annual average growth in highest maximum demand	**19.0%**	**0%**	**0%**	**0%**	**0%**	**0%**
Energy volumes delivered	**23.0%**	**0.3%**	**0%**	**2.89%**	**2.5%**	**0.0%**
Annual average growth in entry and exit points	**20.0%**	**-0.24%**	**-0.7%**	**-0.25%**	**-0.98%**	**0.00%**
Transmission growth	**100%**	**0.14%**	**-0.2%**	**0.7%**	**0.5%**	**0.12%**

193. The ERA has reviewed Western Power's forecasts for each of the variables and notes the circuit length estimates are based on AA3 actuals. As Western Power is forecasting reductions in its demand forecasts for AA4, the ERA considers the circuit length forecasts should be updated for AA4.

194. The transmission energy volumes delivered appear to only include volumes delivered to transmission connected customers. The ERA considers total energy volumes transported through the transmission system should be used. These are forecast to decline each year, rather than increase as Western Power has assumed for 2017/18, 2019/20 and 2020/21. This would result in transmission scale escalation being zero or negative.

195. The ERA is also not convinced the distribution cost escalation attributed to an increase in customer numbers is accurate and consistent with a service provider efficiently minimising its costs. The proposed scale escalation results in $75.00 of recurring operating expenditure being added for each new customer. The ERA would need to see evidence to support this cost increase before approving any customer growth scale escalation.

196. For the purposes of this draft decision, the ERA has removed scale escalation on the basis that it is inconsistent with the costs that would be incurred by a service provider efficiently minimising costs.

Efficiency

197. Western Power has included a 1 per cent per annum productivity improvement in its proposed operating costs. Western Power states this is based on anticipated savings during AA4 due to efficiencies achieved through business improvement initiatives and programs during AA3.

198. Western Power's proposed operating expenditure for AA4 includes efficiencies achieved during AA3 that were higher than assumed in the AA3 decision, and includes further step reductions in AA4. The total base operating expenditure including indirect costs is less than the predicted efficient cost using the AER's benchmarking models.

199. On this basis, the proposed one per cent annual reduction is reasonable.

200. However, the proposed capital program for AA4 includes $184 million expenditure for depot modernisation which Western Power states will deliver recurring expenditure savings of $10 million per annum and a one-off benefit of $60 million. The capital program also includes $149 million for new business driven information technology systems which Western Power states will deliver further efficiencies.

201. These efficiencies do not appear to have been taken into account in Western Power's proposed one per cent productivity improvement. The ERA will consider this matter further in its final decision. For the draft decision, the ERA has assumed the one per cent annual reduction is consistent with what would be achieved by a service provider efficiently minimising costs.

Non-recurrent network operating expenditure

202. Western Power has forecast non-recurrent operating expenditure in its total forecast operating expenditure of $34.4 million for AA4. The expenditure is for corporate costs. The $34.4 million of expenditure is made up of the following:

- business transformation program - $28.3 million;
- electricity market review program - $5.1 million; and
- ERA regulatory costs - $1.0 million.

203. Western Power has included $28.3 million in operating expenditure to complete the business transformation program which it states is due to be completed in 2018.

204. Western Power notes that to date it has found $72 million of operating efficiencies in the AA3 period and has removed a further $5 million from the base year to reflect what it considers is an efficient amount of operating expenditure. Western Power also notes that the program has resulted in $51 million of indirect cost efficiencies in the AA3 period and the indirect costs will be further reduced by $12 million per year for AA4.

205. Western Power has stated that the success of its business transformation program relies on the completion of several critical initiatives in the AA4 period, including:

- restructuring areas of the business;
- standardising depot and crew tasks;
- enhancing forecasting processes;
- an automated planned outage notification system for network outages; and

- a "self-service portal HR solutions centre".

206. While Western Power has identified the above initiatives as being completed with the non-recurrent expenditure, it is not clear how any savings from the final element of the business transformation program during 2017/18 have been incorporated in Western Power's forecast operating expenditure.

207. On that basis, the ERA considers the $28.3 million must be excluded as it is not consistent with a service provider efficiently minimising costs.

208. Western Power has included $5.1 million under the heading "electricity market review costs". It states these costs are required for the relocation of staff from East Perth to AEMO's control centre and the transfer of systems to AEMO following the transfer of system management functions from Western Power to AEMO.[42]

209. Prior to 1 July 2016, a ring-fenced business unit in Western Power was responsible for providing system management services to the WEM. The costs of this function were recovered from WEM participants and not included in Western Power's access arrangement target revenue.

210. On 1 July 2016, AEMO became legally responsible for system management functions. Between July 2016 and October 2016, AEMO and Western Power entered into an operating agreement for Western Power to exercise System Management functions on AEMO's behalf. On 31 October 2016, AEMO became responsible for system management functions and had a services agreement with Western Power to provide access to Western Power's control centre and equipment and a secondee service. This continued until AEMO completed its new control centre in the Perth CBD.

211. AEMO's allowable revenue (the costs it is permitted to charge WEM participants) included provision for the costs of transferring system management functions from Western Power to AEMO. It is unclear why Western Power is seeking funding through the access arrangement process for system management costs. Any such costs should be (and presumably were) recovered through the contract it had with AEMO. In any case, the ERA considers system management costs do not form part of the provision of network covered services and therefore should not be included in Western Power's AA4 forecast operating expenditure.

212. Western Power has included non-recurring costs of $0.5 million in 2017/18 and 2021/22 for the ERA costs it is required to pay under the *Economic Regulation Authority (Electricity Networks Access Funding) Regulations 2012*[43] related to the AA4 and AA5 review processes.

213. Western Power submits the costs included in its AA3 expenditure did not take account of additional costs incurred during an access arrangement review as the regulations took effect after the AA3 review was completed.

214. The ERA considers inclusion of these costs is consistent with a service provider efficiently minimising costs.

[42] Western Power Access Arrangement Information, p. 138.

[43] These regulations were introduced on 10 October 2012 and require Western Power to pay for the ERA's costs for its electricity access functions.

215. For the reasons set out above, the ERA does not consider Western Power's proposed non-recurrent network costs are consistent with a service provider efficiently minimising costs and requires them to be amended as set out in Table 24 below.

Table 24 Draft decision non-recurrent network costs (real $ million at June 2017)

Expenditure	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total
Proposed non-recurrent network costs	32.5	1.2	0.2	0.0	0.5	34.4
Business transformation program	(28.3)					(28.3)
Electricity market review program	(3.7)	(1.2)	(0.2)			(5.1)
Draft decision	0.5	0.0	0.0	0.0	0.5	1.0

Indirect costs

216. Indirect costs are costs that are not directly linked to the networks program but are incurred as a result of the works program. They cover project management and coordination, as well as maintaining computers and facilities for operational staff. These indirect costs are allocated to activities and expensed or capitalised in line with Western Power's cost and revenue allocation model.

217. Western Power's proposed indirect expenditure for AA4 is set out in Table 25 (below).

Table 25 AA4 proposed indirect expenditure (real $ million at June 2017)

Expenditure	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total
Recurrent network base costs	181.4	181.4	181.4	181.4	181.4	907.1
Step changes	(12.0)	(12.0)	(22.5)	(22.5)	(22.5)	(91.5)
Total recurrent indirect costs	**169.4**	**169.4**	**158.9**	**158.9**	**158.9**	**815.6**
Network growth escalation	1.6	3.2	4.7	6.4	7.9	23.7
Efficiency	(1.7)	(3.4)	(4.9)	(6.5)	(8.2)	(24.7)
Labour cost escalation	0.6	1.2	1.7	2.4	3.2	9.1
Total indirect costs	**169.9**	**170.3**	**160.5**	**161.2**	**161.8**	**823.7**

218. The recurrent network base costs are based on actual indirect costs (excluding those attributable to non-revenue cap expenditure) incurred in 2016/17.

219. Indirect costs are allocated across capital and operating expenditure based on Western Power's cost and revenue allocation model. Western Power's proposed allocation is set out in Table 26 below.

Table 26 AA4 proposed indirect expenditure allocation (real $ million at June 2017)

Expenditure	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total
Total indirect costs	**169.9**	**170.3**	**160.5**	**161.2**	**161.8**	**823.7**
Capitalised						
Transmission	29.8	35.2	36.5	38.1	36.8	176.4
Distribution	99.9	98.1	90.3	83.2	84.8	456.3
Total	129.7	133.3	126.8	121.3	121.6	632.7
Operating expenditure						
Transmission	10.0	9.1	8.2	9.7	9.7	46.7
Distribution	30.2	27.9	25.4	30.3	30.6	144.4
Total	40.2	37.0	33.6	40.0	40.3	191.1

220. Western Power states its step change reduction of $12 million is for productivity gains and reductions through a combination of system enhancements and process improvements in asset management, asset operations, finance and customer and corporate services.

221. The step change increases by $10.5 million in the last three years of AA4. This reflects a change Western Power is proposing to make to fleet expenditure. As discussed under forecast capital expenditure, Western Power is proposing to capitalise fleet costs. For reasons set out in the forecast capital expenditure section, the ERA has not accepted this. Consequently, fleet costs should remain in indirect costs, as they currently are, and the step change should be $12 million for each year of AA4.

222. Western Power has applied network growth to indirect costs. However, similar to corporate costs, the ERA considers indirect costs such as project management and coordination, and maintaining computers and facilities for operational staff, are not proportional to growth in service outputs that may result from changes in customer demand. Consequently no growth escalation should be applied to indirect costs.

223. Consistent with its proposed operating expenditure, Western Power has included a one per cent per annum productivity improvement negative adjustment in its proposed indirect costs. As noted previously, the ERA will give further consideration to the level of efficiencies in its final decision to ensure efficiencies arising from the depot rationalisation and new business driven IT systems are taken account of.

224. The ERA does not consider Western Power's proposed indirect costs are consistent with a service provider efficiently minimising costs and requires them to be amended as set out in Table 27 and Table 28 below.

Table 27 ERA draft decision indirect expenditure (real $ million at June 2017)

Expenditure	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total
Recurrent network base costs	181.4	181.4	181.4	181.4	181.4	907.1
Step changes	(12.0)	(12.0)	(12.0)	(12.0)	(12.0)	(60.0)
Total recurrent indirect costs	**169.4**	**169.4**	**169.4**	**169.4**	**169.4**	**847.1**
Network growth escalation	-	-	-	-	-	-
Efficiency	(1.7)	(3.4)	(5.0)	(6.7)	(8.3)	(25.1)
Labour cost escalation	0.6	1.1	1.8	2.5	3.2	9.3
Total indirect costs	**168.3**	**167.2**	**166.2**	**165.2**	**164.4**	**831.3**

225. The ERA's estimate of the allocation of indirect costs, after taking account of the adjustments to operating and capital expenditure set out in the draft decision, is shown in Table 28 below.

Table 28 ERA draft decision indirect expenditure allocation (real $ million at June 2017)

Expenditure	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total
Total indirect costs	**168.3**	**167.2**	**166.2**	**165.2**	**164.4**	**831.3**
Capitalised						
Transmission	23.9	29.2	30.5	29.0	27.0	139.6
Distribution	102.5	100.1	99.6	92.9	94.3	489.4
Total	126.4	129.3	130.1	121.9	121.3	629.0
Operating expenditure						
Transmission	9.9	9.0	8.6	10.2	10.2	47.9
Distribution	32.0	28.9	27.5	33.1	32.8	154.4
Total	42.0	37.9	36.1	43.3	43.0	202.3

Labour cost escalation

226. Western Power has incorporated into both its proposed operating expenditure and capital expenditure forecasts, movements in the cost of labour that will escalate at a rate above CPI.

227. The ERA considers including a labour cost escalation factor is consistent with ensuring operating expenditure only includes those costs that would be incurred by a service provider efficiently minimising costs providing the escalation factor is based on a reasonable forecast.

228. Western Power commissioned Synergies Economic Consulting to forecast a Wage Price Index (**WPI**) for the Electricity, Gas, Water and Waste Services sector (**EGWWS**) and CPI to be used in its AA4 proposal.

229. Synergies used a whole-of-economy model to develop economic forecasts for Western Australia and Australia. These economic forecasts were then used as inputs into an econometric model, which quantifies the relationship between CPI and WPI in the EGWWS industry and their key economic drivers.

230. Synergies' forecasts are set out in Table 29 below together with the latest Western Australian Treasury forecast of WPI.

Table 29 Synergies' forecast labour escalation rate

Expenditure	2017/18	2018/19	2019/20	2020/21	2021/2	Average
CPI	2.0	2.5	2.5	2.5	2.5	2.4
Nominal WPI-All Industries Western Australia	2.4	2.8	3.0	3.1	3.1	2.9
WA Treasury WPI forecast	1.5	1.75	2.75	3.0		
Nominal WPI-EGWWS Western Australia	2.9	3.3	3.5	3.6	3.7	3.4
Real WPI-EGWWS Western Australia	0.9	0.8	1.0	1.1	1.2	1.0

231. As can be seen in the table above, Synergies' forecast of WPI is higher than the Western Australian Treasury forecasts for the first few years of AA4. The Synergies report is not dated but would have been prepared before October 2017, so does not reflect current data.

232. As the labour cost escalation is a relatively small component of Western Power's proposed costs ($20 million of total operating expenditure of $1.8 billion and $9.3 million of total indirect costs of $831.3 million) and there is still some uncertainty about other elements of Western Power's proposed operating costs, the ERA has not amended the labour escalation component for the purposes of the draft decision.

233. The ERA requires Western Power to update its forecasts to reflect current data and will review the forecast in the final decision.

Total operating expenditure

234. Taking into account the consideration of the individual cost line items set out above, network growth escalation, labour cost escalation and other adjustments, the ERA considers that Western Power's forecast of operating expenditure as set out in its access arrangement information are not consistent with the requirements of section 6.40.

235. The ERA's amended operating expenditure forecasts are set out in Table 30 below.

Table 30 ERA draft decision operating expenditure (real $ million at June 2017)

Expenditure	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total
Recurrent network base costs	311.3	311.3	311.3	311.3	311.3	1,556.5
Step changes	-7.2	-7.2	-7.2	-7.2	-7.2	-36.0
Total recurrent network costs	**304.1**	**304.1**	**304.1**	**304.1**	**304.1**	**1,520.5**
Network growth escalation	0.0	0.0	0.0	0.0	0.0	0.0
Efficiency	-3.0	-6.1	-9.0	-12.0	-14.9	-45.0
Non-recurrent network costs	0.5	0.0	0.0	0.0	0.5	1.0
Expensed indirect network costs	41.8	37.6	35.7	42.6	42.2	200.0
Labour cost escalation	1.2	2.3	3.6	5.1	6.7	18.9
Total	**344.6**	**337.9**	**334.4**	**339.8**	**338.6**	**1,695.4**

236. The target revenue and price control in the proposed revisions to the access arrangement must be amended to be consistent with the operating cost forecasts set out in Table 31 below.

Table 31 ERA draft decision operating expenditure (real $ million at June 2017)

	2016/17 Actual	2017/18	2018/19	2019/20	2020/21	2021/22
Transmission	60.3	58.7	57.4	56.7	58.2	57.9
Corporate	41.3	22.1	21.8	21.7	21.5	21.6
Total transmission	105.6	80.8	79.2	78.4	79.7	79.4
Distribution	224.9	203.4	199.1	196.6	201.2	200.1
Corporate	113.0	60.4	59.7	59.3	59.0	59.0
Total distribution	351.1	263.8	258.6	255.9	260.1	259.1
Total operating expenditure	439.5	344.6	337.8	334.3	339.8	338.5

Required Amendment 5

The proposed revised access arrangement must be amended to reflect the forecast operating expenditure set out in Table 31.

Opening regulated capital base for AA4

Access Code requirements

237. The capital base is the value ascribed to the network assets used to provide covered services. Where the target revenue for the price control is set by reference to the service provider’s approved total costs, section 6.43 of the Access Code provides

for the value of capital related costs to be calculated by determining a capital base and calculating a return on the capital base and an amount of depreciation.

238. Section 6.48 of the Access Code requires that the capital base at the start of any access arrangement period, other than the first access arrangement period, be determined in a manner that is consistent with the Access Code objective. A note to section 6.48 indicates that:

> {A number of options are available in relation to the determination of the capital base at the start of an access arrangement period, including:
>
> - rolling forward the capital base from the previous access arrangement period applying benchmark indexation such as the consumer price index or an asset specific index, plus new facilities investment incurred during the previous access arrangement period, less depreciation and redundant capital etc; and
> - valuation or revaluation of the capital base using an appropriate methodology such as the Depreciated Optimised Replacement Cost or Optimised Deprival Value methodology.}

239. Although section 6.48 of the Access Code does not mandate a specific method for determining the capital base, sections 6.51A to 6.63 of the Access Code contemplate new facilities investment being added to the capital base and the value of any redundant assets being subtracted from the capital base, consistent with use of the "roll forward" method for determination of the capital base.

240. Section 6.51A of the Access Code provides that new facilities investment may be added to the capital base if it passes certain tests:

> 6.51A New facilities investment may be added to the capital base if:
>
> (a) it satisfies the new facilities investment test; or
>
> (b) the Authority otherwise approves it being adding to the capital base if:
>
> (i) it has been, or is expected to be, the subject of a contribution; and
>
> (ii) it meets the requirements of section 6.52(a); and
>
> (iii) the access arrangement contains a mechanism designed to ensure that there is no double recovery of costs as a result of the addition.

241. The new facilities investment test is set out in section 6.52 of the Access Code:

> 6.52 New facilities investment satisfies the new facilities investment test if:
>
> (a) the new facilities investment does not exceed the amount that would be invested by a service provider efficiently minimising costs, having regard, without limitation, to:
>
> (i) whether the new facility exhibits economies of scale or scope and the increments in which capacity can be added; and
>
> (ii) whether the lowest sustainable cost of providing the covered services forecast to be sold over a reasonable period may require the installation of a new facility with capacity sufficient to meet the forecast sales;
>
> and
>
> (b) one or more of the following conditions is satisfied:
>
> (i) either:
>
> A. the anticipated incremental revenue for the new facility is expected to at least recover the new facilities investment; or

B. if a modified test[44] has been approved under section 6.53 and the new facilities investment is below the test application threshold – the modified test is satisfied;

or

(ii) the new facility provides a net benefit in the covered network over a reasonable period of time that justifies the approval of higher reference tariffs; or

(iii) the new facility is necessary to maintain the safety or reliability of the covered network or its ability to provide contracted covered services.

242. Section 6.54 of the Access Code requires that the ERA, in determining whether new facilities investment satisfies the new facilities investment test, must consider whether the new facilities investment was required by a written law or a statutory instrument.

243. Sections 6.61 to 6.63 of the Access Code provide for an amount to be subtracted from the capital base in respect of redundant network assets:

Redundant capital

6.61 Subject to section 6.62, the Authority may in relation to a determination under section 6.44(a) require an amount ("redundant capital") to be removed from the capital base to the extent (if any) necessary to ensure that the network assets which have ceased to contribute in any material way to the provision of covered services are not included in the capital base.

6.62 Before requiring a removal under section 6.61, the Authority must have regard to:

(a) whether the service provider was efficiently minimising costs when it developed, constructed or acquired the network assets; and

(b) the uncertainty such a removal may cause and the effect which any such uncertainty may have on the service provider, users and applicants; and

(c) whether the cause of the network assets ceasing to contribute in any material way to the provision of covered services was the application of a written law or a statutory instrument; and

(d) whether the service provider was compelled to develop, construct or acquire the network assets:

(i) by an award by the arbitrator; or

(ii) Because of the application of a written law or a statutory instrument; and

(e) whether the depreciation of the network assets should be accelerated instead of or in addition to a redundant capital amount being removed from the capital base under section 6.61.

6.63 If the Authority requires a removal under section 6.61, then when making other determinations under this Chapter 6 the Authority may have regard to the removal.

{Examples of such other determinations include approving a weighted average cost of capital and assessing the economic life of assets.}

[44] Under the "modified test" referred to in section 6.52(b)(i)B of the Access Code, and set out in section 6.53, the ERA may approve new facilities investment below the threshold value where the ERA determines that approving the access arrangement with the modified test would be efficient and would promote the Access Code objective.

Western Power's proposal

244. Consistent with the current access arrangement, Western Power has specified capital base values separately for the transmission and distribution networks.

245. The capital base values for the transmission and distribution networks have been calculated by Western Power for the beginning of the AA4 period using a roll-forward method that involves commencing with the opening value at the beginning of the AA3 period and:

- **adding** the actual values of capital expenditure (new facilities investment) during the AA3 period that Western Power considers meet the requirements of the new facilities investment test under section 6.52 of the Access Code (excluding gifted assets and capital expenditure which is funded by customers via capital contributions);[45]
- **deducting** values of redundant assets and disposals;
- **deducting** values of depreciation as allowed for in target revenue for AA3; and
- **making an escalation** for inflation to be expressed in dollar values at June 2017 prices.

246. Western Power's calculated values of the capital base for the transmission and distribution networks at the commencement of AA4 are set out in Table 32 and Table 33 (below).

Table 32 Western Power's proposed capital base as at 30 June 2017 for the transmission network (real $ million June 2017)

	30 June 2013	30 June 2014	30 June 2015	30 June 2016	30 June 2017	Total
Opening asset value	2,816.7	2,942.8	3,177.6	3,215.4	3,156.0	2,816.7
New facilities investment	224.5	342.4	161.2	122.4	106.7	957.2
Asset disposals	(4.4)	(4.2)	(9.3)	(60.6)	(1.5)	(80.0)
Depreciation	(94.0)	(103.4)	(114.1)	(121.3)	(129.4)	(562.2)
Accelerated depreciation						
Closing asset base	2,942.8	3,177.6	3,215.4	3,156.0	3,131.8	3,131.8

[45] Capital expenditure is added to the regulated capital base on an "as incurred" basis rather than an "as commissioned" basis.

Table 33 Western Power's proposed capital base as at 30 June 2017 for the distribution network (real $ million June 2017)

	30 June 2013	30 June 2014	30 June 2015	30 June 2016	30 June 2017	Total
Opening asset value	4,248.7	4,709.9	5,144.4	5,506.4	5,752.6	4,248.7
New facilities investment	679.9	671.5	628.9	515.5	364.4	2,860.2
Asset disposals	(0.9)	(0.3)	(4.9)	(2.8)	(0.6)	(9.5)
Depreciation	(214.0)	(236.2)	(261.9)	(266.5)	(281.5)	(1,260.1)
Accelerated depreciation	(3.8)	(0.5)				(4.3)
Closing asset base	4,709.9	5,144.4	5,506.4	5,752.6	5,834.9	5,834.9

Submissions

247. Submissions on the opening capital base for AA4 are addressed below under *Considerations of the ERA*.

Considerations of the ERA

248. The ERA has considered whether Western Power's calculation of the capital base for the transmission and distribution networks is consistent with the requirements of the Access Code. These considerations are documented below in the following order:

- the general method applied in calculating the capital base;
- verification that stated capital expenditure during AA3 actually occurred; and
- determination of the capital base at the commencement of AA4, taking into account:
  - an assessment of actual capital expenditure in AA3 against the test in section 6.51A of the Access Code;
  - depreciation; and
  - redundant assets.

General method

249. As described above, Western Power has calculated the capital base for each of the transmission and distribution networks using a roll-forward method. This method was used for AA2 and AA3 and is consistent with the method described in the note to section 6.48 of the Access Code.

250. The roll-forward method is generally used by utility regulators throughout Australia and is the method mandated for electricity transmission and distribution networks in the National Electricity Market under chapters 6A and 6 of the National Electricity Rules.

251. Perth Energy submits that the opening capital base should be based on the cost of replacement rather than rolling forward previous balances and indexing by CPI. It notes assets that are redundant, or would not need to be replaced today, should have a value of zero. It also considers real deprecation should not be used:

> The revenue allowed for deprecation in real terms has the potential to create a cash "glut" within Western Power, and a situation where the value of Western Power is not diminished as its assets diminish in value over time, as the loss of value in physical assets is replaced with cash, creating value "neutrality" in real terms within Western Power.

252. Regulatory frameworks such as the Access Code provide for a return on efficient capital investments in assets that are required to provide regulated services as well as the return of the assets over their economic lives. Depreciation is an input into the calculation of regulated charges.

253. The issue raised by Perth Energy suggests Western Power is recovering more than its efficient investment. A service provider's cash flow will vary over time depending on such factors as the replacement lifecycle of assets. However, the regulatory framework ensures the service provider's target revenue only includes a regulatory depreciation allowance equal to (in real terms) the value of its initial capital investment and that assets are fully depreciated by the end of their economic lives.

254. The ERA does not consider that Perth Energy's concern is a likely outcome given the checks and balances provided in the Access Code including the ability to provide for redundant assets.

255. The ERA considers that the roll-forward method used by Western Power to establish the opening capital base for AA4 is consistent with the Access Code objective.

Verification of capital expenditure in AA3

256. In accordance with the ERA's Guidelines for Access Arrangement Information, Western Power has provided regulatory accounts that reconcile the costs of regulated activities with a set of base accounts for the business. These regulatory accounts provided a reconciliation of claimed new facilities investment with actual capital costs incurred for 2012/13 to 2016/17 as shown in Table 34 (below).

Table 34 Reconciliation of claimed new facilities investment with recorded capital costs ($ million 2017)

	Base Account	Adjustments	Regulatory Account	Claimed new facilities investment
Transmission 2012/13:				
Capital expenditure	250.4	(7.5)	242.8	242.8
Contributions	(19.6)	(0.4)	(19.2)	(19.2)
Net expenditure	230.8	(7.9)	223.6	223.6
Transmission 2013/14:				
Capital expenditure	353.9	(12.2)	341.7	341.7
Contributions	(24.4)	22.6	(1.8)	(1.8)
Net expenditure	329.5	10.4	339.9	339.9
Transmission 2014/15:				
Capital expenditure	177.9	(12.2)	165.7	165.7
Contributions	(13.6)	8.6	(5.0)	(5.0)
Net expenditure	164.3	(3.6)	160.7	160.7
Transmission 2015/16:				
Capital expenditure	128.6	(2.2)	126.4	126.4
Contributions	(7.3)	1.8	(5.5)	(5.5)
Net expenditure	121.3	(0.4)	120.9	120.9
Transmission 2016/17:				
Capital expenditure	119.1	(0.9)	118.2	118.2
Contributions	(3.0)	(12.3)	(15.3)	(15.3)
Net expenditure	116.1	(13.2)	102.9	102.9
Distribution 2012/13:				
Capital expenditure	771.4	0.0	771.4	771.4
Contributions	(109.2)	12.2	(97.0)	(97.0)
Net expenditure	662.2	12.2	674.4	674.4
Distribution 2013/14:				
Capital expenditure	774.0	0.0	774.0	774.0
Contributions	(113.8)	6.6	(107.2)	(107.2)
Net expenditure	660.2	6.6	666.8	666.8
Distribution 2014/15:				
Capital expenditure	704.6	0.0	704.6	704.6
Contributions	(93.9)	14.4	(79.5)	(79.5)
Net expenditure	610.7	14.4	625.1	625.1
Distribution 2015/16:				
Capital expenditure	606.4	0.0	606.4	606.4
Contributions	(79.1)	(13.5)	(92.6)	(92.6)
Net expenditure	527.3	(13.5)	513.8	513.8
Distribution 2016/17:				
Capital expenditure	457.9	0.0	457.9	457.9
Contributions	(98.1)	4.7	(93.4)	(93.4)
Net expenditure	359.8	4.7	364.5	364.5

257. The adjustments in the regulatory accounts include:

- removing capitalised borrowing costs that are not properly recorded as capital expenditure in the regulatory accounts; and
- restating capital contributions to be on a cash received basis.

258. The regulatory accounts are audited by the Office of the Auditor General.

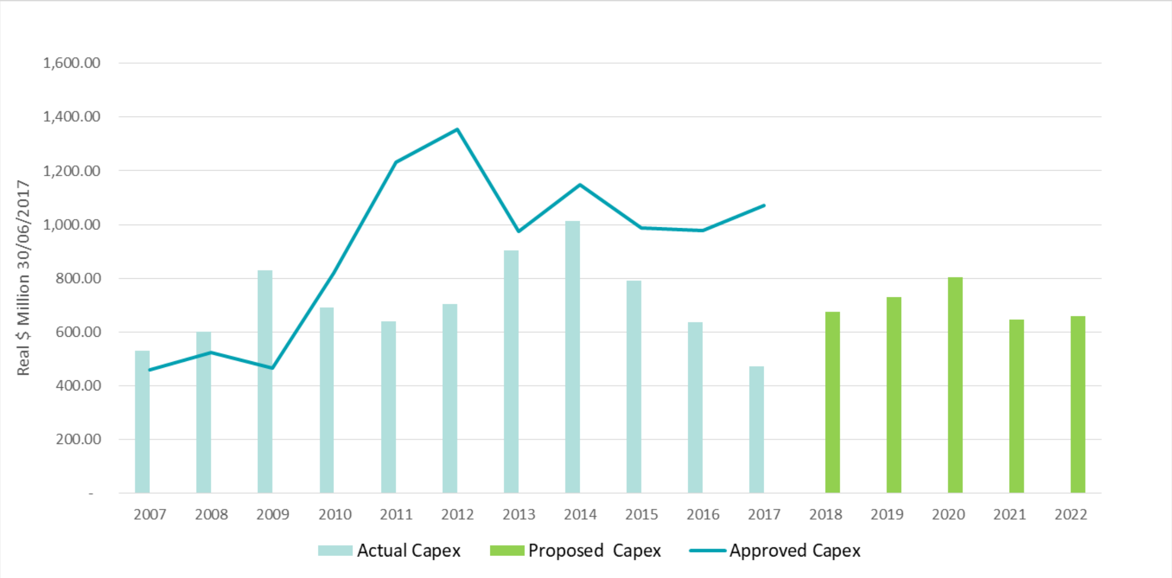
259. The ERA has considered the adjustments made in the regulatory accounts and considers them to be appropriate and consistent with previous practice.

Capital base at the commencement of AA4

Capital expenditure during AA3

260. A comparison of forecast and actual capital expenditure (net of capital contributions and gifted assets) since the network became regulated is shown in Figure 9.

Figure 9 Western Power net capital expenditure (excluding gifted assets and cash contributions)



261. Capital expenditure in AA3 was higher than in AA2 primarily due to construction expenditure on the Mid-West energy project, which made up almost 40 per cent of total AA3 transmission capex and is Western Power's largest one-off capital expenditure project in more than 25 years.[46]

262. As seen in Figure 9 (above), Western Power has spent significantly below the amount forecast for AA3. Transmission expenditure is $957.23 million or 43.1 per cent below the forecast, and distribution expenditure is $2,860.26 million or 17.7 per cent below the forecast.

[46] Geoff Brown and Associates, *Review of Western Power's Actual Capital Expenditure during AA3 (Final)*, 10 April 2018, p.7.

263. A comparison of Western Power's actual capital expenditure with approved expenditure during AA3 for transmission and distribution is set out in Table 35 and Table 36 (below).

Table 35 AA3 actual and forecast transmission capital expenditure (real $ million at June 2017)

Expenditure	Actual	Forecast	Difference
Growth	517.2	1,154.2	(637.0)
Asset replacement and renewal	186.3	184.1	2.2
Improvement in service	60.3	84.3	(24.0)
Compliance	111.9	135.6	(23.6)
Corporate	81.6	125.8	(44.2)
Total	**957.2**	**1,683.8**	**(726.6)**

Table 36 AA3 actual and forecast distribution capital expenditure (real $ million at June 2017)

Expenditure	Actual	Forecast	Difference
Growth	592.1	1,083.9	(491.8)
Asset replacement and renewal	1,613.0	1,579.8	33.3
Improvement in service	24.6	35.8	(11.2)
Compliance	460.5	567.9	(107.4)
Corporate	170.2	208.9	(38.7)
Total	**2,860.3**	**3,476.1**	**(615.8)**

264. The main reasons for differences between forecast and actual expenditure are set out as follows.

Growth

265. Growth expenditure has the largest underspend for transmission and distribution. The ERA's technical adviser, GBA, observes in its report that:

> The demand growth forecast at the time of the AA3 review has not materialised and Western Power is now putting much more focus on quantifying the risk of deferring or not proceeding with a capacity expansion project and on identifying lower cost means of mitigating that risk. This has led to 40 of 68 capacity expansion capital projects in the approved forecast not proceeding during AA3. Many projects that have proceeded have come in under budget.

266. The distribution growth capital expenditure underspend is also primarily due to the decline in the rate of demand growth which can be attributed to the sluggish state economy, a substantial increase in behind-the-meter solar generation and the impact of energy efficiency initiatives.

267. Growth expenditure is subject to the investment adjustment mechanism. This ensures the return on investment included in Western Power's AA3 target revenue

is adjusted to reflect the underspend. Target revenue is adjusted for AA4 to return this revenue to users.

Asset replacement and renewal

268. Asset replacement and renewal expenditure is broadly in line with forecasts for transmission and distribution.

269. Western Power's transmission replacement and renewal expenditure of $187 million was consistent with its forecast expenditure of $184 million for the AA3 period. However, there were differences between sub-categories due to the Muja power transformer replacement expenditure, which resulted in power transformer expenditure being 160 per cent higher than forecast and a reallocation from other sub-categories, in particular from switchboard replacement.

270. Asset replacement and renewal expenditure for the distribution network totalled $1,675.07 million for AA3, which was overspent by 3 per cent compared to forecast expenditure of $1,627.80 million. The asset replacement and renewal category included the significant expenditure projects of wood pole management and distribution conductor replacement which will be reviewed later in this decision.

271. Metering expenditure is also included in asset replacement and renewal. Synergy considers Western Power's proposed target revenue should be adjusted to remove the capital and operating expenditure approved at AA3 for Western Power's proposed smart grid that was not used for that purpose.

272. The ERA's determination of forecast capital expenditure does not set limits on specific projects Western Power must undertake. During the access arrangement period, Western Power is free to manage its expenditure as it sees fit. The only requirement is that it must meet the new facilities investment test for the expenditure to be added to the capital base.

273. Asset replacement and renewal expenditure is not subject to the investment adjustment mechanism.

Improvement in service

274. Improvement in service expenditure for transmission and distribution was underspent by $35.2 million during the AA3 period.

275. Western Power states a number of planned projects were deferred due to resources being directed to other high priority projects, including business transformation initiatives, and uncertainty about changes to the energy market rules as a result of the State Government's electricity market review initiatives. Additional cost efficiencies were achieved by changes to asset management strategies that extended asset lives into the AA4 period.

Compliance

276. Western Power has advised that the underspend in transmission compliance expenditure was a result of deferral of work in a number of the sub-categories due to reprioritisation of the works program and reallocation of resources to emergency projects.

277. Western Power also notes that substation security, a sub category of transmission compliance, had its program of works delayed during the period due to the very high

capital cost of some security fencing proposals. The delay allowed additional detailed planning of requirements for different types of fencing and the program recommenced later in the AA3 period.

278. Western Power advises that the underspend in distribution compliance expenditure was due to the completion of safety programs, including the replacement of all known streetlight switch wire and at-risk overhead customer service connections. Western Power states it has also introduced zonal treatment instead of standalone programs for some asset categories, which has resulted in a reduction of replacement volumes as only known defects in each zone were addressed. Finally, it has identified and adopted alternative risk based treatment options to address some compliance issues.

Corporate

279. Western Power states that both corporate real estate and property, and plant and equipment actual expenditure were less than forecast due to a delay in re-building a number of its depots which was forecast to take place during AA3.

Application of the new facilities investment test to actual capital expenditure

280. In order to include the actual capital expenditure incurred during AA3 in the capital base, Western Power must satisfy the ERA that the expenditure meets the new facilities investment test under section 6.52 of the Access Code.

281. The new facilities investment test of section 6.52 of the Access Code comprises two parts.

282. The first part of the new facilities investment test under section 6.52(a) of the Access Code is a test of whether the new facilities investment does not exceed the amount that would be invested by a service provider efficiently minimising costs, taking into account whether the new facility exhibits economies of scale or scope, the increments in which new capacity can be added and forecasts of sales of services. This is hereafter referred to as the “efficiency test”.

283. The second part of the new facilities investment test under section 6.52(b) of the Access Code is a test of whether the new facilities investment provides benefits that justify addition of the new facilities investment to the capital base of the covered network and the recovery of the cost of the investment from users of the network generally. The limbs of the second part of the new facilities investment test provide for new facilities investment to be added to the capital base if one or more of the following three conditions is satisfied:

- Unless a modified test has been approved under section 6.53, the anticipated incremental revenue for the new facility is expected to at least recover the new facilities investment (the “incremental revenue test”).
- The new facility provides a net benefit in the covered network over a reasonable period of time that justifies the approval of higher reference tariffs (the “net benefits test”).
- The new facility is necessary to maintain the safety or reliability of the covered network or its ability to provide contracted covered services (the “safety and reliability test”).

284. Expenditure that does not meet the new facilities investment test cannot be added to the capital base and recovered through regulated network tariffs.

285. Expenditure that does not meet the new facilities investment test needs to be financed by some other means or is otherwise unrecoverable through regulated network tariffs. This would typically be a capital contribution from the user of the network whose service application gives rise to the need for the investment.

286. The ERA sought advice from its technical consultant GBA on whether Western Power's AA3 expenditure was consistent with the requirements of the new facilities investment test.

287. GBA's review included an assessment of:

- the extent to which Western Power applied its expenditure management governance processes in the development, approval and implementation of the project or program;
- the justification for any positive or negative variance between the estimated cost at the time of project or program approval and the final project or program cost;
- the justification for project or program implementation schedule changes; and
- the scope of the forecast project compared to the scope at the time of project approval.

288. GBA's review of AA3 capital expenditure for compliance with new facilities investment test requirements was undertaken using both top-down and bottom-up analyses. GBA's top-down analysis involved comparing capital expenditure in different asset categories with both the equivalent expenditure during AA2 and the forecast expenditure for AA3, as approved by the ERA during the AA3 regulatory review.

289. GBA sought further explanation from Western Power to justify expenditure that appeared abnormally high.

290. GBA's bottom-up approach included a review of a sample of capital projects undertaken during AA3 to assess whether these projects individually met the new facility investment test requirements.

291. From its review, GBA observed the following:

> Over the course of AA3, Western Power has significantly improved the efficiency of its management of capital expenditure (capex). These improvements relate both to the selection of capex projects and to the use of capital once projects have been committed for implementation. Total capex over AA3 was 22% lower than the approved expenditure forecast at the start of the regulatory period, and despite this, Western Power has still been able to meet or exceed the service levels that it promised its stakeholders. While some capex reductions were due to forecast demand growth not materialising, we think that improved project identification and expenditure management were significant factors in delivering this result.

292. While GBA has observed improved efficiency in Western Power's management of its capital expenditure, GBA identified a number of projects in full or part that it considered did not meet the new facility investment test requirements. These projects are considered further below.

Summary of compliance with the new facilities investment test

293. The ERA has reviewed the information provided by Western Power, submissions received from stakeholders and the advice received from its technical consultant.

294. Synergy's submission raises concerns that Western Power has not adequately justified that all expenditure during AA3 met the new facilities investment test noting:

> WP's internal processes for assessing new facilities investment (see AAI Attachment 5.1 at sections 3.2 to 3.4) do not include any requirement to identify various options for dealing with an identified risk/requirement and to assess (e.g. via cost-benefit analysis) which option offers the most efficient way to manage the identified risk/requirement. If WP does not properly identify and assess alternative options, there is a risk a sub-optimal option will be adopted, which is unlikely to satisfy the goal of efficiently minimising costs.

295. Based on the information submitted by Western Power and the advice from its technical consultant, the ERA considers Western Power's internal processes during AA3 were in most instances adequate and that Western Power's expenditure met the new facilities investment test.

296. However, the ERA has identified several projects that do not meet the new facilities investment test. Reasons for this are set out below. In summary, the expenditure identified as not meeting the new facilities investment test is made up of:

- Transmission:
  - $2.1 million capital expenditure for the undergrounding of the Manning-Osborne Park 132 kV transmission line in Ewen Street, Woodlands; and
  - $0.7 million for a transmission capital contribution for the Medical Centre substation.
- Distribution:
  - $7.1 million provision for the future decommissioning and site restoration of the Shenton Park, Herdsman's Parade, British Petroleum and Durlacher substations;
  - $1.8 million distribution capital expenditure for the Perenjori battery storage system project; and
  - $28.9 million distribution expenditure for wood poles which should have been included in operating expenditure.
- Corporate:
  - $2.1 million for a corporate provision for the removal of asbestos from Western Power's offices; and
  - $6.7 million corporate costs capitalised for intellectual property completed in preparation for a transition to the national regulatory regime.

297. In addition, the ERA has concerns that expenditure on the head office refurbishment (Project Vista) and wood pole program may not be consistent with the new facilities investment test and will give further consideration to this in the final decision.

298. The amended new facilities investment is set out in Table 37 below, followed by a discussion of each item.

Table 37 Amounts of new facilities investment in the AA3 period to be added to the capital base (real $ million June 2017)

	2012/13	2013/14	2014/15	2015/16	2016/17	Total
Total transmission new facilities investment claimed by Western Power	**224.5**	**342.4**	**161.2**	**122.4**	**106.7**	**957.2**
Manning-Osborne Park 132kV line		(0.1)	(1.9)			(2.0)
Medical centre substation capital contribution	(0.7)					(0.7)
Asbestos removal provision	(0.7)					(0.7)
Capitalisation of intellectual property for work completed in preparation for a transition to the national regime (share)	(2.3)					(2.3)
Value to be added to the transmission capital base	**220.8**	**342.3**	**159.3**	**122.4**	**106.7**	**951.5**
Total distribution new facilities investment claimed by Western Power	**679.9**	**671.5**	**628.9**	**515.5**	**364.4**	**2,860.2**
Wood poles expenditure included in operating expenditure			(10.5)	(12.9)	(5.5)	(28.9)
Perenjori battery storage system				(0.3)	(1.5)	(1.8)
Future decommissioning costs for various substations	(7.1)					(7.1)
Asbestos removal provision	(1.4)					(1.4)
Capitalisation of intellectual property for work completed in preparation for a transition to the national regime (share)	(4.4)					(4.4)
Value to be added to the distribution capital base	**667.0**	**671.5**	**618.4**	**502.3**	**357.4**	**2,816.6**

Manning – Osborne Park transmission line undergrounding

299. Following inquiries from the ERA and its technical consultant regarding this project, Western Power has advised that it considers the expenditure does not meet the new facilities investment test and the expenditure had been included in the AA4 submission due to an oversight.

Medical centre substation

300. Western Power has advised that it received a $0.7 million bring-forward customer contribution for this project. As capital contributions do not meet the new facilities investment test requirements to be included into the regulatory capital base, $0.7 million has been excluded from the regulatory capital base for AA4.

Wood poles reclassification of expenditure

301. This is considered below under wood pole expenditure.

Perenjori battery energy storage system

302. During the AA3 period, Western Power installed a battery energy storage system to improve reliability of supply to users in Perenjori, supplied by the Morawa feeder supplied from the Three Springs zone substation.

303. Western Power's business case identified that some of the expenditure did not meet the new facilities investment test, however, this was overlooked when preparing the AA4 submission.

304. Western Power has advised the ERA that $1.78 million of the total expenditure of $3.83 million does not meet the new facilities investment test and should not be included in the opening capital base.

Decommissioning provisions

305. Western Power has included $7.13 million in its AA3 transmission capacity expenditure that has been characterised as decommissioning provisions. Western Power has described these costs as:

> … capitalised decommissioning costs for assets meeting the asset recognition criteria stated in Western Power's capital expenditure and depreciation standard; and in compliance with paragraph 16c of Australian accounting standard AASB116, Property Plant and Equipment.

306. Western Power has justified its treatment as follows:

- Paragraph 16c of the Australian Accounting Standards Board (**AASB**) standard 116 provides that the cost of an item of property should include the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located.
- AASB 137-Provisions, Contingent Liabilities and Contingent Assets provides that a provision shall be recognised where a legal or constructive obligation has arisen from a past event that will more likely result in an outflow of benefits, and the amount can be measured reliably. Western Power's legal obligation towards land rehabilitation arise from the completion and/or removal of an asset (past event) and it is highly probable that this obligation will result in the outflow of benefits and that the amount can be measured reliably.

307. Paragraph 16c of AASB would not normally apply to the construction of new transmission and distribution assets on a greenfield site since it is generally assumed that at the end of an asset's economic life an asset will need to be replaced and the cost of decommissioning and removing the asset would be included in the cost of installing its replacement. Western Power states it has recognised this and has only capitalised decommissioning provisions for sites no longer required.

308. Section 6.49 of the Access Code states that the RAB must not include *forecast* new facilities investment. As a provision is a forecast, the ERA considers the decommissioning provisions are not consistent with the requirements of section 6.49 of the Access Code. Consequently, this amount must be removed from the opening capital base for AA4.

Asbestos provision

309. Western Power has included a provision for $2.64 million for the removal of asbestos from across its network including from its Murray Street offices, depots and substations.

310. Western Power advised the provision was raised for all identified remedial work necessary for asbestos removal as per accounting standard requirements and of the initial $2.6 million provision, $546,000 was for works completed in the AA3 period.

311. As noted above, section 6.49 of the Access Code does not permit forecast expenditure to be included in the capital asset value. Consequently, the remaining value of the provision ($2.1 million being $2.6 million less $0.5 million) must be removed from the opening capital base.

Intellectual property

312. Western Power has proposed to include $6.70 million for intellectual property for work completed in preparation for transition to the national electricity network regulation regime. Western Power does not suggest that the expenditure meets the new facilities investment test requirements but that it is covered under the unforeseen event adjustments mechanism.

313. GBA has advised:

> We do not see any justification for including any expenditure related to possible transition to the NER in the AA4 opening RAB and note that:
>
> - intellectual property is, by definition, an intangible asset and it is not usual to include intangible assets in the regulatory asset base of an electricity lines business;
> - the state government has indicated that it has no plans for Western Power to be regulated by the Australian Energy Regulator under the NER;
>
> Furthermore, the code defines the capital base (or RAB) as the value of network assets used to provide covered services. Network assets are defined as:
>
> - the apparatus, equipment, plant, and buildings used to provide or in connection with providing covered services on the network, which assets are either connection assets or shared assets.
>
> This definition would appear to preclude intangible assets being included in the RAB.

314. The ERA considers that an intangible asset of the nature Western Power has described would not fall within the definition of network assets.

315. In any case, as the expenditure was not required to meet an obligation and has not delivered any value to customers, it does not meet the requirements of section 6.52(b) of the Access Code. Consequently, the ERA does not consider the expenditure can be included in the opening capital base.

Project Vista

316. The ERA's technical consultant identified Project Vista as not meeting the new facilities investment test. GBA noted:

> This was a legacy project commenced in 2008 and inherited by Western Power's current Board and management.

317. GBA considers project inefficiencies arose from the high quality of the internal fitout and a loss of control of project costs during implementation. GBA considers some of these inefficiencies could be removed by not allowing the full $10 million capital expenditure incurred during AA3. GBA has not been able to recommend the quantity of any such reduction.

318. The project stretched over more than seven years and three access arrangement periods. The ERA considers there have been inefficiencies in project management, during that period, particularly between October 2008 and November 2010 when cost variations of $13.4 million, 20 per cent of the original cost, were incurred.

319. The ERA has in the past identified deficiencies in Western Power's design and governance of capital projects that had led to inefficiencies. As a consequence, the ERA excluded $261 million of capital expenditure incurred in AA1 from Western Power's regulated capital base.[47]

320. As noted by GBA, Project Vista has been inherited by Western Power's current Board and management. The ERA considers it would be difficult to attribute inefficiencies directly to the expenditure incurred during the AA3 period as it was affected by project management during previous periods.

321. At this stage, the ERA does not propose to require Western Power to remove any Project Vista expenditure from the opening capital base but will give further consideration to this in its final decision.

Distribution wood pole program

322. At the time of submitting its AA3 proposal, Western Power was subject to EnergySafety Order 01-2009 for its distribution wood pole network. A requirement of the Order was that Western Power replace or reinforce unsupported rural wood poles that did not meet specified wind speed design criteria by 31 December 2015.

323. At the time of the AA3 submission Western Power estimated that this would involve the replacement of 140,000 wooden poles and the reinforcement of up to 110,000 poles. Western Power considered this volume of replacements and reinforcements was undeliverable, and based its AA3 wood pole replacement forecast on the replacement of 100,000 poles and reinforcement of a further 64,000 poles by the end of AA3.

324. In its further final decision for the AA3 period, the ERA accepted Western Power's proposal on the basis that, while it would not fully meet the requirements of the Order, it was the most that could be expected to be achieved given financial and deliverability constraints.

325. The ERA's decision also included wood pole replacements in the access arrangement's investment adjustment mechanism, which meant that if Western Power was able to treat more poles than forecast, the additional expenditure would be funded provided it met the new facility investment test requirements.

[47] Economic Regulation Authority, *Draft Decision on Proposed Revisions to the Access Arrangement for the Western Power Network*, 29 March 2012, paragraphs 18 and 45.

326. GBA indicates that at the time of submitting its AA3 proposal, Western Power faced three problems that constrained its ability to fully comply with the EnergySafety Order:

- Western Power had not found a method that would reliably assess the condition of its hardwood poles and, partly because of this, did not have a management plan in place that would allow it to identify individual hardwood poles that required replacement in accordance with the Order. Western Power's solution was to replace or reinforce all hardwood poles in rural areas that had been in service for 25 years or longer.
- Western Power did not have the delivery capacity to replace or reinforce the number of poles that would need to be replaced in accordance with its deterministic replacement policy. There was only one pole reinforcement contractor available that was acceptable to Western Power and this contractor had capacity limitations.
- Western Power considered the total cost of complying with the Order was prohibitive, given the number of poles believed to require treatment under its deterministic treatment policy.

327. In implementing its wood pole replacement program, the Western Power board approved two business cases for the replacements and reinforcements program. The first business case in May 2012 covered the first two years of AA3 and the second business case in March 2014 covered the final three years of AA3.

328. During the first half of 2016, EnergySafety reviewed Western Power's compliance with its order and on 10 June 2016 issued a report that found that:

> …the principal public safety objectives set out in the Order have been achieved. The Director of Energy Safety is therefore satisfied that Western Power has complied with the Order as at 31 December 2015.

329. The review found that:

- Western Power had replaced or reinforced to a safe standard all hardwood poles on its rural network by 31 December 2015 and in doing so met the intent of the order. It made this determination using a statistically valid sampling process; and
- Western Power had improved its wood pole management plan to the point where EnergySafety considered it to be an acceptable basis for managing the safety risks of its wood pole fleet going forward.

330. Synergy submits that although the work undertaken by Western Power on wood poles may have been required to meet the EnergySafety Order, this does not necessarily mean it meets the new facilities investment test as Western Power must also demonstrate that the works it implemented were the best way to efficiently minimise costs.

331. Western Power replaced and reinforced fewer poles than forecast for the total AA3 period. However, during the first few years of AA3, the number of poles replaced and reinforced, and corresponding expenditure, was higher than forecast.

332. The ERA's technical consultant advises:

> … expenditure was significantly higher in the first years of AA3 because poles were replaced that in hindsight were still in satisfactory condition and were not overloaded. At the time Western Power was under intense pressure from both EnergySafety and

> the Government to reduce the public safety risk of its wood pole fleet and to comply with the requirements of the EnergySafety Order. It now uses a much improved wood pole management strategy, which we understand analyses the need to replace or reinforce each individual pole using highly granular data that has been developed over several years and required a significant investment in research and development. It was not available to Western Power until the middle of the AA3 period.
>
> Over the whole of AA3, Western Power has replaced 15 per cent less poles and reinforced 29 per cent less poles than forecast at the beginning of the period. Notwithstanding this, EnergySafety has confirmed that Western Power has fully complied with the intent of its 2009 Order and has also endorsed its current wood pole management strategy as an appropriate basis for managing its wood pole fleet going forward.

333. The ERA has also considered the costs of the program. Total actual costs were 5.9 per cent less than forecast. The reduced expenditure was a combination of lower than forecast volumes and higher than forecast unit rates.

334. As noted above, Western Power undertook 15.6 per cent less replacements and 28.7 per cent less reinforcements compared to the forecasted volumes for the AA3 period. The unit rate for replacements was 31.7 per cent above forecast while reinforcements were 10.2 per cent below forecast.

335. Western Power provided reasons as to why the unit costs for replacements were above the forecasted amounts. The reasons included:

- the need for greater utilisation of external contractors with higher unit rates to ramp up delivery to meet the Order;
- a higher proportion of complex poles being treated than forecast based on historical rates (for example, it costs more to replace a transformer pole than a pole that supports only a phase and earth conductor);
- more accurate recording of work types (now four different types of pole types and their corresponding costs can be tracked, rather than a single average); and
- a change to the accounting treatment of unplanned pole replacements which increased the proportion of the replacement cost capitalised from around 40 per cent to 100 per cent.

336. The ERA requested additional information from Western Power on the change in accounting treatment for unplanned pole replacements. Western Power advised that, prior to AA3, data quality issues meant obtaining accurate and reliable information to perform asset disposals was not possible. As a result of these data issues, the method previously in place estimated the net cost of the asset by using a percentage of total cost based on the estimated life of the asset.

337. Western Power adopted this method because the true cost of the unplanned replacement could not be correctly accounted for, nor could the specific details of the asset being replaced. To avoid over-inflating the value of fixed assets, Western Power only capitalised a portion of each job, with the remainder left as operating expenditure and no disposal recorded.

338. From November 2013, improvements in data quality enabled Western Power to calculate asset disposals and capitalise 100 per cent of the replacement cost.

339. The method in place prior to November 2013 resulted in 40 per cent of the costs being allocated to capital expenditure and 60 per cent of the costs allocated to

operating expenditure. The AA3 capital and operating expenditure forecasts would have been prepared on the basis of this 40/60 split.

340. As this method changed during the period and Western Power has from November 2013 capitalised the remaining 60 per cent of the costs of unplanned wood pole replacements that was previously regarded as operating expenditure, if Western Power were to roll this expenditure into the capital base it would effectively be double counting the costs as it had received the 60 per cent as an operating expenditure allowance for AA3.

341. From the additional information provided by Western Power, the total amount for the years 2014/15, 2015/16 and 2016/17 for unplanned pole replacements was $48.2 million. Sixty per cent of this expenditure equates to $28.9 million that is required to be removed from the capital base to avoid double counting.

342. The ERA recognises a combination of circumstances may, with the benefit of hindsight, have led to unnecessary pole replacements or reinforcements during the first few years of AA3. However, as Western Power did not have its improved wood pole management strategy ready in time to meet EnergySafety's standards, it appears the only option available to Western Power during the first few years of AA3 was the age-based criteria that it used.

343. Making a retrospective adjustment would be both difficult, in terms of estimating the number of poles that would not have needed to be replaced based on Western Power's current risk based approach, and should not be based on hindsight.

344. The ERA's technical consultant's review of the program has not identified inefficiencies in the delivery of the program. Although the unit costs were higher than forecast, Western Power has been able to provide reasons for those differences.

345. As set out above, the ERA has required $28.9 million to be excluded from the opening capital base to be consistent with the AA3 decision which assumed such expenditure was included in operating expenditure.

346. The ERA will give further consideration to the efficiency of the remaining expenditure in its final decision.

Redundant assets and disposals

347. During the AA2 review, the ERA determined that the value of any revenues from the disposal of assets should be added to the value of redundant assets applied in the calculation of the capital base.

348. Western Power has followed this process in its calculation of the opening capital base for the AA4 period by deducting asset disposals based on the gross asset sales proceeds.

349. Submissions from Alinta, Bluewaters, Emergent Energy and ERM Power suggest consideration should be given to whether declines in peak demand could result in under-utilisation of assets and whether some of the existing asset base should be written down as a consequence of this.

350. Section 6.62 of the Access Code provides for the regulator to remove amounts from the capital base to the extent necessary to ensure that network assets which have

ceased to contribute in any material way to the provision of covered services are not included in the capital base. Before doing so the Access Code requires that the ERA must have regard to:[48]

(a) whether the service provider was efficiently minimising costs when it developed, constructed or acquired the network assets; and

(b) the uncertainty such a removal may cause and the effect which any such uncertainty may have on the service provider, users and applicants; and

(c) whether the cause of the network assets ceasing to contribute in any material way to the provision of covered services was the application of a written law or a statutory instrument; and

(d) whether the service provider was compelled to develop, construct or acquire the network assets:

(i) by an award by the arbitrator; or

(ii) because of the application of a written law or a statutory instrument; and

(e) whether the depreciation of the network assets should be accelerated instead of or in addition to a redundant capital amount being removed from the capital base under section 6.61.

351. The ERA considers it is not clear that peak demand has declined to the extent that it is possible to identify assets that no longer contribute to providing covered services, even though Western Power's forecasts suggest peak demand is expected to be flat to slightly declining over the AA4 period.

352. The Access Code and other regulatory frameworks in Australia and other jurisdictions encourage service providers to undertake efficient investment by providing a return of their investment (i.e. depreciation) in the regulated revenue stream and for the investment to be recovered over the economic life of the assets. As required under section 6.62 of the Access Code, identifying and removing redundant assets requires careful consideration of a range of factors.

353. The ERA intends to monitor asset utilisation during AA4 to inform its decision at the next access arrangement review.

Depreciation

354. The current access arrangement specifies the depreciation of the opening capital base for AA4 is the forecast depreciation included in the AA3 target revenue.

355. The ERA is satisfied that the depreciation values, including accelerated depreciation values, used in Western Power's calculation of the opening capital base for AA4 are consistent with the depreciation values included in the AA3 target revenue.

Capital base at the commencement of AA4

356. The ERA has calculated revised values of the capital base for the transmission and distribution networks as at 30 June 2017 in accordance with the ERA's determination under this draft decision on the value of new facilities investment in the AA3 period that may be added to the capital base under section 6.51A of the Access Code.

---

[48] *Electricity Networks Access Code 2004* section 6.62.

357. The ERA’s calculation of the revised capital base values are shown in Table 38 and Table 39 below.

Table 38 Draft decision capital base as at 30 June 2017 for the transmission network (real $ million June 2017)

	30 June 2013	30 June 2014	30 June 2015	30 June 2016	30 June 2017	Total
Opening asset value	2,816.7	2,939.1	3,173.7	3,209.7	3,150.2	2,816.7
New facilities investment	220.8	342.3	159.3	122.4	106.7	951.5
Asset disposals	(4.4)	(4.2)	(9.3)	(60.6)	(1.5)	(80.0)
Depreciation	(94.0)	(103.4)	(114.1)	(121.3)	(129.4)	(562.2)
Accelerated depreciation						
Closing asset base	2,939.1	3,173.7	3,209.7	3,150.2	3,126.0	3,126.0

Table 39 Draft decision capital base as at 30 June 2017 for the distribution network (real $ million June 2017)

	30 June 2013	30 June 2014	30 June 2015	30 June 2016	30 June 2017	Total
Opening asset value	4,248.7	4,496.9	5,131.4	5,483.0	5,716.0	4,248.7
New facilities investment	667.0	671.5	618.4	502.3	357.4	2,816.6
Asset disposals	(0.9)	(0.3)	(4.9)	(2.8)	(0.6)	(9.5)
Depreciation	(214.1)	(236.2)	(261.9)	(266.5)	(281.5)	(1,260.2)
Accelerated depreciation	(3.8)	(0.5)				(4.3)
Closing asset base	4,696.9	5,131.4	5,483.0	5,716.0	5,791.3	5,791.3

Forecast regulated capital base for AA4

Access Code requirements

358. Section 6.51 of the Access Code provides for the target revenue for an access arrangement period to include forecast capital costs that are reasonably expected to satisfy the new facilities investment test.

Western Power’s proposal

359. For the purposes of determining target revenue for the AA4 period, Western Power has forecast values of the capital base for the transmission and distribution networks at the commencement of each year.

360. Table 40 and Table 41 (below) set out Western Power’s proposed forecast capital base for AA4.

Table 40 Western Power's forecast transmission capital base (real $ million June 2017)

	2017/18	2018/19	2019/20	2020/21	2021/22
Opening asset value	3,131.8	3,183.9	3,277.4	3,396.1	3,473.8
New facilities investment	165.8	210.7	245.6	216.0	212.7
Depreciation	113.7	117.2	126.8	138.2	144.3
Closing asset base	3,183.9	3,277.4	3,396.1	3,473.8	3,542.2

Table 41 Western Power's forecast distribution capital base (real $ million June 2017)

	2017/18	2018/19	2019/20	2020/21	2021/22
Opening asset value	5,834.9	6,080.8	6,320.0	6,582.2	6,715.3
New facilities investment	509.5	520.0	557.4	431.3	445.7
Depreciation	263.6	280.8	295.2	298.3	289.1
Closing asset base	6,080.8	6,320.0	6,582.2	6,715.3	6,871.8

361. Table 42, Table 43 and Table 44 (below) set out Western Power's proposed forecast capital expenditure by regulatory category for AA4. The tables include direct costs, indirect costs and labour escalation. They exclude gifted assets and cash contributions.

362. Corporate capital expenditure is allocated across transmission and distribution with 30 per cent allocated to transmission and 70 per cent allocated to distribution. A summary of total corporate capital expenditure is shown in Table 44.

Table 42 AA4 proposed transmission network capital expenditure (real $ million at June 2017) excluding gifted assets and cash contributions

	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total	AA3 Actual	AA3 F/cast
Growth	40.6	40.9	55.4	82.4	72.1	291.4	517.2	1,154.2
Asset replacement and renewal	42.5	70.5	56.9	57.9	68.5	296.2	186.3	184.1
Improvement in service	14.0	23.6	27.0	24.7	19.1	108.4	60.3	84.3
Compliance	39.4	40.4	40.5	33.2	33.3	186.9	111.9	135.6
Corporate	29.2	35.2	65.8	17.8	19.7	167.6	81.6	125.8
Total added to the capital base	**165.8**	**210.7**	**245.6**	**216.0**	**212.7**	**1,050.6**	**957.2**	**1,683.8**

Table 43 AA4 proposed distribution network capital expenditure (real $ million at June 2017) excluding gifted assets and cash contributions

	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total	AA3 Actual	AA3 F/cast
Growth	104.2	101.2	92.5	93.4	98.9	490.3	592.1	1,083.9
Asset replacement and renewal	279.2	255.9	248.7	243.3	250.2	1,277.3	1,613.0	1,579.8
Improvement in service	27.9	34.7	18.9	16.8	15.0	113.3	24.6	35.8
Compliance	27.7	43.2	41.7	34.2	34.4	181.3	460.5	567.9
Corporate	70.6	85.0	155.3	43.4	47.1	401.4	170.2	208.9
Total added to the capital base	**509.5**	**520.0**	**557.4**	**431.3**	**445.7**	**2,463.9**	**2,860.3**	**3,476.1**

Table 44 AA4 proposed corporate capital expenditure (real $ million at June 2017) excluding gifted assets and cash contributions

	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total	AA3 Actual	AA3 F/cast
Total corporate expenditure	99.8	120.2	221.1	61.2	66.8	569.0	251.8	334.7
Transmission	29.2	35.2	65.8	17.8	19.7	167.6	81.6	125.8
Distribution	70.6	85.0	155.3	43.4	47.1	401.4	170.2	208.9

Submissions

363. Matters raised in submissions relevant to the determination of the AA4 forecast capital base include:

- forecasts for the capital asset base to continue increasing, despite flat or declining demand;
- the importance of ensuring only efficient investment is approved;
- whether moving to constrained network access should reduce the need for future investment, and the importance of ensuring investment prior to implementation takes account of it being introduced;
- ensuring Western Power has considered all non-network alternatives in its investment plans, including new technologies that will reduce demand or allow demand to be managed more effectively to minimise long term capital costs; and
- the effects of changing technologies and energy markets[49] on the network and the need to manage the effects of those changes on the network to maintain security and supply reliability.

[49] Including battery storage systems, micro-grids, distributed generation systems, electric vehicles and the retirement of fossil fuelled generators.

364. Stakeholder views on Western Power's proposed advanced metering program were mixed. There was general recognition of the benefits advanced metering can provide, but concerns about:

- a lack of information and consultation on the proposal;
- whether the proposal was sufficiently robust to support the investment;
- whether the roll out should be undertaken by Western Power or a contestable approach should be taken (as is the case in the national electricity market); and
- whether Western Power would actually proceed with the program given that it did not undertake the smart grid investment proposed in AA3.

Considerations of the ERA

365. Similar to the determination of the opening capital base, the ERA has considered whether Western Power's proposed forecast capital base is consistent with the requirements of the Access Code. The ERA's considerations include:

- the general method applied in calculating the capital base;
- an assessment of forecast capital expenditure for AA4 against the test in section 6.51A of the Access Code; and
- depreciation calculations and asset lives.

366. Each of these is considered below.

General method

367. Consistent with the method used to establish the opening capital base for AA4, Western Power has calculated the capital base for each of the transmission and distribution networks using a roll-forward method, applied in a manner consistent with the method contemplated in the note to section 6.48 of the Access Code.

368. The roll-forward method is favoured by utility regulators throughout Australia and is mandated for electricity transmission and distribution networks of the National Electricity Market under chapters 6A and 6 of the National Electricity Rules.

369. The ERA is satisfied this method is consistent with the Access Code objective.

Forecast capital base for AA4

Application of the section 6.51A test to forecast new facilities investment

370. Section 6.51 of the Access Code provides for the target revenue for an access arrangement period to include capital costs calculated for an amount of forecast new facilities investment that is reasonably expected to satisfy the test in section 6.51A of the Access Code.

371. Western Power has determined amounts of forecast capital expenditure to be notionally added to the capital base by deriving a total amount of forecast capital expenditure and subtracting a forecast of capital contributions.

372. The approach taken by the ERA to assess whether the forecast capital expenditure satisfies the new facilities investment test has been to:

- assess whether the forecast capital expenditure is reasonably expected to satisfy the efficiency test under section 6.52(a) of the Access Code; and
- assess whether Western Power has made a reasonable forecast of the amount of capital expenditure that will satisfy the new facilities investment in its entirety.

373. The ERA's consultant GHD provided advice to assist the ERA in its review. GHD's review included an assessment of Western Power's governance processes, asset management strategies and forecasts.

374. GHD advised that Western Power's governance policies and processes and procedures provide a good basis for governance of investment decisions and project delivery, and that Western Power addresses the principles of good governance well. GHD also found that the application of the policies, processes and procedures was in accordance with the relevant standards and guidelines.

375. GHD advised that Western Power has invested in various parts of the business to improve weaknesses identified during the AA3 governance review. These included poor data on asset condition and the lack of a quantitative risk assessment tool. Western Power has addressed both these issues. Investment in Western Power's asset management framework has led to strengthened asset condition data and Western Power has developed a network risk management tool.

376. GHD's review of Western Power's asset management strategies included an assessment of:

- the level of maturity and effective integration of asset management practices in the business;
- the effectiveness of how data, information and business processes lead to sound decision making to balance risk, service levels and costs and how well these decisions align with the business objectives and customer needs; and
- the asset strategies for capital renewal and compliance projects and maintenance expenditure requirements which underpin the 10-year forecast capital and operating budgets and the revenue requirements for the AA4 period.

377. GHD concluded that the level of maturity and effective integration of asset management practices in the business significantly strengthened over the AA3 period and that Western Power would now be considered as having an industry-leading asset management system in place.

378. GHD assessed the information and business process tools and systems developed for asset management as being effective in improving asset strategies and managing risks for network assets. It noted that Western Power recognised improvement requirements in the accuracy of the data, but there were also improvements that could be made in the application of the tools to the different classes of assets.

379. GHD considers the asset management practices adopted by Western Power to be industry-leading and that asset strategies are being improved to target the higher-risk segments of each asset class. It considers the challenge for Western Power is to improve data accuracy and consistency and tools and practices to enable it to efficiently analyse and revise strategies to inform asset management decisions.

380. GHD's assessment is consistent with the results of *Western Power's 2017 Asset Management System Review* undertaken by CutlerMerz. The review findings included:

- the maturity of Western Power's Asset Management System has strengthened significantly over the review period, particularly in the area of defining strategy and objectives and enhancing the sophistication of approaches and supporting tools;
- there are comprehensive and rigorous processes in place for business as usual planning, resulting in effective asset management plans;
- operational activities and programme delivery is systematically managed and monitored to enable desired outcomes to be achieved; and
- Western Power's approach to risk based asset management can be considered effective, particularly as applied to asset maintenance and renewal.

381. Based on an assessment of the information provided by Western Power and GHD, the ERA considers Western Power's governance processes and asset management strategies are generally adequate to ensure its capital expenditure forecasts can reasonably be expected to satisfy the new facilities investment test.

382. However, GHD's review of the capital expenditure forecasts identified areas of expenditure that are not reasonably expected to satisfy the new facilities investment test.

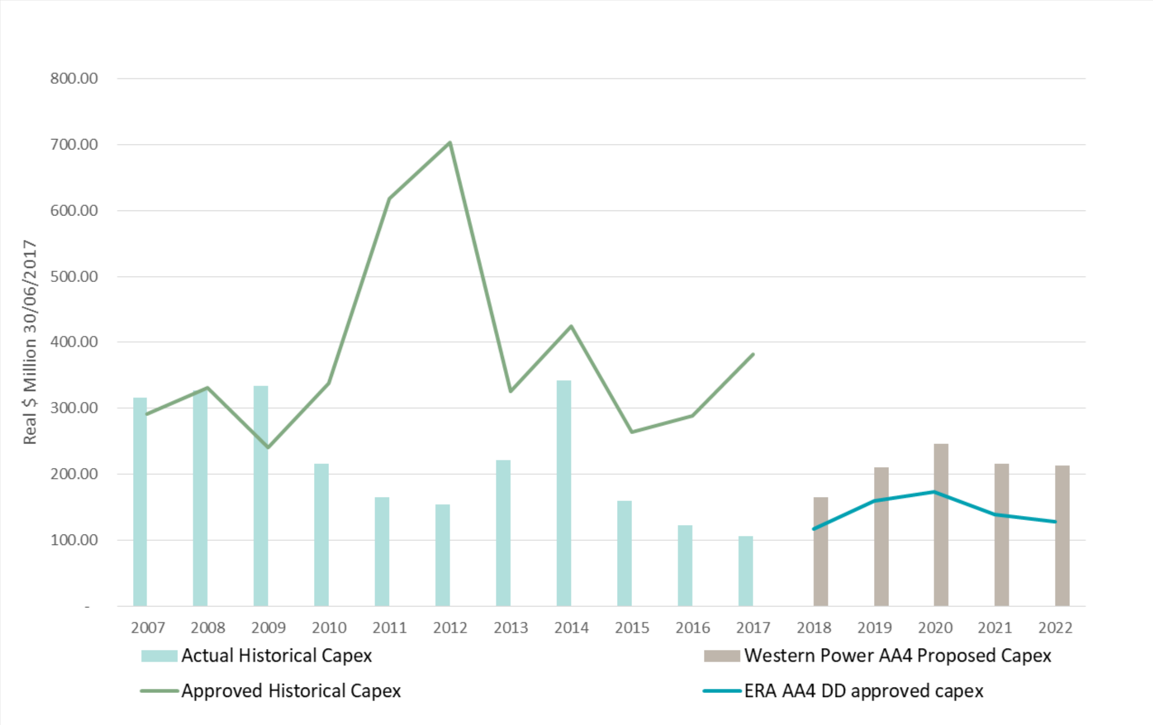
383. In making its assessment of the level of expenditure for AA4 likely to meet the requirements of the new facilities investment test, the ERA has considered the level of historical expenditure, information provided by Western Power and advice from GHD.

384. The ERA has determined some of Western Power's forecast expenditure is not likely to satisfy the new facilities investment test. In addition, in some areas further evidence is needed to demonstrate the forecast expenditure is likely to satisfy the new facilities investment test. The ERA has addressed the forecast capital expenditure for transmission, distribution and corporate services separately below.

Transmission forecast capital expenditure

385. Figure 10 below compares actual and forecast transmission capital expenditure since AA1 and the ERA's draft decision for AA4.

Figure 10 Comparison of historical and forecast transmission net capital expenditure



386. As can be seen above, transmission expenditure has varied from year to year and, since AA1, has been less than forecast. These differences are primarily due to peak demand increases being less than forecast and the deferral or cancellation of planned investment. The higher levels of actual expenditure in 2012/13 to 2014/15 are due to the Mid-West energy project which incurred around $400 million over that period.

387. A comparison of expenditure by regulatory category, as set out in Table 45 below, shows the largest difference between forecast and actual expenditure for AA3 was in the growth category. The underspend of $637 million makes up 88 percent of the total underspend.

Table 45 Comparison of transmission network capital expenditure forecasts and actuals (real $ million at June 2017) excluding gifted assets and cash contributions

	AA4 Draft Decision	AA4 Western Power Proposal	AA3 Actual	AA3 Forecast	AA3 Actual less AA3 Forecast
Growth	196.8	291.4	517.2	1,154.2	(637.0)
Asset replacement and renewal	161.8	296.2	186.3	184.1	2.2
Improvement in service	110.7	108.4	60.3	84.3	(24.0)
Compliance	117.4	186.9	111.9	135.6	(23.7)
Corporate	132.9	167.6	81.6	125.8	(44.2)
Total	**719.5**	**1,050.6**	**957.2**	**1,683.8**	**(726.6)**

388. Western Power's proposal for AA4 is greater than actual expenditure in AA3 due to:

- an increase in expenditure for the replacement of switchboards, static VAR compensators and protection systems;
- replacement of SCADA and communications network assets; and
- a program to increase substation security.

389. Corporate capital expenditure is discussed separately below.

390. The ERA's draft decision amendments include:

- the removal of growth projects that are unlikely to proceed in AA4 (CBD substation and Picton-Busselton 132 kV line);
- reductions in replacement expenditure for power transformers, protection, switchboards, transmission primary plant and static VAR compensators; and
- reducing the proposed increase in substation security expenditure.

391. Capital expenditure (as shown in the tables above) includes direct costs, indirect costs and labour escalation. The considerations of specific elements of Western Power's forecast capital expenditure examined below are based on direct costs.

392. Western Power's forecast transmission direct costs capital expenditure for AA4 is provided in Table 46 below.

Table 46 AA4 proposed transmission network capital expenditure direct costs (real $ million at June 2017) excluding gifted assets and cash contributions

	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total
Growth	33.6	34.2	46.8	67.5	58.8	240.8
Asset replacement and renewal	35.1	58.9	48.0	47.4	55.8	245.2
Improvement in service	11.5	19.7	22.8	20.2	15.6	89.9
Compliance	32.6	33.7	34.2	27.2	27.2	155.0
Corporate	24.6	29.8	56.8	15.0	17.3	143.5
Total direct capital expenditure	**137.4**	**176.3**	**208.6**	**177.3**	**174.7**	**874.4**

393. Each of the regulatory categories is considered below.

Transmission - growth

394. Western Power's proposed transmission growth capital expenditure direct costs is set out in Table 47 below.

Table 47 AA4 proposed transmission growth capital expenditure direct costs (real $ million at June 2017) excluding gifted assets and cash contributions

	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total
Capacity expansion	25.4	26.0	38.6	59.3	50.6	199.8
Customer driven	8.2	8.2	8.2	8.2	8.2	41.0
Total Growth	**33.6**	**34.2**	**46.8**	**67.5**	**58.8**	**240.8**

395. Western Power states its proposed growth expenditure is based on the 2016 demand forecast as there was insufficient time to take into account the most recent 2017 demand forecast before submitting its proposal. It also states it did not have time to fully consider the effect of the retirement of the Muja AB, Western Kalgoorlie and Mungarra generators on security of supply and network reliability.

396. Western Power proposes to provide updated forecasts following the draft decision to take into account the latest demand forecast and generator retirements.

397. The ERA will consider this new information in the final decision to determine the level of growth expenditure likely to meet the requirements of the new facilities investment test.

398. For the draft decision, the ERA requires the expenditure for two projects that are unlikely to proceed in AA4 to be removed from the forecast expenditure:

- CBD new substation –$62.2 million
- Picton-Busselton 132 kV line –$19.2 million

399. As discussed above, actual growth expenditure has generally been less than forecast resulting in adjustments to target revenue in the following period through the investment adjustment mechanism. The ERA's final decision on growth expenditure for AA4 will only include expenditure for projects that are reasonably likely to proceed in the AA4 period to minimise the likelihood of under expenditure against forecasts.

400. The ERA also requires Western Power to provide evidence that it has considered all non-network alternatives when developing its growth investment plans.

401. The ERA's draft decision on transmission growth expenditure is set out in Table 48 below.

Table 48 Draft decision transmission growth capital expenditure direct costs (real $ million at June 2017) excluding gifted assets and cash contributions

	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total
Expenditure proposed by Western Power	33.6	34.2	46.8	67.5	58.8	240.8
CBD substation	(0.2)	(0.3)	(6.4)	(27.6)	(27.6)	(62.2)
Picton-Busselton 132 kV line	(0.5)	(0.5)	(15.6)	(2.2)	(0.3)	(19.2)
Draft decision	32.8	33.4	24.8	37.6	30.8	159.4

Transmission - asset replacement and renewal

402. Western Power's forecast transmission asset replacement and renewal expenditure is set out in Table 49 below.

Table 49 AA4 proposed transmission asset replacement and renewal capital expenditure direct costs (real $ million at June 2017) excluding gifted assets and cash contributions

	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total
Switchboards	5.5	14.7	12.9	14.2	20.1	67.4
Power transformers	4.1	14.2	12.8	9.3	12.0	52.4
Protection-replacement	9.3	7.8	7.7	7.7	7.7	40.3
Static VAR compensator	7.5	11.5	1.8	7.5	7.9	36.2
Primary plant	8.1	10.2	12.3	8.2	8.0	46.8
Replacement other	0.7	0.5	0.5	0.5	0.1	2.2
Total	**35.1**	**58.9**	**48.0**	**47.4**	**55.8**	**245.2**

403. Western Power has proposed a $100 million increase in asset replacement expenditure compared to AA3 actual expenditure. Western Power submits its AA3 program was affected by the Muja transformer failures which resulted in planned asset replacements being deferred.

404. GHD's review of Western Power's planned asset replacement expenditure indicates a general lack of robustness in the forecast expenditure including:

- the proposed expenditure for power transformers is not supported by detailed investment business cases and condition reports to confirm all of the plant needs to be replaced at this time;
- information on justification of primary plant replacement is not detailed and should reflect efficiencies from the business transformation program.

405. GHD recommends the removal of the following expenditure:

  - $20.5 million for power transformers;
  - $20.1 million for protection systems;
  - $30.1 million for switchboards; and
  - $7.1 million for primary plant.

406. AEMO submits the replacement of the West Kalgoorlie and Merredin Terminal static VAR compensators is critical to the delivery of reliable power and power quality to customers in those towns. However, GHD's review indicates there is no detailed condition analysis to confirm Western Power's view that the assets need to be replaced in AA4 or any evidence of consideration of mitigation actions that could defer the replacement.

407. The information to support the proposed costs also lacks detail and GHD considers the costs appear excessive compared with market cost information.

408. The weaknesses identified in Western Power's expenditure forecasts result in the ERA being unable to conclude that the proposed expenditure is reasonably likely to

meet the new facilities investment test. The ERA also notes GHD's views that some of the expenditure could be deferred to future periods. Given this is an area where planned investment has been deferred in the past, the ERA is particularly concerned that only projects that are reasonably likely to proceed during AA4 are included in the forecast expenditure.

409. The ERA's draft decision on transmission asset replacement and renewal expenditure is set out in Table 50 below. The ERA requires Western Power to take account of the concerns raised regarding its asset replacement expenditure forecast and provide updated information to demonstrate the proposed expenditure is likely to satisfy the new facilities investment test and that it is reasonably likely to proceed in the AA4 period.

Table 50 Draft decision transmission asset replacement and renewal capital expenditure direct costs (real $ million at June 2017) excluding gifted assets and cash contributions

	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total
Total proposed by Western Power	35.1	58.9	48.0	47.4	55.8	245.2
Power transformers	(1.6)	(5.5)	(5.0)	(3.6)	(4.7)	(20.5)
Protection	(4.6)	(3.9)	(3.9)	(3.9)	(3.9)	(20.1)
Switchboards	(2.4)	(6.6)	(5.8)	(6.3)	(9.0)	(30.1)
Transmission primary plant	(1.2)	(1.5)	(1.8)	(1.2)	(1.2)	(7.1)
Static VAR compensator	(7.5)	(11.5)	(1.8)	(7.5)	(7.9)	(36.2)
Draft Decision	17.7	29.8	29.8	24.9	29.1	131.2

Transmission - improvement in service

410. Western Power's forecast transmission improvement in service expenditure is set out in Table 51 below.

Table 51 AA4 proposed transmission improvement in service capital expenditure direct costs (real $ million at June 2017) excluding gifted assets and cash contributions

	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total
Reliability driven	-	-	-	-	-	-
SCADA and communications						
Asset replacement	8.2	10.8	10.5	11.1	12.1	52.7
Compliance	0.4	2.0	4.1	3.6	3.0	13.0
Corporate	1.8	3.1	3.1	1.0	0.4	9.4
Master station	1.2	3.7	4.9	4.5	0.1	14.5
Third party actions	-	0.1	0.1	0.1	0.1	0.3
Total	**11.5**	**19.7**	**22.8**	**20.2**	**15.6**	**89.9**

411. Western Power notes in its proposal that over previous regulatory periods, the SCADA and communications network has been maintained on a reactive basis, and has now reached the point where technical obsolescence becomes an issue and an increase in investment is required to replace obsolete SCADA and communications equipment and maintain the performance of system monitoring and control.

412. GHD advises the current Western Power capital expenditure per circuit kilometre is well below the average expenditure for other industry participants and that the forecast expenditure in 2018/19 is more comparable with the industry average.

413. GHD also notes and makes the following recommendation:

> Given that Western Power has changed its asset strategy for SCADA & Communications from a reactive to largely proactive, and that the existing network is aged, technical obsolete and lacking manufacturer support, we are of the opinion that the forecast AA4 expenditure allowances are “catch-up” to bring Western Power in-line with a majority of transmission electricity utilities in the Australian market. Whilst we have been unable to review the forecast CAPEX in detail, given the benchmarking study found that the proposed Western Power AA4 forecast expenditure is comparable to industry average CAPEX per circuit kilometre, we are of the opinion that the proposed CAPEX allowances for AA4 are reasonable.

414. The current assets are old and in many cases no longer supported by the vendor. Reliable SCADA and communications are necessary to enable Western Power to effectively manage its network.

415. However, the ERA is concerned the forecast investment is not supported by sufficient information to demonstrate the proposed costs are likely to meet the new facilities investment test and evidence that the replacement is reasonably likely to occur in the AA4 period.

416. The ERA has not adjusted the forecast expenditure for the draft decision, but it will be reviewing this item for the final decision and requires Western Power to provide

sufficient information to demonstrate the costs are reasonably likely to meet the new facilities investment test and are reasonably likely to occur in the AA4 period.

Transmission - compliance

417. Western Power's forecast transmission compliance expenditure is set out in Table 52 below.

Table 52 Western Power proposed transmission compliance capital expenditure (real $ million at June 2017) excluding gifted assets and cash contributions

	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total
Poles and towers	12.6	12.6	12.7	11.2	11.1	60.0
Cross arm replacement	1.0	0.9	0.9	0.9	0.9	4.8
Substation security	18.2	13.2	17.1	12.4	11.3	72.1
Transformers	0.4	5.2	3.5	2.5	1.1	12.7
Protection	0.5	1.8	-	-	-	2.3
Cables			0.1	0.2	2.7	3.0
Total	**32.6**	**33.7**	**34.2**	**27.2**	**27.2**	**155.0**

418. Western Power has proposed capital expenditure of $72.1 million for substation security. This is $66.6 million higher than expenditure during AA3. The increase in expenditure arises from Western Power's view that it must upgrade security for all substations in its network to comply with the National Guidelines for Protecting Critical Infrastructure from Terrorism, introduced in 2015.

[redacted] [redacted]

[redacted]

[redacted] [redacted]

[redacted]

[redacted]

421. The ERA has reviewed the material submitted by Western Power and the advice provided by its technical consultant.

422. The National Guidelines do not set any mandatory requirements on the timeline for compliance and are not prescriptive about the measures to be taken or the assets to be assessed. Individual states or businesses are left to assess this in their own risk assessment frameworks.

[redacted]

[redacted]

[redacted]

425. The ERA does not agree that it was the intent of the National Guidelines or the Office of the Auditor General that a blanket assessment would be applied to the whole of the SWIS.

426. Unless there is a directive or legislation from the Western Australian Government requiring all assets in the SWIS to be regarded as critical infrastructure, the ERA considers there should be a specific risk assessment for each substation.

427. For that reason, the ERA considers Western Power has not demonstrated its proposed increase in substation security is reasonably likely to meet the new facilities investment test. For the purposes of the draft decision, the ERA has reduced expenditure to historical levels and requires Western Power to review the requirements of the National Guidelines to develop an investment proposal based on a specific risk assessment for each substation.

428. GHD's review of the other elements of the compliance program indicate they are based on reasonable forecasts and assumptions. Taking account of this advice, and noting the expenditure is in line with actual expenditure during AA3, the ERA considers the proposed forecast is reasonably likely to meet the requirements of the new facilities investment test.

429. The ERA's draft decision on transmission compliance expenditure is set out in Table 53 below.

Table 53 Draft decision transmission compliance capital expenditure (real $ million at June 2017) excluding Gifted Assets and Cash Contributions

	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total
Western Power proposed expenditure	32.6	33.7	34.2	27.2	27.2	155.0
Substation security	(15.7)	(10.7)	(14.6)	(9.9)	(8.8)	(59.7)
Draft decision	16.9	23.0	19.6	17.3	18.4	95.3

Transmission - total

430. A summary of the ERA's draft decision on transmission total direct capital expenditure is set out in Table 54 below.

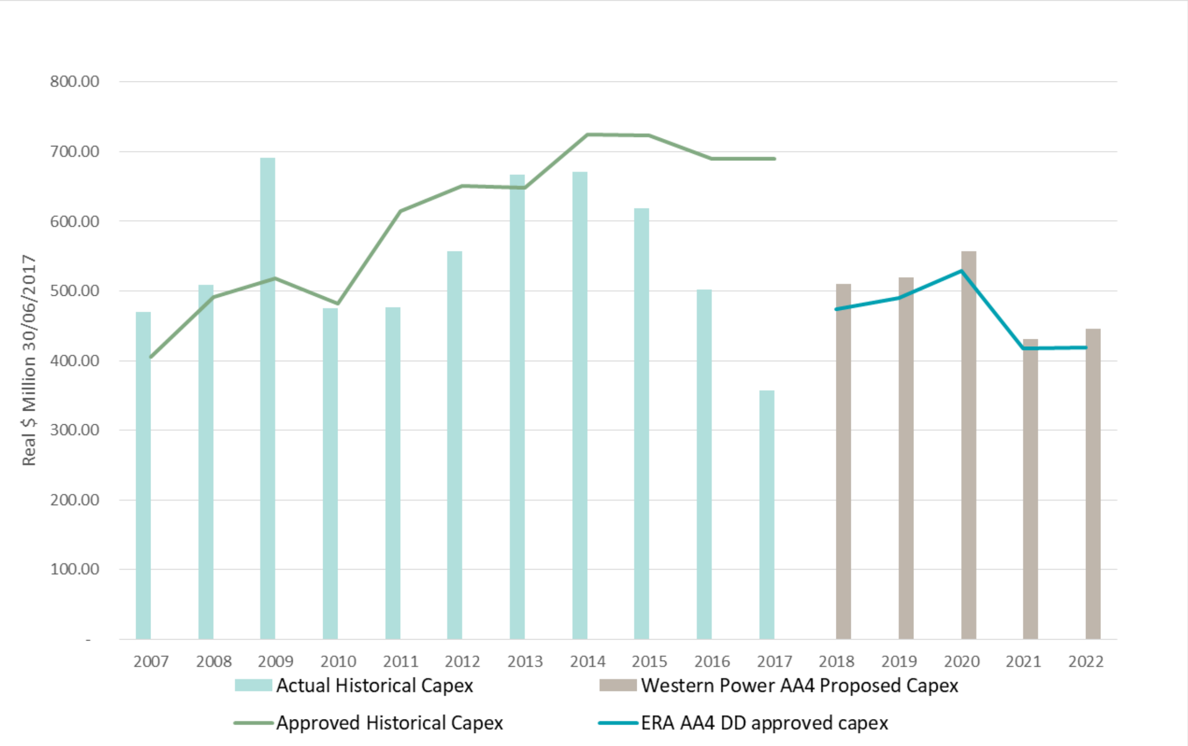
Table 54 Draft decision transmission network capital expenditure direct costs (real $ million at June 2017) excluding gifted assets and cash contributions

	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total
Growth	32.8	33.4	24.8	37.6	30.8	159.4
Asset replacement and renewal	17.7	29.8	29.8	24.9	29.1	131.2
Improvement in service	11.5	19.7	22.8	20.2	15.6	89.9
Compliance	16.9	23.0	19.6	17.3	18.4	95.3
Corporate	16.9	26.0	47.1	11.1	8.1	109.1
Total direct capital expenditure	**95.9**	**132.0**	**144.1**	**111.1**	**102.1**	**585.1**

Distribution forecast capital expenditure

431. Figure 11 below compares actual and forecast transmission capital expenditure since AA1 and the ERA's draft decision for AA4.

Figure 11 Comparison of historical and forecast distribution net capital expenditure



432. As can be seen in the figure above, distribution expenditure increased during the first few years of AA3 primarily due to the wood pole program. It was lower in the final years of AA3 following completion of the EnergySafety Order in 2015 and expenditure was scaled back in 2016/17 for the business transformation program as Western Power investigated more efficient ways to deliver works.

433. A comparison of expenditure by regulatory category, set out in Table 55, below, shows the largest difference between forecast and actual expenditure for AA3 was growth, which made up 80 per cent of the total difference, and compliance, which made up 17 per cent of the total difference.

Table 55 Comparison of distribution network capital expenditure forecasts and actuals (real $ million at June 2017) excluding gifted assets and cash contributions

	AA4 Draft Decision	AA4 Western Power Proposed	AA3 Actual	AA3 F/cast	AA3 Actual less AA3 Forecast
Growth	500.2	490.3	592.1	1,083.9	(491.8)
Asset replacement and renewal	1,253.7	1,277.3	1,613.0	1,579.8	33.2
Improvement in service	70.9	113.3	24.6	35.8	(11.2)
Compliance	184.9	181.3	460.5	567.9	(107.4)
Corporate	319.0	401.4	170.2	208.9	(38.7)
Total	**2,328.8**	**2,463.9**	**2,860.3**	**3,476.1**	**(615.8)**

434. Western Power's proposed expenditure for AA4 is lower than actual expenditure for AA3 due to lower growth expenditure from reduced demand and reductions in asset replacement and compliance expenditure due to adoption of a more risk based approach. This is offset by increases in expenditure to install advanced meters and build a communication network for those meters.

435. The ERA's draft decision adjustments include:

- reductions to conductor management unit costs;
- removal of the advanced metering communication network forecast expenditure; and
- reductions in improvements in service expenditure that are not supported by benefits.

436. Although the AA4 draft decision values for growth and compliance expenditure are shown as $9.9 million and $3.6 million greater than Western Power's proposed expenditure, this is due to the reallocation of indirect costs after other adjustments are made to operating and capital expenditure. As is discussed further below, the ERA has not made any adjustments to Western Power's proposed distribution growth or compliance direct costs in this draft decision.

437. Consistent with transmission expenditure, the considerations below of elements of Western Power's forecast capital expenditure are based on direct costs.

438. Western Power's forecast distribution direct costs capital expenditure for AA4 is provided in Table 56 below, broken down into regulatory categories.

Table 56 AA4 proposed distribution capital expenditure direct costs (real $ million at June 2017) excluding gifted assets and cash contributions

	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total
Growth	86.1	84.6	78.2	76.5	80.6	405.9
Asset replacement and renewal	230.8	213.7	210.2	199.5	203.8	1,058.0
Improvement in service	23.0	29.0	16.0	13.8	12.2	94.0
Compliance	22.9	36.1	35.3	28.0	28.1	150.3
Corporate	59.8	71.8	134.0	36.6	41.4	343.6
Total direct capital expenditure added to the capital base	**422.6**	**435.2**	**473.7**	**354.4**	**366.1**	**2,051.8**

439. Each of the regulatory categories is considered below.

Distribution - growth

440. Western Power's forecast distribution growth expenditure is set out in Table 57 below.

Table 57 AA4 proposed distribution growth capital expenditure direct costs (real $ million at June 2017) excluding gifted assets and cash contributions

	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total
Capacity expansion	36.2	34.7	28.3	26.6	30.7	156.5
Customer driven	49.9	49.9	49.9	49.9	49.9	249.4
Total growth	**86.1**	**84.6**	**78.2**	**76.5**	**80.6**	**405.9**

441. Western Power notes that although forecast peak growth is flat, there are some parts of the network that will require reinforcement to mitigate against feeders reaching voltage limits or thermal constraints.

442. Western Power notes that the AA4 distribution capacity expansion forecast increase is driven largely by an increase in High Voltage (**HV**) distribution and HV fault rating and protection expenditure. Expenditure in these two subcategories is primarily

focused on addressing increasing demand in Mandurah, Rockingham, Bunbury and Busselton, and follow a period of lower-than-expected investment.

443. As for transmission growth expenditure, Western Power's proposal is based on the 2016 demand forecast. It proposes providing an updated expenditure forecast following the draft decision.

444. Consistent with the section above on transmission growth expenditure, the ERA will reconsider forecast growth expenditure for the final decision as Western Power's proposal was not based on the most recent demand forecast.

Distribution - asset replacement and renewal

445. Western Power's forecast distribution asset replacement and renewal expenditure is set out in Table 58 below.

Table 58 AA4 proposed distribution asset replacement and renewal capital expenditure direct costs (real $ million at June 2017) excluding gifted assets and cash contributions

	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total
Conductor management	37.2	36.1	43.2	48.1	54.0	218.7
Other assets	24.2	28.7	27.3	25.6	28.4	134.1
Total asset replacement	**61.4**	**64.8**	**70.5**	**73.7**	**82.4**	**352.8**
Pole management	137.2	106.6	99.8	94.8	86.5	525.0
Metering	17.1	22.9	27.0	27.8	28.1	123.0
State Underground Power Program	14.9	19.5	12.8	3.2	6.8	57.2
Total asset replacement and renewal	**230.6**	**213.8**	**210.1**	**199.5**	**203.8**	**1,058.0**

446. The proposed asset replacement expenditure is lower than actual expenditure for AA3 reflecting Western Power's revised risk management strategy.

447. From the information provided by Western Power and GHD's advice, the ERA is satisfied the proposed expenditure is reasonably likely to meet the new facilities investment test with two exceptions:

- unit costs for conductor management; and
- the advanced metering business case.

448. GHD notes that Western Power's proposed weighted average unit cost estimate for the conductor management program is approximately $100,000 per km. However, GHD advises that a significant portion of older (and poorer condition) overhead distribution conductors are of low voltage and single phase single wire earth return

types which would be at the lower end of the range used to estimate costs. GHD considers the average rate should be reduced to $96,000 per km.

449. The ERA considers this adjustment to conductor unit rates is necessary to ensure the proposed expenditure is reasonably likely to meet the new facilities investment test. Consequently, the conductor management program expenditure must be reduced from $352.8 million to $344.1 million.

450. Western Power's advanced metering proposal is based on installing 355,493 new and replacement meters over the next five years at a total cost of $177 million. This includes $137 million for advanced meters with communication capability and $40 million for communication infrastructure (comprising $25.1 million in corporate SCADA and communications and $15 million in IT business-driven expenditure.)

451. The ERA considers installing modern electronic devices with enhanced capabilities in new properties and when replacing old meters is consistent with good electricity industry practice and, therefore, is consistent with the new facilities investment test. However, expenditure for the communications network would need to be supported by a corresponding benefit to consumers to meet the requirements of the new facilities investment test. The ERA has considered the metering costs and communication costs separately below.

452. As stated above, expenditure to install advanced meters in new properties and replacement meters is reasonably likely to meet the requirements of the new facilities test. However, Western Power's forecast overestimates the number of new and replacement meters for the AA4 period. The ERA has adjusted the number of meters to 273,493 to be consistent with the number of new meters included in the demand forecast and a reasonable forecast of non-compliant meters requiring replacement. This adjustment reduces metering capital expenditure by $31.6 million over the AA4 period.[50]

453. As stated above, the expenditure for communication infrastructure needs to be supported by a corresponding benefit. Western Power's advanced metering proposal was based on a business case suggesting a positive net present value would be achieved by around 2026/27 based on quantified metering service and network benefits such as remote access, interval and power factor data, fault identification, power quality monitoring and deferring network augmentation.

454. Western Power's initial advanced metering business case anticipated a net present value totalling [redacted]. It subsequently revised this downwards to [redacted].

455. There were some inconsistencies in data across the information provided by Western Power on its advanced metering business case which made analysis difficult. In addition, the information provided did not include sensitivity analysis of costs and benefits which should have been undertaken, particularly given the uncertainty of the benefits.

[50] On 27 April 2018, the ERA's technical consultant, GHD, advised it had amended its forecast of new meters to be installed to 331,925. The amendment increases forecast capital expenditure by approximately $25 million. Due to time constraints, the draft decision has not been updated to include this adjustment. However, the ERA has calculated the effect on target revenue to be $4.9 million, which is less than 0.1 per cent of total target revenue. This adjustment will be included in the final decision.

456. After reviewing the material provided by Western Power and taking account of advice from GHD, the ERA considers the benefits have been overstated and the net present value is actually negative.

457. Specific benefits identified as being overstated are:

- the level of savings from deferred network investment and power correction factors attributable to advanced metering data;
- the timing of savings from service connection monitoring as these require the communications to be operational so should only be taken into account from the date it is assumed the data becomes available;
- the reductions in call centre costs and voltage balancing are high compared with data from advanced metering rollouts conducted elsewhere; and
- a benefit from avoided communication system costs for unregulated services should not have been included as a benefit to be covered by regulated investment.

458. As Western Power has not been able to demonstrate a positive net benefit, the proposed expenditure on the communication infrastructure is not reasonably likely to meet the requirements of the new facilities investment test.

459. Consequently, the ERA requires the expenditure for the communication infrastructure to be removed from the forecast capital base. As set out above, this comprises $25.1 million included under improvement in service capital expenditure and $15 million included under corporate capital expenditure.

460. The ERA's draft decision on distribution asset replacement and renewal expenditure is set out in Table 59 below.

Table 59 Western Power proposed distribution asset replacement and renewal capital expenditure direct costs (real $ million at June 2017) excluding Gifted Assets and Cash Contributions

	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total
Western Power proposed expenditure	230.6	213.8	210.1	199.5	203.8	1,058.0
Conductor management	(1.5)	(1.5)	(1.7)	(1.9)	(2.2)	(8.7)
Metering	(4.6)	(5.9)	(6.9)	(7.1)	(7.1)	(31.6)
Draft decision	224.7	206.4	201.5	190.5	194.6	1,017.7

Distribution – improvement in service

461. Western Power's forecast distribution improvement in service expenditure is set out in Table 60 below.

Table 60 AA4 proposed distribution improvement in service capital expenditure direct costs (real $ million at June 2017) excluding gifted assets and cash contributions

	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total
Reliability-driven						
Distribution reliability other	3.0	7.7	1.5	0.5	0.5	13.1
Targeted reliability-driven automation	1.1	1.1	1.1	1.1	1.1	5.6
RD pilot projects	0.1	0.1	0.1	0.1	0.1	0.5
Total	**4.2**	**8.9**	**2.7**	**1.7**	**1.7**	**19.2**
SCADA and communications						
Asset replacement	3.9	5.2	7.6	7.4	8.2	32.2
Core infrastructure growth	0.2					0.2
Corporate-advanced meters	10.5	10.5	1.6	1.7	1.0	25.1
Master station	4.2	4.5	4.1	3.0	1.3	17.2
Total	**18.8**	**20.1**	**13.2**	**12.1**	**10.5**	**74.8**
Total improvement in service	**23.0**	**29.0**	**16.0**	**13.8**	**12.2**	**94.0**

462. The reliability-driven expenditure includes $8 million for the Kalbarri microgrid which is supported by a business case and demonstration of benefits arising through improvements to rural long SAIDI. However, the remaining expenditure is not supported by demonstrated benefits. Consequently the ERA considers the expenditure is not reasonably likely to meet the new facilities investment test and must be removed.

463. Similar to transmission, Western Power has forecast significant increases in SCADA and communications expenditure in AA4 compared to AA3. Western Power submits the increase in distribution SCADA and communication investment is required to replace obsolete equipment and maintain the performance of network monitoring and control.

464. Consistent with its view on the proposed transmission SCADA and communications expenditure, the ERA is concerned the forecast investment is not supported by sufficient information to demonstrate the proposed costs are likely to meet the new facilities investment test and evidence that the replacement is reasonably likely to occur in the AA4 period.

465. For the draft decision, the ERA has not adjusted the forecast expenditure but it will be reviewing this item for the final decision and requires Western Power to provide sufficient information to demonstrate the costs are reasonably likely to meet the new facilities investment test and are reasonably likely to occur in the AA4 period.

466. As discussed under distribution replacement expenditure, the ERA considers Western Power's proposed installation of a communications network for the advanced meters is not reasonably expected to meet the new facilities investment test. Consequently the proposed expenditure of $25.1 million included above must be removed.

467. The ERA's draft decision on distribution improvement in service expenditure is set out in Table 61.

Table 61 Draft decision distribution improvement in service capital expenditure direct costs (real $ million at June 2017) excluding gifted assets and cash contributions

	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total
Western Power proposal	23.0	29.0	16.0	13.8	12.2	94.0
Distribution reliability other		(2.7)	(1.5)	(0.5)	(0.5)	(5.1)
Targeted reliability-driven automation	(1.1)	(1.1)	(1.1)	(1.1)	(1.1)	(5.6)
RD pilot projects	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.5)
Corporate-advanced meters	(10.5)	(10.5)	(1.6)	(1.7)	(1.0)	(25.1)
Draft decision	11.4	14.7	11.7	10.4	9.5	57.7

Distribution - compliance

468. Western Power's forecast distribution compliance expenditure is set out in Table 62 below.

Table 62 AA4 proposed distribution compliance capital expenditure direct costs (real $ million at June 2017) excluding gifted assets and cash contributions

	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total
Compliance	22.9	36.1	35.3	28.0	28.1	150.3

469. Western Power's proposed compliance program is significantly lower than actual expenditure in AA3 reflecting the adoption of its risk-based management approach. Based on the information provided by Western Power and advice from GHD, the ERA is satisfied the proposed expenditure is reasonably likely to meet the requirements of the new facilities investment test.

Distribution - total

470. For the reasons outlined above, the ERA considers that not all of Western Power's proposed distribution capital expenditure is likely to meet the requirements of the new facilities investment test.

471. A summary of the ERA's draft decision on the value of distribution direct capital expenditure that is reasonably likely to meet the new facilities investment test is set out in Table 63 below. As discussed above, the ERA expects Western Power to update its growth expenditure forecasts to reflect the latest demand forecasts and will review the forecast expenditure for the final decision.

Table 63 Draft decision distribution network capital expenditure direct costs (real $ million at June 2017) excluding gifted assets and cash contributions

	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total
Growth	86.1	84.6	78.2	76.5	80.6	405.9
Asset replacement and renewal	224.7	206.4	201.5	190.5	194.6	1,017.7
Improvement in service	11.4	14.7	11.7	10.4	9.5	57.7
Compliance	22.9	36.1	35.3	28.0	28.1	150.3
Corporate	40.9	62.6	111.2	27.2	19.8	261.8
Total	**385.9**	**404.3**	**437.9**	**332.6**	**332.6**	**1,893.3**

Corporate capital expenditure

472. Table 64 below compares actual and forecast corporate capital expenditure for AA3 and AA4.

Table 64 Comparison of corporate capital expenditure forecasts and actuals (real $ million at June 2017) excluding gifted assets and cash contributions

	AA4 Draft Decision	AA4 Western Power Proposal	AA3 Actual	AA3 Forecast	AA3 Actual less AA3 Forecast
Total corporate expenditure	451.9	569.0	251.8	334.7	(82.9)
Transmission	132.9	167.6	81.6	125.8	(44.2)
Distribution	319.0	401.4	170.2	208.9	(38.7)

473. Historically, Western Power has underspent against its corporate expenditure forecasts due to the deferral of projects. Western Power states the underspend against forecast for AA3 was due to a delay in rebuilding some of its depots which was forecast to take place during AA3.

474. Western Power notes that the primary driver for the increase in AA4 is the need to modernise Western Power's portfolio of metropolitan and regional operational depots, many of which Western Power considers are in poor condition.

475. In addition, Western Power's proposal for AA4 is higher than AA3 actuals as it includes:

- adding the fleet assets to the regulated capital base;
- IT business driven expenditure for advanced metering; and
- new customer relationship management software.

476. The ERA's draft decision:

- removes the fleet assets from the regulated capital base;
- removes the advanced metering expenditure; and
- removes the expenditure for the new customer relationship management software.

477. The ERA also requires Western Power to submit more evidence to demonstrate that its proposed expenditure is reasonably likely to meet the new facilities investment test.

478. Consistent with transmission and distribution expenditure, the considerations below of specific elements of Western Power's forecast corporate capital expenditure are based on direct costs.

479. Western Power's forecast corporate direct costs capital expenditure is set out in Table 65 below.

Table 65 AA4 Western Power forecast corporate direct cost capital expenditure ($ million real, June 2017)

	2017/18	2018/19	2019/20	2020/21	2021/22	AA4
Business Support						
Corporate real estate	23.3	43.2	116.6	9.9	8.1	201.1
Fleet	11.8	6.1	26.9	7.6	24.7	77.2
Property plant and equipment	0.8	0.8	0.8	0.8	0.8	4.2
Total	**36.0**	**50.2**	**144.3**	**18.4**	**33.7**	**282.5**
ICT						
Business-driven	39.9	39.3	29.5	22.4	18.1	149.3
Business infrastructure	8.5	12.1	17.0	10.8	7.0	55.3
Total	**48.4**	**51.4**	**46.6**	**33.2**	**25.1**	**204.6**
Total corporate capital expenditure	**84.4**	**101.5**	**190.8**	**51.6**	**58.7**	**487.1**

480. Corporate real estate includes $184 million for depot modernisation and $16 million for relocating the control centre. The expenditure is supported by business cases which GHD advises are reasonable.

481. However, the ERA considers Western Power has not adequately demonstrated the net benefits of the proposed expenditure to satisfy the second limb of the new facilities investment test. For example, the savings arising from modernised depots, and whether they have been incorporated in forecast operating and capital expenditure. The ERA will consider this further in the final decision.

482. In addition, given the history of Western Power deferring this type of expenditure in the past, the ERA requires evidence from Western Power that it is reasonably certain this project will proceed in AA4.

483. The fleet expenditure reflects a change in the way Western Power accounts for its fleet costs.

484. Historically, plant and vehicle costs have been ring-fenced, in accounting terms, from covered (regulated) services. Plant and vehicle costs are charged to regulated services operating and capital works on a usage basis ($ per hour). This results in the costs being expensed directly against the relevant works and in the case of capital works, the costs are included in the capital asset base.

485. In its AA4 submission, Western Power proposes to include fleet assets in the regulated capital asset base. In addition, in 2019/20 there will be a change in

accounting standards requiring operating leases to be recognised as an asset (and the future payments as a liability). Western Power proposes adding the asset value arising from this accounting change to the capital asset base.

486. This change in treatment will result in fleet costs being included in depreciation and earning a return on the regulated capital asset base.

487. As discussed under forecast operating expenditure, Western Power has made a step change reduction in indirect costs of $10.5 million each year from 2019/20 to reflect the change in the treatment of fleet costs.

488. The ERA considers this change in approach is inconsistent with the new facilities investment test. The regulated capital base must only include capital expenditure that meets, or is reasonably likely to meet, the new facilities investment test. Adding an amount for existing vehicles previously purchased by the unregulated business, or an amount arising from an accounting adjustment to capitalise leases is not consistent with the requirements of the new facilities investment test.

489. The current method of accounting for fleet assets in the non-regulated business and charging costs to the relevant regulated services based on usage, ensures costs are allocated between the regulated and non-regulated business. Western Power should maintain the current arrangements and the fleet assets, including the capitalisation of operating leases, should not be added to the regulated capital asset base.

490. Western Power's proposed information technology spend is $88 million higher (a 76 per cent increase) than actual AA3 expenditure. GHD advises a large part of the increase is catch-up investment on corporate systems that have been deferred over previous review periods. In addition, the IT business-driven expenditure includes $15 million for advanced metering infrastructure and $24 million for new customer relationship management software.

491. As discussed under forecast distribution capital expenditure, the ERA considers the advanced metering infrastructure costs are not reasonably likely to meet the new facilities investment test and therefore requires it to be removed from the forecast capital expenditure.

492. GHD advises the current customer relationship management system is over 10 years old and in need of replacement. However, it advises the forecast expenditure is excessive and there are other, less capital intensive options that could reduce the expenditure involved.

493. The ERA considers Western Power has not demonstrated sufficiently that its proposed customer relationship management software is reasonably likely to meet the new facilities investment test and therefore requires it to be removed from the forecast capital expenditure.

494. Similar to the proposed depot expenditure, given the history of deferrals in IT expenditure, the ERA also requires Western Power to provide evidence that the proposed projects are reasonably likely to proceed and will consider this in the final decision.

495. The ERA's draft decision on the value of corporate expenditure that is reasonably likely to meet the new facilities investment test is set out in Table 66 below.

Table 66 Draft decision corporate direct cost capital expenditure ($ million real, June 2017)

	2017/18	2018/19	2019/20	2020/21	2021/22	AA4
Western Power proposal	84.4	101.5	190.8	51.6	58.7	487.1
Fleet adjustment	(11.8)	(6.1)	(26.9)	(7.6)	(24.7)	(77.2)
Advanced metering infrastructure	(10.0)	(2.0)	(0.9)	(0.9)	(1.2)	(15.0)
Customer relationship management software	(4.8)	(4.8)	(4.8)	(4.8)	(4.8)	(24.0)
Draft decision	**57.8**	**88.6**	**158.3**	**38.3**	**28.0**	**370.9**

496. The allocation between transmission and distribution is set out in Table 67 below.

Table 67 Draft decision allocation of corporate capital expenditure direct costs between transmission and distribution (real $ million at June 2017) excluding gifted assets and cash contributions

	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total
Total direct expenditure added to the capital base	57.8	88.6	158.3	38.3	28.0	370.9
Transmission	16.9	26.0	47.1	11.1	8.1	109.1
Distribution	40.9	62.6	111.2	27.2	19.8	261.8

Indirect costs and labour escalation

497. As discussed in the operating expenditure section, the ERA has amended Western Power's proposed indirect costs as they were not consistent with a service provider efficiently minimising costs. In addition, the ERA's amendments to direct capital expenditure and operating expenditure affect the allocation of indirect costs and labour escalation across different categories of expenditure.

498. The revised indirect costs and labour escalation allocated to transmission and distribution capital expenditure are set out in Table 68 and Table 69 below.

Table 68 Indirect costs and labour escalation included draft decision transmission capital expenditure (real $ million at June 2017)

	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total	Western Power Proposal
Direct capital costs approved by the ERA	95.9	132.0	144.1	111.1	102.1	585.1	874.4
Indirect cost allocation	21.4	26.8	28.1	26.1	24.0	126.4	164.0
Labour escalation allocation	0.4	1.1	1.9	2.1	2.5	8.0	12.1
Total capital expenditure	**117.7**	**159.9**	**174.0**	**139.3**	**128.6**	**719.5**	**1,050.6**

Table 69 Indirect costs and labour escalation included in draft decision distribution expenditure (real $ million at June 2017)

	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total	Western Power Proposal
Direct capital costs approved by the ERA	385.9	404.3	437.9	332.6	332.6	1,893.3	2,051.8
Indirect cost allocation	86.3	82.2	85.3	78.2	78.2	410.2	385.4
Labour escalation allocation	1.7	3.3	5.7	6.3	8.3	25.3	26.6
Total capital expenditure	**474.0**	**489.8**	**528.9**	**417.1**	**419.0**	**2,328.8**	**2,463.9**

Summary of revised capital expenditure

499. The ERA has calculated revised values for AA4 forecast capital expenditure in accordance with the ERA's determination under the draft decision on whether the forecast of new facilities investment may, under section 6.50 of the Access Code, be taken into account in the determination of total costs and target revenue. The revised values are shown in Table 70, Table 71 and Table 72 below.

Table 70 Draft decision transmission network capital expenditure including indirect costs and labour escalation and excluding gifted assets and cash contributions (real $ million at June 2017)

	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total	Western Power Proposal
Growth	40.3	40.5	30.0	47.2	38.9	196.8	291.4
Asset replacement and renewal	21.8	36.1	35.9	31.2	36.7	161.8	296.2
Improvement in service	14.2	23.9	27.6	25.4	19.7	110.7	108.4
Compliance	20.8	27.9	23.7	21.7	23.2	117.4	186.9
Corporate	20.7	31.4	56.8	13.8	10.2	132.9	167.6
Total added to the capital base	**117.7**	**159.9**	**174.0**	**139.3**	**128.6**	**719.5**	**1,050.6**

Table 71 Draft decision distribution network capital expenditure including indirect costs and labour escalation and excluding gifted assets and cash contributions (real $ million at June 2017)

	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total	Western Power Proposal
Growth	105.7	102.5	94.5	96.0	101.6	500.2	490.3
Asset replacement and renewal	276.0	250.0	243.5	239.0	245.2	1,253.7	1,277.3
Improvement in service	14.0	17.8	14.1	13.1	12.0	70.9	113.3
Compliance	28.1	43.7	42.6	35.1	35.4	184.9	181.3
Corporate	50.1	75.8	134.2	33.9	24.9	319.0	401.4
Total added to the capital base	**473.9**	**489.8**	**528.9**	**417.1**	**419.0**	**2,328.8**	**2,463.9**

Table 72 Draft decision corporate capital expenditure including indirect costs and labour escalation and excluding gifted assets and cash contributions (real $ million at June 2017)

	2017/18	2018/19	2019/20	2020/21	2021/22	AA4 Total	Western Power Proposal
Total corporate expenditure	70.8	107.2	191.0	47.7	35.1	451.9	569.0
Transmission	20.7	31.4	56.8	13.8	10.2	132.9	167.6
Distribution	50.1	75.8	134.2	33.9	24.9	319.0	401.4

Depreciation

500. Under section 6.70 of the Access Code, an access arrangement must include a specification of the method by which depreciation allowances for assets of the capital base are calculated, assumptions for asset lives and the circumstances in which the depreciation of a network asset may be accelerated.

501. Western Power's proposed method and assumptions for calculation of depreciation allowances are set out in sections 5.3.1 to 5.3.4 of the proposed access arrangement revisions.

502. Western Power proposes retaining the current access arrangement section which specifies depreciation is calculated using:

- the straight line depreciation method;
- the existing weighted average lives for assets that are included in the capital base at the beginning of the access arrangement period (i.e. beginning of AA4); and
- asset lives specified in the access arrangement for capital expenditure during the access arrangement period (i.e. AA4).

503. The ERA is satisfied that this approach is consistent with applying the roll-forward calculation in a manner consistent with the Code objective.

504. Western Power proposes to retain the current access arrangement section specifying the depreciation of the opening capital base for AA5 will be the forecast depreciation included in the AA4 target revenue.

505. Synergy considers the use of forecast depreciation for the purposes of rolling-forward the RAB is not consistent with other elements of WP's proposal. Synergy submits:

> … the Authority should consider whether the operation of the IAM, as it is proposed by WP, provides sufficient incentive for efficient capex to justify rolling the RAB forward using forecast depreciation.

506. As Synergy inidcates, the Investment Adjustment Mechanism only adjusts the return on any under or over expenditure. The forecast depreciation included in target revenue is not adjusted in the following access arrangement period for any under or over expenditure. However, as the forecast depreciation is deducted from the

opening capital base, the return and depreciation in future periods is reduced. The ERA considers the current approach of using forecast depreciation provides sufficient incentives for efficient investment and ensures the recovery of return on and return of investment is NPV neutral.

507. Western Power proposes to maintain the economic lives that were applied in AA3 for all assets except distribution meters. It proposes to change the asset life for meters from 25 years to 15 years. Existing metering assets will continue to be depreciated over 25 years. The 15 year life will apply only to metering expenditure during AA4.

508. The revised asset life for metering assets is consistent with the shorter technical life of the new advanced meters. Western Power already has electronic meters in its asset base. It is likely these have a similar life to the new advanced meters. Consequently, the ERA requires Western Power to review its existing metering assets to identify whether the current asset life is consistent with the economic life of those assets.

509. Western Power has not proposed any assets should be subject to accelerated depreciation and has removed the current access arrangement section stating that Western Power will apply accelerated depreciation to any network assets decommissioned as a result of the State Underground Power Project (**SUPP**).

510. The ERA considers this is not consistent with the requirements of the Access Code regarding redundant assets and requires Western Power to re-instate the section and include details of redundant assets resulting from the SUPP or any other programs that lead to in-service assets being removed.

Notional capital base values for AA4

511. The ERA has calculated revised values of the notional capital base for AA4 in accordance with the ERA's determinations under this draft decision on whether the forecast of new facilities investment may, under section 6.50 of the Access Code, be taken into account in determination of total costs and target revenue.

512. As discussed above, Western Power is also required to:

- update its forecast growth expenditure for transmission and distribution to reflect the latest demand forecasts;
- review existing metering assets to identify if the asset life currently being used is consistent with the economic life of those assets; and
- identify any redundant assets arising from the forecast SUPP or any other program.

513. The revised values, subject to any changes arising from the requirements in paragraph 512 are set out in Table 73 and Table 74 below.

Table 73 ERA draft decision forecast transmission capital base (real $ million June 2017)

	2017/18	2018/19	2019/20	2020/21	2021/22	Total
Opening asset value	3,126.0	3,132.3	3175.9	3225.9	3232.3	3,126.0
New facilities investment	117.7	159.9	174.0	139.3	128.6	719.5
Depreciation	111.4	116.3	123.9	133.0	137.4	622.0
Closing asset base	3,132.3	3,175.9	3,225.9	3,232.3	3,223.4	3,223.4

Table 74 ERA draft decision forecast distribution capital base (real $ million June 2017)

	2017/18	2018/19	2019/20	2020/21	2021/22	Total
Opening asset value	5,791.3	6,009.2	6,223.6	6,465.6	6,595.7	5,791.3
New facilities investment	473.9	489.8	528.9	417.1	419.0	2,328.7
Depreciation	256.0	275.5	286.9	287.0	276.0	1,381.4
Closing asset base	6,009.2	6,223.6	6,465.6	6,595.7	6,738.7	6,738.7

Required Amendment 6

The proposed access arrangement revisions must be amended to incorporate the forecast capital expenditure, depreciation and capital asset base values set out in this draft decision.

Return on regulated capital base

Access Code requirements

514. Section 6.4 of the Access Code requires that the price control in an access arrangement must (among other things) provide the service provider with an opportunity to earn revenue sufficient to cover its forward-looking and efficient costs of providing covered services, including a return on investment commensurate with the commercial risks involved.

515. The rate of return, based on a weighted average cost of capital (**WACC**), provides a service provider with a return on the capital it has invested in its business. It is calculated as a return on the regulatory asset base.

516. Section 6.64 of Access Code requires an access arrangement to set out the WACC for a covered network. Under section 6.65, the ERA may from time to time publish a determination of its preferred method for calculating the WACC in access arrangements. If such a determination is in effect at the time of an access arrangement review, the WACC must be determined using that method unless the service provider can demonstrate that an alternative method would better achieve the objectives set out in section 6.4 and the Access Code objective. Otherwise the WACC must be calculated in a manner consistent with section 6.66 of the Access Code.

517. As no determination is in effect the WACC must be estimated in a manner consistent with section 6.66 of the Access Code. Section 6.66 requires that a WACC calculation:

- must represent an effective means of achieving the Access Code objective and the objectives in section 6.4; and
- must be based on an accepted financial model, such as the Capital Asset Pricing Model.

Western Power's proposal and ERA considerations

518. The ERA has not approved Western Power's proposed WACC. Western Power's proposal and the ERA's considerations are detailed in Appendix 5 of this draft decision. In summary, the ERA accepts Western Power's proposed:

- risk free rate (for the cost of equity estimate), updated for current data;
- equity beta, updated for current data;
- risk free rate (for the cost of debt estimate), updated for current data;
- debt risk premium, updated for current data and the use of calendar years;
- the term of debt;
- forecast inflation, updated for current data;
- value of imputation credits (gamma); and
- annual update of the debt risk premium.

519. The ERA has made changes to:

- the credit rating;
- the gearing ratio;
- debt raising and hedging costs, correcting for a double counting in the debt raising costs; and
- the market risk premium.

520. The ERA's draft decision is set out in Table 75 below, with detailed reasoning for its decision set out in Appendix 5.

Table 75 Draft decision on Weighted Average Cost of Capital (WACC) parameters

Parameter	ERA Draft Decision	Western Power Proposal
Averaging period	29 March 2018	30 June 2017
Cost of equity parameters		
Nominal risk free rate (per cent)	2.37	1.99
Equity beta	0.7	0.7
Market risk premium (per cent)	6.2	7.5
Nominal after tax return on equity (per cent)	**6.71**	**7.24**
Cost of debt parameters		
Five-year interest rate swap (effective yield) (per cent)	2.590	2.290
Debt risk premium (per cent)	2.613	2.790
Benchmark credit rating	BBB+	BBB-/BBB/BBB+
Term of debt for debt risk premium	10 years	10 years
Debt issuing costs (per cent)	0.100	0.125
Debt hedging costs (per cent)	0.114	0.114
Nominal cost of debt (return on debt) (per cent)	**5.42**	**5.32**
Other parameters		
Debt proportion (gearing)	55	60
Forecast inflation rate (per cent)	1.84	1.64
Franking credits (gamma) (per cent)	40	40
Corporate tax rate (per cent)	30	30
Weighted Average Cost of Capital		
Nominal after-tax WACC (per cent)	**6.00**	**6.09**
Real after tax-WACC (per cent)	**4.08**	**4.38**

Required Amendment 7

Western Power must amend the (nominal after-tax) weighted average cost of capital to 6.00 per cent, based on the parameters set out in Table 75 of this draft decision and reasoning detailed in Appendix 5 of this draft decision.

Return on working capital

Access Code requirements

521. The Access Code does not explicitly contemplate a return on working capital as a cost.

522. The objectives for a price control set out in section 6.4 of the Access Code include giving the service provider an opportunity to earn an amount of target revenue that meets the forward looking and efficient costs of providing covered services, including a return on investment commensurate with the commercial risks involved.

Current access arrangement

523. The values of target revenue applying under the price control in the current access arrangement include an allowance for a return on working capital.

524. Working capital refers to a stock of funds that must be maintained by a service provider to pay costs as they fall due. In circumstances where it is the norm for the costs of providing services to be incurred before the revenues from provision of services are received, a stock of working capital may need to be derived from a capital investment in the business. The cost of this stock of working capital (the required return on the capital investment) is a cost to the service provider of operating its business and providing services.

525. For both the transmission and distribution networks, a cost of working capital for each year of the access arrangement was determined as the implicit cost incurred by Western Power by providing credit to users of services and holding inventory offset by the implicit benefit to Western Power of receiving credit from suppliers.

526. The requirement for working capital was calculated using the following assumptions:

- an assumed revenue lag of 45 days, based on meter reading cycles and payment terms of the electricity transfer access contract;
- inventory based on 4 per cent of capital expenditure; and
- an average expense lead of 24.2 days on operating and capital expenditure based on:
  - an expense lead of 10 days on labour costs, comprising 29 per cent of total expense excluding depreciation and borrowing costs;
  - an expense lead of 30 days on direct costs of materials and services, comprising 66 per cent of total expense excluding depreciation and borrowing costs; and
  - an expense lead of 30 days on indirect cost (which includes items such as rates and insurance), comprising 5 per cent of total expense excluding depreciation and borrowing costs.

527. The cost of working capital was calculated as the value of working capital at the beginning of each year of the access arrangement period multiplied by the approved real post-tax WACC.

Western Power's proposal

528. Western Power has proposed to continue using the same method and assumptions for determining the cost of working capital as approved for AA3. Its proposed working capital requirements over AA4 are shown in Table 76 and Table 77 below.

Table 76 Western Power's proposed cost of working capital – transmission network (nominal $ million)

	2017/18	2018/19	2019/20	2020/21	2021/22
Smoothed target revenue	293.579	343.074	400.911	466.074	539.711
Expenses					
Forecast capital expenditure	168.512	217.653	257.860	230.471	230.712
Forecast operating costs	95.382	86.956	87.312	90.243	91.714
Total expenses	263.893	304.609	345.172	320.714	322.426
Working capital requirement					
Receivables (45 days)	36.195	39.735	43.503	47.642	51.828
Creditors (24.2 days)	(17.496)	(20.196)	(22.823)	(21.264)	(21.377)
Inventory (4% of capital expenditure)	6.740	8.706	10.314	9.219	9.228
Working capital requirement (nominal)	25.439	28.246	30.995	35.597	39.679
Return on working capital at WACC = 6.09%	1.114	1.549	1.720	1.887	2.168

Source: Western Power, AA4 Regulatory Revenue Model, 2 October 2017.

Table 77 Western Power's proposed cost of working capital – distribution network (nominal $ million)

	2017/18	2018/19	2019/20	2020/21	2021/22
Smoothed target revenue	1221.25	1269.4	1308.1	1340.0	1376.1
Expenses					
Forecast capital expenditure	517.864	537.230	585.230	460.340	483.477
Forecast operating costs	297.310	277.203	279.859	290.957	298.060
Total expenses	815.174	814.406	865.088	751.297	781.537
Working capital requirement					
Receivables (45 days)	150.565	156.496	160.835	165.209	169.654
Creditors (24.2 days)	(54.047)	(53.996)	(57.200)	(49.812)	(51.817)
Inventory (4% of capital expenditure)	20.715	21.488	23.409	18.414	19.339
Working capital requirement (nominal)	25.4	28.2	31.0	35.6	39.7
Return on working capital at WACC = 6.09%	7.238	7.138	7.550	7.736	8.148

Source: Western Power, AA4 Regulatory Revenue model, 2 October 2017.

Submissions

529. No submissions were received on working capital.

Considerations of the ERA

530. The working capital provided for should only reflect the essential items for the conduct of the service provider's business.

531. Western Power's proposal is consistent with the method approved by the ERA for AA3.

532. The ERA sought further information from Western Power to verify the assumptions used for AA4. Western Power advised it had not identified any information that would indicate the AA3 assumptions should be changed.[51] The ERA has not adjusted the assumptions for the purposes of this draft decision but expects Western Power to provide updated information with its response to the draft decision to support its statement that there has been no change in the number of debtor days, creditor days or the proportion of inventory compared with capital expenditure since AA3.

533. The return on working capital will change as a result of amendments elsewhere in this draft decision to the weighted average cost of capital, smoothed target revenue, forecast new facilities investment and forecast non-capital costs.

Required Amendment 8

The values of smoothed target revenue, forecast new facilities investment, forecast non-capital costs and weighted average cost of capital used to calculate working capital must be adjusted to be consistent with this draft decision.

Taxation

Current access arrangement

534. Prior to AA3, an allowance for taxation costs was included through the use of a "pre-tax" weighted average cost of capital. For AA3 a "post-tax" weighted average cost of capital was used and the revenue model incorporated a tax module to estimate tax liabilities. A tax building block was included in the annual revenue requirement estimate for each year.

535. To implement the post-tax methodology it was necessary to establish the value of the tax asset base as at 30 June 2012 (the initial tax asset base) and the corresponding tax depreciation schedule. Capital contributions were excluded from the initial tax asset base to be consistent with the regulatory accounting treatment. The initial tax asset base was depreciated on a straight-line basis.

536. The initial tax asset base and corresponding tax depreciation approved for AA3 is set out in Table 78 and Table 79 below.

[51] Email from Western Power 16 February 2018.

Table 78 Western Power's initial tax asset base for AA3, transmission $ nominal

	2012/13	2013/14	2014/15	2015/16	2016/17
Opening tax asset base	2,043.3	1,978.4	1,912.0	1,848.5	1,785.6
Tax depreciation	(64.8)	(66.4)	(63.6)	(62.9)	(60.9)
Closing initial tax asset base	1,978.4	1,912.0	1,848.5	1,785.6	1,724.7

Table 79 Western Power's initial tax asset base for AA3, distribution $ nominal

	2012/13	2013/14	2014/15	2015/16	2016/17
Opening tax asset base	3,127.7	3,040.4	2,955.0	2,874.1	2,794.1
Tax depreciation	(87.3)	(85.4)	(80.9)	(80.0)	(77.3)
Closing initial tax asset base	3,040.4	2,955.0	2,874.1	2,794.1	2,716.8

537. Forecast capital expenditure for the AA3 period was added to the tax asset base in the year it was forecast to be incurred. Tax depreciation can be claimed from the year the asset is commissioned. An assumption was made that typically assets are commissioned the year after the expenditure is incurred. The exception to this was equity raising costs for which depreciation can be claimed from the year the expenditure is incurred.

538. As proposed by Western Power, tax depreciation for capital expenditure during AA3 was calculated on a diminishing value basis.

539. The tax asset lives approved for AA3 are set out in Table 80 below.

Table 80 Tax asset lives approved for AA3

	Western Power proposal
Transmission assets	
Cables	47.5
Steel towers	47.5
Wood poles	47.5
Metering	25
Transformers	40
Reactors	40
Capacitors	40
Circuit breakers	40
SCADA and communications	12.5
IT	4
Other non-network assets	12.5
Equity raising costs	5
Distribution assets	
Wooden pole lines	45
Underground cables	50
Transformers	40
Switchgear	30
Street lighting	15
Meters and services	25
IT	4
SCADA and communications	10
Other distribution non-network	10
Equity raising costs	5

540. The forecast tax asset base and tax depreciation for the approved AA3 capital expenditure is set out in Table 81 and Table 82 below.

Table 81 Western Power's forecast tax asset base for approved AA3 capital expenditure, transmission $ nominal

	2012/13	2013/14	2014/15	2015/16	2016/17
Opening tax asset base	0.0	300.9	679.2	891.0	1,124.1
Tax depreciation	(0.3)	(22.9)	(42.5)	(51.4)	(63.2)
Capital expenditure	301.2	401.2	254.3	284.4	384.5
Closing tax asset base	300.9	679.2	891.0	1,124.1	1,445.4

Table 82 Western Power's forecast tax asset base for approved AA3 capital expenditure, distribution $ nominal

	2012/13	2013/14	2014/15	2015/16	2016/17
Opening tax asset base	0.0	598.1	1,236.1	1,843.1	2,399.0
Tax depreciation	(2.0)	(49.0)	(92.4)	(123.9)	(152.0)
Capital expenditure	600.1	687.0	699.3	679.7	694.4
Closing tax asset base	598.1	1,236.1	1,843.1	2,399.0	2,941.4

541. Taxable income was calculated as follows:

- approved revenue
- **minus** forecast operating expenditure and TEC[52]
- **minus** tax depreciation
- **minus** interest costs (calculated by multiplying the debt portion of the opening capital base by the gearing ratio used for determining the weighted average cost of capital and the cost of debt)
- **equals** estimated taxable income.

542. The taxation cost was calculated by multiplying the estimated taxable income by the statutory income tax rate of 30 per cent. The estimated taxation payable was calculated by deducting the value of imputation credits.

543. A notional whole of business tax expense and a stand-alone transmission and distribution business tax expense was calculated. The whole of business tax expense was then allocated on the basis of the proportion of the notional tax expense for each business segment.[53]

Western Power's proposal

544. For AA4, Western Power has proposed a similar method to AA3 to estimate tax liabilities.

545. An update of the initial tax asset base is shown in Table 83 and Table 84 below.

Table 83 Western Power's initial tax asset base, transmission $ nominal

	2012/13	2013/14	2014/15	2015/16	2016/17
Opening tax asset base	1,724.7	1,666.9	1,609.1	1,551.3	1,493.5
Tax depreciation	(57.8)	(57.8)	(57.8)	(57.8)	(57.8)
Closing initial tax asset base	1,666.9	1,609.1	1,551.3	1,493.5	1,435.7

52 Tariff Equalisation Contribution.

53 Western Power, Access arrangement information: Access arrangement revisions for the fourth access arrangement period, 2 October 2017, p. 237.

Table 84 Western Power's initial tax asset base, distribution $ nominal

	2012/13	2013/14	2014/15	2015/16	2016/17
Opening tax asset base	2,716.8	2,644.3	2,572.8	2,501.3	2,429.8
Tax depreciation	(72.5)	(71.5)	(71.5)	(71.5)	(71.5)
Closing initial tax asset base	2,644.3	2,572.8	2,501.3	2,429.8	2,358.3

546. Western Power has also updated the tax asset base to reflect actual capital expenditure during AA3. The revised tax asset base for capital expenditure during AA3 is shown in Table 85 and Table 86 below.

Table 85 Western Power's proposed revised tax asset base for actual AA3 capital expenditure, transmission $ nominal

	2012/13	2013/14	2014/15	2015/16	2016/17
Opening tax asset base	0.0	204.0	512.2	631.2	654.8
Tax depreciation	(0.3)	(15.4)	(28.5)	(37.0)	(43.1)
Capital expenditure	208.5	327.6	156.5	120.1	106.7
Asset disposal	(4.1)	(4.1)	(9.0)	(59.5)	(1.4)
Closing tax asset base	204.0	512.2	631.2	654.8	716.9

Table 86 Western Power's proposed revised tax asset base for actual AA3 capital expenditure, distribution $ nominal

	2012/13	2013/14	2014/15	2015/16	2016/17
Opening tax asset base	0.0	628.5	1,224.8	1,754.2	2,149.5
Tax depreciation	(2.1)	(45.8)	(76.6)	(107.6)	(128.2)
Capital expenditure	631.4	642.4	610.7	505.7	364.4
Asset disposal	(0.9)	(0.3)	(4.8)	(2.8)	(0.6)
Closing tax asset base	628.5	1,224.8	1,754.2	2,149.5	2,385.1

547. Western Power has rolled forward the tax asset base for the AA4 period by adding capital expenditure (excluding capital contributions and gifted assets), deducting tax depreciation, and deducting asset disposals (at written down tax value). Tax depreciation has been calculated using the same asset lives and method approved for AA3. Western Power's forecast tax asset base and depreciation for the AA4 period is set out in Table 87 and Table 88 below.

Table 87 Western Power's forecast tax asset base AA4 period, transmission $ nominal

	2017/18	2018/19	2019/20	2020/21	2021/22
Opening tax asset base	2,441.6	2,504.5	2,606.4	2,736.6	2,823.3
Forecast capital expenditure	168.5	217.7	257.9	230.5	230.7
Forecast tax depreciation (initial tax asset base)	(57.8)	(57.8)	(57.8)	(57.8)	(57.8)
Forecast tax depreciation on capital expenditure since 30 June 2012	(47.8)	(57.9)	(69.8)	(85.9)	(90.7)
Total tax depreciation	(105.6)	(115.8)	(127.7)	(143.7)	(148.5)
Closing tax asset base	2,504.5	2,606.4	2,736.6	2,823.3	2,905.5

Source: Western Power, Access arrangement information: Access arrangement revisions for the fourth access arrangement period*, 2 October 2017, p. 219.*

Table 88 Western Power's forecast tax asset base AA4 period, distribution $ nominal

	2017/18	2018/19	2019/20	2020/21	2021/22
Opening tax asset base	5,101.9	5,400.3	5,685.5	5,988.7	6,129.2
Forecast capital expenditure	517.9	537.2	585.2	460.3	483.5
Forecast tax depreciation (initial tax asset base)	(72.5)	(71.5)	(71.5)	(71.5)	(71.5)
Forecast tax depreciation on capital expenditure since 30 June 2012	(147.0)	(180.5)	(210.6)	(248.3)	(252.5)
Total tax depreciation	(219.5)	(252.0)	(282.1)	(319.8)	(324.0)
Closing tax asset base	5,400.3	5,685.5	5,988.7	6,129.2	6,288.6

Source: Western Power, Access arrangement information: Access arrangement revisions for the fourth access arrangement period*, 2 October 2017, p. 219.*

548. A summary of Western Power's forecast tax calculations is set out in Table 89, Table 90 and Table 91 below.

Table 89 Western Power's estimated cost of taxation for the AA4 period, total business $ nominal

	2017/18	2018/19	2019/20	2020/21	2021/22
Target revenue	1447.3	1535.5	1615.3	1685.5	1763.4
Operating expenditure	(392.7)	(364.2)	(367.2)	(381.2)	(389.8)
TEC	(167.0)	(175.0)	(162.0)	(157.0)	(161.0)
Tax depreciation	(325.1)	(367.8)	(409.7)	(463.6)	(472.5)
Interest	(290.7)	(305.3)	(321.5)	(339.6)	(352.6)
Taxable income/(loss)	271.8	323.3	354.9	344.1	387.5
Tax loss brought forward	-	-	-	-	-
Tax loss carried forward	-	-	-	-	-
Taxable profit	271.8	323.3	354.9	344.1	387.5
Taxation (30 per cent of taxable income)	(81.6)	(97.0)	(106.5)	(103.2)	(116.3)

Source: Western Power, AA4 Regulatory Revenue Model, 2 October 2017.

Table 90 Western Power's estimated cost of taxation for the AA4 period, transmission $ nominal

	2017/18	2018/19	2019/20	2020/21	2021/22
Target revenue	293.6	322.3	353.8	386.4	420.4
Operating expenditure	(95.4)	(87.0)	(87.3)	(90.2)	(91.7)
TEC					
Tax depreciation	(105.6)	(115.8)	(127.7)	(143.7)	(148.5)
Interest	(100.6)	(104.1)	(109.0)	(114.9)	(119.5)
Taxable income/(loss)	(8.0)	15.4	29.8	37.6	60.6
Tax loss brought forward	(87.2)	(95,2)	(79,7)	(49,9)	(12,3)
Tax loss carried forward	(95.2)	(79.7)	(49,9)	(12,3)	-
Taxable profit	-	-	-	-	48.3
Taxation (30 per cent of taxable income)	-	-			14.5
Allocated tax cost	-	-	-	-	15.0

Source: Western Power, AA4 Regulatory Revenue Model, 2 October 2017.

Table 91 Western Power's estimated cost of taxation for the AA4 period, distribution $ nominal

	2017/18	2018/19	2019/20	2020/21	2021/22
Smoothed target revenue	1,153.7	1,213.2	1,261.4	1,299.0	1,343.1
Operating expenditure	(297.3)	(277.2)	(279.9)	(291.0)	(298.1)
TEC	(167.0)	(175.0)	(162.0)	(157.0)	(161.0)
Tax depreciation	(219.5)	(252.0)	(282.1)	(319.8)	(324.0)
Interest	(190.1)	(201.1)	(212.4)	(224.7)	(233.1)
Taxable income/(loss)	279.8	307.9	325.0	306.5	326.9
Tax loss brought forward	-	-	-	-	-
Tax loss carried forward	-	-	-	-	-
Taxable profit	279.8	307.9	325.0	306.5	326.9
Taxation (30 per cent of taxable income)	84.0	92.3	97.5	92.0	98.1
Allocated tax cost	81.6	97.0	106.5	103.2	101.3

Source: Western Power, AA4 Regulatory Revenue Model, 2 October 2017.

Submissions

549. Synergy provided the only submission on this matter, and recommended the ERA review Western Power's calculations and assumptions.

Considerations of the ERA

550. The ERA found two errors in Western Power's determination of the costs of taxation.

- There is an error in Western Power's submitted revenue model. The transmission deferred revenue (caused by re-smoothing) was deducted from both the distribution and transmission revenue for the tax calculation resulting in total revenue used in the calculation of tax being incorrect.
- The revenue under-recovery from AA3 should not be included in the taxable income for the benchmark tax calculation of AA4 as it has already been taken account of in the AA3 taxation allowance.

551. The ERA has also considered the method used to allocate between transmission and distribution. It has found the current method, which calculates taxation for the total business and then allocates it based on stand-alone tax calculations for each service results in an incorrect allocation between the services when notional tax losses arise in one service. To remove this, the ERA requires the allocation to be based on the proportion of revenue for each service.

552. As the ERA has determined different values for the parameters used to calculate taxation (including revenue, operating costs and capital expenditure) the forecast taxation cost must be updated to be consistent with these values.

Required Amendment 9

Forecast taxation costs must be updated to be consistent with the draft decision and must be allocated between services based on the proportion of revenue. The K-factor must not be included in the calculation.

Adjustments to target revenue

Access Code requirements

553. Section 6.4 of the Access Code provides for the target revenue for an access arrangement period to include certain amounts “carried over” from the previous access arrangement period, including:

- an amount for costs incurred as a result of a force majeure event under sections 6.6 to 6.8 of the Access Code;
- an amount for costs incurred as a result of changes to the Technical Rules, for which no allowance was made in the access arrangement, under sections 6.9 to 6.12 of the Access Code;
- an amount under an investment adjustment mechanism under sections 6.13 to 6.18 of the Access Code;
- an amount under a gain sharing mechanism under sections 6.19 to 6.28 of the Access Code; and
- an amount under a service standards adjustment mechanism under sections 6.29 to 6.37 of the Access Code.

Current access arrangement

554. The current access arrangement provides for several revenue adjustment mechanisms to adjust target revenue in AA3 to account for unforeseen events or other cost pass-throughs, over or under-recovery of revenue in preceding years or provide financial incentives to Western Power to be more efficient or perform better. These adjustments occur under the following mechanisms:

- Investment adjustment mechanism – an adjustment to account for differences between forecast and actual costs of certain classes of new facilities investment
- Unforeseen events adjustment – an adjustment to account for costs incurred in the current access arrangement period as a result of force majeure events
- Technical rule change revenue adjustment – an adjustment to account for costs incurred as a result of changes to the Technical Rules that could not have reasonably been foreseen at the commencement of the current access arrangement period
- Gain sharing mechanism – an adjustment to account for the out-performance of the forecast operating expenditure in the current access arrangement

- Service standards adjustment mechanism – an adjustment to account for any difference between service standard performance and service standard benchmarks in the current access arrangement
- D-factor – an adjustment to account for any additional operating expenditure incurred as a result of deferring a capital expenditure project, and any additional operating or capital expenditure incurred in relation to demand management initiatives
- Deferred revenue from the current access arrangement – an adjustment to account for the amount of revenue deferred in the current access arrangement (as a result of an alternative treatment of capital contributions) which was to be recovered in subsequent access arrangement periods

Western Power's proposal

555. Table 92 summarises Western Power's calculation of the financial implications of the adjustment mechanisms on the AA4 target revenue.

Table 92 Revenue adjustments under AA3 adjustment mechanisms

Adjustment mechanism	Adjustment to AA4 transmission revenue	Adjustment to AA4 distribution revenue
Investment adjustment mechanism	-33.58	-5.89
Gain sharing mechanism	103.69	168.93
Service standard adjustment mechanism	13.4	241.70
D-factor	0.0	8.78
Unforeseen events	5.52	14.19
Technical Rules changes	0.0	0.0
Total	89.03	427.71

Source: Western Power, Access arrangement information: Access arrangement revisions for the fourth access arrangement period, 2 October 2017, p. 224.

556. The following sections describe the revenue adjustments under each AA4 mechanism.

Submissions

557. Submissions received by the ERA on Western Power's proposed adjustments to target revenue are addressed below under "Considerations of the ERA".

Considerations of the ERA

Investment adjustment mechanism

558. The investment adjustment mechanism is set out in sections 7.3.1 to 7.3.7 of the current access arrangement.

7.3.2 An amount will be added to, or deducted from, the target revenue for the next access arrangement period in accordance with the investment adjustment mechanism set out below.

7.3.3 The investment adjustment mechanism will apply separately to each of:

a) new facilities investment for the transmission system; and

b) new facilities investment for the distribution system.

7.3.4 The purpose of the investment adjustment mechanism is to adjust Western Power's target revenue in the next access arrangement period in a manner that exactly corrects for the economic loss or gain to Western Power as a result of any investment difference in this access arrangement period in relation to the categories of new facilities investment specified in section 7.3.7 of this access arrangement. In order to give effect to this purpose, the investment adjustment mechanism must take account of:

(a) The effects of inflation;

(b) The time value of money as reflected by Western Power's weighted average cost of capital for the Western Power Network; and

(c) The capital-related costs due to any investment difference in this access arrangement period.

7.3.5 Given the requirements of the investment adjustment mechanism as described in section 7.3.4 of this access arrangement, Western Power's approach to calculating the capital-related costs due to any investment difference is to calculate the difference in present value terms between:

(a) The target revenue that would have been calculated for this access arrangement period if the investment difference had been zero (i.e. there was no forecasting error in relation to the capital expenditure categories that are subject to the investment adjustment mechanism); and

(b) The target revenue that actually applied in this access arrangement period.

The amount under section 7.3.2 of this access arrangement is equal to the present value of the difference calculated under section 7.3.5 of this access arrangement.

7.3.7 The categories that are used in calculating the investment difference are new facilities investment:

(a) arising from the connection of new generation capacity to the transmission system or distribution system from 1 July 2012;

(b) arising from the connection of new load to the transmission system or distribution system from 1 July 2012;

(c) in relation to all augmentations to provide additional capacity to the transmission system or distribution system for the provision of covered services from 1 July 2012;

(d) Undertaken for augmentation of the distribution system under the rural power improvement program;

(e) undertaken for augmentation of the distribution system under the state underground power program; and

(f) in relation to distribution system wood pole management for the provision of covered services from 1 July 2012.

559. Prior to AA3, the investment categories subject to the investment adjustment only included capacity expansion and customer driven categories, on the basis that the drivers for this expenditure are outside Western Power's control.

560. Distribution wood pole management expenditure was added to the mechanism for AA3. Western Power's performance and strategy for managing wood poles was a major issue for AA3. Western Power had been issued with an Order by EnergySafety and was also subject to an inquiry by the Legislative Council's Standing Committee on Public Administration.

561. In its final decision, the ERA recognised that the investment needs for wood pole management may change as Western Power further developed its understanding of what is required. The final decision noted:

> To ensure that Western Power is incentivised to do this in an efficient manner, the Authority decided that, for the third access arrangement period, expenditure relating to wood pole management should be subject to the investment adjustment mechanism. This will then enable expenditure higher than forecast to be recovered, to the extent that it is demonstrated to be efficient expenditure, and will provide Western Power with a return on that investment from the date it is incurred. Alternatively, the provisions of the Access Code enable Western Power to apply to the Authority at any time for pre-approval of capital expenditure forecasts. All of these provisions ensure Western Power is not constrained to only spend what is allowed in the current forecast.

562. Western Power has calculated adjustments of $33.6 million for transmission and $5.9 million for distribution that will be returned to customers due to actual expenditure being lower than approved. These calculations are summarised in Table 93 and Table 94 below.

Table 93 Western Power's proposed adjustments to target revenue under the investment adjustment mechanism – transmission network (real $ million June 2017)

	2012/13	2013/14	2014/15	2015/16	2016/17
Approved capital expenditure					
Capacity expansion	212.5	299.0	143.7	154.4	244.1
Customer-driven	12.5	21.8	21.8	22.0	22.4
Total	225.0	320.8	165.5	176.4	266.5
Actual capital expenditure					
Capacity expansion	122.5	215.6	90.4	27.8	31.3
Customer-driven	21.2	40.5	(22.9)	(0.3)	(8.9)
Total	143.7	256.1	67.6	27.5	22.4
Above or (below) approved expenditure					
Capacity expansion	(89.9)	(83.4)	(53.3)	(126.6)	(212.8)
Customer-driven	8.7	18.7	(44.7)	(22.3)	(31.4)
Total	(81.3)	(64.7)	(98.0)	(148.9)	(244.1)
Adjustment to target revenue Compound return based on the AA3 WACC of 3.6 per cent.	-	(2.9)	(5.3)	(8.8)	(14.16)
Amount (deducted)/added from/to target revenue in 2017/18	(33.6)				

Source: Western Power, AA4 Regulatory Revenue Model, 2 October 2017.

Table 94 Western Power's proposed adjustments to target revenue under the investment adjustment mechanism – distribution network (June 2017 $ million)

	2012/13	2013/14	2014/15	2015/16	2016/17
Approved capital expenditure					
Capacity expansion	62.7	67.6	75.1	75.5	84.2
Customer-driven	142.7	142.2	144.1	143.4	146.4
State Underground Power Program	10.0	4.8	-	-	-
Wood pole management	181.4	207.7	219.5	231.3	245.1
Total	396.8	422.3	438.7	450.2	475.7
Actual capital expenditure					
Capacity expansion	52.2	41.1	26.9	25.9	35.5
Customer-driven	121.9	93.5	88.6	60.3	46.2
State Underground Power Program	16.5	9.3	6.0	4.8	5.0
Wood pole management	233.5	295.3	241.2	190.1	81.7
Total	424.1	439.2	362.7	281.0	168.5
Above or (below) approved investment					
Capacity expansion	(10.5)	(26.5)	(48.1)	(49.6)	(48.7)
Customer-driven	(20.8)	(48.7)	(55.5)	(83.1)	(100.2)
State Underground Power Program	6.5	4.5	6.0	4.8	5.0
Wood pole management	52.1	87.6	21.7	(41.3)	(163.4)
Total	27.3	16.8	(76.0)	(169.2)	(307.2)
Adjustment to target revenue Compound return based on the AA3 WACC of 3.6 per cent.	-	0.98	1.59	(1.15)	(7.25)
Amount (deducted)/added from/to target revenue in 2017/18	(5.89)				

Source: Western Power, AA4 Regulatory Revenue Model, 2 October 2017.

563. In its assessment of the amounts proposed by Western Power under the investment adjustment mechanism, the ERA has addressed:

- whether the amounts to be added to the target revenue have been calculated correctly and consistently with the methods of financial modelling applied for the determination of target revenue; and

- whether the above-forecast new facilities investment is able to be added to the capital base for the network under section 6.51A of the Access Code, allowing Western Power to earn a return on the investment.

564. Consistency of the calculation of amounts to be added to target revenue with the methods of financial modelling applied for the determination of target revenue requires consistency with the implicit timing assumptions for costs and revenues and with the methods applied in calculating the capital base. The ERA has verified the Western Power's calculations and is satisfied that the calculation method has been undertaken appropriately.

565. In its review of the opening capital base, the ERA identified expenditure that did not meet the new facility test investment requirements and therefore must be removed from the opening capital base. The adjustment under the Investment Adjustment Mechanism also changes as a result. Western Power must update the Investment Adjustment Mechanism calculation to be consistent with the draft decision on the opening capital base.

Required Amendment 10

Western Power must update the Investment Adjustment Mechanism value to reflect the ERA's draft decision on AA3 capital expenditure.

Gain sharing mechanism

566. The gain sharing mechanism provides an additional incentive to Western Power to achieve operating cost efficiencies during an access arrangement period as it ensures Western Power retains the efficiency saving for five years from when the efficiency is achieved. For example, without this mechanism, efficiency savings made in year one would be retained for five years but savings in year five would only be retained for one year. Consequently, there would be less incentive to make efficiency savings in the latter years of an access arrangement period.

567. The gain sharing mechanism is set out in sections 7.4.1 to 7.4.9 of the current access arrangement. Section 7.4.2 specifies the annual "efficiency and innovation benchmarks" against which Western Power's actual performance will be assessed and the formula for calculating the costs for comparison purposes.

Table 95 AA3 efficiency and innovation benchmarks, $ million real June 2017

	2012/13	2013/14	2014/15	2015/16	2016/17
Total forecast operating expenditure	498.8	501.6	497.7	495.0	507.7
Less forecast costs for defined benefit superannuation schemes	3.2	3.3	3.3	3.4	3.4
Less forecast non-revenue cap services cost	0	0	0	0	0
Less forecast licence fees	0.05	0.05	0.05	0.05	0.05
Less forecast energy safety levy	4.52	4.52	4.52	4.52	4.52
Less network control service	0	0	0	0	0
Less amounts payable under the *ERA (Electricity Network Access Funding Regulations) 2012*	0.99	1.54	1.32	1.32	1.32
Efficiency and innovation benchmark forecast	490.0	492.4	488.4	485.8	498.3

568. The forecast scale factors used to derive the efficiency and innovation benchmark for AA3 are replaced with the actual scale factors when calculating the above-benchmark surplus at the end of AA3. This ensures Western Power will not be rewarded or penalised for variations from forecast operating expenditure that are attributable to differences in the scale factors driving expenditure and that, conversely, customers do not pay more under the gain sharing mechanism because of slower growth. The scale factors are:

- customer numbers;
- line length;
- distribution transformers;
- zone substation capacity; and
- network growth factor.

569. The forecast scale escalation assumptions and formula for updating the efficiency and innovation benchmarks are set out in section 7.4.8 of the access arrangement. Section 7.4.9 includes requirements for the actual scale escalation factors to be independently audited.

570. The formulation detailed in section 7.4 is summarised in the following tables. Western Power has updated the values for EIB_t[54] and A_t[55] for each year for actual audited scale escalation factors. Western Power engaged Deloitte to perform an audit of the efficiency and innovation scale escalation factors for the AA3 period.[56]

[54] Efficiency and Innovation Benchmarks at time t.

[55] Actual non-capital costs at time t.

[56] Western Power, *Access arrangement information: Access arrangement revisions for the fourth access arrangement period*, 2 October 2017, p. 226.

571. Deloitte found:[57]

> In our opinion, based on the procedures performed, in all material respects:
>
> - The data used in the calculation of the scale escalation drivers for the purposes of AA3 section 7.4.8(b)(i) for the 2011/12 to 2016/17 financial years is valid and has been accurately and completely applied
> - The scale escalation drivers are calculated in accordance with the methodology set out in table 34 of AA3.

Table 96 Western Power's proposed adjusted benchmark for actual scale escalation drivers, $ million real June 2017

	2012/13	2013/14	2014/15	2015/16	2016/17
Efficiency and innovation benchmark approved for AA3– based on forecast scale escalation drivers	$490.0	$492.4	$488.4	$485.8	$498.3
Benchmark scaling factors:					
Customer numbers escalation	2.41%	2.41%	2.41%	2.41%	2.41%
Network growth escalation	2.1%	2.1%	2.1%	2.1%	2.1%
Line length	1.31%	1.31%	1.31%	1.31%	1.31%
Number of distribution transformers	1.33%	1.33%	1.33%	1.33%	1.33%
Zone substation capacity	3.65%	3.65%	3.65%	3.65%	3.65%
Actual scaling factors:					
Customer numbers escalation	3.41%	0.68%	2.49%	2.37%	1.54%
Network growth escalation	0.46%	2.33%	0.62%	-0.37%	0.56%
Line length	0.09%	1.35%	1.35%	0.79%	0.53%
Number of distribution transformers	0.47%	1.5%	1.11%	0.85%	0.64%
Zone substation capacity	0.82%	4.15%	-0.61%	-2.76%	0.51%
Reduction in the benchmark due to growth being lower than forecast	($3.1)	($3.2)	($6.7)	($12.8)	($16.9)
Efficiency and innovation benchmark – adjusted for actual scale escalation drivers	$486.9	$489.2	$481.7	$473.0	$481.4

[57] Western Power, *Access arrangement information: Access arrangement revisions for the fourth access arrangement period - Attachment 10.3: Audit of Efficiency and Innovation Benchmark scale escalation drivers for the period 2011/12 to 2016/17*, 2 October 2017, p. 4.

Table 97 Western Power's proposed actual expenditure for gain sharing mechanism, $ million real June 2017

	2012/13	2013/14	2014/15	2015/16	2016/17
Total operating expenditure	530.9	510.6	482.0	511.8	456.7
Less costs for defined benefit superannuation schemes	(0.1)	(0.5)	-	(0.3)	(0.3)
Less non-revenue cap services cost	(34.0)	(17.5)	(16.6)	(17.7)	(17.2)
Less licence fees	(0.1)	(0.1)	(0.4)	-	-
Less energy safety levy	(4.3)	(4.3)	(4.3)	(4.4)	(4.4)
Less network control service	(2.1)	(1.8)	(1.7)	(1.5)	(0.6)
Less amounts payable under the ERA (Electricity Network Access Funding Regulations) 2012	(0.8)	(0.8)	(0.4)	(0.8)	(0.5)
Unforeseen events			(0.7)	(4.5)	(13.4)
Efficiency and innovation actuals	489.5	485.6	457.9	482.6	420.3

572. The gain sharing mechanism also includes provisions to ensure expenditure savings achieved by, or resulting in, failure to meet service standard benchmarks are not rewarded.

> $272.6 million is included in AA4 target revenue as a result of performance under the GSM during the AA3 period. The GSM provides Western Power an incentive to make operating cost efficiencies by allowing the business to add a share of efficiency gains achieved during one access arrangement period to target revenue for the next access arrangement period. Efficiency improvements must not be made at the expense of service performance, therefore GSM rewards are only applied if Western Power achieves a defined set of minimum service standards. Customers receive the majority of the benefits as a result of the significantly lower operating expenditure in future periods.
>
> … The current GSM requires Western Power to achieve all 17 SSBs in any one year in order to receive efficiency rewards. The business met all 17 SSBs in two of the five years of the AA3 period. [58]

[58] Western Power, *Access arrangement information: Access arrangement revisions for the fourth access arrangement period*, 2 October 2017, p. 226.

Table 98 Western Power's calculation of inputs for gain sharing mechanism calculation, $ million real June 2017

	2012/13	2013/14	2014/15	2015/16	2016/17
Efficiency and innovation benchmark – adjusted for actual scale escalation drivers	486.9	489.2	481.7	473.0	481.4
Actual costs	489.5	485.6	457.9	482.6	420.3
Benchmark less actual (current year) (A)	(2.6)	3.6	23.8	(9.6)	61.1
Benchmark less actual (prior year) (B)		2.6	(3.6)	(23.8)	9.6
Above benchmark surplus/(loss) (A)+(B)	(2.6)	6.2	20.2	(33.5)	70.8
Above benchmark surplus adjusted for service standard performance	(2.6)	0.0	20.2	(33.5)	70.8

Source: Western Power, Access arrangement information: Access arrangement revisions for the fourth access arrangement period, 2 October 2017, p. 227.

573. Western Power has calculated the reward payable in each year of AA4 as follows.

Table 99 Western Power's proposed gain sharing mechanism, $ million real June 2017

	2017/18	2018/19	2019/20	2020/21	2021/22
2012/13	(2.6)				
2013/14	0.0	0.0			
2014/15	20.2	20.2	20.2		
2015/16	(33.5)	(33.5)	(33.5)	(33.5)	
2016/17	70.8	70.8	70.8	70.8	70.8
Total	**54.9**	**57.5**	**57.5**	**37.3**	**70.8**

574. The current access arrangement specifies the gain sharing mechanism reward as a whole of Western Power reward without specifying how this should be allocated between distribution and transmission. Western Power has calculated a notional gain sharing mechanism reward for distribution and transmission separately, and used these outcomes to allocate the total reward to transmission and distribution.

Table 100 Western Power proposed allocation between transmission and distribution, $ million real June 2017

	2017/18	2018/19	2014/15	2015/16	2016/17
Total - GSMA$_t$	54.9	57.5	57.5	37.3	70.8
Distribution allocation	36.4	37.5	34.8	13.3	46.9
Transmission allocation	18.5	20.0	22.7	24.0	23.9

Source: Western Power, Access arrangement information: Access arrangement revisions for the fourth access arrangement period, 2 October 2017, p. 227.

575. The ERA's draft decision includes required amendments that affect the gain share mechanism. As set out in Table 101 below, an adjustment is required for wood pole operating expenditure and the amounts Western Power claimed as unforeseen events must be removed.

576. The gain share mechanism was set on the basis of total business performance. On that basis, the ERA has allocated the total value between services based on revenue proportions as set out in Table 103 below.

Table 101 ERA draft decision gain sharing mechanism, $ million real June 2017

	2012/13	2013/14	2014/15	2015/16	2016/17
Total reported operating expenditure	530.9	510.6	482.0	511.8	456.7
Adjustment for wood pole operating expenditure			10.5	12.9	5.5
Less costs for defined benefit superannuation schemes	(0.1)	(0.5)	-	(0.3)	(0.3)
Less non-revenue cap services cost	(34.0)	(17.5)	(16.6)	(17.7)	(17.2)
Less licence fees	(0.1)	(0.1)	(0.4)	-	-
Less energy safety levy	(4.3)	(4.3)	(4.3)	(4.4)	(4.4)
Less network control service	(2.1)	(1.8)	(1.7)	(1.5)	(0.6)
Less amounts payable under the ERA (Electricity Network Access Funding Regulations) 2012	(0.8)	(0.8)	(0.4)	(0.8)	(0.5)
Less unforeseen events	-	-	-	-	-
Total actual efficiency and innovation expenditure	489.5	485.6	469.1	500.0	439.2
Efficiency and Innovation Benchmark	486.9	489.2	481.7	473.0	481.4
Benchmark less actual (current year)	(2.6)	3.6	12.6	(27.0)	42.2
Benchmark less actual (prior year)		2.6	(3.6)	(12.6)	27.0
Annual surplus	(2.6)	6.2	9.0	(39.6)	69.2
Adjusted for service standard performance	(2.6)	-	9.0	(39.6)	69.2

Table 102 ERA draft decision gain sharing mechanism, $ million real June 2017

	2017/18	2018/19	2019/20	2020/21	2021/22
2012/13	-2.6				
2013/14	0.0	0.0			
2014/15	9.0	9.0	9.0		
2015/16	(39.6)	(39.6)	(39.6)	(39.6)	
2016/17	69.2	69.2	69.2	69.2	69.2
Total	**36.0**	**38.6**	**38.6**	**29.6**	**69.2**

Table 103 ERA draft decision allocation of gain share mechanism between transmission and distribution, $ million real June 2017

	2017/18	2018/19	2019/20	2020/21	2021/22
Transmission	8.6	9.3	9.3	7.1	16.6
Distribution	27.4	29.3	29.3	22.5	52.6
Total	**36.0**	**38.6**	**38.6**	**29.6**	**69.2**

Required Amendment 11

Western Power must update the Gain Share Mechanism to reflect the ERA's draft decision on wood pole expenditure and unforeseen events and must allocate the value between services based on revenue proportions.

Service standard adjustment mechanism

577. The service standard adjustment mechanism underwent major revisions at the last access arrangement review. The changes were initiated by Western Power to more closely align the methodology with the comparable NEM incentive mechanism (Service Standard Performance Incentive Scheme).

578. The service standard adjustment mechanism is intended to ensure Western Power has an incentive to maintain service standards and improve service standards only where the improvement is of value to customers.

579. Western Power is forecasting a cumulative net reward of $13.4 million for transmission and $241.7 million for the distribution service for the AA3 period.

580. Western Power has calculated an overall $13.4 million reward under the service standard adjustment mechanism for performance against the transmission network service standard targets during the AA3 period. Table 104 shows performance compared with the service standard target and the financial penalty or reward for each measure.

Table 104 AA3 transmission service standard adjustment mechanism adjustments, $ million real June 2017

	2012/13	2013/14	2014/15	2015/16	2016/17
Circuit availability (% of total time)					
Target	98.1	98.1	98.1	98.1	98.1
Performance	98.4	98.0	98.5	98.7	98.9
Penalty / reward $	**2.7**	**-0.5**	**3.6**	**5.4**	**7.2**
System minute interrupted radial (minutes)					
Target	1.9	1.9	1.9	1.9	1.9
Performance	1.2	3.7	1.6	0.5	0.7
Penalty / reward $	**0.1**	**-0.3**	**0.0**	**0.2**	**0.1**

Source: Western Power, Access arrangement information: Access arrangement revisions for the fourth access arrangement period, 2 October 2017, pp. 227-228.

581. Western Power has calculated an overall $241.7 million reward under the service standard adjustment mechanism for performance against the distribution network service standard targets during the AA3 period. Table 105 (below) shows performance compared with the service standard target and the financial penalty or reward for each measure.

582. Western Power has calculated an overall $9.2 million reward under the service standard adjustment mechanism for performance against the call centre performance service standard targets during the AA3 period. Table 106 (below) shows performance compared with the service standard target and the financial penalty or reward for the measure.

583. Western Power's calculation of the Service Standard Adjustment Mechanism has been calculated in accordance with the access arrangement.

Table 105 AA3 distribution service standard adjustment mechanism adjustments, $ million real June 2017

	2012/13	2013/14	2014/15	2015/16	2016/17
SAIDI - CBD (minutes)					
Target	20.3	20.3	20.3	20.3	20.3
Performance	7.6	18.3	26.2	22.6	13.8
Penalty / reward $	**0.9**	**0.1**	**-0.4**	**-0.2**	**0.5**
SAIDI - Urban (minutes)					
Target	136.6	136.6	136.6	136.6	136.6
Performance	102.7	107.4	103.0	91.3	104.4
Penalty / reward $	**19.8**	**17.1**	**19.6**	**26.5**	**18.8**
SAIDI – Rural short (minutes)					
Target	207.8	207.8	207.8	207.8	207.8
Performance	181.4	171.2	182.6	168.4	175.6
Penalty / reward $	**6.5**	**9.0**	**6.2**	**9.7**	**7.9**
SAIDI - Rural long (minutes)					
Target	582.2	582.2	582.2	582.2	582.2
Performance	685.4	673.8	677.5	582.6	626.2
Penalty / reward $	**-7.4**	**-6.6**	**-6.9**	**0.0**	**-3.2**
SAIFI – CBD (number of instances)					
Target	0.14	0.14	0.14	0.14	0.14
Performance	0.03	0.20	0.17	0.10	0.11
Penalty / reward $	**1.1**	**-0.6**	**-0.3**	**0.4**	**0.3**
SAIFI – Urban (number of instances)					
Target	1.36	1.36	1.36	1.36	1.36
Performance	1.16	1.13	1.09	0.91	1.00
Penalty / reward $	**12.1**	**13.9**	**16.3**	**27.2**	**20.6**
SAIFI – Rural short (number of instances)					
Target	2.27	2.27	2.27	2.27	2.27
Performance	2.17	1.83	1.98	1.75	1.76
Penalty / reward $	**2.5**	**10.8**	**7.1**	**12.8**	**12.5**
SAIFI – Rural long (number of instances)					
Target	4.06	4.06	4.06	4.06	4.06
Performance	4.91	4.98	4.41	3.99	3.95
Penalty / reward $	**-5.0**	**-5.0**	**-3.9**	**0.8**	**1.2**

Source: Western Power, Access arrangement information: Access arrangement revisions for the fourth access arrangement period, 2 October 2017, pp. 228-229.

Table 106 AA3 call centre performance service standard adjustment mechanism adjustments. $ million real June 2017

		2012/13	2013/14	2014/15	2015/16	2016/17
Call centre performance (% calls responded to within 30 seconds)						
Target	%	87.6	87.6	87.6	87.6	87.6
Performance	%	90.6	92.8	93.7	91.4	91.8
Penalty / reward	**$m**	**1.4**	**2.4**	**2.8**	**1.7**	**1.9**

Source: Western Power, Access arrangement information: Access arrangement revisions for the fourth access arrangement period, 2 October 2017, p. 229.

D-factor

584. The D-factor mechanism provides for the recovery in the next access arrangement period of operating expenditure that is incurred by Western Power as a result of deferring a capital expenditure project or in relation to demand-management initiatives.

585. Many non-network options (including demand management programs) involve substituting non-capital costs for capital investment in a network to resolve network constraints. However, the Access Code does not include a mechanism for the retrospective recovery of non-capital costs. The inability to recover these costs could result in Western Power not choosing the overall least cost option.

586. The D-factor scheme was approved in AA2 to remove the apparent disincentive for Western Power to seek efficiency in capital costs where an increase in non-capital costs was necessary to achieve the efficiency on the basis that, otherwise, such non-capital costs could not be recovered.

587. The types of expenditure and the evidence Western Power must provide to support a claim under the D-factor are set out in sections 7.6.3 to 7.6.5.

7.6.3 In the next access arrangement period, the Authority will add to Western Power's target revenue an amount so that Western Power is financially neutral as a result of:

a) any additional non-capital costs incurred by Western Power as a result of deferring a new facilities investment project during this access arrangement period, net of any amounts previously included in target revenue in relation to the deferred new facilities investment (other than such amounts included in the calculation of the capital-related costs due to any investment difference under clause 7.3.5); and

b) any additional non-capital costs incurred by Western Power in relation to demand management initiatives or network control services.

7.6.4 In relation to 7.6.3a), the new facilities investment project that has been deferred must have been included in the forecast new facilities investment in its revised access arrangement information or supporting documentation, and in the Authority's allowed new facilities investment for this access arrangement period.

7.6.5 In relation to 7.6.3a) and 7.6.3b), an amount will only be added to target revenue for the next access arrangement period if there is an approved business case for the relevant expenditure, and this business case is made available to the Authority. The business case must demonstrate to the Authority's satisfaction that the proposed non-capital costs satisfy the requirements of sections 6.40 and 6.41 of the Code, as relevant.

7.6.6 In relation to 7.6.3a) and 7.6.3b), the adjustment to the target revenue for the next access arrangement period must leave Western Power financially neutral by taking account of:

a) the effects of inflation; and

b) the time value of money as reflected by Western Power's weighted average cost of capital for the Western Power network.

588. Western Power is seeking an adjustment of $8.8 million to recover costs of the Ravensthorpe and Bremer Bay network control services. Section 7.6 of the current access arrangement permits Western Power, in certain circumstances, to recover non-capital costs through the D-factor scheme.

589. Western Power states that network control services enable it to procure generation and demand management in localised areas of network constraint to defer the need for more costly network augmentation. Western Power advises that the Ravensthorpe Power Station has been providing network control services since 2012/13, while Bremer Bay has been in operation since 2006. In both cases, localised generation can be dispatched in response to network contingencies at peak times and during lengthy outages to ensure covered services can be provided and reliability is not compromised.

590. In accordance with the requirements of the access arrangement, these network control services are for demand management or will enable network augmentation to be deferred. Western Power considers this operating expenditure is compliant with the requirements of Sections 6.40 and 6.41 of the Access Code.

Table 107 AA4 D-factor revenue adjustment, $ million real June 2017

	2012/13	2013/14	2014/15	2015/16	2016/17
Ravensthorpe	1.2	0.8	0.6	0.6	0.6
Bremer Bay	0.9	1.0	1.1	0.9	0.1
Total	**2.1**	**1.8**	**1.7**	**1.5**	**0.7**

Source: Western Power, Access arrangement information: Access arrangement revisions for the fourth access arrangement period, 2 October 2017, p. 230.

591. No stakeholders commented on these adjustments.

592. Western Power has provided business cases and supporting information which demonstrates the expenditure claimed meets the D-factor requirements.

593. Western Power's AA3 proposal forecast expenditure of $73 million for network control services. The ERA's decision for AA3 was to exclude network control service costs from the approved operating costs and expand the D-factor scheme to enable Western Power to recover the actual costs at the next review. As can be seen above, total actual network control costs amounted to $7.8 million.

Unforeseen events adjustment

594. The unforeseen events adjustment is set out in sections 7.1.1 to 7.1.4 of the current access arrangement as follows:

7.1.1 If a *force majeure event*[59] occurs which results in Western Power incurring *unrecovered costs* during the *access arrangement period* then Western Power will, as part of its proposed revisions for the next *access arrangement period*, provide a report to the Authority setting out:

(a) a description of the *force majeure event*;

(b) a description of the insurance cover that Western Power had in place at the time of the *force majeure event*; and

(c) the *unrecovered costs* borne, or an estimate of the unrecovered costs likely to be borne, by Western Power during this *access arrangement period* as a result of the occurrence of the *force majeure event*.

7.1.2 Pursuant to sections 6.6 to 6.8 of the Code, an amount will be added to the *target revenue* for the *covered network* for the next *access arrangement period* in respect of the *unrecovered costs* relating to a *force majeure event* which occurred in the *access arrangement period*.

7.1.3 The addition to target revenue in the next access arrangement period must leave Western Power financially neutral given the timing of when Western Power incurred any unrecovered costs by taking account of:

a) the effects of inflation; and

b) the time value of money as reflected by Western Power's weighted average cost of capital for the Western Power Network.

7.1.4 A *force majeure event* includes but is not limited to any costs arising from the introduction of any scheme or mechanism with respect to any activity including pricing, reduction, cessation, offset and sequestration (including the Carbon Pricing Mechanism announced by the Commonwealth in February 2011), full retail contestability, and the mandated roll-out of Advanced Interval Meters to the extent that such costs were not included in the calculation of target revenue for this access arrangement period or otherwise addressed through the trigger event provisions in section 8 of this access arrangement.

595. In its proposal, Western Power submits that the electricity market review meets the Access Code requirements for a force majeure event:

> … the EMR was a State Government-led initiative that proposed a series of reforms to the Western Australian energy sector. The EMR had two phases, the first of which was largely investigatory and resulted in Western Power incurring some discretionary costs. The second phase laid out specific market reform, which imposed significant mandatory costs on Western Power.
>
> The need to incur EMR costs was outside Western Power's control. The EMR was not foreseen at the beginning of the AA3 period, therefore no forecast costs were included in the AA3 access arrangement decision. These costs are not recoverable under Western Power's insurance policies.

596. Western Power states it has reviewed the costs and identified those incurred in Phase 2 directly related to the introduction of the review. It has adopted the following accounting treatment:[60]

- costs that were incurred of a capital nature were capitalised (e.g. IT costs)

[59] The Access Code defines "force majeure" as a fact or circumstance beyond the person's control and which a reasonable and prudent person would not be able to prevent or overcome.

[60] Western Power, *Access arrangement information: Access arrangement revisions for the fourth access arrangement period*, 2 October 2017, p. 231.

- costs that had potential to provide a benefit to Western Power should it transition to the National Electricity Rules in the future were capitalised
- all remaining costs were expensed (i.e. operating expenditure).

597. Table 108 and Table 109 (below) summarise the electricity market review operating expenditure and capital expenditure that Western Power has included as a force majeure event in the AA4 proposal. The tables also show the operating expenditure and capital expenditure amounts of the proposed force majeure event. The revenue adjustment due to operating expenditure is $19.7 million (in present value terms).

598. Western Power proposes the capital expenditure it has identified should be added to the regulated capital asset base. The amounts are shown in the table below for completeness. The ERA considered the proposed capital expenditure amount under the opening regulated capital base for AA4.

Table 108 Summary of electricity market review operating expenditure incurred, $ million real June 2017

	Total cost incurred	Less excluded costs	Total force majeure
Network regulation – regulatory submission program	8.8	-2.6	6.2
Market competition – contestability	1.4	-	1.4
Market competition – connections and access	2.0	-	2.0
Institutional arrangements – System Management /AEMO	4.6		4.6
Review program management – electricity market review transition	4.3		4.3
Total	**21.3**	**-2.6**	**18.7**

Source: Western Power, Access arrangement information: Access arrangement revisions for the fourth access arrangement period*, 2 October 2017, p. 232.*

Table 109 Summary of electricity market review capital expenditure incurred, $ million real June 2017

	Total cost incurred	Excluded costs	Total force majeure
Network regulation – regulatory submission program	5.6	-0.06	5.6
Institutional arrangements – System Management /AEMO	0.5		0.5
Review program management – electricity market review transition	0.3		0.3
Total	**6.4**	**-0.06**	**6.4**

Source: Western Power, Access arrangement information: Access arrangement revisions for the fourth access arrangement period*, 2 October 2017, p. 232.*

599. Submissions from Alinta, CdL Advisory, Change Energy, Community Electricity, Emergent Energy, ERM Power and Synergy all include discussion of the costs of

energy market reform. Generally submissions considered this expenditure should not be included as an unforeseen event adjustment.

600. In addition to meeting the requirements of a force majeure event, section 6.6 of the Access Code only permits costs that would be incurred by a service provider efficiently minimising costs. Furthermore, under section 6.4 of the Access Code, the costs must be for the provision of covered services.

601. The ERA has considered each element of the costs submitted by Western Power against the Access Code requirements:

Preparation of a possible regulatory submission to the Australian Energy Regulator

602. The ERA notes there was no regulatory obligation for this submission to be prepared. Western Power has not provided any evidence to demonstrate that the costs are no greater than would be incurred by a service provider efficiently minimising costs. The ERA does not consider these costs meet the Access Code requirements for an unforeseen event adjustment.

Market competition contestability, connections and access and review program management for electricity market review transition

603. The ERA does not consider developing or responding to possible energy reform meets the Access Code requirements for a force majeure event. Energy policy is an ongoing process and should be part of normal business for any network service provider.

System Management/AEMO

604. As discussed in the opening capital base, system management costs do not form part of Western Power's regulated network services. Prior to AEMO taking on these functions, Western Power recovered its system management costs through wholesale electricity market fees. Since AEMO took on responsibility for System Management, Western Power has been charging AEMO for the services it has provided. Consequently, the ERA does not consider these costs fall within the requirements of the Access Code for the unforeseen events adjustment.

Required Amendment 12

Western Power must adjust target revenue to remove its proposed unforeseen event adjustment.

Technical Rules changes

605. Western Power has assessed the Technical Rules changes that occurred over AA3 and considers there is no need for an adjustment to target revenue for AA4.

606. Synergy submits the ERA should also assess whether a reduction in target revenue is required.

607. During AA3, Western Power proposed three sets of amendments to the Technical Rules.[61] The ERA undertook a review of these proposed amendments as required under the Access Code, including conducting public consultation, and published the following decisions:

- Final Decision on Western Power's Proposed Amendments to the Technical Rules (Submitted November 2015):[62]
  - removing the limit for direct current injection (clause 3.2.1(c)(3))
  - removing out-of-date references to Australian Safety Standard AS 4777 (2005);
  - amendments to the definition of the term "connection point";
  - amendments to the definition of the term "connection asset";
  - amendments to the proposed definition of the term "point of common coupling"; and
  - amendments to the proposed correction of the wording to clause A12.2 from "National Professional Engineers' Register Standing" to "National Professional Engineers Register (NPER) or equivalent standing".
- Final Decision on Western Power's Proposed Amendments to the Technical Rules (Submitted March 2016):[63]
  - The removal of three phase faults from credible contingency scenarios for voltages at or above 66kV (i.e. the transmission system);
  - Amendments to the N-1 provisions to allow voluntary load shedding and post contingent run back generation for user agreed connections; and
  - The addition of the term "weak infeed fault conditions" to the Technical Rules Glossary and a new sub-clause to clause 2.9.4 setting out how quickly a protection relay and associated circuit breaker must clear a fault.
- Final Decision on Western Power's Proposed Amendments to the Technical Rules (Submitted April 2016):[64]
  - amendments to the wording of the Normal Cyclic Rating criterion which outlines the permissible level of power loss following the unplanned loss of a supply transformer at a substation;
  - the replacement of references to Electricity (Supply Standards and System Safety) Regulations 2001 with references to Electricity (Network Safety) Regulations 2015;
  - correction of an incorrect cross reference in Clause 4.2.1(b); and
  - correction of the misspelling of the word "Distribution" in the title of Section 5.

[61] Proposals were submitted to the ERA in November 2015, March 2016 and April 2016. These proposals are available from the ERA website at: https://www.erawa.com.au/electricity/electricity-access/western-power-network/technical-rules/technical-rules

[62] Economic Regulation Authority, *Western Power's Proposed Amendments to the Technical Rules Submitted November 2015: Final Decision*, July 2016.

[63] Economic Regulation Authority, *Western Power's Proposed Amendments to the Technical Rules Submitted March 2016: Final Decision*, November 2016.

[64] Economic Regulation Authority, *Western Power's Proposed Amendments to the Technical Rules Submitted April 2016: Final Decision*, November 2016.

608. As required under section 7.2.1 of the current access arrangement, Western Power has included a report in its proposed revisions for AA4 setting out a description of the nature and timing of the effect of the Technical Rule change on its operating and capital expenditure during the AA3 period. The report is included as Attachment 10.7 to the Access Arrangement Information.

609. Attachment 10.7 only refers to what are described as “key changes”. The ERA has compared the list of actual amendments with those identified by Western Power. Western Power has incorrectly described the amendment to the Normal Cyclic Rating criterion as applying only to the CBD. It has also not included the removal of three phase faults from credible contingency scenarios for voltages at or above 66kV. The ERA considers this would be a “key change”. In any case, the report is required to include all amendments to the Technical Rules.

610. The ERA requested Western Power to amend its report to include all Technical Rule changes and to provide a more detailed assessment of the effect on expenditure, rather than just describing the effect on expenditure as “no material impact”. The revised report demonstrated the amendments had not resulted in changes to expenditure.

Deferred revenue

611. In its proposed revisions for AA2, Western Power proposed an alternative treatment of capital contributions from its approach in AA1, which had the effect of significantly increasing the revenue requirement. To avoid price shocks (as required by section 6.4(c) of the Access Code) and considering that the change in treatment of capital contributions policy should have a neutral commercial effect on Western Power’s business in present value terms, an amount of revenue was deferred from the current access arrangement period to subsequent access arrangement periods. The ERA determined the deferred revenue should be recovered over the life of the assets to which it related.

612. The values of the revenue deferred from AA2 are set out in Table 110 and Table 111 below.

Table 110 Derivation of transmission deferred revenue ($m real June 2012)

Financial year ending:	30 June 2009	30 June 2010	30 June 2011	30 June 2012
Opening deferred revenue value		69.6	75.2	81.2
Plus time value of money (AA2 Real Pre-tax WACC 7.98%)		5.6	6.0	6.5
Closing deferred revenue value	69.6	75.2	81.2	87.7

Source: Amended proposed revisions to the Access Arrangement for the Western Power Network AA3

Table 111 Derivation of distribution deferred revenue ($m real June 2012)

Financial year ending:	30 June 2009	30 June 2010	30 June 2011	30 June 2012
Opening deferred revenue value		523.1	564.8	609.9
Plus time value of money (AA2 Real Pre-tax WACC 7.98%)		41.7	45.1	48.7
Closing deferred revenue value	523.1	564.8	609.9	658.6

Source: Amended proposed revisions to the Access Arrangement for the Western Power Network AA3

613. An amendment to the Access Code was gazetted on 30 September 2011 to insert the following new sections as set out below:

Recovery of deferred revenue

6.5A In this Chapter, **"deferred revenue"** means the amounts referred to in paragraphs 5.37A and 5.48A of the Amended Proposed Revisions dated 24 December 2009 to the *Western Power Network access arrangement*, as approved by the *Authority's further final decision* dated 19 January 2010, expressed in present value terms as at 30 June 2009 and in real dollar values as at 30 June 2009, being respectively:

(a) $64.5 million; and

(b) $484.2 million.

6.5B An amount in respect of *deferred revenue* must be added to the *target revenue* for the *Western Power Network* for one or more *access arrangement periods* until the aggregate amount referred to in section 6.5E has been added.

6.5C An amount added to the *target revenue* under section 6.5B must include an adjustment so that the deferral of the *deferred revenue* is financially neutral for the Electricity Networks Corporation, taking into account:

(a) the time value of money; and

(b) inflation.

6.5D The *Authority* must determine the amount to be added under section 6.5B in a given *access arrangement period*.

6.5E The total of all amounts added under section 6.5B (aggregated over all *access arrangement periods* for which such amounts are added) must equal:

(a) the total amount of the *deferred revenue*;

plus:

(b) the sum of all adjustments under section 6.5C.

614. The Access Code does not prescribe over what period the revenue should be recovered, with the ERA being required to determine the amount to be added to target revenue for each access arrangement period.

615. The values of deferred revenue to be recovered in AA4 and future access arrangements are set out in the access arrangement in sections 7.7.1 to 7.7.3:

7.7.1 For the purposes of clauses 6.5A to 6.5E of the Code an amount must be added to target revenue for the distribution system in the fourth access arrangement period or subsequent access arrangement periods such that the present value (at 30 June 2012) of the total amount added to target revenue (taking account of inflation and the time value of money) is equal to $520.5 million ($ real as at 30 June 2012).

7.7.2 For the purposes of clauses 6.5A to 6.5E of the Code an amount must be added to the target revenue for the transmission system in the fourth access arrangement period or subsequent access arrangement periods such that the present value (at 30 June 2012) of the total amount added to target revenue (taking account of inflation and the time value of money) is equal to $70.5 million ($ real as at 30 June 2012).

7.7.3 The timeframe for recovering the deferred revenue amounts in section 7.71 will be 37 years and in section 7.7.2 will be 45 years.

616. The derived closing balance of deferred revenue in 2012 was used as the starting point for calculating AA3 deferred revenue payments. The annuity calculation was based on a real pre-tax WACC of 3.6 per cent. The following tables show how the deferred revenue for transmission and distribution are rolled forward over the AA3 period.

Table 112 Transmission deferred revenue roll forward over the AA3 period ($m real June 2012)

	2012/13	2013/14	2014/15	2015/16	2016/17
Opening deferred revenue value	87.7	87.0	86.3	85.6	84.9
less principal recovered	-0.6	-0.7	-0.7	-0.7	-0.7
Closing deferred revenue value	87.0	86.3	85.6	84.9	84.2
Revenue recovered through tariffs	3.8	3.8	3.8	3.8	3.8

Source: Amended proposed revisions to the Access Arrangement for the Western Power Network AA3 Model

Table 113 Distribution deferred revenue roll forward over the AA3 period ($m real June 2012)

	2012/13	2013/14	2014/15	2015/16	2016/17
Opening deferred revenue value	658.6	651.6	644.4	637.0	629.3
less principal recovered	-6.9	-7.2	-7.4	-7.7	-8.0
Closing deferred revenue value	651.6	644.4	637.0	629.3	621.3
Revenue recovered through tariffs	30.7	30.7	30.7	30.7	30.7

Source: Amended proposed revisions to the Access Arrangement for the Western Power Network AA3 Model

617. Western Power has included these deferred revenue amounts in its proposed target revenue for AA4. The transmission deferred revenue balance at the end of AA3 was $84.2 million in real 2012 prices. This was then indexed with actual inflation to derive an opening balance of $92.8 million in real 2017 prices for the AA4 period. The distribution deferred revenue balance at the end of AA3 was $621.3 million in real

2012 prices. This was then indexed with actual inflation to derive an opening balance for AA4, which is $685 million in real 2017 prices.

618. Western Power proposes to continue recovering the deferred revenue over the life of the assets.

619. The roll forward of these amounts from the opening of the AA4 period to the closing of the AA4 period is shown in Table 114 and Table 115 (below), along with the revenue being recovered in the AA4 period.

Table 114 Transmission deferred revenue roll forward over the AA4 period, $ real June 2017

	2017/18	2018/19	2019/20	2020/21	2021/22
Opening deferred revenue value	92.8	92.1	91.4	90.6	89.9
less principal recovered	0.7	0.7	0.8	0.8	0.8
Closing deferred revenue value	**92.1**	**91.4**	**90.6**	**89.9**	**89.0**
Revenue recovered through tariffs	4.8	4.8	4.8	4.8	4.8

Source: Western Power, Access arrangement information: Access arrangement revisions for the fourth access arrangement period, 2 October 2017, p. 234.

Table 115 Distribution deferred revenue roll forward over the AA4 period, $ real June 2017

	2017/18	2018/19	2019/20	2020/21	2021/22
Opening deferred revenue value	685.0	677.3	669.3	660.8	652.0
less principal recovered	7.7	8.1	8.4	8.8	9.2
Closing deferred revenue value	677.3	669.3	660.8	652.0	642.9
Revenue recovered through tariffs	**37.7**	**37.7**	**37.7**	**37.7**	**37.7**

Source: Western Power, Access arrangement information: Access arrangement revisions for the fourth access arrangement period, 2 October 2017, p. 234.

620. Stakeholder submissions did not comment on the recovery of deferred revenue.

621. The target revenue values for AA4 are consistent with the method and asset lives determined by the ERA in previous decisions, which the ERA has accepted as being compliant with the Access Code requirements.

Tariff Equalisation Contributions

Access Code requirements

622. Section 6.37A of the Access Code provides for target revenue to include an amount of tariff equalisation contributions (TEC), which comprises an amount levied on users of the Western Power Network to finance amounts paid to Horizon Power for the provision of electricity services in areas not serviced by the Western Power Network.

> 6.37A If the service provider for the Western Power Network is or will be required, by a notice made under section 129D(2) of the Act, to pay a tariff equalisation contribution into the Tariff Equalisation Fund during an access arrangement period, then an amount may be added to the target revenue for the covered network for the access arrangement period, which amount—
>
> (a) must not exceed the total of the tariff equalisation contributions which are or will be required to be paid under the notice, including any amount that was payable or paid before the commencement of the access arrangement period; and
>
> (b) must be separately identified as being under this section 6.37A.

Current access arrangement

623. The TEC is included as a separate item in the pricing formula, so the value is not included in the ERA's determination. However, in the past the pricing profile has usually taken account of any forecast variations in the annual TEC values.

Western Power's proposal

624. The 2016/17 network tariffs included $150 million for the TEC. The Government gazetted a value of $167 million for the 2017/18 year on 13 June 2017. Values for future years have not yet been gazetted.

625. Western Power based its proposal on the values included in the 2017 State Budget. These values will be updated for the final decision.

Table 116 Forecast TEC for the AA4 period, $ million nominal

	2017/18	2018/19	2019/20	2020/21	2021/22
Tariff equalisation contribution	167.0	175.0	162.0	157.0	161.0

Source: Western Power, Access arrangement information: Access arrangement revisions for the fourth access arrangement period*, 2 October 2017, p. 233.*

Submissions

626. Submissions from Change Energy, Community Electricity, and the Western Australian Council of Social Services (**WACOSS**) raised concerns regarding how the TEC should be reflected in network tariffs. These submissions have been considered in the section on pricing methods.

Considerations of the ERA

627. Western Power proposes to retain the TEC as a separate factor in the price control formula. The ERA accepts this on the basis that the Access Code provides for these costs to be recovered by Western Power if a notice is made under section 129D(2) of the *Electricity Industry Act 2004* for it to pay a tariff equalisation contribution.

628. As the price control formula includes a separate factor for the tariff equalisation contribution it is not necessary for the ERA to include the cost in its determination of target revenue. However, consistent with the approach taken in the past, the ERA recognises variations in the TEC from year to year will cause variations in customer bills. The ERA has considered this in the section on determining target revenue and the price path.

REFERENCE AND NON-REFERENCE SERVICES

Access Code requirements

629. A reference service is a service described in the access arrangement that includes a specified reference tariff and service standard benchmark.

630. Section 5.1(a) of the *Electricity Networks Access Code* 2004 (**Access Code**) requires that an access arrangement specify one or more reference services.

631. The requirements for reference services are set out in section 5.2 of the Access Code:

> 5.2 An access arrangement must:
>
> (a) specify at least one reference service; and
>
> (b) specify a reference service for each covered service that is likely to be sought by either or both of:
>
> (i) a significant number of users and applicants; or
>
> (ii) a substantial proportion of the market for services in the covered network;
>
> and
>
> (c) to the extent reasonably practicable, specify reference services in such a manner that a user or applicant is able to acquire by way of one or more reference services only those elements of a covered service that the user or applicant wishes to acquire; and
>
> (d) for the covered network that is covered under section 3.1 – specify one or more reference services such that there is both:
>
> (i) a reference service which enables a user or applicant to acquire an entry service at a connection point without a need to acquire a corresponding exit service at another connection point; and
>
> (ii) a reference service which enables a user or applicant to acquire an exit service at a connection point without a need to acquire a corresponding entry service at another connection point.

632. The network covered under section 3.1 of the Access Code is the portions of the SWIS which are owned by Western Power. The SWIS is defined in section 3 of the Act as:

> … the interconnected transmission and distribution systems, generating works and associated works –
>
> (a) located in the South West of the State and extending generally between Kalbarri, Albany and Kalgoorlie; and
>
> (b) into which electricity is supplied by –
>
> (i) one or more of the electricity generation plants at Kwinana, Muja, Collie and Pinjar; or
>
> (ii) any prescribed electricity generation plant[65]

[65] The ERA is not aware of any other generation plant being prescribed.

633. The following definitions included in the Access Code are relevant to understanding the reference services in the access arrangement:

"Covered service" means a *service* provided by means of a *covered network*, including:

(a) a connection service; or

(b) an *entry* service or *exit* service; or

(c) a network use of system service; or

(d) a common service; or

(e) a *service* ancillary to a *service* listed in paragraphs (a) to (d) above,

but does not include an *excluded service*.

{Note: This Code uses the expression *covered service* to describe what is sometimes called a "regulated service". It can be distinguished from an *excluded service*.

Covered services subdivide into reference services and non-reference services.}

"Services" has the meaning given to that term in Part 8 of the Act, and "service" has a corresponding meaning.

{Note: At the time the Electricity Networks Access Code Amendments (No 2) 2008 were made,[66] the definition in section 103 of the Act was:

"**services**" means –

(a) the conveyance of electricity and other services provided by means of network infrastructure facilities[67]; and

(b) services ancillary to such services.}

"Connection service" means the right to connect facilities and equipment at a connection point.

{Note: A *connection service* is the right to physically connect to the network, and will regulate technical compliance etc. It is not the same thing as an *entry service* or *exit service*, which are the right to transfer electricity.}

"Entry service" means a covered service provided by a service provider at an entry point under which the user may transfer electricity into the network at the entry point.

"Exit service" means a covered service provided by a service provider at an exit point under which the user may transfer electricity out of the network at the exit point.

"Common service" means a *covered service* that is ancillary to the provision of one or more of *entry services*, *exit services* and network use of system services that ensures the reliability of a *network* or otherwise provides benefits to *users* of the

[66] The definition in section 103 of the Act has not changed, as at the date of this decision.

[67] Network infrastructure facilities is defined in section 103 of the Act as the electrical equipment that is used only in order to transfer electricity to or from an electricity network at the relevant point of connection including any transformers or switchgear at the relevant point or which is installed to support or to provide backup to that electrical equipment as is necessary for that transfer; and the wires, apparatus, equipment, plant and buildings used to convey, and control the conveyance of, electricity which together are operated by a person (a network service provider) for the purpose of transporting electricity from generators of electricity to other electricity networks or to end users of electricity.

network, the costs of which cannot reasonably be allocated to one or more particular *users* and so needs to be allocated across all *users*.

“Excluded service” means a service provided by means of a covered network, including:

(a) a connection service; or

(b) an entry service or exit service; or

(c) a network use of system service; or

(d) a common service; or

(e) a service ancillary to a service listed in paragraphs (a) to (d) above,

which meets the following criteria:

(f) the supply of the service is subject to effective competition, and

(g) the cost of the service is able to be excluded from consideration for price control purposes without departing from the Code objective.

“Reference service” means a covered service designated as a reference service in an access arrangement under section 5.1(a) for which there is a reference tariff, a standard access contract and service standard benchmarks.

“Non-reference service” means a covered service that is not a reference service.

“Reference tariff” means the tariff specified in a price list for a reference service.

634. The designation of any service as an excluded service is subject to determination by the ERA under section 6.33 of the Access Code. Other than as determined by the ERA under this section, all services provided by means of the covered network are covered services.

Current access arrangement

635. Section 2.2 of the current access arrangement includes the following reference services:

- Anytime Energy (Residential) Exit Service, A1
- Anytime Energy (Business) Exit Service, A2
- Time of Use Energy (Residential) Exit Service, A3
- Time of Use Energy (Business) Exit Service, A4
- High Voltage Metered Demand Exit Service, A5
- Low Voltage Metered Demand Exit Service, A6
- High Voltage Contract Maximum Demand Exit Service, A7
- Low Voltage Contract Maximum Demand Exit Service, A8
- Street lighting Exit Service (including streetlight maintenance), A9
- Un-Metered Supplies Exit Service, A10

- Transmission Exit Service, A11
- Distribution Entry Service, B1
- Transmission Entry Service, B2
- Anytime energy (residential) bi-direction service, C1
- Anytime energy (business) bi-direction service, C2
- Time of Use (Residential) – bi-direction service, C3
- Time of use (business) bi-directional service, C4

636. The current access arrangement does not specify any services as excluded services.

Western Power's proposal

637. Western Power proposes to retain all of the reference services included in the current access arrangement with amendments to four services:

- High Voltage Metered Demand Service, A5
- Low Voltage Metered Demand Service, A6
- High Voltage Contract Maximum Demand Service, A7
- Low Voltage Contract Maximum Demand Service, A8.

638. Western Power proposes deleting "exit" from the high and low voltage reference services to allow bi-directional flows. This will enable such customers to have behind the meter generation such as solar photovoltaics (**PV**).

639. Western Power also proposes modifying the peak/off peak time for the high voltage and low voltage metered demand services (A5 and A6).

640. Currently, the A5 and A6 peak time periods are weekdays 8:00 AM to 10:00 PM. Western Power proposes changing the A5 peak-time to weekdays 3:00pm to 9:00pm. It proposes changing the A6 peak-time to 3:00pm to 9:00pm on weekdays and weekends.

641. In addition, Western Power proposes to introduce four new reference services:

- Time of use energy (residential) service, D1
- Time of use energy (business) service, D2
- Time of use demand (residential) service, D3
- Time of use demand (business) service, D4.

642. Western Power states:

> These services will be provided to all residential and small business customers requesting[68] a new meter as advanced meters will now be installed as standard. The new tariffs that correspond to these new services better reflect the costs incurred by

[68] Where Western Power installs an advanced meter for compliance reasons, the customer may choose to opt-in to these new services.

> Western Power in providing reference services and will provide price signals to customers regarding the most efficient times to use the network.
>
> Western Power has consulted with customers, retailers and the State Government to develop these services. These new time of use reference services will provide customers with the best opportunity to manage their own consumption in an efficient and cost effective manner. Our aim is to encourage customers to change their consumption patterns (where practicable) by shifting their electricity use to off peak times. This would potentially decrease their electricity bills and also allow Western Power to reduce investment in the network to accommodate peak demand.[69]

643. Western Power also proposes amendments to Appendix E of the access arrangement, which describes all of the reference services offered, including the eligibility criteria, reference tariff, service level and applicable contract for each service. The proposed changes are primarily to reflect the new and amended reference services described above and additional or amended definitions and eligibility requirements for existing reference services.

644. Western Power's access arrangement information notes that where a customer requests a non-standard service it can develop a customised product as a non-reference service. Examples of non-reference services currently provided by Western Power include:[70]

- processing and administration fees for an application for network access as detailed in the applications and queuing policy;
- network access services with conditions that vary from reference services; and
- all other services that are not core to the transport of electricity from the supplier to the end-use customer, including, for example the elevation of overhead lines to allow the transport of high loads and the provision of pre-payment metering services.

645. Western Power proposes that non-standard services provided under non-reference service contracts are not listed or priced other than in the contract and do not have minimum service standards provided.[71]

Submissions

646. Submissions on reference services were received from AGL, Alinta Energy (**Alinta**), Bluewaters Power, Community Electricity, Synergy, and Perth Energy.

647. Details of matters raised in the submissions are included below in Considerations of the ERA.

---

[69] Western Power, *Access arrangement information: Access arrangement revisions for the fourth access arrangement period*, 2 October 2017, p. 81.

[70] Western Power, *Access arrangement information: Access arrangement revisions for the fourth access arrangement period*, 2 October 2017, p. 83.

[71] Western Power, *Access arrangement information: Access arrangement revisions for the fourth access arrangement period*, 2 October 2017, p. 83.

Considerations of the ERA

648. This section has focussed on the services offered. The structure and pricing of services is considered under Pricing Methods, Price List and Price List Information.

649. The Economic Regulation Authority's (**ERA**) considerations are set out below in the following order:

- Identification of reference services required.
- Western Power's proposed new reference services.
- Western Power's proposed amended reference services.
- Metering services.
- Additional reference services proposed by users.
- Other amendments to reference services.
- Non-reference services.

Identification of reference services required

650. Western Power must specify a reference service for each covered service that is likely to be sought by a significant number of users and applicants or a substantial proportion of the market for services in the covered network.

651. The "users" of Western Power's network are predominantly retailers, generators and large users with direct connections to the transmission system. As set out below, many of these users do not consider Western Power has adequately determined the services they require.

652. Submissions from AGL, Alinta, the Australian Energy Council, Community Electricity and Synergy all raise concerns that Western Power has not adequately determined the services its users, that is retailers, require. They consider the consultation Western Power undertook directly with residential and business customers was inappropriate.

653. AGL submits:

> Western Power is a service provider to the retailers in the WEM, and therefore should be focussed on meeting the connection needs of the retailers, who in turn have the relationship with the customers.[72]

654. The Australian Energy Council questions whether:

> … existing or prospective retailers have been adequately engaged to determine their reference service requirements. For example, to what extent has Western Power historically modified or introduced new reference services directly in response to retailer requests?

655. Community Electricity submits:

> We suggest that the majority of customers consulted actually thought they were talking to Synergy, their retailer. We suggest that the Western Power side of the conversation did not know that there are other retailers in competition to Synergy and which have to

[72] AGL submission, page 4.

> be treated equitably to Synergy. We question the probity of loosing Western Power on customers (with whom they have no ETAC) without a retailer chaperone. We were not informed if Western Power interfered with any of our customers.
>
> …
>
> Insofar as we were consulted as a retailer, our advice has been entirely ignored.

656. Synergy considers Western Power has not provided the reference services it requires:

> Reference services should provide a fundamental mechanism to "…promote competition in markets upstream and downstream of the networks" in accordance with the Code objective.
>
> In the case of retail markets, the extent to which reference services provide retailers with the ability to develop customer offerings that meet their commercial interests and those of their customers is key to determining how well the reference service satisfies the Code objective. WP's proposed reference services do not achieve this, in part because the eligibility criteria for these services requires that they are only available in circumstances where an electricity transfer access contract between WP and a user is not materially different to the standard access contract approved by the Authority for AA4. In Synergy's view, this may operate to prevent a user with a negotiated electricity transfer access contract from obtaining reference services. Such an outcome may amount to a breach of section 4.34 of the Code which requires that the revised access arrangement must not override prior contractual rights.
>
> In Synergy's view the Code objective will be poorly served if retailers are forced to use services or are offered services that do not underpin customer offerings. In light of our customer research and customer demand for affordability, behind the meter and distributed generation solutions, Synergy (a significant user) considers its proposed reference services better achieve the Code objective and will provide the basis to develop customer offerings that are likely to be sought by a substantial proportion of the market.
>
> The provision of network services that reflect user requirements is an essential base for users to develop and offer products and services that meet their customers' requirements. More dynamic network tariff structures are needed compared to what currently exist to address the changing consumption patterns and consumer expectations brought on by emerging technologies. Put simply, limited network services limit the capacity for retailers to offer new electricity retail products that meet the needs and preferences of their customers. This is reflected in WP's annual planning report 2017 in which WP sees itself as "acting as a platform for business and residential customers to choose how they want their electricity supplied and delivered".

657. Synergy advises that none of its requested reference services have been included in Western Power's proposal.

658. Synergy expresses concern that there is no mechanism in Western Power's proposed revised access arrangement to determine which services a significant number of users or a substantial proportion of the market wants:

> Under WP's current proposal any request for a service by a user or applicant will be treated as a request for a non-reference service. This approach compels a network user to negotiate with WP for a non-reference service required by that network user, granting WP the ability to access a potentially significant source of revenue without the need for independent regulatory determination by the Authority. In Synergy's view, this arrangement is inconsistent with the Code objective because it gives WP the ability to use its monopoly position in an unconstrained manner, contrary to economic efficiency. It is also an outcome that is inconsistent with the matters to which the Authority is required to have regard under section 26(1) of the *Economic Regulation Authority Act 2003* (WA) (ERA Act).

659. The ERA agrees with the views expressed in submissions that Western Power should base its reference services on users' requirements, rather than basing them on what Western Power thinks is required. The Access Code clearly states that a reference service should be specified for covered services *likely to be sought by users*.

660. The ERA's considerations of specific reference services proposed by users is set out below.

Proposed new reference services

661. Western Power's proposed new reference services are based on customers having advanced meters installed:[73]

> Western Power's change to advanced meters as the standard meter … enables new services to be introduced which give customers greater control over their electricity bills, and also help Western Power mitigate the need for costly capital investment to address the peak demand on the network. We propose to introduce four new reference services that are enabled by advanced meters:
>
> - D1 - Time of use energy (residential) service
> - D2 - Time of use energy (business) service
> - D3 - Time of use demand (residential) service
> - D4 - Time of use demand (business) service.
>
> These services will be provided to all residential and small business customers requesting a new meter as advanced meters will now be installed as standard. The new tariffs that correspond to these new services better reflect the costs incurred by Western Power in providing reference services and will provide price signals to customers regarding the most efficient times to use the network.
>
> Western Power has consulted with customers, retailers and the State Government to develop these services. These new time of use reference services will provide customers with the best opportunity to manage their own consumption in an efficient and cost effective manner. Our aim is to encourage customers to change their consumption patterns (where practicable) by shifting their electricity use to off peak times. This would potentially decrease their electricity bills and also allow Western Power to reduce investment in the network to accommodate peak demand.

662. As set out in the section on forecast capital expenditure for the fourth access arrangement period (**AA4**), the ERA has not approved Western Power's proposed expenditure for the roll-out of communications for advanced meters. Western Power has not adequately demonstrated that the proposed expenditure meets the new facilities investment test. Western Power may wish to re-consider its proposed new reference services in light of this decision.

663. Western Power considers the purpose of a time of use tariff is to encourage customers to spread their electricity use over the course of the day. It notes that currently residential customers tend to use the most electricity between 3:00 PM and 9:00 PM on a weekday:[74]

[73] Western Power, Access arrangement information: Access arrangement revisions for the fourth access arrangement period, 2 October 2017, p. 81.

[74] Western Power, Access arrangement information: Access arrangement revisions for the fourth access arrangement period, 2 October 2017, pp. 251-252.

> Typically, people arrive home from school and work, switch on the oven, turn on the TV, do the laundry, and often use several electrical appliances. This means a lot of electricity is being distributed throughout the network at the same time, particularly on the hottest summer days when many people return home to a hot house and begin using their air conditioning. We call this time the network peak.
>
> Generally, as the population grows the network peak gets higher, which means the network must be able to cope with more and more electricity running through it. To make sure the network can cope with the peak (and so customers don’t lose power), Western Power needs to reinforce and increase the capacity of the network.
>
> With a new substation costing around $45 million, investment in increasing network capacity is very expensive. It is also worth noting that the highest peaks of network demand only occur a few times per year, so the cost of increasing peak network capacity is disproportionate to the amount of time the additional capacity is required.
>
> Time of use network tariffs are a potential alternative to the costly option of increasing network capacity. By encouraging customers to use electricity outside of peak times, the tariffs can help reduce the need for network capacity expansion, which saves customers money over the long term.
>
> Time of use tariffs can assist customers to reduce their bills. A trial of time of use tariffs for 750 Perth households in 2011 and 2012 found that by just making a few moderate changes – washing at a different time, running the pool pump overnight, using the air-conditioning on a timer – customers saved up to $50 per annum.
>
> Time of use network tariffs can also benefit small business customers, particularly where the business is able to adjust its electricity consumption patterns. Western Power already offers a time of use tariff (RT4 Time of Use Energy) to businesses, with about 14 per cent of small businesses currently connected to the network already on the RT4 tariff. The current RT4 tariff has a peak/off peak charging window of 8:00 AM to 10:00 PM on weekdays. While the RT4 tariff is beneficial to customers who can shift their electricity usage to outside these times, the peak charging window is too large to accurately reflect network peak times and encourage electricity usage outside of the typical late afternoon/early evening peak demand period.
>
> Therefore Western Power proposes new time of use network tariffs for small businesses and residential customers that better reflects peak demand times. The new tariff charges a higher rate on weekdays between 3:00 PM and 9:00 PM, and a lower rate between 9:00 PM and 12:00 AM. Customers on existing time of use network tariffs will have the option of moving to these new tariffs.
>
> As more customers take up time of use tariffs, system peaks should not grow at the same rate, reducing the need for costly peak capacity investment over the long-term.
>
> A time of use network tariff requires customers to have advanced meters (or at least electronic or interval meters).

664. Western Power describes its proposed demand-based service as follows:[75]

> Demand tariffs are similar to time of use tariffs, however a demand tariff considers a customer’s maximum usage in any one 30 minute period rather than total consumption over a time period. This sends a much stronger signal about the impact customer behaviour can have on the overall system peak.
>
> As this is the first time residential customers will be offered this type of tariff, it is being offered on an opt in basis only and will have a very small demand component to begin with to allow time for customers to understand the impact of this type of charge. This type of tariff is only possible due to the introduction of advanced meters, which allow for much more data to be captured than via a traditional meter.

[75] Western Power, Access arrangement information: Access arrangement revisions for the fourth access arrangement period, 2 October 2017, p. 252.

> The initial tariff offering will charge the same tariff components of the time of use tariffs described above, albeit at a slightly reduced rate, with an additional component for the maximum demand in the peak window of 3:00 PM to 9:00 PM.

665. Western Power advises that rates for the new reference services will be set so that the average customer would pay the same under a flat rate, time of use or demand-based tariff.

666. The ERA has identified the following matters that need to be considered in evaluating Western Power's proposed new reference services:

- Are the services likely to be sought by users?
- Should the new services should be mandatory?

Are the services likely to be sought by users?

667. As discussed above, the users of the network are retailers, generators and large customers directly connected to the transmission network. Consequently, network tariffs do not necessarily provide a price signal to end-use customers, but rather a price signal to users.

668. Kleenheat is supportive in principle of the new reference services but:

> …questions whether Western Power sufficiently "appreciates the ever-changing patterns of customer demand and technologies to design suitable tariffs and the implications for competitive neutrality between retailers.

669. ERM Power and Community Electricity consider that modifying network tariffs will have little effect if retail tariffs do not change.

670. ERM Power:

> … while Western Power is proposing differing tariff structures, Western Power does not bill the end use customer, Synergy does. Unless residential tariffs are restructured in such a manner that will allow the benefits of smart meters to flow through, is it too early for Western Power to embark on this measure?

671. Community Electricity:

> We consider that the proposed initiative - metering & tariffs - is inappropriate because its effectiveness is contingent on the introduction of retail price signals, which is a government decision outside the authority of Western Power and Synergy. Network design also needs to recognise that bi-directional flows are of increasing importance while the proposed signals are uni-directional only.
>
> The practical reality is that the structure of the existing retail tariffs has remained the same over the last 20+ years and the government has recently committed to price increases under the existing structures as a means of budget repair. Further, insofar as time of use tariffs were to be introduced, customers would respond to the holistic price signal without perceiving the network structure that contributes to it. In particular, the wholesale market capacity charge would dominate the price signal, making the impact of customer response to Western Power's cashflows unpredictable and likely to spawn unintended consequences through unbalancing revenues and costs.

672. Synergy supports sending cost reflective price signals to customers via time of use reference services and providing customers with a range of opt in choices. However, Synergy considers Western Power's proposed time of use reference services are too limited and do not promote the efficient use of the network. It considers that offering a range of time of use network services with cost reflective price differential

would allow for services that are better aligned with the diverse needs of electricity consumers:

> Multiple network services provides network users with greater choice and flexibility to create retail products that meet the needs of their customers, as opposed to a one size fits all approach. Although take up rates of time of use retail tariffs are historically low, Synergy considers voluntary uptake can be encouraged through a combination of reference service choice (that facilitates retail tariff choice), embedded generation, advanced energy efficiency, consumer engagement and education.

673. It also considers the transition to new tariffs will need to be supported by the up-take of enabling technologies as consumers seek to manage their electricity costs using demand side technologies such as solar, storage and efficient appliances:

> More dynamic tariff structures are needed to address the changing consumption patterns and consumer expectations brought on by emerging technologies rather than a one size fits all approach. Forecasts indicate increasing uptake of electric vehicles (EVs) in coming years and Synergy's proposed time of use references services are specifically aimed at promoting such uptake in the SWIS. Notwithstanding future growth, EVs have the potential to increase peak period demand if not addressed with appropriate tariff structures.

674. Synergy proposes alternatives to Western Power's new time of use and demand reference services. These are considered below under reference services proposed by users.

675. The ERA considers the proposed new reference services should be assessed on the merits of price signals to retailers. Retailers have many opportunities to influence customers' use of energy, such as retail pricing structures and customer education. Network reference services should promote competition by giving retailers the opportunity to be innovative in the prices and services they offer to customers.

676. The ERA considers there is likely to be a demand for a time-of-use service, and this demand may increase if there is deregulation of the market for small-use customers. In any case, providing users retain the ability to obtain the flat rate service, introducing the time-of-use service will not result in any adverse consequences for users.

Should the proposed new reference services be mandatory?

677. Western Power is proposing all new residential and commercial customers will be on the new time of use reference service with the option to select the new demand reference service.

678. AGL, Alinta, the Australian Energy Council and Kleenheat consider the network operator should not be able to unilaterally determine the service to be provided.

679. AGL submits:

> … it is not for the network operator to unilaterally determine the service that should be provided to a customer, as this is a matter to be negotiated and agreed between the retailer and customer. In the NEM, there is no mandatory linking by the network operators between the customer's meter and tariffs as network tariffs are a feed in, and should not drive a retailer and its customer's selection of a retail product.

680. Alinta and the Australian Energy Council note it is standard in the National Electricity Market (**NEM**) for customers to be able to opt in or opt out of time of use transport charges.

681. Kleenheat considers the new reference services should be on a voluntary opt-in basis rather than the mandated requirement that Western Power is proposing. It considers mandating new tariffs is inconsistent with the Access Code objective of promoting competition and inconsistent with the matters the ERA must consider as principles under section 26 of the *Economic Regulation Authority Act 2003*.[76]

682. Kleenheat also considers mandating the proposed new reference services will make it difficult for retailers to design and innovate with their own retail tariffs:

> Kleenheat considers time of use tariffs are likely to affect the bundled electricity contracts that non-Synergy retailers have traditionally offered to contestable customers which could "thwart full retail contestability and retailers' ability to differentiate product offerings to win customers when competition is introduced."
>
> Kleenheat contends it is difficult to assess the options retailers have to ensure cost recovery with the mandated approach of the proposed tariffs and their associated design of time of use periods. It is understood that in 2018/19, Western Power will charge users a uniform price across the three time of use periods, however there is no price visibility for the remaining four years under AA4. Kleenheat requests that the ERA seek further information in its review and approval of Western Power's AA4 to ensure retailers can fully inform themselves of how its customers and their consumption may be modelled to ensure cost recovery is viable under the proposed new tariffs.
>
> The mandated Time of Use tariffs and the mandatory new meter change over to advanced meters (known as Type Four meters) for contestable customers who churn away from Synergy, means that non-Synergy retailers are at a competitive disadvantage relative to Synergy. Synergy's position as the incumbent retailer to contestable customers (since market disaggregation) means that these customers can remain on the "anytime" network tariff. As a consequence, if these customers are to churn away from Synergy they, or the retailer, will be required to incur the cost of a new meter. If these customers remain with Synergy they will not incur the cost of a new meter. Competing retailers will either need to absorb this cost disadvantage or pass this cost of a new mandated meter onto their new customer. This policy of mandating the new tariffs with a compulsory replacement of the meter is not competitively neutral to non-Synergy retailers and will frustrate competition. As a consequence, this issue is a major concern.
>
> Unless other competition protections, such as mandating Synergy only offer customers electricity in line with regulated tariffs, are implemented with FRC, Kleenheat does not believe that the mandatory approach is fair and reasonable or appropriate to foster effective competition.

683. Synergy does not support mandating time of use reference services, especially in situations where the retail tariffs are similarly not mandated.

684. The access arrangement must specify a reference service for each covered service likely to be sought by a significant number of users.

685. The ERA has no concerns with Western Power specifying the meter type required for a user to be eligible for a particular reference service. However, users should not be restricted to a particular reference service simply because Western Power has decided to install a particular type of meter.

[76] To ensure that regulatory outcomes are in the public interest as well as have regard for the long-term interests of consumers, in relation to the price, and quality of services provided in the relevant markets for which the ERA has oversight.

686. Retailers should have choice between an anytime use or time of use tariff for both new and existing customers. Providing Western Power sets its network tariffs to recover costs, it should be indifferent to which service retailers select.

687. If Western Power wants a higher take-up of the time of use services, it is open to Western Power to set the terms and reference tariffs for these services such as to make the services attractive to users.

688. The ERA is satisfied there is likely to be a demand for the new time of use services. However, the ERA considers mandating reference services is not consistent with the Access Code objective of promoting competition or the principles under section 26 of the *Economic Regulation Authority Act 2003* regarding the interests of consumers. Western Power must remove the requirement for the proposed new time of use services to be mandatory for new customers.

Required Amendment 13

The proposed new time of use reference services must not be mandatory.

Other matters raised in submissions

689. Western Power may also wish to consider the points made in Change Energy's submission regarding time of use tariffs. Although Change Energy supports demand based tariffs it considers time of use tariffs for residential customers will lead to revenue shortfalls for Western Power as more customers adopt solar PV. It recommends increasing fixed charges for all customers if demand based tariffs cannot be implemented:

> Demand based tariffs for both residential and business customers more accurately reflect customers contributions to the cost of the network and will also incentivise better utilisation of the grid.
>
> We do not support moving to time of use tariffs for residential customers. Tariffs with higher peak charges will be at risk of causing large revenue shortfalls for WP as more and more customers adopt solar PV. Further it does not accurately reflect the costs of the network evenly between solar PV and non-solar PV customers.
>
> Where demand based tariffs are not practical or available, increased fixed charges should be implemented to reflect the cost of connecting and servicing a residential customer given the costs are the same whether or not solar PV has been installed.

690. Regardless of whether the new reference services are mandated or not, users (i.e. retailers) require sufficient information to enable them to understand the effect of the new services and plan accordingly.

691. Alinta and the Australian Energy Council note Western Power's proposed prices for 2018/19 are identical for all time bands and that there is no information on the price path beyond 2018/19. They submit this makes comparisons with existing tariffs difficult.

692. Synergy also submits that customers will need to have an understanding of their energy usage and what the financial effect of moving to a new tariff is likely to be to enable them to make an informed decision. Most customers currently are only provided with two monthly cumulative meter readings. Synergy considers more detailed information will be required:

> Interval energy data[77] provision is critical as a precursor to customers moving off anytime energy tariffs as it is unrealistic to expect customers to make a "leap of faith" to opt into a time of use retail tariff without first knowing what their consumption patterns are, or knowing what the financial impact will be prior to changing retail tariffs. Synergy expects customers will typically require at least a year's worth of interval energy data before changing tariffs. During that time retailers can continually engage with their customers to receive feedback and learn about their consumer experiences to ensure their products and services are fit for purpose.

693. Mr Noel Schubert argues that education programs will be required to support customers' understanding and responses to the proposed new reference services.

694. The ERA agrees users are likely to require consumption data to assist them to understand the effect of the new reference services. It would also be in Western Power's interests to encourage take-up of the new reference services by making metering data available on a cost reflective basis. This is discussed below under metering services.

695. CdL Advisory expresses concerns regarding the effect of time of use tariffs on the health of older people vulnerable to heat stress:

> While WP customers have responded positively to potential time of use tariffs it is understood this is more favourable among younger customers, and is predicated on customers being well informed of the benefits. How therefore, will WP ensure that time of use tariffs do not impact on an aging population (particularly lower socioeconomic households) vulnerable to heat stress exacerbated by climate change. Research by the RMIT University has found older, less financially secure households are generally more likely to ration cooling device use during a heatwave particularly if public messaging urges conservation. RMIT also found that electronic billing and direct debit arrangements may undermine energy literacy aims.

696. Mr Schubert, who supports the proposed new services, submits that customers who need assistance to pay electricity bills should be supported by programs that are separate from electricity tariffs so that new electricity tariffs can deliver the improved outcomes that are available.[78]

697. The ERA agrees the matters raised by CdL Advisory and Mr Schubert are important points and will need to be dealt with for a successful implementation of the proposed new reference services. However, they are matters relevant to retail electricity charges, not network charges, and hence fall outside the remit of the ERA in making its decision on Western Power's proposed revisions to its access arrangement.

Proposed amended reference services

698. Western Power proposes expanding the high voltage and low voltage metered demand (A5 and A6) and contract maximum demand (A7 and A8) reference services to allow bi-directional flows of electricity and amending the time periods to be consistent with its proposed new reference services.

699. Western Power notes the current service only allows for a one-way flow of electricity. It states it has received:

---

[77] Energy consumed in each 30 minute period.

[78] Mr Noel Schubert, *Submission re: Proposed Revisions to the Western Power Network Access Arrangement – AA4*, 11 December 2017, p. 1.

> … numerous requests from retailers to create a variation of these reference services that allow for bi-directional flows. This is largely driven by the increase in installations of solar photovoltaic systems by commercial customers.

700. The proposed amendments to Appendix E to the access arrangement restrict the size of the PV system to 1 Mega Volt Amp (**MVA**). This is the same size as permitted under the current business bi-directional services (C2 and C4) for connection on the low voltage network.

701. No submissions commented on the proposal to expand the A5 to A8 reference services to include bi-directional services. As the ERA did not receive any objections from users it has accepted this amendment.

702. Currently the high voltage and low voltage metered demand peak time periods are weekdays 8:00 am to 10:00 pm. Western Power proposes changing the high voltage peak demand time period to weekdays 3:00 pm to 9:00 pm and the low voltage peak demand time period to 3:00 pm to 9:00 pm on both weekdays and weekends.

703. Alinta comments:

> Alinta notes that this is the first change to the structure of existing metered demand tariffs for some time and acknowledges that tariff structures need to evolve over time to meet changing needs. Noting this, many of the customers on these tariffs are likely to be on pass-through contracts. As such, these changes will affect them directly and Alinta considers Western Power will have a vital role to play in communicating these amendments.

704. Generally the ERA would be concerned by unilateral amendments to an existing reference service. However, in this case the amendments appear to be advantageous to users as Western Power has reduced the peak period time. On this basis, and as no objections were submitted by users, the ERA considers the proposed amendment will still result in the service being required by a significant number of users.

705. Further consideration of the structure and pricing of the A5 to A8 services is included in Pricing Methods, Price List and Price List Information.

Metering services

706. A common theme from stakeholder submissions is the importance of metering services. As discussed in the previous sections, Western Power's proposed new reference services are underpinned by its plans to install advanced meters in all new properties. Synergy's submission highlighted the importance of interval metering data to enable customers to understand the financial effect before changing retail tariffs.

707. Western Power bundles metering services with each of its reference services.

708. Metering is dealt with in both the Access Code and the *Electricity Industry (Metering) Code 2012* (**Metering Code**).

709. Section 5.28 of the Access Code requires that supplementary matters, which include metering, must be dealt with in the access arrangement in accordance with other relevant regulatory requirements including written laws, the Wholesale Electricity Market Rules and the Technical Rules. In the case of metering, the Metering Code is relevant.

710. Section 6.6 of the Metering Code is of particular relevance as it sets out requirements for a model service level agreement which includes details of services to be provided and how they can be charged for:

6.6 Requirements for model service level agreement

(1) A model service level agreement must at least:

(a) specify the metering services that the network operator:

(i) must provide (which must include at least all of the metering services that this Code, the Code of Conduct and the Customer Transfer Code require the network operator to provide); and

(ii) may provide,

to other Code participants on request,

and

(b) for each metering service referred to in clause 6.6(1)(a), specify:

(i) a detailed description of the metering service; and

(ii) a timeframe, and where appropriate other service levels, for the performance of the metering service,

and

(c) subject to clause 5.21(9)[79], specify the maximum charges that the network operator may impose for each metering service referred to in clause 6.6(1)(a); and

(d)if any of the charges specified under clause 6.6(1)(c) is variable, provide details of the methodology and cost components that will be used to calculate the variable charge including (where applicable) hourly labour rates, distance-related costs and equipment usage costs; and

(e) provide that the charges which may be imposed under a service level agreement may not exceed the costs that would be incurred by a network operator acting in good faith an in accordance with good electricity industry practice, seeking to achieve the lowest sustainable costs of providing the relevant metering service

711. Western Power's current model service level agreement, which was approved in March 2006, specifies "standard metering services" and "extended metering services":

- Standard services include scheduled meter readings, standard meter maintenance and the provision of meters for new customers.
- Extended metering services are services that arise in a non-routine manner and not necessarily required at every site each year. For example, non-scheduled meter reads and disconnection/reconnection of properties.

712. The description of each of the current and proposed new reference services, as set out in Appendix E to the access arrangement, states that it includes a standard metering service.

[79] Section 5.21(9) states any written service level agreement entered into for testing and/or auditing meters and metering data must include a provision that no charge is to be imposed if the test or audit reveals a non-compliance with this Access Code.

713. Subsequent to lodging its access arrangement proposal, Western Power submitted proposed amendments to the model service level agreement.[80] Western Power considers its proposed introduction of advanced meters will change and extend the types of metering services available. For example, it will be possible to undertake remote meter readings and remote connections and disconnections rather than the current manual processes. Consequently, Western Power proposes amending the metering services offered under the model service level agreement and changing the classification of some services from “standard service” to “extended service”.

714. As the ERA has not made a determination on the model service level agreement, and will not be doing so until after the access arrangement decision, for the purposes of this decision the ERA assumes the model service level agreement has not changed from the current approved version.

715. The ERA considers the current specification of the metering service for each reference service as a “standard metering service” does not provide sufficient detail of the service provided, for example the frequency and type of meter reading. Neither the current, or proposed model service level agreement provide specific details of the metering service provided for each network reference service.

716. The ERA also considers that bundling the metering service with the reference service limits the ability for users to specify a different metering service, for example, higher frequency readings or interval metered data.

717. The Australian Energy Council submits that metering services must reflect the requirements of retailers and end users and not just the monopoly service provider. It notes Western Power’s proposed amendments to the model service level agreement would result in remote interval data not being provided more frequently than monthly and that, currently, no service exists to provide manual interval data for residential customers from existing legacy meters.

718. Synergy submits that it would like to obtain a greater variety of metering services as reference services, in particular, interval data on a regular basis at a reasonable cost. Synergy considers interval meter data is a service many customers require. It notes the ability to track and limit their energy use, and to receive notifications and updates, is particularly appealing to customers in hardship and/or on a payment plan.

719. Synergy submits that Western Power’s AA4 proposal does not support the manual collection of interval energy data as an interim Advanced Metering Infrastructure (**AMI**) transitional arrangement:

> Consequently the only means of obtaining interval energy data from a deemed Type 6 meter (of which there are between 200-300,000 such meters) is to negotiate yet another non-reference service or replace the meter with a new Type 4 meter. The effect of replacing the meter is to increase the size of WP’s asset base for which it will receive a rate of return. However, until the remote communications infrastructure is installed and operational WP will still not provide interval energy data notwithstanding a Type 4 meter is installed.

720. However, Western Power considers ongoing manual collection of interval data is not in line with good industry practice and would be at a significant cost to end consumers. It submits:

[80] Western Power, *Submission of Proposed Metering Model Service Level Agreement*, 13 October 2017.

> The primary difference between the manual collection of accumulation data and interval data is handling time. Accumulation data is collected via a visual reading of a meter's display, while an interval meter requires connection of a device to the meter to download data. Western Power collects more than 6 million meter readings per year. Western Power's decades of experience in both of these methods has been that download times far exceed the handling times for visual reading. Western Power's experience is that the cost of manually collecting interval data is approximately 6 times that of accumulation data. This is consistent with the experience of other utilities within Australia and is reflected in the opex rates approved by the Australian Energy Regulator (AER) in other jurisdictions.
>
> Western Power's position is that where a User requires data sets from a meter that exceed the requirements of the Code and/or requirements relating to operation and settlement of the electricity market that this should be provided on a User pays basis, with cost reflective fees. This is consistent with the Code.
>
> Further, Western Power considers it is in the interest of customers that potential benefits to customers resulting from the ability to better understand how their behaviour impacts their bill be considered in conjunction with the incremental increase in their bill associated with a higher data collection cost. Western Power considers that the use of remote collection technology significantly improves the case for customer benefits associated with interval data. Not only does it provide a data solution, rather than increase the cost of data collection, it reduces this cost.
>
> Western Power's position is that the case for remote data collection and against manual interval data collection is compelling and that the Access Arrangement should seek to avoid a metering services framework that in any way incentivises the manual collection of interval data.

721. As discussed further below, Synergy has requested a manual interval meter service as part of its reference services request.

722. Section 5.2(c) states that reference services are required, to the extent reasonably practicable, to be specified in such a manner that a user or applicant is able to acquire by way of one or more reference services only those elements of a covered service that the user or applicant wishes to acquire.

723. Section 5.2(b) states that a reference service should be specified for each covered service that is likely to be sought by a significant number of users.

724. The ERA considers these requirements are not being met for metering because:

- the current specification of reference services lacks clarity and detail of the metering service included;
- bundling metering with the reference service restricts the choice for users who may want a different level of metering; and
- the current metering services included with reference services do not meet the requirements of users.

725. The ERA considers that metering should be supplied as separate reference services with sufficient detail specified so that users can be certain of the service they will receive.

726. Sufficient services should be specified so that users can select the one that meets their need for each reference service. The ERA considers this would include as a minimum:

- An accumulation meter manual read every two months

- An interval meter manual read with data provided every two months
- An interval meter manual read with data provided every month
- A one-off interval meter manual read
- An interval meter remote read.

727. The ERA agrees with Western Power's view that metering costs should be recovered on a user-pays basis and based on the cost of the service. Retailers are best placed to determine the value of interval data and decide whether such information is necessary for retail tariff development.

Required Amendment 14

Western Power must unbundle metering services from reference services and specify separate metering services as reference services based on the meter reading services required by users.

Reference services proposed by users

728. As discussed above, stakeholder submissions indicated that new or different reference services are required by users.

729. Perth Energy suggests a service for a "thin connection" should be offered:

> … the current tariff structure is not overly flexible and Western Power's AA4 submission should consider tariff structures like 'thin connection'. Given the prevailing growth in behind the meter energy solutions, it is likely that some parts of the SWIS or even individual customer connections would benefit from a 'thin connection' type tariff arrangement over the AA4 period. A 'thin connection' type tariff would be suitable for customers that will be predominantly sourcing their energy behind the meter and will only utilise the transmission and distribution networks as 'contingencies' or intermittently.

730. The ERA agrees that such a service may be required. However, evidence that this is a service likely to be sought by a significant number of users is currently lacking and would be needed for the ERA to require Western Power to offer the service as a reference service. If sufficient information is presented to demonstrate the service is likely to be sought by a significant number of users, the ERA will give consideration to it being included as a reference service.

731. As discussed above, Synergy considers Western Power has not acted consistent with its obligations[81] and requests the ERA to require each of the reference services it has listed in its submission to be included in the approved access arrangement for AA4. It has proposed 25 reference services comprising amendments to Western

[81] Synergy states this as being: use all reasonable endeavours to accommodate a user's requirement to obtain covered services (section 2.7 of the Access Code); allow a user to acquire, to the extent reasonably practicable, only those parts of a service it wishes to acquire (section 2.8 of the Access Code); and have an access arrangement that specifies as reference services, those services that are "likely to be sought" by a significant number of users and applicants or a substantial portion of the market, and which (to the extent reasonably practicable) specifies reference services in such a way that a user or applicant is able to acquire only those parts of a covered service they wish to be provided with (section 5.2 of the Access Code).

Power's existing and proposed reference services and entirely new reference services.

732. Synergy's requested services include details of the pricing structures it considers should apply. Synergy, as a user, can specify the types of services it requires. However, tariff structure and prices is a matter to be considered for reference tariffs, not the specification of reference services.

733. Synergy's proposed amended and new reference services can be categorised as follows:

- adding requirements to existing reference services to provide interval data, remote connection/disconnection, bi-directional services and the installation of a Type 4 meter where Western Power has not been able to obtain a meter reading for a period of nine months or where a residential customer experiences financial hardship;
- different time periods for time of use and demand tariffs;
- distributed generation reference services;
- reference services that would allow it to swap capacity and contracted maximum demand with other users;
- direct load control and load limitation services; and
- connection and disconnection services:

734. Each of these is discussed below.

Additional requirements for existing services

735. Synergy's proposed amendments to existing reference services are mainly for metering services. As discussed above, the ERA considers the existing metering services need to be specified clearly and should be included as separate reference services. In addition, Western Power should include a service for providing interval metering data.

736. As requested by Synergy, retailers should also have the ability to choose (and pay for) a meter with remote reading functions if required.

Different time periods

737. Synergy has requested different time periods from those offered by Western Power in its various time of use services.

738. As discussed above, Western Power should base its reference services on the requirements of its network users. However, the ERA considers Western Power is best placed to identify the periods of network congestion and structure its network services around this.

739. Retailers are likely to use different time periods from the network operator as they have broader factors to consider than just the network. Providing Western Power supplies sufficient metering data to enable a retailer to bill a customer based on its desired time periods, there should be no need for Western Power to offer network reference services to match every time period a retailer may use for retail tariffs.

740. Offering metering services as a separate reference service should facilitate provision of this data to retailers.

Distributed generation reference services

741. Synergy refers to sections 7.9 and 7.10 of the Access Code regarding prudent discounts and discounts for distributed generating plant. The prudent discount provisions allow the service provider to discriminate between users in its pricing of services to the extent it is necessary to do to aid economic efficiency. Pricing for distributed generation must include a share of any reductions in either or both of the service provider's capital and operating expenditure arising as a result of the entry point for the plant being located in a particular part of the network:

> WP's prudent discount scheme does not provide sufficient ability for a network user to use private assets and investments to receive a prudent discount. The current arrangement requires a user and WP to negotiate a discount. However, the arrangement provides no framework or certainty to deliver private investment to reduce network costs and improve network efficiency other than through a requirement to negotiate. The absence of a workable prudent discount mechanism has resulted in users not being able to obtain and use the discount to financially incentivise their customers to invest in behind the meter solutions such as energy storage, EVs, solar PV, and home energy management services delivered through digital applications.

742. Synergy states it is unaware of any situations where Western Power has provided discounts for the circumstances above. It considers this should be questioned by the ERA given the increasingly constrained Western Power network and the extent to which distributed generation connections have increased in recent years.

743. Synergy is seeking:

- a distributed generation low voltage connection service – residential;
- a distributed generation low voltage connection service – business; and
- a distributed generation high voltage connection service – business.

744. Western Power must meet the requirements of the Access Code regarding prudent discounts and pricing for distributed generation. However, the ERA considers these would be negotiated between a service provider and user, rather than being part of a reference service.

745. The circumstances of each connection would need to be considered to establish whether there was justification to allow Western Power to discriminate between users to aid economic efficiency or, in the case of distributed generation, the level of reductions in either or both of Western Power's capital and operating expenditure arising as a result of the entry point for the plant being located in a particular part of the network.

Capacity and contracted maximum demand swaps

746. Synergy is seeking reference services to allow it to swap capacity and contract maximum demand with other users. It considers these services are required to allow it to share:

- generation connections between users with different network access contracts for example, co-located wind and solar facilities sharing the same connection point; and

- load connections between users with different network access contracts to allow consumers to be supplied electricity by two separate suppliers.

747. Transfers between users are dealt with in the transfer and relocation policy and applications and queuing policy. It is likely the specific details of any such transfers will be particular to each case and it would be difficult to specify a standard service.

748. The ERA considers there is not sufficient evidence to demonstrate this is a standard service likely to be sought by a significant number of users or proportion of the market.

Direct load control and load limitation services

749. A direct load control service turns power to a load or appliance on or off remotely, thus controlling the quantity of power that a load can consume, resulting in a reduction to the quantity of power that a load can consume through the network.

750. A load limitation service reduces the power transfer capability or demand at a connection point resulting in a reduction to the quantity of power that a load can consume through the network.

751. These services require remote communication with advanced meters. As the expenditure for this has not been approved the cost of this service may be quite high, as a meter with remote communications would need to be installed by Western Power and paid for by the user requesting the service. If Synergy is able to demonstrate that this would still be a service sought by a significant number of users, then Western Power should offer it as a reference service.

Connection and disconnection services

752. Synergy is seeking services for remote disconnection/reconnection and manual disconnection/reconnection. It considers reconnection or disconnection is a covered service and could be part of (or could also be stand-alone) a reference service or a stand-alone reference service.

753. Connection and disconnection services are currently provided as extended metering services and, therefore, are not included in the existing network reference services. The terms and prices are set out in the model service level agreement.

754. The ERA agrees it would provide greater clarity to users if the manual connection/disconnection process was included as a reference service in the access arrangement.

Other amendments to reference services

755. Western Power considers the current reference services document (Appendix E to the access arrangement) which sets out all the reference services, including the eligibility criteria, reference tariff, service level and applicable contract for each service, does not include sufficient detail.

756. Western Power has proposed amendments to include definitions for all terms used in the document and updated to incorporate the proposed new reference services and amended reference services. It considers these revisions should:[82]

> … provide clarity around which customers are classified as residential, voluntary/charity or business. In addition, all of the new services and modifications to services discussed above have been incorporated into the document.

757. The Appendix will need to be amended to reflect the ERA's required amendments set out above.

758. The ERA has identified further minor required amendments to Appendix E, which are set out in the table below.

Table 117 Required amendments to the definitions of reference services set out in Appendix E of Western Power's proposed access arrangement

Reference service	Amendment	Reason
D1-D4	Eligibility criteria to be stated in full instead of referring to another reference service	For clarity and ease of use, the information for each reference service should be included as a stand-alone document.
All services	Remove the term "compliance instruments" and replace with "Technical Rules, the Western Australian Electrical Requirements and AS3000"	For clarity and to remove reference to the WA Distribution Connection Manual which is a Western Power internal document and not a written law, statutory instrument or recognised code, standard or guideline.
All services	Remove references to the retail tariff by-laws when defining residential properties, voluntary/charitable organisations	The retail tariff by-laws are not relevant for the definition of property type for network reference services.
All services	Remove the terms "compliance instruments", "compliance meter" and "compliance metering installation"	These terms are confusing and seem only to be required for making the new time of use reference services mandatory, which the ERA has not approved.

Required Amendment 15

Western Power must amend Appendix E of the access arrangement in line with Table 117 of the draft decision.

[82] Western Power, *Access arrangement information: Access arrangement revisions for the fourth access arrangement period*, 2 October 2017, p. 255.

Non-reference services

759. Where a user requests non-standard services, Western Power advises it can develop a customised product as a non-reference service:[83]

> The specifics of the non-standard service and corresponding tariff provided by Western Power is negotiated with the customer following a request for a non-standard service. The non-standard services we provide under non-reference service contracts are not listed or priced, other than in the contract. Further, as these services are customers, they do not have minimum service standards provided.

760. Western Power provides the following examples of non-reference services: [84]

- processing and administration fees for an application for network access as detailed in the applications and queuing policy
- network access services with conditions that vary from reference services, including:
  - transmission connected users that have agreed to accept an interruptible service to avoid paying the cost prohibitive deep connection costs that would otherwise be required to provide a standard service
  - users with additional network redundancy or back-up supply available where they have paid for increased security and reliability for their connection
  - connections for which the user's equipment does not meet the Technical Rules, but for which Western Power has sought an exemption from the ERA, and Western Power is required to provide additional services
- all other services that are not core to the transport of electricity from the supplier to the end-use customer, including, for example the elevation of overhead lines to allow the transport of high loads and the provision of pre-payment metering services.

761. Community Electricity raises concerns that there are no minimum terms and conditions or service standards for non-standard services, and it does not consider Western Power should set prices without oversight:

> While we support the notion of flexibly facilitating access to users, this proposal circumvents the reasonableness mandate that Western Power already ignores. We object to Western Power being authorised to capaciously and arbitrarily impose its monopoly power on a developing market. We consider that it will abuse this power to discriminate between users and erect barriers to entry. The extent to which Western Power bullies applicants into accepting onerous terms and conditions should not be underestimated. We suggest that the reasonableness mandate should be enforced and a low cost appeal mechanism where it is perceived not to do so. The alternative is to motivate disconnection from the grid.

762. The Access Code does not require a service provider to include in an access arrangement a designation or description of non-reference services or a standard

[83] Western Power, *Access arrangement information: Access arrangement revisions for the fourth access arrangement period*, 2 October 2017, p. 83.

[84] Western Power, *Access arrangement information: Access arrangement revisions for the fourth access arrangement period*, 2 October 2017, p. 83.

access contract for non-reference services. Under section 4.29(c), the ERA cannot require a service provider to include these matters in an access arrangement.

763. The ERA has a limited role in managing access requirements between Western Power and users. In this case, the ERA's role is to ensure the access arrangement includes reference services that meet the requirements of the Access Code. This includes ensuring there is a reference service for each covered service that is likely to be sought by a significant number of users.

764. Under the Access Code the ERA, when notified of an access dispute, may settle the dispute by conciliation or refer the dispute to an arbitrator. It may also refer contractual disputes to the arbitrator. Beyond these statutory requirements, the ERA does not have a role in managing negotiations between the parties for non-reference services.

765. If a significant number of users seek a particular network access service not currently offered as a reference service then, under section 5.2(b) of the Access Code, consideration would need to be given for such services to be included as reference services.

PRICING METHODS, PRICE LIST AND PRICE LIST INFORMATION

Access Code requirements

766. Section 5.1(e) of the *Electricity Networks Access Code 2004* (**Access Code**) requires an access arrangement to include pricing methods in accordance with the requirements of chapter 7 of the Access Code.

767. Section 7.1 of the Access Code defines “pricing methods” to mean the structure of reference tariffs included in an access arrangement, which determines how target revenue is allocated across and within reference services.

768. Section 7.2 of the Access Code provides that an access arrangement may contain any pricing methods; provided that the pricing methods collectively meet the objectives set out in sections 7.3 and 7.4 and otherwise comply with the chapter 7. A note under section 7.2 gives examples of tariffs that may result from pricing methods, indicating that tariffs or parts of tariffs may be set to take into account matters such as different classes of users, different voltage levels, different connection points, demand levels, energy quantities and times of use.

769. Sections 7.3 and 7.4 of the Access Code set out the objectives for pricing methods, as follows:

7.3 Subject to sections 7.5, 7.7 and 7.12, the pricing methods in an access arrangement must have the objectives that:

(a) reference tariffs recover the forward-looking efficient costs of providing reference services; and

(b) the reference tariff applying to a user:

(i) at the lower bound, is equal to, or exceeds, the incremental cost of service provision; and

(ii) at the upper bound, is equal to, or is less than, the stand-alone cost[85] of service provision.

7.4 Subject to sections 7.5, 7.7 and 7.12, the pricing methods in an access arrangement must have the objectives that:

(a) the charges paid by different users of a reference service differ only to the extent necessary to reflect differences in the average cost of service provision to the users; and

(b) the structure of reference tariffs so far as is consistent with the Code objective accommodates the reasonable requirements of users collectively; and

[85] The Access Code defines stand-alone cost of service provision as “in relation to a *user* or group of *users*, a *covered service* and a specified period of time, means that part of *approved total costs* that the *service provider* would incur in providing the *covered service* to the *user* or group of *users*, for the period of time if the *covered service* was the sole *covered service* provided by the *service provider* and the *user* or group of *users* was the sole *user* of group of *users* supplied by the *service provider* during the specified period of time.”

(c) the structure of reference tariffs enables a user to predict the likely annual changes in reference tariffs during the access arrangement period; and

(d) the structure of reference tariffs avoids price shocks (that is, sudden material tariff adjustments between succeeding years).

770. Section 7.5 of the Access Code requires that the Economic Regulation Authority (**ERA**), in reconciling any conflicting objectives for the pricing methods or determining which objective is to prevail, should have regard to the Access Code objective, and where necessary must permit the objectives of section 7.3 to prevail over the objectives of section 7.4.

771. Section 7.6 of the Access Code provides guidance for establishing components of tariffs:

7.6 Unless an access arrangement containing alternative pricing methods would better achieve the Code objective, for a reference service:

(a) the incremental cost of service provision should be recovered by tariff components that vary with usage or demand; and

(b) any amount in excess of the incremental cost of service provision should be recovered by tariff components that do not vary with usage or demand.

772. Section 7.7 of the Access Code requires that tariffs be established as "postage stamp" charges in certain cases as follows:

7.7 The tariff applying to a standard tariff user in respect of a standard tariff exit point must not differ from the tariff applying to any other standard tariff user in respect of a standard tariff exit point as a result of differences in the geographic locations of the standard tariff exit points.

773. Section 7.9 of the Access Code provides for "prudent discounts" to be made available to some users:

7.9 A service provider may propose in its access arrangement to discriminate between users in its pricing of services to the extent that it is necessary to do so to aid economic efficiency, including:

(a) by entering into an agreement with a user to apply a discount to the equivalent tariff to be paid by the user for a covered service; and

(b) then, recovering the amount of the discount from other users of reference services through reference tariffs.

774. In sections 7.9 and 7.10 of the Access Code, "equivalent tariff" means:

(i) for a reference service – the reference tariff; and

(ii) for a non-reference service – the tariff that it is reasonably likely would have been set as the reference tariff had the non-reference service been a reference service.

775. Section 7.10 of the Access Code provides for discounts for users connecting distributed generation plant:

7.10 If a user seeks to connect distributed generating plant to a covered network, a service provider must reflect in the user's tariff, by way of a discount, a share of any reductions in either or both of the service provider's capital-related costs or non-capital costs which arise as a result of the entry point for distributed generating plant being located in a particular part of the covered network by:

(a) entering into an agreement with a user to apply a discount to the equivalent tariff to be paid by the user for a covered service; and

(b) then, recovering the amount of the discount from other users of reference services through reference tariffs.

776. Section 7.11 of the Access Code requires an access arrangement to include a detailed policy setting out how discounts under sections 7.9 and 7.10 will be implemented, including a detailed mechanism for determining when a user will be entitled to receive a discount and for calculating the discount to which the user will be entitled.

777. Section 7.12 of the Access Code requires that the value of any tariff equalisation contributions be recovered as a tariff component from users of the distribution network:

> 7.12 If an amount is added to the target revenue under section 6.37A and is intended to be recovered from users of reference services through one or more reference tariffs, then the recovery must have the objective of:
>
> (a) applying only to users of reference services provided in respect of exit points on the distribution system; and
>
> (b) being equitable in its effect as between users referred to in section 7.12(a); and
>
> (c) otherwise being consistent with the Code objective.

778. Section 5.1(f) of the Access Code requires an access arrangement to include a Price List in accordance with the requirements of chapter 8 of the Access Code. A "price list" is defined in the Access Code as a schedule of reference tariffs.

779. Chapter 8 of the Access Code sets out the requirements and processes for a service provider to submit Price Lists to the ERA for approval and for the ERA to approve or not approve a proposed Price List.

780. Section 8.1 of the Access Code requires that the service provider must submit a proposed Price List to the ERA at least 45 business days before the start of each pricing year other than the first pricing year. A proposed Price List must be accompanied by Price List Information. "Price List Information" is defined as a document that would reasonably be required to enable the ERA, users and applicants to understand how the service provider derived the elements of the proposed Price List; and assess the compliance of the proposed Price List with the access arrangement.

781. Sections 8.2 to 8.6 of the Access Code sets out the process for the ERA to approve or not approve a proposed Price List. The ERA is obliged to approve a proposed Price List if it determines that the proposed Price List complies with the price control and pricing methods in the service provider's access arrangement.

782. Sections 8.7 and 8.8 of the Access Code require a service provider to submit Price Lists to the ERA, even if the access arrangement does not require the service provider to submit Price Lists to the ERA for approval. In these circumstances, the role of the ERA is to publish the submitted Price List and Price List Information.

Current access arrangement

783. Pricing methods are included in the current access arrangement at section 6 and include the formula for determining maximum target revenue each year, the

allocation of costs to particular reference services and the pricing structure of each reference tariff.

784. A Price List and Price List Information for the period 1 February 2013 to 30 June 2013[86] was included in the current access arrangement at Appendix F. Subsequent to the approval of the current access arrangement, the Price List was revised to incorporate variations to reference tariff charges made in accordance with the price control for the years 2013/14, 2014/15, 2015/16 and 2016/17.

785. The current access arrangement includes a side constraint formula based on the CPI, the percentage change in the approved target revenue, correction factors (the under or over-recovery of revenue and the TEC) and an additional two per cent. The side constraint limits annual changes to individual reference tariffs during the access arrangement period to mitigate the effects of price shocks during an access arrangement period.

Western Power's proposal

786. Apart from making changes to reflect the fourth access arrangement period (**AA4**), Western Power has not proposed any amendments to the pricing methods[87] set out in section 6 of its proposed revised access arrangement.

787. Sections 6.5.14 and 6.5.16 have been added to provide for annual updates to the weighted average cost of capital to be taken account of in the side constraint.

788. Western Power has included proposed Price Lists and Price List Information for 2017/18[88] and 2018/19[89] in its submission. Western Power notes:

> Due to the one year delay in commencement of the AA4 revenue recovery, the revenue caps for 2017/18 are treated slightly differently. In the normal course of events, there would be a revised Price List and Price List Information produced for 2017/18, and these documents would outline the calculation of the revenue target for the year …, including a calculation of the revenue adjustment factor (known as the k-factor). The versions of these documents (Appendix F.1 and F.2 to the proposed access arrangement) are the 2016/17 Price List reproduced, without any adjustments made for the k-factor. The 2016/17 Price List is adopted as the 2017/18 Price List absent a different Price List produced in April 2017 and approved by the ERA in May 2017 due to the delay to the AA4 process.

789. Western Power's Proposed Price List and Price List Information for 2018/19 sets out the tariffs it proposes to commence on 1 July 2018 based on the target revenue it has proposed in its submission.

790. Western Power summarises its proposed amendments to reference tariffs as:

> We are proposing the following changes to reference tariffs for the AA4 period:

---

86 As the access arrangement was approved after the commencement of the 2012/13 financial year, the Price List for 2012/13 did take effect until 1 Feb 2013. The prices were set in such a way that the total revenue earned throughout 2012/13 was equal to the 2012/13 approved revenue caps.

87 With the exception of adding the proposed new reference services (D1 to D4) to clause 6.32 which specifies the costs relating to reference services are allocated so that those costs can determine the relevant reference tariff in a cost reflective manner.

88 Appendix F.1 and F.2 of Western Power's proposed revisions to the Access Arrangement.

89 Appendix F.3 and F.4 of Western Power's proposed revisions to the Access Arrangement.

- Introducing two new time of use tariffs
- Introducing two new demand-based tariffs
- Modifying peak/off-peak time periods in the existing RT5 and RT6 demand tariffs to reflect the time periods in the new time of use tariffs
- Modifying existing demand-based tariffs for medium to large businesses (RT5-RT8) to allow for bi-directional flows;
- Recovering Tariff Equalisation Contribution (TEC) from the fixed component of tariffs rather than the variable component of most tariffs."

791. Western Power's proposed Price List Information for 2018/19 indicates changes to metering charges and the excess network usage charge. It also notes that future changes are likely for streetlight tariffs. Details of these changes are included under considerations of the ERA.

Submissions

792. Submissions from Perth Energy, Mr Noel Schubert, Community Electricity, Emergent Energy, Mr Craig Hosking, Energy Networks Australia, Synergy, Bluewaters, CdL Advisory, WACOSS and WALGA all included comments on Western Power's proposed pricing methods and tariffs.

793. The submissions include support for more cost-reflective tariffs. However, views on whether Western Power's proposal achieve this vary. Alternative suggestions for developing prices are also put forward together with specific comments on Western Power's proposed tariffs. Details of the matters raised in submissions are included under considerations of the ERA.

Considerations of the ERA

Pricing methods in the access arrangement

794. The ERA has considered pricing methods separately from the application of the pricing method. This section considers the pricing method. The following section, *Proposed 2018/19 Price List and Price List Information*, considers the application of the pricing methods.

795. Western Power's pricing methods are set out in section 6 of the proposed access arrangement and specific details are set out in the price list information included as Appendix F.2 and F.4 of the proposed access arrangement.

796. As set out in the price list information, and consistent with previous access arrangements, Western Power has determined the value of individual reference tariffs and the individual charges of the reference tariffs by applying a cost allocation model. Under the model, the capital and non-capital components of total costs are allocated to cost pools and location zones, then to customer groups corresponding to reference services, and to charges that make up each reference tariff. Costs are allocated according to:

- the characteristics of a user at a connection point and measures of each user's proportional share of use of the network relative to other users; and

- the amount of costs that can be allocated to a user at a connection point such that the total charges paid by the user under a reference tariff lie between the incremental cost of service provision and the stand-alone cost of service provision.

797. This method is consistent with the requirements of 7.3(a) of the Access Code that reference tariffs must recover the forward looking efficient costs of providing reference services and 7.3(b) that requires tariffs to be between the stand-alone and incremental cost of service.

798. With the exception of metering costs, which are considered below, Western Power has not materially changed its cost assumptions and allocation method since the first access arrangement.

799. The tariffs offered and the structure of those tariffs have also not changed significantly since the first access arrangement.

800. Mr Schubert notes:[90]

> Network tariff and franchise customer retail tariff reform in WA has been minimal over the last 23 years since the very effective tariff reform program that was in progress up to 1994 in WA. … Most residential and small business customers have remained on non-cost-reflectively structured flat electricity tariffs over these many years with little or no structural reform.

801. The role of the ERA in approving pricing methods proposed by Western Power is to assess whether the pricing methods satisfy the objectives for pricing methods under the Access Code. As section 6 of Western Power's proposed access arrangement includes all of the requirements set out in Access Code requirements, and the price list information is based on these requirements, the pricing methods are consistent with the Access Code.

802. Stakeholder submissions comment on the lack of pricing and tariff reform and include suggestions for more efficient tariffs. The Access Code does not provide for the ERA to approve structures of reference tariffs to the level of detail that would enable the ERA to impose particular tariff structures such as those proposed in submissions.

803. As discussed in the section on price control, the ERA considers Western Power's current price control mechanism does not incentivise Western Power to develop more efficient tariff structures. The ERA has required Western Power to amend its price control. The ERA considers exposing Western Power to demand risk will encourage it to develop more efficient tariff structures.

804. Western Power could consider the following suggestions for developing more efficient tariffs.

805. Submissions highlight the problems that arise from the current structure of tariffs. Mr Schubert submits:[91]

---

[90] Mr Noel Schubert, *Submission re: Proposed Revisions to the Western Power Network Access Arrangement – AA4*, 11 December 2017, p. 2.

[91] Mr Noel Schubert, *Submission re: Proposed Revisions to the Western Power Network Access Arrangement – AA4*, 11 December 2017, p. 3.

> A key contributor to the rapid take-up of alternative technologies like photovoltaic (PV) systems by customers is also the lack of cost-reflectively structured network and retail tariffs. Existing flat, energy-based tariffs provide greater financial incentives to take up these technologies, and air conditioners too … than is economically efficient.
>
> The widely used flat (non-time-varying) energy-based network and retail tariffs (without a demand component to reflect customer demand that drives network and generation capacity capex) are a key reason that customers install solar PVs and avoid more (bill) costs than is economically efficient.

806. Mr Hosking submits:[92]

> … Western Power's network tariffs, applied to most electricity customers, charge kWh energy rates …. These kWh energy based network tariffs result in economic inefficiencies in the electricity supply system and cross-subsidies between customers, because they do not match the network cost structure.

807. Emergent Energy submits that the current tariff structures are not adequate for the technological disruption that is occurring:[93]

> Another aspect of technological disruption is that the rules and regulations of the sector are seldom appropriate to manage the new technology entrants. In other words, the playing field is not initially level. Nor should it be expected to. Technological disruption is characterised as being unexpected and sudden. In the case of online retailers, already boasting many advantages over their traditional competitors, the initial absence of GST levied against online sales provided an unfair advantage over the bricks and mortar incumbents. Similarly, in the electricity supply sector, the existing structure of (fixed and variable) pricing, for so long an adequate (if not particularly sophisticated) method of recovering the costs of providing the service, now place incumbents at a disadvantage.

808. Stakeholders consider change in pricing and tariff structures is necessary to deliver efficient outcomes.

809. Mr Schubert considers:[94]

> The introduction of more cost-reflectively structured, time-varying network and retail electricity tariffs would start to drive more economically efficient outcomes, including the beneficial application of energy storage such as batteries.

810. Emergent Energy considers change is required but notes issues that could arise and the need for policy makers to respond to and influence change:

> … new pricing mechanisms are required to better align with recovery of the fixed cost to Western Power in maintaining the network… but if those pricing mechanisms are properly structured to incentivise even greater efficiency (and lower costs to consumers), then by implementing them, Western Power faces a likely devaluation to its business. Similarly, if not structured effectively, higher fixed prices will stymie the uptake of BTM assets to the detriment of network efficiency.
>
> The manner in which properly structured price incentives are to be implemented must cut across a number of regulatory and policy levers. While the Authority has only a mandate to deal with those levers provided under the Access Code, it should be recognised that as technology changes the nature of the network, a collaborative

---

[92] Mr Craig Hosking submission, *Submission to the ERA Regarding Western Power's AA4 Proposal*, 11 December 2017, p. 1.

[93] Emergent Energy Submission, 8 December 2017, p. 2.

[94] Mr Noel Schubert, *Submission re: Proposed Revisions to the Western Power Network Access Arrangement – AA4*, 11 December 2017, p. 3.

response from policy makers and rule makers alike is required to respond to, influence and even harness this change.

811. Specific alternative tariff structures are proposed by Mr Hosking who recommends Western Power should implement demand based charges using $/kilo-volt-ampere (**kVA**) and that it should review its cost allocation assumptions:[95]

> By using kWh energy rates for the network tariffs, Western Power is promoting that retailers and customers reduce their network kWh consumption, even when there is no reduction to network kVA demand, which is the primary incremental network cost driver. This mismatch between network prices and costs leads to economic inefficiencies in the electricity supply system and cross-subsidies between network electricity customers.
>
> Western Power should recast the network tariffs to properly reflect the actual network cost structure i.e. $/customer per annum and $/kVA per annum demand. Prior to recasting the network tariffs, Western Power should re-examine its Fixed ($/customer per annum) verses Variable ($/kVA per annum) allocation to the distribution cost groups, especially considering the weighting of Western Power's line and underground cable assets and their true Fixed verses Variable (incremental) cost nature.

812. Mr Hosking also suggests how Western Power could implement these charges, including for users that do not have demand metering:[96]

> Practically, Western Power is able to restructure its distribution network tariffs fairly easily, because it only sells to retailers and not directly to the distribution electricity customers. For electricity customers without kVA demand metering, Western Power can use the customer group any time maximum demand (ATMD) to determine the appropriate $/kVA rate to be applied and thereby the total aggregated charge to apply to each retailer, depending on their customer types.
>
> Thus Western Power's revenue would remain the same, retailers would receive the right cost signals to develop retail tariffs that closely matched the network cost drivers, and electricity customers would be encouraged to examine ways and technologies for reducing their network peak kVA demand.

813. Emergent Energy provides suggestions to implement a new charging structure that encourages users to install smart meters themselves:[97]

> Customers can be incentivised, via a "carrot and stick" approach, to install smart meters themselves. Customers have already spent over half a billion dollars on BTM assets over the past five years and are likely to more than triple that expenditure over the next five. Their ability and propensity to outlay capital for the superior utility brought by investing in new technology has been demonstrated and should be harnessed by policy makers.
>
> …
>
> By deeming a peak demand level for individual customers, based on some formula utilising historical usage patterns, customers will pay a higher, but fair fixed price to access the grid. However, customers will have the opportunity (and incentive) to install a smart meter in order to set an actual peak demand level, rather than have it deemed. They will be further incentivised to modify their consumption, as well as to adopt BTM storage earlier than they otherwise might, which will reduce their actual peak demand. They will pay less to use the network because the more efficient network will cost less

---

[95] Mr Craig Hosking submission, *Submission to the ERA Regarding Western Power's AA4 Proposal*, 11 December 2017, p. 1.

[96] Mr Craig Hosking submission, *Submission to the ERA Regarding Western Power's AA4 Proposal*, 11 December 2017, p. 2.

[97] Emergent Energy Submission, 8 December 2017, pp. 9-10.

> to operate. This would be a significant exercise to implement, but it will have the potential for dramatic impacts around the way in which customers access electricity supply services into the future. Multiple retail models are possible. As seen in the telecoms and internet markets, ownership of phones and modems quickly passed from the service provider to the customer under lease, outright ownership, [bring your own] or other mechanisms. And as grid defection becomes a reality, network owners face the increasing likelihood that electricity meters will disappear from their asset base at any rate. As the role of networks change and regulated revenue drops, it is preferable to not embark on an exercise that would require a large new set of assets (smart meters) to be added to the already overweight distribution asset base.

814. Other matters raised in submissions include postage stamp pricing, charging energy exported from behind the meter generation for use of the network and affordability.

815. Emergent Energy discusses issues arising from the current Access Code requirement to use postage stamp tariffs for users with energy consumption less than 1 Mega Volt Amp (**MVA**):[98]

> Where Western Power eschews ‘conventional network management’, or poles and wires, for new technology (such as distributed generation and storage), it is moving from a natural monopoly service model into what is a very competitive sector. If it is more efficient to install distributed generation and storage, rather than replace aging poles and wires, should Western Power be able to replace one with the other on its asset base? The market for providing distributed generation and storage services is not a natural monopoly. But only Western Power has access to the ‘benefit’ of the obligation-cost of replacing an existing monopoly asset.
>
> This issue raises questions about the ability to apply ‘postage stamp’ tariffs to all consumers. It also raises questions about whether a consumer at the end of a remote distribution line, which has enjoyed subsidised (postage stamp) tariffs, should be allowed to leave the grid for an alternative supply model at a point in time when the network assets are still useful.

816. Bluewaters submits that behind-the-meter exporters should be charged for using network, as is the case for other generators:[99]

> Bluewaters notes that one of the contributory factors for the expected lack of growth in Western Power network capacity demand is the emergence of the BTM technologies. Bluewaters also notes that, under the proposed Western Power tariff structure, there is no transmission network cost recovery from these BTM facilities. This is despite the fact that these BTM facilities require access to the transmission networks (mostly via the distribution network) due to the intermittent nature of these generation facilities.
>
> Bluewaters considers this creates an inequitable situation where BTM facilities get free access to the transmission network at the expense of the non-BTM facilities. Bluewaters considers this to be an inefficient allocation of costs and can potentially distort the investment signal in the SWIS. Bluewaters also notes that the rapid growth of BTM facilities will only magnify this problem.
>
> Distortion in investment signal can compromise the adequacy of generation mix in the SWIS, in turn gives rise to various economics and technical issues (inertia and intermittency problems, for examples). This can compromise the reliability and security of the power system.
>
> Bluewaters considers, to the extent which Western Power’s network is required to support the efficient generation investment signal discussed above, cost recovery of

[98] Emergent Energy Submission, 8 December 2017, p. 13.

[99] Bluewaters Power, *Response to issues paper on proposed revisions to the western power network access arrangement (2017/18 to 2021/22 - aa4)*, 11 December 2017, p. 2.

the network assets from the BTM generation should be reflected in the principles underpinning the pricing method in the Access Arrangement. Bluewaters also recommends that such cost recovery be in turn reflected in the Western Power's tariff structure.

817. WACOSS discusses the significant effect electricity retail prices have on households, particularly those with low incomes. It notes that low income earners may be forced to forsake services such as water or electricity, which are essential to maintaining a reasonable standard of living, in order to feed themselves or to keep a roof over their head.

Proposed 2018/19 Price List and Price List Information

Target revenue cap and side constraint formula

818. As set out in this draft determination, the ERA has not approved the transmission or distribution network revenue caps. Consequently, Western Power is required to amend its proposed revised Price List and Price List Information for 2018/19 to be consistent with the approved transmission network revenue cap and distribution network revenue cap target.

Required Amendment 16

Western Power must amend the 2018/19 Price List and Price List Information to be consistent with the target revenue approved by the ERA in this draft decision.

819. As part of this update, Western Power will need to update Table 16 of Appendix F.4 (2018/19 Price List Information), which demonstrates compliance with section 7.3(b)(i) and (ii) of the Access Code and Table 18, which demonstrates compliance with section 7.6 of the Access Code. Western Power has only included distribution tariffs in these tables. Western Power must expand the tables to include transmission tariffs.

Required Amendment 17

Western Power must expand Table 16 and Table 18 in Appendix F.4 ("2018/19 Price List Information") to include transmission tariffs.

820. As set out in the section on price control, the ERA has required amendments to remove the correction factor for under or over recovery of target revenue from prior periods from the price control mechanism. As the current side constraint formula includes the correction factor, the side constraint formula must also be amended.

Required Amendment 18

Western Power must amend the side constraint formula to remove the correction factor for under or over recovery of target revenue from prior periods.

Fixed and variable charges

821. Under section 7.6 of the Access Code, the incremental cost of service provision should be recovered by tariff components that vary with usage or demand and the remaining costs should be recovered by tariff components that do not vary with usage or demand, unless an alternative method would better achieve the Access Code objective.

822. As discussed above, stakeholders have suggested changing charging structures to increase the level of fixed charges.

823. Western Power notes that during the third access arrangement period (AA3) it increased the proportion of revenue recovered by fixed charges:

> In line with the premise of cost reflectivity, it is reasonable that the fixed component of a network tariff reflects the fixed costs of running the network. Historically, the fixed charges increased from 27 per cent for an average bill to 40 per cent over AA3. It should be noted that these fixed charge increases were offset by variable charge decreases, meaning that the change is revenue neutral.

824. In Attachment 11.1 to its access arrangement information, Western Power provides the following comment on its ability to recover revenue through fixed charges:

> Recovering more revenue on a fixed basis has an appeal to Western Power, particularly from a revenue stability point of view. However, there are a number of reasons why we have not increased the fixed charge much higher than current levels.
>
> - The variable components give Western Power the opportunity to send signals around the most efficient use of the network. A fully fixed tariff structure removes this option.
> - Section 7.6(a) of the Access Code requires that the incremental cost of service provision is recovered by variable components. This limits the extent to which tariffs can be fixed.

825. Table 18 of Western Power's proposed 2018/19 Price List Information shows the revenue recovered from variable tariff components for all reference tariffs is approximately double Western Power's estimate of the incremental cost of service for each reference tariff. The proportion of fixed charges could be increased substantially and still be compliant with section 7.6(a) of the Access Code.

826. However, the ERA recognises that any changes between fixed and variable charges would need to be carefully structured and managed. Submissions from CdL Advisory and Emergent Energy provide comment on this.

827. CdL Advisory supports cost-reflective pricing but notes:[100]

> … it should be implemented with due regard to the broader regulatory and technological context particularly concerning rooftop solar, battery backup and feed in tariffs.

828. Emergent Energy submits:[101]

> … it is likely that the prevailing fixed and variable pricing structure is not appropriate, given the new technological forces re-shaping the sector. A higher fixed portion, offset by lower variable portion may provide a more appropriate cost recovery structure,

[100] CdL Advisory, 4 December 2017, p. 2.

[101] Emergent Energy Submission, 8 December 2017, p. 14.

> given the previous requirement to investment in peak demand infrastructure. But higher fixed tariffs must be implemented in a manner that provides incentives to customers to change their behaviour. That is, fixed tariffs should be attributed to a customer's contribution to peak demand. By increasing fixed tariffs without any accompanying price signal, Western Power is simply recovering costs when those costs are becoming inefficient due to technological changes to the electricity supply model. [page 14]

829. The ERA considers that amending Western Power's price control to expose it to demand risk (rather than its current price control which completely shields it from any changes in demand) will encourage Western Power to develop more efficient tariff structures, including the balance between fixed and variable charges and the basis of setting any fixed charges.

Tariff Equalisation Contribution

830. A large component of Western Power's fixed costs is the Tariff Equalisation Contribution (**TEC**). An amount of $167 million was gazetted for the 2017/18 year which is around 15 per cent of Western Power's proposed operating expenditure for the distribution service. Currently the TEC is collected through a combination of fixed and variable components of the network tariffs.

831. In its submission for AA4, Western Power proposed to recover the TEC entirely from fixed components of network tariffs:[102]

> For most tariffs, the TEC is currently fully recovered from the variable network tariff components. This is despite the TEC being to all intents and purposes a fixed and unavoidable cost, determined by State Government. Therefore Western Power considers it reasonable that the TEC should be wholly collected via the fixed tariff component. Recovering the TEC from fixed tariff components would also mean the regional subsidy is shared equally by all Western Power customers.
>
> In most cases, customers will be no worse off as a result of the increased fixed charges. This is because there would be an offsetting decrease in variable charges.

832. Submissions from Synergy and Emergent Energy support this approach. Synergy considers recovering the TEC through reference service fixed charges rather than through reference service variable charges is consistent with section 7.6 of the Access Code. Emergent Energy noted:[103]

> Given the decline in demand (and variable revenue risk), and given the TEC is an obligation imposed on Western Power by the government, then it is appropriate that Western Power is not exposed to TEC recovery risk.

833. However, Community Electricity considered the proposal is inconsistent with the Access Code as it would result in an inequitable allocation of the TEC between users:[104]

> … clause 7.12b which requires the TEC to be allocated equitably between users; specifically, the proposal is that the most vulnerable members of society will unavoidably bear the charge of subsidising affluent users benefitting from the subsidy.

---

[102] Western Power, *Access arrangement information: Access arrangement revisions for the fourth access arrangement period*, 2 October 2017, p. 254.

[103] Emergent Energy, 8 December 2017, p. 15.

[104] Community Electricity, *Response to ERA Public Consultation*, 10 December 2017, p. 6.

> Further, this cost would be born by Synergy, who could only pass it through to customers at the direction of government, which controls retail tariffs.

834. Since lodging its proposed revisions to the access arrangement, Western Power has advised the ERA that:[105]

> Following consultation with our shareholder and the Department of Treasury, we have decided not to proceed with the proposed change to the TEC at this time as we believe it would be prudent to allow more time to fully consider any forthcoming market reforms. As this is essentially an administrative change to the recovery of the TEC, we will revisit it at a later date, as required.

835. The ERA considers, given the fixed nature of the TEC, recovering it via fixed charges would be consistent with section 7.6 of the Access Code. The current practice of including the TEC in variable tariff components contributes to the need for adjustments to tariffs for under/over recovery of revenue for previous periods.

836. Section 7.12 provides for the TEC to be recovered from users of reference services through one or more reference tariffs. The recovery must apply only to users of reference services provided in respect of exit points on the distribution system, be equitable in its effect between users and be consistent with the Access Code objective.

837. As discussed elsewhere in this decision, the users of Western Power's network are predominantly retailers, generators and large users with direct connections to the transmission system. Consequently, the relevant users for allocation of the TEC are retailers. The ERA considers the requirement is for Western Power to ensure the allocation is equitable between those retailers.

838. As the TEC can vary each year, depending on the value gazetted by the government, it contributes to price uncertainty. Recovering the TEC through variable charge components compounds the uncertainty as it will generally be necessary to adjust prices for under or over recovery in the previous period. Developing a fixed charge based on an equitable allocation between retailers may provide a more predictable and transparent charge for users. Users would continue be able to determine how they recovered these costs in their retail tariffs.

839. The ERA considers there is a range of options available to Western Power to recover the TEC which would be compliant with the requirements of the Access Code. Western Power has indicated it intends to revise its current proposal. The ERA will consider any revised proposal as part of its final decision.

840. Synergy's submission also raised concerns regarding which customers are charged the TEC. It submits that not allocating the TEC to distribution customers that use more than 7,000 kVA is not consistent with section 7.12 of the Access Code.

841. As set out in the Price List Information, historically Western Power has not allocated TEC costs to users with demand greater than 7,000 kVA as these users can usually choose between a transmission or distribution connection. As the TEC does not apply to transmission customers, Western Power considers charging the TEC to distribution connected users would create a perverse incentive for users to transition to being transmission connected due to the additional charges. The variable demand charge between 1,000 and 7,000 kVA is negative so that when added to

[105] Western Power letter, *Update to Western Power's Access Arrangement (AA4) position on time of use network tariffs and the Tariff Equalisation Contribution* 15 December 2017, p. 2.

the fixed demand charge users with demand greater than 7,000 kVA do not pay any TEC costs.

842. The ERA considers this approach to be reasonable and consistent with the requirements of section 7.12 of the Access Code to allocate costs equitably between users.

Metering costs

843. Western Power has also proposed a change in the allocation of metering costs. It proposes moving from a number of different prices and structures, to one fixed price for all standard metering services.

844. Western Power states:[106]

> Analysis show that for distribution customers, there is very little variation in meter costs based on the type of meter installed. Most of the costs of providing meter services are fixed costs for IT systems, meter testing facilities and labour costs.

845. Western Power proposes to charge for metering solely through a fixed daily price, and has removed the energy consumption components currently included in tariffs. The proposed 2018/19 metering price for all distribution tariffs is $32 per year and for all transmission tariffs is approximately $8,000 per year. The same charge applies regardless of meter type.

846. Mr Schubert's submission supports the proposed move to fixed metering charges, noting that metering costs do not vary by energy consumption. Mr Schubert considers the proposed change will remove a distortion that the current variable metering charges cause which results in cross subsidies between customers.

847. As set out in the section on reference services, the ERA has determined that metering services should be separated from the current reference services and that a range of metering services (for each service that is likely to be sought by a significant number of users) should be offered. Western Power must also develop tariffs for these metering services.

Required Amendment 19

Western Power must amend the 2018/19 Price List and Price List Information to include tariffs for each metering service. Evidence must be provided to demonstrate the proposed charges are cost reflective.

Specific tariffs included in the 2018/19 Price List

New time of use and demand tariffs

848. Western Power has proposed new residential and commercial time of use services and demand tariffs (RT17 to RT20). Although the new tariffs include peak and off peak time periods, Western Power has set charges for each period the same as the residential and commercial anytime energy tariffs (RT1 and RT2). The proposed

[106] Western Power, *Proposed Access Arrangement, Appendix F.4: 2018/19 Price List Information*, 2 October 2017, p. 46.

new commercial demand tariff includes a shoulder period which is also priced at the same rate as the commercial anytime energy tariff.

849. Western Power considers time of use tariffs could reduce peak demand and the need for investment to increase the capacity of the network:[107]

> Time of use tariffs are a potential alternative to the costly option of increasing network capacity. By encouraging customers to use electricity outside of peak times, the tariffs can help reduce the need for network capacity expansion, which saves customers money over the long term. Time of use tariffs can also help customers save money directly, as it provides greater opportunity to control costs by making just a few moderate changes to when and how they use electricity.

850. Submissions from Energy Networks Australia and Change Energy indicate general support for the new tariffs, although Change Energy queries which types of business customers will qualify for the new demand tariff and whether peak demand will be measured each month or on a rolling twelve month basis like the existing high and low voltage metered demand tariffs (RT5 and RT6).

851. Submissions from Perth Energy, Community Electricity, Synergy and Mr Schubert all raise concerns regarding the proposed new tariffs.

852. Perth Energy submits:[108]

> …Western Power Tariffs should be variable driven and offer better price signals to customers in order for them to optimise their use of the network. Perth Energy believes the new time of use tariffs proposed do not go far enough in offering efficient price signals to customers. It is important to note, without changing all the tariffs to time of use it is hard to establish longer term benefits to Western Power. Customers that contribute to high system peaks will not migrate to the new time of use tariffs as they will view this tariff as financial penalty when compared to the existing tariffs. However, customers who do not contribute to the peak demand will migrate to the time of use tariff as they will see cost savings.
>
> The tariffs proposed do not support change in consumer usage patterns, rather they will entrench behaviours that are not in the best interests of the market as a whole. The dichotomy that exists within the proposed tariff structure is that those customers Western Power want to target with the new tariffs will be most resistant to adoption, whereas those customers who do not materially contribute to system peaks may migrate to the new tariff in search of savings. Given this, Perth Energy would question the applicability of the proposed tariff regime.
>
> Perth Energy would propose that Western Power undertake a more holistic tariff reform to develop a structure that will more appropriately provide price signals and incentivise customers to manage their energy consumption more efficiently. Perth Energy is also concerned the new tariffs proposed by Western Power will not yield efficiencies, as it is not clear what the reduction in target revenue is as a result of the implementation of new time of use tariffs.
>
> Perth Energy would like to see an estimate from Western Power on how successful they believe these new tariffs will be and how the new tariff relates to an expected reduction in the amount of revenue it needs to recover over AA4.

---

[107] Western Power, *Access Arrangement Information, Access arrangement revisions for the fourth access arrangement period*, 2 October 2017, p. xxviii.

[108] Perth Energy *Submission to the Economic Regulation Authority regarding Western Power's Proposed Revisions to the Access Arrangement for the Western Power Network (2018-2022)*, November 2017, pp. 13-14.

853. Submissions from Mr Schubert and Community Electricity raise concerns that Western Power's proposed prices for the new tariffs are identical to existing anytime energy tariffs. Mr Schubert submits:[109]

> When a new tariff is introduced, ideally it should be set at cost-reflective rates from the start and be applied to customers in an acceptable, managed way to account for the different impacts on customers with different electricity consumption load profiles. I do not support starting the introduction of these new tariffs with rates in each time period that are not cost-reflective.

854. Community Electricity submits:[110]

> … there is no point in delivering a price signal that cannot be responded to.
>
> …
>
> …Equally, there is no point developing new tariff options that contain identical prices to existing tariffs but with more time structure, which is effectively of null effect.
>
> …
>
> We challenge Western Power to demonstrate by application to sample load profiles that any of the new tariffs have any practical utility whatsoever.
>
> …
>
> We consider that the proposed tariff reforms are a missed opportunity that do nothing to mitigate the death spiral, and guarantee mal-investment and an eventual price dislocation when the system is forced to reset. We suggest it is preposterous to base a programme of investment in advanced meters on such insubstantial fine-tuning and customer inability to understand or respond to the price signals.

855. Synergy is also concerned there is insufficient information to evaluate the proposed new tariffs, including the effect on demand and prices:[111]

> Introducing time of use tariffs and demand tariffs for residential and small business customers may result in a large change to their historical electricity costs. The WP proposal notes the intention to manage this impact by setting energy and demand tariffs for RT19 and RT20 so that an average customer would pay the same under a flat rate, time of use or demand based tariff. This in turn raises several questions:
>
> - Will time of use tariffs RT17 and RT18 be established to manage the impact on customers so that customers would pay the same under a flat rate or the time of use tariff? WP's proposal contains no statement to this effect.
> - What is an average customer? New customers typically have lower energy use and different consumption profiles to existing customers because new buildings tend to be designed to maximise energy efficiency and incorporate more energy efficient appliances. If WP is assuming new residential customers have the same average consumption as existing residential customers it is possible they could be over-recovering from existing customers and under-recovering from new customers. This, together with the requirement for new residential and small use customers to face time of use tariffs on a compulsory basis, while allowing existing residential and small use customers to opt in at a future stage, may mean new and existing customers face significantly different network charges on an ongoing basis. Synergy submits this may contravene the Code requirement that tariffs only

[109] Mr Noel Schubert, *Proposed Revisions to the Price Waterhouse Coopers access arrangement- AA4,* 17 December 2017, p. 2.

[110] Community Electricity, *Response to ERA Public Consultation*, 10 December 2017, p. 6 para 37, p. 8 para 48, 51, p. 9 para 55.

[111] Synergy, *AA4 submission No. 5: Western Power's proposed price control mechanisms*, 11 December 2017, p. 90.

> differ to reflect divergence in the underlying cost of service (section 7.4(a) of the Code).
>
> Synergy therefore submits:
>
> - all residential and small use customers be given the option to choose time of use tariffs (i.e. these tariffs be not compulsory);
> - consideration be given to adopting a more comprehensive and systematic approach to determining customer demand for the application of demand tariffs;
> - WP's intentions in relation to managing the customer impact for tariffs RT17 and RT18 be more clearly stated; and
> - WP's assumptions in relation to the average customer used to calculate time of use and demand tariffs be clarified and published.

856. Community Electricity raises concerns regarding the structure of the proposed demand tariff and time periods. Community Electricity submits:[112]

> The proposed tariffs RT19 and RT20 are different from existing tariffs and contain an important feature of defining a new Peak period. …This tariff style suffers the inefficiency that its maximum demand component is reset monthly and has no regard to system conditions; all months are of equal importance where in actuality only one or two drive network investment. Equally, users are penalised for behaviours that are immaterial. While these two new tariffs do create different cost outcomes, they are set to return higher revenue than their counterparts in all practical cases.

857. Perth Energy considers further work is needed to establish the time periods:[113]

> Perth Energy is of the view the introduction of a 'shoulder' period does not go far enough. Perth Energy believes the tariff structure should be more dynamic to more accurately represent the cost to the network when the network is under stress compared to when it may not be. For example, the 'peak periods' over summer, may be when system stress is at its highest, however the 'peak periods' over autumn and spring may be less intensive on the network. The current tariff structure does not account for this and simply concludes the rewards/penalties, for adjusting consumption down/up exist for all 'peak' periods, irrespective of the state of the network.

858. The ERA considers there is insufficient information included in Western Power's Price List Information or the material provided with the access arrangement proposal for it to make an assessment of the proposed new tariffs.

859. In order for the ERA to approve the proposed tariffs, Western Power needs to include its proposed prices for the new services and evidence to demonstrate that the proposed prices are consistent with the Access Code requirements to be based on the forward looking efficient costs and set between the incremental and stand-alone cost of service.

[112] Community Electricity, *Response to ERA Public Consultation*, 10 December 2017, p. 8 para 50.

[113] Perth Energy *Submission to the Economic Regulation Authority regarding Western Power's Proposed Revisions to the Access Arrangement for the Western Power Network (2018-2022)*, November 2017, p. 14.

Required Amendment 20

Western Power must demonstrate the proposed new reference tariffs meet the requirements of the Access Code including that they recover the forward looking efficient costs of providing reference services and are set between the incremental and stand-alone cost of service.

Large customer demand tariffs

860. Western Power has modified the peak periods for the large customer demand tariffs. Currently, maximum demand for each customer is set based on its rolling twelve month average demand profile. Western Power has not proposed changing this.

861. Change Energy considers the demand measurement should be based on the monthly, rather than a rolling 12-month peak:[114]

> Change Energy strongly believes that there needs to be changes to the existing business customer demand based tariffs (RT5 ad RT6) so that the demand measurement is monthly rather than a rolling 12-month peak. This is consistent with demand based tariffs in the NEM and represents a fairer outcome to the customer. As an example, an extended power outage, due to no fault of a customer, may result in a new peak demand when power is restored which the customer must then continue to pay for the next 12 months. Additionally, monthly peak demand will actively encourage customers to try and manage their peak load every month.

862. Western Power states it has considered this[115] but has decided to leave the tariff structure unchanged:

> Using a 12 month rolling average gives a much clearer signal in terms of the impact that peak demand has on the network. The network is designed to service maximum demand on the network, regardless of whether it is for 1 hour a year or all hours of the year. Switching to monthly demand would soften this signal and will reduce the incentive for customers to be mindful of the impact their demand has at all times.

863. Perth Energy expresses similar concerns:[116]

> Advanced metering will become an enabler for businesses to innovate their interaction with the network, however the AA4 proposed tariff structure does not accommodate this in any way. For Reference Tariffs 5 to 8; the costs are predominantly fixed on a 12 monthly rolling basis or longer. The lack of accurate and timely price signals for these customers is a concern, and reflects the fact that these customers were not adequately surveyed by Western Power. Western Power is limiting the introduction of innovative energy solutions and products for the Commercial and Industrial sector of the SWIS – the engine room of jobs and economic growth in the state. The full value of products such as peer to peer energy trading or demand side management through the use of batteries will not be achievable, as the price signals proposed in Western Power's proposed tariff structures do not penalise/reward efficient use of the network in a dynamic manner.

---

[114] Change Energy's Submission on AA4, 11 December 2017, p. 2.

[115] Western Power, *Access arrangement information: Access arrangement revisions for the fourth access arrangement period*, 2 October 2017, Attachment 11.1.

[116] Perth Energy *Submission to the Economic Regulation Authority regarding Western Power's Proposed Revisions to the Access Arrangement for the Western Power Network (2018-2022)*, November 2017, p. 14.

864. Submissions from Mr Schubert and Community Electricity all raise concerns with the structure of the large user demand tariffs.

865. Mr Schubert considers the tariffs should be modified to make them time based. He considers the current method of applying these demand charges on an anytime basis means:[117]

> Customers whose annual maximum demand coincides with the network annual peak do not have any flexibility or incentive to shift their maximum demand to another time of day to save and reduce loading on the network at its peak demand time - when it matters to Western Power. This means Western Power has to eventually spend more capital on increasing the capacity of the network, increasing costs of supply unnecessarily.
>
> Customers whose annual maximum demand occurs at a time away from the network annual peak are incentivised and will focus their effort and investments on reducing their maximum demand at a time that that does not matter to Western Power. It provides no demand reduction benefit to Western Power and reduces its revenue for no gain.

866. Community Electricity makes similar points and notes inconsistencies in approach across Western Power's range of tariffs:[118]

> We consider that the proposed changes to the contestable RT5 and RT6 tariffs are dysfunctional in that the changes focus on bulk energy rather than instantaneous demand. Furthermore, there is structural conflict between this tariff style and the proposed tariffs RT19 & RT20. We challenge why two notionally similar tariff types would have conflicting structures; RT5&6 are annual anytime maximum demand with no energy charges, while RT19&20 are monthly peak period maximum demand with peak and off peak energy charges. We suggest that both styles are dysfunctional.
>
> The RT5&6 tariff structures have remained unchanged since their inception nearly 20 years ago. While they have always been based on the importance of the maximum annual kVA demand, for a given load profile they charge the same for a load that peaks overnight on a mild autumn day as for a load that peaks in line with the system peak on a hot summer afternoon. Both tariffs apply a 'discount' factor calculated according to the proportion of Peak time consumption (bulk energy opposed to instantaneous demand) and the proposal is to change the Peak period to better represent the summer time load profile. However, this takes no account that PV penetration is depressing the middle-day consumption and that some geographical areas are winter peaking. More importantly, the proposal to redefine the Peak period fails to adopt the innovation contained in RT19&20 of confining the maximum demand to the Peak (new or current) period.
>
> We further note that no reform is proposed in respect of the RT4 tariff …or the RT7&RT8…. The RT4 tariff makes no reference to maximum demand, while the RT7&RT8 are driven entirely by maximum demand and make no reference to the timing of that demand or its relevance to network conditions. Further, RT7&RT8 incur penalties if the CMD is exceeded, regardless of its impact on the system. Similarly to the RT5 & RT6, overnight peaking is classed as the same as summer time. Generators operating under the equivalent tariffs are potentially penalised when called to support the system to their fullest capability.

867. The ERA considers the matters raised in submissions have merit, however, as discussed above, the Access Code does not provide for the ERA to approve

[117] Mr Noel Schubert, *Proposed Revisions to the Price Waterhouse Coopers access arrangement- AA4,* 17 December 2017, p. 6.

[118] Community Electricity, *Response to ERA Public Consultation*, 10 December 2017, p. 9 para 52ff.

structures of reference tariffs to the level of detail that would enable the ERA to impose particular tariff structures such as those proposed in submissions.

868. The ERA considers modifying Western Power's price control will motivate Western Power to ensure its tariffs are set efficiently.

Excess Network Usage Charge

869. Excess Network Usage Charges (**ENUC**) apply when a customer exceeds its contracted maximum demand (for a load) or its declared sent out capacity (for a generator). The ENUC applies to the high and low voltage contract maximum demand services and the transmission exit and entry services.

870. Western Power considers the charge encourages customers to operate in the contracted values which are used when planning and operating the network:

> However, Western Power recognises that not all instances of exceedance have equal impact. That is, there are some parts of the network where a demand increase won't have an impact on the safety or reliability of the network. The way the ENUC has been applied over the AA3 period does not make that distinction. To address this concern, Western Power is proposing to introduce a more nuanced ENUC. The new charges will consider the location of the customer, making the signal clearer and fairer. Each year, Western Power produces a State of the Infrastructure Report, this document includes discussion on which parts of the transmission network are constrained. It is these areas that the revised ENUC will focus.
>
> In line with the most recent version of the report, for the 2018/19 Price List, the ENUC will be higher for customers in the goldfields region and connected to the Albany substation. Other customers will see a slight reduction in the ENUC.

871. Mr Schubert considers Western Power should remove penalties for customers exceeding their contracted maximum demand (reasonably and in the capacity of the local network) at times that don't matter to the network – i.e. times away from network peak times. Mr Schubert considers this would improve the utilisation of the network and is likely to move customer demand away from network peaks. He also considers this would be preferable to the changes Western Power proposes to make regarding imposing higher penalties for customers in the Goldfields and Albany areas:[119]

> These changes are also preferable to just imposing the high (2.5 times) Excess Network Usage Charges (ENUC) multiplier Western Power proposes to charge RT7, RT8 and TRT1 customers who are on these contract maximum demand (CMD) tariffs in the Goldfields Mining and Albany substation areas – as given in Table 6.19 of the AA4 Appendix F.3 - 2018-2019 Price List. The ENUC multiplier is only 1.0 for all other areas.
>
> I recognise that the Goldfields Mining and Albany areas have very little, if any, spare network capacity available at peak demand times to supply extra, large loads and this is the reason for imposing these high ENUC 'penalties'. However these excess demands are only a problem at these network areas' peak demand times and not at other times.
>
> It would be better, and improve average utilisation of these networks, to incentivise these customers to move their high demands to other times of the day when these networks are not so highly loaded. That is what my recommended demand tariff changes would do. The changes I recommend provide customers with a way of helping to keep the network loads within their respective supply capabilities, at the same time

[119] Mr Noel Schubert, *Proposed Revisions to the Price Waterhouse Coopers access arrangement- AA4, 17 December 2017*, p. 7.

> as enabling customers to use more power when capacity is available with no penalty. The changes would be 'win-win' for both customers and Western Power.

872. Although the ERA considers Mr Schubert's submission has merit and could lead to more efficient outcomes, it is for Western Power to determine the structure of its tariffs within the requirements of the Access Code.

873. Under the Access Code, reference tariffs are required to recover the forward-looking efficient costs of providing reference services and charges paid by different users of the reference service should only differ to the extent necessary to reflect differences in the average cost of service provision to the users. The ERA is concerned the ENUC is in the nature of a penalty rather than a charge to recover forward-looking efficient costs.

874. In order for the ERA to be able to approve the proposed ENUC, including the different factors applied for different geographical areas, Western Power needs to demonstrate that the charge is based on the forward-looking efficient costs from a user exceeding its contracted capacity and that the factors applied for different geographical areas are consistent with the Access Code requirement that charges paid by different users of the reference service only differ to the extent necessary to reflect differences in the average cost of service provision.

Required Amendment 21

Western Power must provide cost information to support its proposed Excess Network Usage Charges, including the factors applied for different geographical areas.

Streetlight tariffs

875. Western Power states it has based its current AA4 proposal for streetlights on the existing practice of generally installing like for like lights on failure. However, it notes there are two factors likely to change this approach:

- Significant improvements in Light-Emitting Diode (LED) technology and affordability mean that it is likely that Western Power will commence replacing failed lights with LEDs. At the time of this submission, the tender evaluation process is nearly complete. Following which a decision will be made on a new replacement strategy.
- The Australian Government is currently considering ratifying the Minimata convention[120] on mercury. This could have significant effects on the range of streetlights Western Power can offer.

876. Western Power notes it is working with Local Government associations to better understand the transition approach that should be taken. It notes it is too early to assess what will need to change in its access arrangement proposal.

[120] The Minamata Convention on Mercury is a multilateral environmental agreement that addresses the adverse effects of mercury through practical actions to protect human health and the environment from anthropogenic emissions and releases of mercury and mercury compounds.

877. The ERA expects an updated proposal from Western Power following the draft decision. It will consider the updated proposal and the matters raised by WALGA in its submission in the final decision.

SERVICE STANDARD BENCHMARKS

Access Code requirements

878. Service standard benchmarks are the minimum level of service to be provided to reference service customers, under section 11.1 of the *Electricity Networks Access Code 2004* (**Access Code**). Service standards are defined in section 1.3 of the Access Code to mean either or both of the technical standard, and reliability, of delivered electricity and service standard benchmarks are defined as the benchmarks for service standards for a reference service in an access arrangement under section 5.1(c).

879. Section 5.1(c) requires an access arrangement to include service standard benchmarks for each reference service, under section 5.6 which states:

> A service standard benchmark for a reference service must be:
>
> (a) reasonable; and
>
> (b) sufficiently detailed and complete to enable a user or applicant to determine the value represented by the reference service at the reference tariff.

880. Generally, section 4.2 of the Access Code requires access arrangement information submitted with the proposed access arrangement to enable the ERA, users and applicants to:

> (a) understand how the service provider derived the elements of the proposed access arrangement; and
>
> (b) form an opinion as to whether the proposed access arrangement complies with the Code.

881. Section 4.12 requires the ERA to consider any submissions received on the proposed access arrangement and make a draft decision to either:

> (a) approve the proposed access arrangement; or
>
> (b) not approve the proposed access arrangement, in which case the Authority must in its reasons provide details of the amendments required to the proposed access arrangement before the Authority will approve it.

882. The criteria for approval of the proposed access arrangement are specified in section 4.28 of the Access Code, which requires the ERA to consider whether the proposed access arrangement meets the Code objective and other requirements, including Chapter 5 of the Code. Specifically, the ERA must approve the proposed access arrangement if the ERA considers that the Code objective and other requirements are satisfied and must not approve the proposed access arrangement if the ERA considers the Code objective and other requirements are not satisfied.

883. Section 4.28(b) further states that the ERA must not refuse to approve the proposed access arrangement if the ERA considers the Code objective and other requirements are satisfied, even if another form of access arrangement might better or more effectively satisfy the Code objective and other requirements. The effect of this section is to make the decision of the ERA a “pass or fail” assessment of the proposed access arrangement.

Current access arrangement

Service standard benchmarks

884. The current access arrangement includes the following service standard benchmarks under the distribution, transmission and street lighting reference service categories:

- distribution network, including;
  - System Average Interruption Duration Index (**SAIDI**) for the Central Business District (**CBD**), urban, rural short and rural long feeders;
  - System Average Interruption Frequency Index (**SAIFI**) for the CBD, urban, rural short and rural long feeders; and
  - call centre performance.
- transmission network, including;
  - circuit availability;
  - system minutes interrupted, recorded separately for meshed and radial transmission networks;
  - loss of supply event frequency for interruptions greater than 0.1 minutes and interruptions greater than 1.0 minutes; and
  - average outage duration.
- street lighting repair times for metropolitan and regional areas.

885. The Access Code (section 1.3) defines distribution and transmission networks respectively:

> **“distribution system”** means any apparatus, equipment, plant or buildings used, or to be used, for, or in connection with, the transportation of electricity at nominal voltages of less than 66 kV.
>
> **“transmission system”** means any apparatus, equipment, plant or buildings used, or to be used, for, or in connection with, the transportation of electricity at nominal voltages of 66 kV or higher.

886. Terminal station interconnecting power transformers are included in the transmission system, although zone substation transformers are included in the distribution system.

887. SAIDI is a measure of the average duration of interruptions greater than one minute attributable to the distribution network, in minutes per customer per year, where a lower value corresponds to better service performance.

888. SAIFI measures the average number of interruptions greater than one minute on the distribution network, in number of events per customer per year, where a lower value also corresponds with better service performance.

889. Feeder category definitions applicable to Western Power SAIDI and SAIFI performance measures are described in Table 118 below.

Table 118 Feeder category descriptions applicable to Western Power distribution reliability performance measures

Feeder category	Description
CBD	A feeder supplying predominantly commercial, high-rise buildings, supplied by a predominantly underground distribution network containing significant internal connection and redundancy when compared to urban areas.
Urban	A feeder, which is not a CBD feeder, with actual maximum demand over the reporting period per total feeder route length greater than 0.3 MVA/km.
Rural short	A feeder which is not a CBD or urban feeder with a total feeder route length less than 200km.
Rural long	A feeder which is not a CBD or urban feeder with a total feeder route length greater than 200km.

890. Call centre performance records the percentage of fault calls responded to in 30 seconds or less. A higher value reflects a higher standard of service.

891. Circuit availability refers to the proportional time that the transmission network is available to users directly connected to the network, measured as a percentage of total possible hours available where a higher value corresponds to a higher service standard.

892. System minutes interrupted records the period of transmission network outages measured in minutes, recorded separately for the meshed and radial networks. Meshed networks include more than one path between network nodes while radial networks are those having a single path between nodes. System minutes interrupted is calculated as the sum of megawatt minutes of unserved energy at substations connected to the meshed and radial transmission networks, respectively, divided by the maximum peak demand in megawatts, where a lower value corresponds to a higher service standard.

893. Loss of supply event frequency measures record the number of interruptions per year for events exceeding 0.1 system minutes and 1.0 system minutes. A lower event frequency reflects a higher service standard.

894. Average outage duration records the average duration of all unplanned outages on the transmission network in minutes per year. A lower average outage duration value reflects a higher service standard.

Permitted exclusions

895. The following events are excluded from the calculation of distribution reliability measures SAIDI and SAIFI:

- For an interruption on the distribution system, a day on which the major event day threshold, determined in accordance with Institute of Electrical and Electronic Engineers (**IEEE**) 1366-2003 definitions applying the “2.5 beta method”, is exceeded
- Interruptions shown to be caused by a fault or other event on the transmission system

- Interruptions shown to be caused by a fault or other event on a third party system (for instance, without limitation, interruptions caused by an intertrip signal, generator unavailability or a consumer installation)
- Planned interruptions caused by scheduled works
- Force majeure events affecting the distribution system

896. The following events are excluded from call centre performance:

- Calls abandoned by a caller in four seconds or less of their postcode being automatically determined or when a valid postcode is entered by the caller
- Calls abandoned by a caller in 30 seconds or less of the call being placed in the queue to be responded to by a human operator
- All telephone calls received on a major event day which is excluded from SAIDI and SAIFI
- A fact or circumstance beyond the control of Western Power affecting the ability to receive calls to the extent that Western Power could not contract on reasonable terms to provide for the continuity of service

897. Exclusions from transmission reliability performance measures are summarised in Table 119 below.

Table 119 Events excluded from the calculation of transmission reliability performance measures during the AA3 period

Exclusion	Circuit availability	System minutes interrupted	Loss of supply event frequency	Average outage duration
Planned interruptions	-	Yes	Yes	Yes
Momentary interruptions	-	Yes	Yes	Yes
Unregulated transmission assets	-	Yes	Yes	Yes
Zone substation power transformers	Yes	-	-	Yes
Third party faults	Yes	Yes	Yes	Yes
Force majeure	Yes	Yes	Yes	Yes
14-day cap	Yes (planned works only)	-	-	Yes (all outages)

898. Force majeure events are also excluded from streetlight repair time calculations, in addition to maintenance of streetlights for which Western Power is not responsible.

Service performance during AA3

899. Service performance on Western Power networks relative to service standard benchmarks during the third access arrangement (**AA3**) are shown in Table 120 below.

900. Western Power has achieved or exceeded the minimum level of service performance for all of the performance measures in each year, except in the following instances:

- SAIFI Rural long in 2012/13, due to lightning strikes and other unknown causes. A total of 0.50 interruptions were excluded from the SAIFI Rural long performance measure in 2012/13 due to major event days.[121]
- SAIFI Rural long in 2013/14, due to pole top fires, fauna interference and localised weather events. A total of 0.61 interruptions were excluded from the SAIFI Rural long performance measure in 2013/14 due to major event days.[122]
- Average outage duration in 2015/16, due to transformer failures and cable failures, which were capped at 14 days.[123]

[121] Western Power, Service Standard Performance Report, Year ending 30 June 2013, 23 September 2013, pp. 23 and 30.

[122] Western Power, Service Standard Performance Report, Year ending 30 June 2014, September 2014, pp. 22 and 28.

[123] Western Power, Service Standard Performance Report, Year ending 30 June 2016, September 2016, p. 22.

Table 120 Western Power service standard benchmarks and actual performance during the AA3 period, from 2012/13 to 2016/17 (below benchmark performance shown in red)

Performance measure	Service Standard Benchmark	2012/13	2013/14	2014/15	2015/16	2016/17
Distribution reliability performance measures						
System average interruption duration index (minutes)						
- CBD	39.9	7.6	18.3	26.2	22.6	13.8
- Urban	183.0	102.7	107.4	103	91.3	104.4
- Rural short	227.8	181.4	171.2	182.6	168.4	175.6
- Rural long	724.8	685.4	673.8	677.5	582.6	626.2
System average interruption frequency index (interruptions)						
- CBD	0.26	0.03	0.20	0.17	0.1	0.11
- Urban	2.12	1.16	1.13	1.09	0.91	1.02
- Rural short	2.61	2.17	1.83	1.98	1.75	1.76
- Rural long	4.51	4.91	4.98	4.41	3.99	3.95
Calls centre performance (%)	77.50	90.60	92.80	93.70	91.40	91.80
Transmission reliability performance measures						
Circuit availability (%)	97.70	98.37	98.04	98.53	98.66	98.90
System minutes interrupted (minutes)						
- Meshed networks	12.5	4.5	4.8	6.6	6.8	8.2
- Radial networks	5	1.2	3.7	1.6	0.5	0.7
Loss of supply event frequency (interruptions)						
- >0.1 and ≤1.0 system mins.	33	11	17	24	15	16
- >1.0 system minutes	4	1	1	0	1	2
Average outage duration (minutes)	886	866	795	720	1265	653
Street lighting repair times (days)						
- Metropolitan area	5	1.23	1.14	1.26	1.55	2.47
- Regional area	9	2.01	1.07	1.18	0.89	4.59

Western Power's proposal

901. Western Power is proposing to implement 15 service standard benchmarks across the distribution and transmission networks and street lighting reference services during the fourth access arrangement (**AA4**) period. The majority of service standard benchmarks will be retained from the AA3 period, with the following proposed amendments:

- removing the system minutes interrupted measures as service standard benchmarks for the radial and meshed transmission networks; and
- clarifying the definition of the loss of supply event frequency measure for events greater than 0.1 system minutes.

902. Western Power is also proposing to refine the methods applied in setting the service standard benchmarks for the AA4 period as follows,:

- using five years of data for all measures, rather than three years for SAIDI and SAIFI and five years for other measures;
- using daily unplanned SAIDI (after permitted exclusions), rather than daily SAIDI, to calculate the major event day threshold;
- applying a Box-Cox transformation to daily unplanned SAIDI data to calculate the major event day threshold, rather than a logarithmic transformation;
- setting benchmarks at the average of the 99th percentile (or 1st percentile for call centre performance and circuit availability) of probability distributions selected according to specified threshold criteria, rather than the 97.5th (or 2.5th) percentile;

903. Western Power is also proposing to maintain the service standard benchmarks set for the AA3 period through to the 2017/18 financial year until a final decision is issued on AA4.

904. The service standard benchmarks proposed by Western Power to be applied during the AA4 period are listed in Table 121 below. In most cases, the service standard benchmarks proposed by Western Power from 2018/19 are set at a higher service standard than those which applied during AA3, due to improved service performance during the AA3 period. Exceptions are rural long SAIDI and SAIFI measures, circuit availability and average outage duration.

Table 121 Service standard benchmarks proposed by Western Power to be applied during the AA4 period, compared with service standard benchmarks for the AA3 period

Performance measure		AA3 (2012/13 to 2016/17)	AA4 (2017/18)	AA4 (2018/19 to 2021/22)
Distribution reliability performance measures				
System average interruption duration index (minutes)				
-	CBD	39.9	39.9	37.2
-	Urban	183.0	183.0	134.7
-	Rural short	227.8	227.8	226.3
-	Rural long	724.8	724.8	902.9
System average interruption frequency index (interruptions)				
-	CBD	0.26	0.26	0.23
-	Urban	2.12	2.12	1.33
-	Rural short	2.61	2.61	2.38
-	Rural long	4.51	4.51	5.90
Calls centre performance (%)		77.5	77.5	85.3
Transmission reliability performance measures				
Circuit availability (%)		97.7	97.7	97.6
Loss of supply event frequency (interruptions)				
-	>0.1 and ≤1.0 system minutes	33	33	27
-	>1.0 system minutes	4	4	4
Average outage duration (minutes)		886	886	1333
Street lighting repair times (days)				
-	Metropolitan area	5	5	5
-	Regional area	9	9	9

Submissions

905. Submissions referring to proposed amendments to the service standard benchmarks during the AA4 period were received from:

- the Western Australian Council of Social Services (**WACOSS**);
- Mr Noel Schubert;
- Mr Stephen Davidson; and
- the Western Australian Local Government Association (**WALGA**).

906. A submission was also received from Synergy referencing service standard targets, which is discussed in more detail within the section on the service standard adjustment mechanism.

907. WACOSS notes that service standards are a critical driver of costs which are ultimately passed onto consumers. WACOSS questions whether an appropriate

balance has been struck between service quality and price, recommending a careful examination of customer willingness to pay for improved service standards.[124]

908. Mr Schubert submits that there are a number of towns and communities in the long rural feeder category where customers have experienced extended or frequent outages which are not reflected in the aggregate indices reported by Western Power due to the low number of customers.[125]

909. Mr Schubert also considers the increasing uptake of electronic equipment makes customers susceptible to momentary interruptions “in a way that annoys or inconveniences customers”, suggesting the introduction of a service standard benchmark to record momentary interruptions, such as Momentary Average Interruption Frequency Index (**MAIFI**), as envisaged in the ERA’s final decision for the AA3 period. Mr Schubert notes that Western Power has been recording and reporting momentary supply interruptions as required in the AA3 final decision.

910. Mr Davidson also supports the inclusion of interruptions less of than one minute in service standard benchmarks, noting that interruptions of very short duration can be disruptive to electronic devices, computers, point of sale and security systems, resulting in lost time, resources and productivity.[126]

911. Mr Davidson objects to the removal of the system minutes interrupted services standard benchmarks and clarification of the loss of supply event frequency measures on the transmission networks, claiming customers will receive a lower standard of service.

912. Mr Davidson questioned the minimum performance benchmarks set for the AA4 period, specifically questioning why SAIDI and SAIFI performance on the rural long feeder had not improved following the investment in the Ravensthorpe diesel backup plant.

913. Mr Davidson also recommends disallowing many of the exclusions currently permitted for the SAIDI and SAIFI distribution reliability measures, circuit availability and average outage duration service standard benchmarks.

914. WALGA proposes the introduction of a Public Lighting Code, overseen by an independent body, to regulate street lighting standards and proposes consideration of a contestable maintenance model in the access arrangement to provide councils with greater capacity to manage street lighting networks for the benefit of local communities.[127] This was considered by the ERA to be external to the scope of the draft decision.

---

[124] Western Australian Council of Social Services, AA4 Access Arrangement Submission 2017, 11 December 2017, pp. 10-11.

[125] Mr Noel Schubert, Submission re: Proposed Revisions to the Western Power Network Access Arrangement – AA4, 11 December 2017, pp. 13-14.

[126] Mr Stephen Davidson, Submission TWO on Proposed Revisions to the Western Power Network Access Arrangement, 11 December 2017, p. 3.

[127] WALGA, Western Power Proposed Access Arrangement 2017-2022, Submission to the Economic Regulation Authority, December 2017, p. 18.

Considerations of the ERA

915. The ERA has considered the following proposed amendments and submissions in accordance with the requirements of the Access Code:

- discontinuing the system minutes interrupted performance measure as a service standard benchmark;
- clarifying the definition of the loss of supply event frequency measure for events greater than 0.1 system minutes;
- using daily unplanned SAIDI (after permitted exclusions), rather than daily SAIDI, to calculate the major event day threshold;
- applying a Box-Cox transformation to daily unplanned SAIDI data to calculate the major event day threshold, rather than a logarithmic transformation;
- using five years of data for all measures, rather than three years for SAIDI and SAIFI and five years for other measures;
- setting benchmarks at the average of the 99th percentile (or 1st percentile in the case of call centre performance and circuit availability) of distributions of best fit rather than the 97.5th (or 2.5th) percentile;
- maintaining the service standard benchmarks set for the AA3 period in the 2017/18 financial year until a final decision is issued on AA4;
- implementing a service standard benchmark for momentary interruptions; and
- permitted exclusions.

Removal of the system minutes interrupted performance measures

916. Western Power has proposed to remove the system minutes interrupted performance measures as service standard benchmarks on the meshed and radial transmission networks in AA4.

917. Western Power states these measures do not provide meaningful information and do not reflect the service performance experienced by customers:

> We consider these measures do not provide meaningful information and do not accurately represent the service performance experienced by our customers. Moreover, transmission network performance is already covered by other transmission measures, meaning the system minutes interrupted measures can be removed from the service incentive framework without increasing the risk that customers will experience a deterioration in performance. Therefore, we consider there is little value in retaining these measures during the AA4 period.[128]

918. Western Power submitted the following reasons supporting removal of the system minutes interrupted performance measures on the meshed and radial transmission networks:

- The system minutes interrupted service standard benchmark measures system wide performance on the transmission network, including both reference and

[128] Western Power, Access Arrangement Information, Access arrangement revisions for the fourth access arrangement period, 2 October 2017, pp. 85-86, paragraph 279.

non-reference customers, and therefore does not meet the definition of a service standard benchmark under sections 5.1 and 5.6 of the Access Code.[129]

- The system minutes interrupted service standard benchmark is statistically unsound and does not provide a reliable representation of transmission services.[130]
- The performance of the transmission network is adequately represented by the remaining transmission reliability service standard benchmarks.[131]
- The majority of transmission customers connected to the radial network are non-reference service customers and retaining the system minutes interrupted measure on the radial transmission network creates an incentive to make investments to improve reliability that is not valued by customers on that network.[132]

919. Western Power states the system minutes interrupted performance measure is a system-wide measure, including both reference and non-reference customers and therefore does not comply with the Access Code:

> The system minutes interrupted SSBs measure the system-wide performance of the transmission network. That is, they measure the level of performance provided to reference service customers and non-reference service customers, in aggregate. They do not reflect the level of service provided specifically to reference service customers. We therefore consider the system minutes interrupted measures do not meet the definition of a SSB and should be removed.[133]

920. Section 5.1 of the Access Code requires an access arrangement to include a service standard benchmark for each reference service and section 5.6 requires a service standard benchmark to be reasonable and sufficiently detailed and complete to enable a user or applicant to determine the value represented by the reference service at the reference tariff.

921. In response to an enquiry from the ERA, Western Power stated that the load supplied to non-reference customers is excluded from the calculation of the system minutes interrupted performance measures:

> The calculation of system minutes interrupted (as per the service standard benchmark definitions for system minutes interrupted and loss of supply event frequency in 4.3 of Access Arrangement 3) is based on the total MW of unserved energy, which excludes the load supplied to the non-reference service customers.[134]

922. This contrasts with statements in the access arrangement information referenced at paragraph 919 above.

---

[129] Western Power, Access Arrangement Information, Access arrangement revisions for the fourth access arrangement period, 2 October 2017, p. 86, paras 281-2.

[130] Western Power, Access Arrangement Information, Access arrangement revisions for the fourth access arrangement period, 2 October 2017, p. 86, paras 283-5.

[131] Western Power, Access Arrangement Information, Access arrangement revisions for the fourth access arrangement period, 2 October 2017, pp. 86-7, paras 286-88.

[132] Western Power, Access Arrangement Information, Access arrangement revisions for the fourth access arrangement period, 2 October 2017, p. 87, paras 289-92.

[133] Western Power, Access arrangement information, Access arrangement revisions for the fourth access arrangement period, 2 October 2017, p. 86, paragraph 282.

[134] Western Power, ERA030b & ERA030c – Service standards and transmission customers, response to enquiry from the Economic Regulation Authority, 8 March 2018.

923. Western Power also states that the system minutes interrupted measures are not statistically sound:

> We do not consider that the system minutes interrupted SSBs are statistically sound and therefore do not provide a reliable representation of transmission services.[135]

924. Western Power has referred to a review completed by the Australian Competition and Consumer Commission in 2003 and the final decision for AA3, in which the ERA acknowledged the system minutes interrupted performance measure had some less than desirable statistical characteristics.[136]

925. The Australian Competition and Consumer Commission has previously concluded the equivalent "minutes off supply" benchmark was statistically unsound as an indicator of transmission network service performance within a review of service standard guidelines.[137] Supporting this conclusion, the consultant's report to that review stated:

- Events causing loss of supply are stochastic, being caused by weather or other unpredictable events beyond the control of transmission network service providers, and
- It is not sound to assess performance as a one-point measure such as average, let alone moving average.[138]

926. The consultant also stated that the measure could not be improved by excluding non-characteristic events:

> ERM Energy is aware of statistical studies commissioned by NSPs, which conclude it is not possible to correlate measures of weather with outages. Hence it does not seem possible to define inclusions and exclusions or transform the measure to make it valid.[139]

927. The loss of supply event frequency performance measure was accepted by the Australian Competition and Consumer Commission as an alternative to the system minutes off performance measure, being a direct measure of the impact of network performance on end-customer reliability.[140]

928. The ERA also accepted the view that the system minutes interrupted measure has some less than desirable statistical characteristics in the final decision for the AA3

[135] Western Power, Access arrangement information, Access arrangement revisions for the fourth access arrangement period, 2 October 2017, p. 86, paragraph 285.

[136] Western Power, Access arrangement information, Access arrangement revisions for the fourth access arrangement period, 2 October 2017, p. 86, paras 283-4.

[137] Australian Competition and Consumer Commission, Transmission Network Service Provider (TNSP) Service Standards, Final Report prepared by Sinclair Knight Merz, March 2003.

[138] Environmental Resource Management Australia, Advice on statistical soundness of transmission network service measures, Report prepared for SKM, included at Appendix F of Australian Competition and Consumer Commission, Transmission Network Service Provider (TNSP) Service Standards, Final Report, March 2003, p. 74.

[139] Environmental Resource Management Australia, Advice on statistical soundness of transmission network service measures, Report prepared for SKM, included at Appendix F of Australian Competition and Consumer Commission, Transmission Network Service Provider (TNSP) Service Standards, Final Report, March 2003, p. 75.

[140] Australian Competition and Consumer Commission, Transmission Network Service Provider (TNSP) Service Standards, Final Report prepared by Sinclair Knight Merz, March 2003, p. 5.

period, although did not consider these deficiencies to be sufficient to justify removing the measure at that time.[141]

929. The ERA considered the exclusion of events that cause system minutes interruptions to occur beyond levels considered reasonable for good electricity practice and the introduction of minimum service standard benchmarks in the AA3 period sufficient to ensure the system minutes interrupted measure did not set an unreasonable performance benchmark.[142]

930. Western Power also claims the remaining transmission network service standard benchmarks adequately measure the service performance provided to reference service customers on the transmission networks.[143]

931. Western Power has again referred to the AA3 final decision in which the ERA agreed that the combined loss of supply event frequency and average outage duration measures provide an equivalent measure of service performance to system minutes interrupted on the transmission networks.[144]

932. In requiring the retention of the system minutes interrupted measure in the AA3 final decision, however, the ERA noted that the loss of supply event frequency and average outage duration measures were not disaggregated for radial networks.[145]

933. The ERA had also noted, in particular, that Western Power had been underperforming on the radial transmission network by a significant margin in not accepting the proposal to remove the system minutes interrupted performance measure in the AA3 draft decision.[146]

934. The maintenance of incentives to improve performance on the radial transmission networks was an important consideration of the ERA in requiring that the disaggregated system minutes interrupted measures be retained as service standard benchmarks and the radial network measure be applied in the service standard adjustment mechanism for AA3:

> The Authority considers that the System Minutes Interrupted (meshed and radial networks) also are important SSAM incentive measures. This is because these incentives will help to ensure that the maintenance of service levels related to elements such as radial networks are not neglected. The Authority notes that based on the unit currently in use – minutes of interruption per system peak MW – performance on these measures recently has been deteriorating for radial networks.[147]

---

[141] Economic Regulation Authority, Final Decision on Proposed Revisions to the Access Arrangement for the Western Power Network, 5 September 2012, p. 440, paragraph 1911.

[142] Economic Regulation Authority, Final Decision on Proposed Revisions to the Access Arrangement for the Western Power Network, 5 September 2012, p. 441, paragraph 1914.

[143] Western Power, Access arrangement information, Access arrangement revisions for the fourth access arrangement period, 2 October 2017, p. 86, paras.286.

[144] Economic Regulation Authority, Final Decision on Proposed Revisions to the Access Arrangement for the Western Power Network, 5 September 2012, p. 441, paragraph 1915.

[145] Economic Regulation Authority, Final Decision on Proposed Revisions to the Access Arrangement for the Western Power Network, 5 September 2012, p. 441, paragraph 1915.

[146] Economic Regulation Authority, Draft Decision on Proposed Revisions to the Access Arrangement for the Western Power Network, 29 March 2012, p. 265, paragraph 1117.

[147] Economic Regulation Authority, Draft Decision on Proposed Revisions to the Access Arrangement for the Western Power Network, 29 March 2012, p. 313, paragraph 1310.

935. Western Power has outperformed the minimum service standard benchmark for system minutes interrupted on radial networks in each year of the AA3 period (Table 120).

936. In the AA3 draft decision, the ERA also considered the system minutes interrupted performance measure on radial networks provided a corresponding measure of service on critical transmission networks as that applied by the Australian Energy Regulator in the service target performance incentive scheme for transmission network service providers, which sub-divides the circuit availability performance measure into critical and non-critical elements.[148]

937. On that basis, the system minutes interrupted measure was required to be retained as a service standard benchmark for both radial and transmission networks and the system minutes interrupted measure for radial networks was included as an incentive measure in the service standards adjustment mechanism.[149]

938. To facilitate the replacement of the system minutes interrupted performance measure in AA4, the ERA noted in the final decision for the AA3 period that Western Power could consider collecting disaggregated data for loss of supply event frequency and average outage duration for radial and meshed networks.

939. In response to an enquiry from the ERA, Western Power stated that a disaggregated measure is likely to be more volatile and of limited value as a service standard benchmark:

> Western Power has not collected disaggregated data for the Loss of Supply Event Frequency and Average Outage Duration measures for radial and meshed networks. Western Power's view is that these measures (without system minutes interrupted) and in conjunction with current practices to provide a customer relationship manager for all transmission customers, provides a transmission service that is valued by our transmission connected reference service customers. Moreover, should these data sets be disaggregated the measures are likely to be more volatile and lumpy which would be unlikely to provide a meaningful benchmark for our transmission customers.[150]

940. Outage data for the AA3 period provided by Western Power, disaggregated for radial and transmission networks (Table 122) illustrates that approximately 20 per cent of loss of supply events occur on the radial transmission feeders in both system minutes threshold categories.

941. Western Power has not proposed disaggregated measures for the loss of supply event frequency and average outage duration service standard benchmarks for the AA4 period.

---

[148] Economic Regulation Authority, Draft Decision on Proposed Revisions to the Access Arrangement for the Western Power Network, 29 March 2012, p. 265, paragraph 1110.

[149] Economic Regulation Authority, Final Decision on Proposed Revisions to the Access Arrangement for the Western Power Network, 5 September 2012, p. 500, paragraph 2200.

[150] Western Power, ERA033a & ERA033b – Historical Service Standards data, response to enquiry from the Economic Regulation Authority, 8 March 2018.

Table 122 Loss of supply event frequency performance measures disaggregated for meshed and radial transmission networks during the AA3 period, from 2012/13 to 2016/17

Performance measure	Service Standard Benchmark	2012/13	2013/14	2014/15	2015/16	2016/17
Meshed transmission network (interruptions)						
- >0.1 and ≤1.0 system mins.	*Not set*	8	13	20	13	14
- >1.0 system minutes	*Not set*	1	0	0	1	2
Radial transmission network (interruptions)						
- >0.1 and ≤1.0 system mins.	*Not set*	3	4	4	3	2
- >1.0 system minutes	*Not set*	0	1	0	0	0
Total loss of supply event frequency on meshed and radial transmission networks (interruptions)						
- >0.1 and ≤1.0 system mins.	33	11	17	24	15	16
- >1.0 system minutes	4	1	1	0	1	2

Source: Outage data supplied by Western Power.
Note: Total loss of supply event data for 2015/16 is not yet reconciled.

942. Western Power also claims that the majority of customers on the radial transmission network are connected to non-reference services:

> Western Power currently has an estimated 28 transmission connected customer loads, 14 of which are connected to radial networks with limited redundancy. Seven of these 14 customers have agreed to Western Power providing a non-reference service, at a lower standard of service, to avoid the significant deep network connection costs they would otherwise have had to pay to receive a reference service in rural areas of the network. That is, there are currently only three customers that are supplied by radial transmission network and receive a reference service.[151]

943. Western Power is also anticipating a decline in the number of transmission reference customers connected to the radial networks:

> Moreover, given the recent [Electricity Market Review] and the general discussion in the WA energy sector, it is reasonable to assume a fully constrained network and market solution will be introduced in the near future. This would see a decline in the number of transmission customers that receive reference services when connected to radial networks. As a result, not only is the measure not particularly meaningful, it will only apply to a very small number of customers.[152]

944. Western Power also stated that the system minutes interrupted measure as a service standard benchmark creates an incentive for investment in the radial transmission network which is not valued by customers:

[151] Western Power, Access arrangement information, Access arrangement revisions for the fourth access arrangement period, 2 October 2017, p. 87, paragraph 289.

[152] Western Power, Access arrangement information, Access arrangement revisions for the fourth access arrangement period, 2 October 2017, p. 87, paragraph 290.

> If customers valued the unconstrained access they would be willing to pay for the deep network augmentation costs and would not have agreed to a lower level of service.[153]

945. Western Power proposed a customer relationship measure as a more efficient and effective service performance measure on the radial transmission networks:

> A more effective and efficient way to address the ERA's concern that these three customers do not receive the level of service required is for us to closely measure the relationship with these customers.[154]

946. This reasoning is flawed on the following grounds:

- Statements within the access arrangement information regarding the number of reference customers on radial transmission networks does not reconcile with information subsequently provided by Western Power in response to an enquiry from the ERA, which shows 16 transmission connected customers at 30 exit points. Of those 16 customers, 14 are on radial networks, with eight receiving non-reference services and six receiving reference services at nine exit points.[155]
- Section 11.1 of the Access Code requires the service provider to provide reference services at a service standard at least equivalent to the service standard benchmark, irrespective of the number of customers subscribed to the reference service:

> A service provider must provide reference services at a service standard at least equivalent to the service standard benchmarks set out in the access arrangement and must provide non-reference services to a service standard at least equivalent to the service standard in the access contract.[156]

- Implementation of the constrained access mechanism is contingent on legislation being introduced to Parliament by mid-2018. The anticipated 'go-live' date for implementation of constrained access is 1 October 2022 and therefore is not applicable during the AA4 period.[157]
- The proposal to introduce a customer engagement measure was not approved by the ERA during the AA3 period because it did not provide an adequate incentive to improve service performance on critical radial transmission networks:

> The Authority does not consider that this measure provides incentive for Western Power to improve its transmission networks service performance. It is a process measure which will not be related in any way to the outcomes on the transmission network.[158]

---

[153] Western Power, Access arrangement information, Access arrangement revisions for the fourth access arrangement period, 2 October 2017, p. 87, footnote 65.

[154] Western Power, Access arrangement information, Access arrangement revisions for the fourth access arrangement period, 2 October 2017, p. 87, paragraph 292.

[155] Western Power, ERA030b & ERA030c – Service standards and transmission customers, response to enquiry from the Economic Regulation Authority, 8 March 2018.

[156] Electricity Networks Access Code 2004, section 11.1.

[157] Department of Treasury, Western Australian Government, Improving access to Western Power's network, Information sheet, 1 February 2018 < http://www.treasury.wa.gov.au/Public-Utilities-Office/Open-consultations-reviews/Constrained-Network-Access-Reform/ >

[158] Economic Regulation Authority, Draft Decision on Proposed Revisions to the Access Arrangement for the Western Power Network, 29 March 2012, p. 236, paragraph 1110.

947. In proposing the customer service measure for the AA3 period, Western Power had cited support from customers for the implementation of the measures and indicated that data may be collected with the intention of implementing the performance measure as a service standard benchmark:

> We tested the new customer service measure with our transmission-connected customers and they are supportive. Feedback shows they would support a more customised measure and reporting for individual customers. They would be particularly interested in being able to set a scaled benchmark level for the customer satisfaction survey.
>
> There is the potential in future access arrangement periods for a qualitative customer service measure to be included as a service standard benchmark, however this is not feasible for AA3 as we have insufficient historical data to allow an appropriate target to be set. We will collect data during AA3 that may allow the performance measure to be enhanced for AA4.[159]

948. The ERA had accepted the undertaking by Western Power in the final decision on AA3 to collect data on the outcomes of a customer satisfaction survey in preparation for the implementation of the individual customer service measure as a service standard benchmark during the AA4 period:

> Western Power in its amended access arrangement information (May 2012) states that it will not implement the measure as an SSB, as it does not have data at this point to set a reasonable target for the customer satisfaction survey. However, Western Power notes that it still intends to proceed with the elements set out in paragraph 1897, and to begin to collect data on the outcomes of the customer satisfaction survey. The Authority is satisfied that this approach is reasonable.[160]

949. In response to an enquiry from the ERA, Western Power has advised that, although customers are surveyed regularly, this data has not been compiled for the purpose of setting a service standard benchmark:

> Western Power independently surveys all managed customers twice per annum and uses the outcomes of the customer satisfaction surveys to develop action plans to target areas of improvement to our service to our transmission connected customers.
>
> At this stage, the customer satisfaction surveys have not been setup for the purposes of setting a service standard benchmark.[161]

950. Western Power has also advised that, although transmission reference customers have been engaged in preparation for the submission of the access arrangement information for AA4, radial transmission network customers have not been consulted on the specific proposal to remove the system minutes interrupted service standard benchmarks:

> Western Power invited our transmission customers to forums on the AA4 submission including the Perth Public Forum on the 2 November 2017, Geraldton Customer Town Hall on the 27 June 2017, Bunbury Customer Town Hall on the 14 June 2017, Kalgoorlie Town Hall on the 13 June 2017, Perth Customer Town Hall on the 12 June 2017, Albany Customer Town Hall on the 7 June 2017 and the Generator, Large Load and New Connections Forum on the 3 May 2017. In addition, customers have an avenue to raise any issues with their customer relationship manager on a day to day basis. Western Power has not specifically engaged our reference service customers

---

[159] Western Power, Access Arrangement Information for 1 July 2012 to 30 June 2017, September 2011, p. 89.

[160] Economic Regulation Authority, Final Decision on Proposed Revisions to the Access Arrangement for the Western Power Network, 5 September 2012, p. 437, paragraph 1899.

[161] Western Power, Response to enquiry ERA033b, 8 March 2018.

> on radial transmission networks on the removal of system minutes interrupted for AA4, however Western Power conduct an independent customer satisfaction survey with our transmission connected customers twice per annum and Western Power uses the outcomes to develop an action plan to better service our transmission customers.[162]

951. In a submission referencing this proposal, Mr Davidson objected to the removal of the system minutes interrupted service standard benchmarks, expressing concern that reference customers would receive a lower standard of service:

> If adopted, Western Power's proposal would considerably lower the service standard without any reduction of the cost of electricity to consumers. In order words, customers should not be receiving substandard service if they subscribed for the standard service.[163]

952. Mr Davidson also proposed an alternative method of calculating the performance measure:

> I support Western Power's intention is to better describe the impact of the particular outage upon the power system and propose the following better alternative, that overcomes deficiencies of the proposal discussed here.
>
> I, therefore, propose the denominator to be the "System MW Load at the Time of the Interruption".
>
> My rationale is that the same (MW curtailed) interruption will have greater (relative) impact on the power system if it occurs during the periods of low or medium loads than if it occurs during the periods of the peak load.
>
> It can be calculated from the outage data available at the time of interruption, hence it overcomes the transparency concern No. 7 here.
>
> In addition, it does not require, often time consuming, search through the historical load data base, and is therefore a more efficient procedure than the Western Power proposed formula for the "load integration method".
>
> Given that the transmission system interruptions are of relatively short durations, during which the system load is stable, the marginal potential benefit the load integration method (over the old formula used in AA3) provides is negligible and does not justify the loss of transparency.
>
> My proposal to use the old formula used in AA3 (and probably in AA2 and AA1) and change the denominator to that of the "System Load in MW at the Time of the Interruption" (instead of the annual peak SWIS System Load in MW), if adopted, provides additional information on the relative impact of each interruption at the time of that interruption.[164]

953. The ERA has not been able to assess the compliance of the formula proposed by Mr Davidson with the requirements of the Access Code. The ERA has previously considered the existing formula to be reasonable and sufficiently detailed and complete to enable a user or applicant to determine the value of the reference service at the reference tariff.

954. In conclusion, the ERA considers:

- radial feeders are critical components of the transmission network which, unlike meshed networks, do not have redundancy;

[162] Western Power, Response to enquiry ERA033c, 8 March 2018.

[163] Mr Stephen Davidson, Submission TWO on Proposed Revisions to the Western Power Network Access Arrangement, 11 December 2017, p. 8.

[164] Mr Stephen Davidson, Submission TWO on Proposed Revisions to the Western Power Network Access Arrangement, 11 December 2017, p. 8.

- sections 5.1(c) and 5.6 of the Access Code require an access arrangement to include service standard benchmarks for each reference service and those benchmarks to be reasonable and sufficiently detailed and complete to enable a user or applicant to determine the value represented by the reference service at the reference tariff; and
- Western Power has not proposed an alternative service standard benchmark that is reasonable and sufficiently detailed and complete to enable a user or applicant on the radial transmission network to determine the value represented by the reference service at the reference tariff.

955. The ERA does not approve the proposed amendment to the access arrangement to remove the disaggregated system minutes interrupted performance measures as service standard benchmarks during the AA4 period.

956. Western Power must reinstate the system minutes interrupted performance measures disaggregated for radial and meshed networks as service standard benchmarks for the AA4 period.

Required Amendment 22

Western Power must reinstate the system minutes interrupted performance measures disaggregated for radial and meshed networks as service standard benchmarks.

Clarification of the loss of supply event frequency definition

957. The loss of supply event frequency performance measures are currently described in the access arrangement as:

> Over a 12 month period, the frequency of unplanned customer outage events where loss of supply:
>
> - exceeds 0.1 system minutes interrupted and
> - exceeds 1.0 system minutes interrupted.[165]

958. In determining performance against loss of supply event frequency benchmarks and targets during the AA3 period, Western Power has adjusted the loss of supply event frequency performance measures based upon historical data for:

- loss of supply events greater than 0.1 and equal to or less than one system minute; and
- loss of supply events greater than one system minute.[166]

959. This description is consistent with that used in the AA3 final decision in setting service standard benchmarks and targets for the AA3 period.[167]

---

[165] Western Power, Amended proposed revisions to the Access Arrangement for the Western Power Network, June 2015, p. 18.

[166] Western Power, Access arrangement information, Access arrangement revisions for the fourth access arrangement period, 2 October 2017, p. 87, paragraph 293.

[167] Economic Regulation Authority, Final Decision on Proposed Revisions to the Access Arrangement for the Western Power Network, 5 September 2012, p. 623.

960. Western Power proposes to clarify that the two loss of supply event frequency measures are independent and reflect different types of events by specifying the loss of supply event frequency greater than 0.1 system minutes interrupted relates to events where loss of supply exceeds 0.1 and is equal to or less than 1.0 system minutes interrupted.[168]

961. Western Power states this definition ensured that the two measures were discrete and did not duplicate the compliance and financial incentives for events of duration greater than 0.1 and less than or equal to 1.0 system minutes.[169]

962. Western Power also states the discrete measures reflect distinct types of events and is consistent with national measures that encourage transmission network service providers to reduce the duration of moderate and small customer interruptions:

> The use of two discrete loss of supply event frequency measures is consistent across Australia, with the intention to "encourage transmission network service providers to reduce the duration of moderate and small customer interruptions through improved reliability.[170]

963. Synergy also referred to differences between the measures implemented by Western Power and those applied in the service target performance incentive scheme administered by the Australian Energy Regulator:

> The STPIS sets different X and Y thresholds for loss of supply event frequency. Specifically, the AER typically sets X-minute thresholds at 0.05 system minutes and Y-system thresholds at between 0.2 to 0.4 system minutes, compared to 0.1 and 1 system minutes proposed by WP, respectively. It follows the parameter is capturing different types of events and providing different types of incentives to WP vis-à-vis the networks in the NEM.[171]

964. In the service target performance incentive scheme, the loss of supply event frequency performance measure is described as a service reliability parameter designed to encourage service providers to reduce the number of unplanned outages and restore service promptly when supply interruptions occur. The measure records the number of outages resulting in loss of supply in the following instances:

> It measures the number of small events (small loads interrupted for short periods) and large events (large loads interrupted for even a short duration, or a customer with a moderate load interrupted for a long duration). The parameter is designed to encourage TNSPs to reduce the duration of moderate and small customer interruptions through fast response times and to reduce the frequency of large customer interruptions through improved reliability.[172]

965. The 'x' and 'y' parameter settings are specified individually for each service provider according to the particular network characteristics and customer loads, with 'x'

---

[168] Western Power, Access arrangement information, Access arrangement revisions for the fourth access arrangement period, 2 October 2017, p. 88, paragraph 297.

[169] Western Power, Access arrangement information, Access arrangement revisions for the fourth access arrangement period, 2 October 2017, p. 88, paragraph 294.

[170] Western Power, Access arrangement information, Access arrangement revisions for the fourth access arrangement period, 2 October 2017, p. 88, paragraph 295.

[171] Synergy, AA4 Submission No. 5: Western Power's proposed price control mechanisms, 11 December 2017, p. 77.

[172] Australian Energy Regulator, Final Decision, Electricity transmission network service providers service target performance incentive scheme, September 2015, p. 5.

parameters ranging from 0.05 to 0.10 system minutes and ‘y’ parameters ranging from 0.20 to 1.00 system minutes (Table 124):

> The x and y sub-parameters are designed in order to drive reductions in the duration of moderate and small customer interruptions (through fast respond times) and to drive reductions in the number of small customer interruptions through improved reliability. The parameter does so by setting an 'x' system minute threshold to incentivise the reduction in duration of events and a 'y' system minute threshold to incentivise a reduction in the frequency of high loss events.
>
> If the x or y system minute threshold is set inappropriately, TNSPs may be unable to change their behaviour to meet targets. Further, if the thresholds are set too close to one another, one of the incentives is lost.[173]

Table 123 System minute thresholds implemented by the Australian Energy Regulator within version 5 of the service target performance incentive scheme for transmission network service providers

	X system minutes	Y system minutes
ElectraNet	0.05	0.20
Powerlink	0.05	0.40
AusNet Services	0.05	0.30
TransGrid	0.05	0.25
TasNetworks	0.10	1.00

Source: Australian Energy Regulator, FINAL Electricity transmission network service provider Service Target Performance Incentive Scheme, Version 5 (corrected), October 2015, page 29

966. The scheme also states, explicitly, that an interruption of duration greater than y system minutes also registers as an interruption greater than x system minutes.[174]

967. Mr Davidson objects to the proposed clarification of loss of supply event frequency, claiming the amendment is inconsistent with the Access Code, is biased against customers, sets an unrealistic target and is inadequate as a performance measure on the transmission network:

> The proposed amendment of supply event frequency service standard for transmission reference services proposed by Western Power contradicts the purpose of benchmark standards:
>
> 1. It removes from the measure outages of short durations (<0.1minute). This is an unacceptable inconsistency with clause 4.3.4 (see my comment No.2:“it removes from the measure outages of long durations (<1minute)”.
> 2. The newly proposed measure gives “better performance”, for the same outage, than the old (AA3) measure. It is therefore biased against the customers.
> 3. The target for the financial year ending 30/6/2018 is unrealistically high, for the above reasons.

[173] Australian Energy Regulator, Final Decision, Electricity transmission network service providers service target performance incentive scheme, September 2015, pp. 11-12.

[174] Australian Energy Regulator, FINAL Electricity transmission network service provider Service Target Performance Incentive Scheme, Version 5 (corrected), October 2015, p. 28.

> 4. Transmission systems are of the meshed design and allow, by design, uninterrupted supply for credible contingencies. The proposed measure is inadequate for the transmission system.
>
> If adopted, it would lower the service standard without any reduction of the cost of electricity to consumers.[175]

968. The ERA considers Mr Davidson's concerns regarding actual performance against targets established for the AA3 period to be invalid because service standard benchmarks and targets have been set based upon the description of the measure as recording discrete, rather than overlapping, events.

969. Mr Davidson also proposed implementing separate measures of loss of supply event frequency for the radial and transmission networks, consistent with the approach discussed at paragraph 938 and Table 122, above:

> I therefore suggest to delete the body of Table 14 and replace it with two separate measures for meshed and radial parts of the SWIN transmission system (aka Table 13 in AA3, which is deleted in AA4), as shown above.[176]

970. Subject to the retention of the disaggregated system minutes interrupted performance measures described in the previous section, the ERA considers Mr Davidson's proposal to be consistent with the Code objective and Chapter 5 of the Access Code.

971. Notwithstanding the inconsistency of the method proposed by Western Power with that applied by transmission network service providers regulated by the Australian Energy Regulator, the ERA considers the proposal by Western Power to clarify the definition of the loss of supply event frequency service standard benchmarks as two discrete performance measures to be reasonable and sufficiently detailed and complete to enable a user or applicant to determine the value of the reference service at the reference tariff.

972. The ERA approves the proposed amendment to clarify the loss of supply event frequency as two discrete measures, comprising events:

- exceeding 0.1 system minutes interrupted and less than or equal to 1.0 system minutes interrupted; and
- exceeding 1.0 system minutes interrupted.

Events considered in defining major event days

973. In calculating the major event day threshold, Western Power is proposing to remove interruptions from daily SAIDI data that are also excluded from distribution reliability measures.[177]

974. Interruptions which may be excluded from SAIDI and SAIFI performance measures in the current access arrangement include:

[175] Mr Stephen Davidson, Submission TWO on Proposed Revisions to the Western Power Network Access Arrangement, 11 December 2017, p. 8.

[176] Mr Stephen Davidson, Submission TWO on Proposed Revisions to the Western Power Network Access Arrangement, 11 December 2017, p. 8.

[177] Western Power, Access arrangement information, Access arrangement revisions for the fourth access arrangement period, 2 October 2017, p. 93 (section 6.6.2.3, paragraph 325).

- For an interruption on the distribution system, a day on which the major event day threshold, determined in accordance with IEEE1366-2003 definition applying the "2.5 beta method" is exceeded.
- Interruptions shown to be caused by a fault or other event on the transmission system.
- Interruptions shown to be caused by a fault or other event on a third party system (for instance, without limitation, interruptions caused by an intertrip signal, generator unavailability or a customer installation).
- Planned interruptions caused by scheduled works.
- Force majeure events affecting the distribution system.

975. Western Power is proposing to amend the description of major event days to be excluded from the calculation of SAIDI and SAIFI as follows:

- For an unplanned interruption on the distribution system, a day on which the major event day threshold, applying the "2.5 beta method", is exceeded. This method excludes events which are more than 2.5 standard deviations greater than the mean of the log normal distribution of five financial years of SAIDI data. The major event day threshold is determined at the end of each financial year for use in the next financial year. The data set comprises daily unplanned SAIDI calculated over the five immediately preceding financial years after exclusions (below) are applied. Where the logarithms of the data set are not normally distributed, the Box-Cox transformation will be applied to reach a better approximation of the normal distribution.[178]

976. Western Power states this change will ensure alignment of events excluded for the purpose of reporting on SAIDI and SAIFI measures and the determination of the major event day threshold. Western Power also stated the change will be financially neutral when historical data is adjusted for the new definition of excluded events.[179]

977. Western Power also cites the final report of the review by the Australian Energy Market Commission into distribution reliability measures, which states:

> When distribution reliability is considered (eg reported) purely from the perspective of the service experienced by customers then all interruptions should be included, irrespective of the cause. However, when benchmarking the performance of distributors or applying an incentive scheme, it is common to remove events that are beyond the control of the distributor from the calculation of the reliability measures. Such events include lack of generation or a failure in the transmission network where the distributor can neither act to reduce the probability of such an event occurring nor manage the restoration of supply.[180]

978. The procedure outlined by the Australian Energy Regulator in the service target performance incentive scheme permits the exclusion of events from daily unplanned

[178] Western Power, Proposed revisions to the Access Arrangement for the Western Power Network, 2 October 2017, p. 16.

[179] Western Power, Access arrangement information, Access arrangement revisions for the fourth access arrangement period, 2 October 2017, pp. 93, 94, paragraphs 326, 329.

[180] Australian Energy Market Commission, Review of Distribution Reliability Measures, Final Report, 5 September 2014, p. 21.

SAIDI under the reliability of supply and customer service components of the performance incentive scheme.[181]

979. Mr Davidson submitted that the removal of planned interruptions provides a disincentive to Western Power to quickly restore supply to customers or engage backup generators.[182]

980. For reasons referenced at paragraph 977 above, the removal of planned interruptions and those beyond the ability of the service provider to control is consistent with benchmarking practice for distribution reliability measures. These events continue to be reported separately in the annual service standard performance report.

981. The removal of planned interruptions and other events outside the control of the distributor from the data set used to determine the major event day threshold ensures those events are not double-counted when assessing performance against service standard benchmarks.

982. The ERA considers the use of daily unplanned SAIDI, derived after interruptions permitted to be excluded for the purposes of measuring distribution reliability, to be reasonable and sufficiently detailed and complete to enable a user or applicant to determine the value of the reference service at the reference tariff.

983. The ERA approves the proposed amendment to the access arrangement specifying that daily unplanned SAIDI, calculated over the five immediately preceding financial years after permitted exclusions, be used in calculating the major event day threshold.

Determining the probability of a major event day

984. Western Power currently applies the “2.5 beta method” for the purpose of determining the major event day threshold, described in the IEEE Standard 1366 as follows:

a. Assemble the five most recent years of historical values of SAIDI/day. If less than five years of data is available, use as much as is available.

b. Discard any day in the data set that has a SAIDI/day value of zero.

c. Find the natural logarithm of each value in the data set.

d. Compute the average (α, or Alpha) and standard deviation (β, or Beta) of the natural logarithms computed in step 3.

e. Compute the threshold TMED = exp(Alpha + 2.5 * Beta).

f. Any day in the next year with SAIDI > T_{MED} is a major event day.[183]

[181] Australian Energy Regulator, Draft Electricity distribution network service providers Service target performance incentive scheme, Version 2, December 2017, Appendix D, p. 39.

[182] Mr Stephen Davidson, Submission TWO on Proposed Revisions to the Western Power Network Access Arrangement, 11 December 2017, p. 3.

[183] Institute of Electrical and Electronic Engineers, IEEE Guide for Electric Power Distribution Reliability Indices, IEEE Standard 1366-2003, Annex B, p. 27.

985. The IEEE Standard relies upon the logarithms of the daily SAIDI data transforming to a normal distribution. The major event day threshold is then derived as a function of the mean and standard deviation of the transformed data.

986. In proposing to apply a Box-Cox transformation to calculate the major event day threshold, Western Power cites the Australian Energy Market Commission which recommended the Australian Energy Regulator permit network service providers to propose an alternative method for transforming daily unplanned SAIDI data to achieve a better fit to a normally distributed data set.[184]

987. The Australian Energy Regulator amended the service target and performance incentive scheme for distribution network service providers in November 2009 to permit service providers to propose an alternative method of transforming daily unplanned SAIDI data where a "commonly accepted statistical test" indicates the logarithms of the data set are not normally distributed.[185]

988. This amendment has been maintained in the draft revised service target performance incentive scheme in December 2017.[186]

989. In the steps outlined in the service target performance incentive scheme, where a service provider proposes an alternative transformation method, the service provider must:

   a. Demonstrate that the natural logarithm of the data set of each unplanned SAIDI value is not normally distributed.

   b. Explain the proposed alternative data transformation method.

   c. Provide the calculations that demonstrate the application of the alternative data transformation method to the unplanned SAIDI values.

   d. Provide the data set resulting from applying the proposed alternative transformation method.

   e. Demonstrate that the resulting data set is normally distributed or that the normality of the data set is improved.[187]

990. Western Power did not provide an analysis of the data set that would permit the ERA to form an opinion on whether the proposed amendment to the access arrangement complies with the Access Code, in accordance with section 4.2 of the Access Code.

991. The ERA did, however, complete analysis of data subsequently provided by Western Power to determine:

- the natural logarithms of daily unplanned SAIDI data from 2012/13 to 2016/17 do not transform to a normal distribution, and
- the Box-Cox transformation of daily unplanned SAIDI data similarly does not conform to a normal distribution, although statistical tests indicate the Box-Cox transformation achieves a closer approximation to a normal distribution.

---

[184] Western Power, Access arrangement information, Access arrangement revisions for the fourth access arrangement period, 2 October 2017, p. 92, paragraph 320.

[185] Australian Energy Regulator, Electricity distribution network service providers Service target performance incentive scheme, November 2009, Appendix D, p. 36.

[186] Australian Energy Regulator, Draft Electricity distribution network service providers Service target performance incentive scheme, Version 2, December 2017, Appendix D, p. 39.

[187] Australian Energy Regulator, Draft Electricity distribution network service providers Service target performance incentive scheme, Version 2, December 2017, Appendix D, p. 41, paragraph 6.

992. Quantile-quantile (Q-Q) plots also indicate the Box-Cox transformation achieves an improved fit of the transformed data to a normal distribution at extreme values (Figure 12 and Figure 13).

Figure 12 Q-Q plot of Western Power daily unplanned SAIDI data from 2012/13 to 2016/17 transformed by natural logarithm, including 95% confidence bands

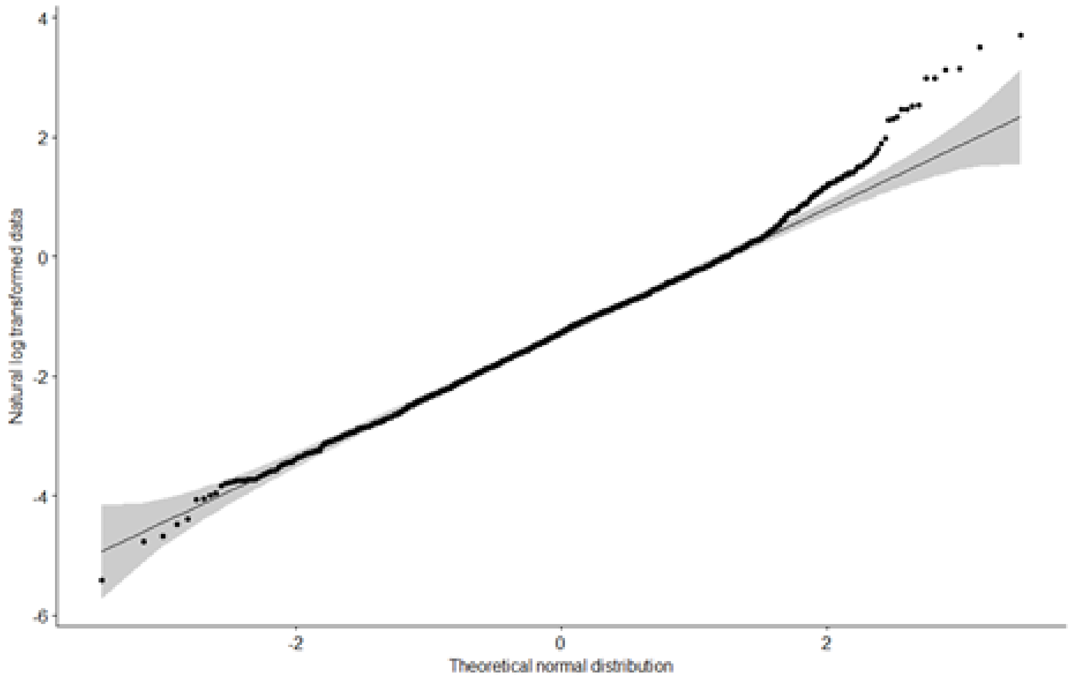
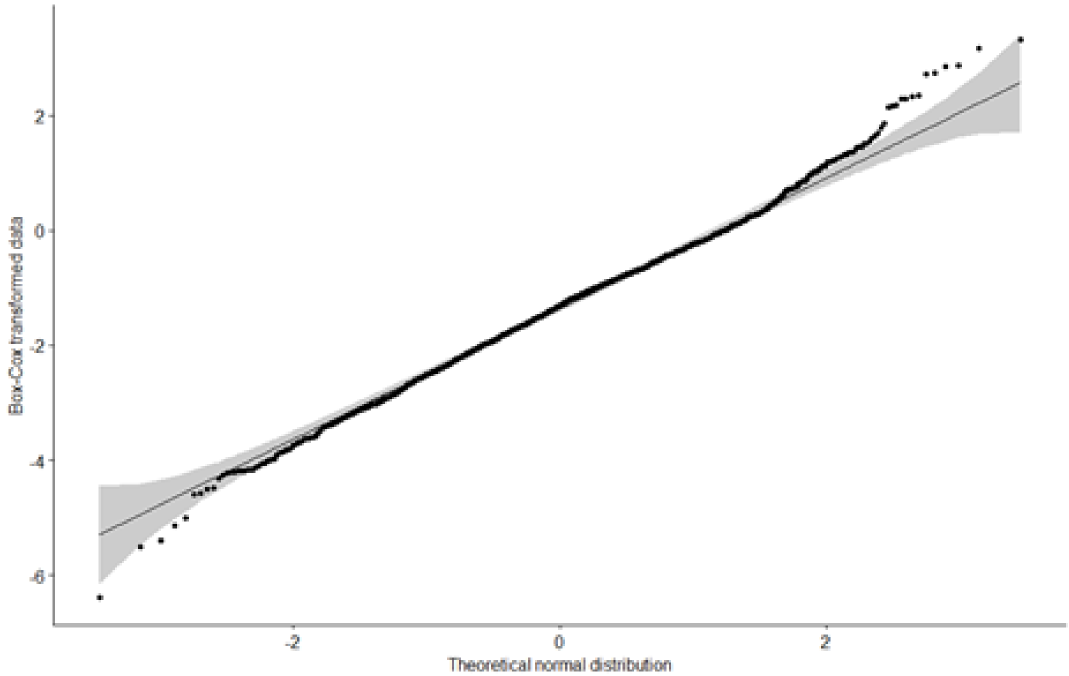


Figure 13 Q-Q plot of Western Power daily unplanned SAIDI data from 2012/13 to 2016/17 transformed by the Box-Cox method, including 95% confidence bands



993. Mr Davidson submitted the following comments on the proposal to apply the Box-Cox method to daily unplanned SAIDI data for the purpose of determining the major event day threshold:

> The 1st bullet point exclusion item "long-winded" should be removed from Table 5 for six reasons. One, planned interruptions are removed from the measure. Their removal provides disincentive to Western Power to quickly restore supply to customers (instead Western Power could wait "until Monday" to send a crew") and/or to engage backup generators ", without "any consequences" or evidence of its consequences. Two, IEEE methodology (deleted in the AA4 proposal) is balanced overall and fair to customers. The intended application of the Box-Cox transformation is not qualified; hence there is nothing to preclude Western Power to selectively apply it only when it gives "better performance" than the IEEE methodology (as the degree of non-linearity of the input data, which is a prerequisite for the application of Box-Cox transformation is not stated). Three, exclusion of "events which are more than 2.5 standard deviations greater than …" is unfair to customers, as it excludes the most severe customer interruption events. Four, the body that recommended the Box-Cox transformation protects the interests of networkers, not their customers (namely, the customers do not care if the "logarithms of the data set are or are not normally distributed", they need electricity supply). Five, customers do not care about "better approximation of the normal distribution". Customers need all outages to be recorded as these occurred and not as these were "approximated or transformed" by Western Power. Six, no technical justification is given on why the well-established and balanced IEEE methodology is not suitable any more to Western Power.[188]

994. The first point raised by Mr Davidson regarding the removal of unplanned interruptions has been addressed in the previous section. The IEEE standard also states, in reference to major events days and other exclusions:

> To ensure accurate and equitable assessment and comparison of absolute performance and performance trends over time, it is important to classify performance for each day in the data set to be analyzed as either day-to-day or major event day. Not performing this critical step can lead to false decision making because major event day performance often overshadows and disguises daily performance. Interruptions that occur as a result of outages on customer owned facilities or loss of supply form another utility should not be included in the index calculation.[189]

995. Mr Davidson's second point regarding the selective application of the Box-Cox method may be addressed through annual reporting of the data and calculations applied by Western Power. Additionally, the Box-Cox power transformation is continuous for all parameter values and equates to the logarithmic transformation for $\lambda = 0$. The parameter value (λ) is determined by maximum likelihood method and would result in a value at or close to zero in the case that a logarithmic transformation would fit a normal distribution:

$$y^{(\lambda)} = \begin{cases} \dfrac{y^{\lambda} - 1}{\lambda} \; for \; \lambda \neq 0, \\ \ln(y) \; for \; \lambda = 0 \end{cases}$$

996. Mr Davidson's third point refers to the method described in the IEEE standard and contrasts with Mr Davidson's previous statement, that the "IEEE methodology… is balanced overall and fair to customers."

[188] Mr Stephen Davidson, Submission TWO on Proposed Revisions to the Western Power Network Access Arrangement, 11 December 2017, pp. 3-4.

[189] Institute of Electrical and Electronic Engineers, IEEE Guide for Electric Power Distribution Reliability Indices, IEEE Standard 1366-2003, p. 17.

997. The ERA considers Mr Davidson's fourth and fifth points to be misguided. Section 2.2 of the Access Code requires the ERA to have regard to the Code objective of promoting economically efficient investment in, and operation of, networks and services of networks in Western Australia, when performing its function under the Code. The IEEE standard ("2.5 beta method") relies upon an assumption that the transformed data set is normally distributed to derive a threshold above which major event days are excluded from performance reporting for the purpose of promoting efficient investment in network performance.

998. Mr Davidson's final point is not correctly represented as the IEEE standard ("2.5 beta method") remains the framework in which the Box-Cox transformation method is proposed to be applied in determining the major event day threshold. The ERA does consider the provision of information justifying the application of the method to be necessary in order to meet the Access Code requirements of being sufficiently detailed and complete to enable users or applicants to determine the value of the reference service at the reference tariff.

999. Subject to transparent reporting of the method applied by Western Power in determining the major event day threshold, the ERA considers the proposal to apply the Box-Cox transformation to daily unplanned SAIDI data to be reasonable and sufficiently detailed and complete to enable a user or applicant to determine the value of the reference service at the reference tariff.

1000. The ERA approves the proposal to apply the Box-Cox transformation to daily unplanned SAIDI data to determine the major event day threshold where the logarithmic transformation of the data does not conform to a normal distribution, subject to Western Power providing the following information in annual service standard performance reports:

- demonstration that the natural logarithm of the data set of each unplanned SAIDI value is not normally distributed;
- calculations that demonstrate the application of the Box-Cox transformation method to the unplanned SAIDI values;
- the data set resulting from applying the Box-Cox transformation method; and
- demonstrating that the resulting data set is normally distributed or that the normality of the data set is improved.

Required Amendment 23

For the purpose of monitoring the service provider's actual performance against actual service standard performance and in accordance with sections 11.2 and 11.3 of the Access Code, Western Power must amend section 4.5 of the access arrangement as follows:

4.5.3 Where Western Power has applied a Box-Cox transformation of the daily unplanned SAIDI data set to determine the major event day threshold, Western Power must:

1) Demonstrate that the natural logarithm of the data set of each unplanned SAIDI value is not normally distributed.
2) Provide the calculations that demonstrate the application of the Box-Cox transformation method to the unplanned SAIDI values.
3) Provide the data set resulting from applying the Box-Cox transformation method.
4) Demonstrate that the resulting data set is normally distributed or that the normality of the data set is improved.

Determining the time period for data for setting service standard benchmarks and targets

1001. Western Power is proposing to use five years of data to determine service standard benchmarks and targets for all performance measures during the AA4 period.

1002. In setting service standard benchmarks and targets for SAIDI and SAIFI performance measures during the AA3 period, only the most recent three years of data was used due to:

- lower quality data through the first access arrangement period (**AA1**), which was not sufficiently robust for determining compliance targets; and
- improvements in performance achieved through the second access arrangement period (**AA2**) through a targeted reliability program.

1003. Western Power now proposes to use five years of data to set all service standard benchmarks, because:

- Western Power has focused on maintaining service performance through a relatively stable average level of non-growth distribution capex over the last five years;
- a longer data series provides greater statistical accuracy with a better estimate of long term variance;
- a longer period captures a more even pattern of expenditure and minimises the impact of abnormal years;
- the business now has a reliable dataset covering a longer period;
- five years of data aligns with the length of the access arrangement period, the service standards adjustment mechanism period and the gain sharing mechanism period; and

- aligning the data set with the access arrangement period is consistent with the approach applied to other Australian electricity businesses.

1004. The ERA considers the use of five years of data to determine service standard benchmarks and targets to be reasonable and sufficiently detailed and complete to enable a user or applicant to determine the value of the reference service at the reference tariff

1005. The ERA approves the use of five years of performance data to determine service standard benchmarks and targets for the AA4 period.

Set benchmarks at the average of the 99th percentile of probability distributions selected according to nominated threshold criteria

1006. The proposed method of averaging the 99^{th} percentile of probability distributions selected according to nominated threshold criteria comprises two amendments, which are addressed separately:

- averaging the percentile values of probability distributions selected according to nominated threshold criteria; and
- setting the service standard benchmarks at the 99th (or 1st) percentile of the distribution of best fit.

Averaging the percentile values of probability distributions selected according to nominated threshold criteria

1007. In setting service standard benchmarks and targets, Western Power proposes to average the percentile values derived from all probability distributions meeting nominated threshold criteria.

1008. This method contrasts with that applied during the AA3 period, in which service standard benchmarks and targets were derived from respective percentile values of the single probability distribution of best fit.

1009. Western Power states:

> We consider the methodology for averaging distributions will ensure more accurate estimation of the probability of compliance measures being met, provide appropriate incentives to maintain compliance under the service incentive framework, and ensure the setting of more consistent SSBs over time all else being equal.[190]

1010. Specifically, Western Power proposes to:

- fit statistical distributions onto five years of monthly rolling average data using maximum likelihood estimation;
- discard any distributions for which the *p*-value of the Anderson-Darling test for continuous distributions, or Chi-squared statistic for discrete distributions, does not exceed a threshold value of 0.05;
- sample the remaining distributions to obtain the relevant percentile values; and

[190] Western Power, Access arrangement information, Access arrangement revisions for the fourth access arrangement period, 2 October 2017, page 95, paragraph 338.

- average the results for all distributions with an Akaike Information Criterion (AIC) value within one per cent of the distribution of best fit.

1011. Western Power made the following statements in support of this proposal:

> Western Power has based its method firmly on statistics literature.[191]
>
> Given that reliability data is continuously evolving, there is the risk that small changes in the underlying data would result in the AIC indicating a different distribution. The result can be a radical change in SSB/SST benchmark from one year to the next, which would be contrary to the principles of benchmark setting. To help ensure robustness of the resulting benchmark introduced by small changes to the data, Western Power proposes averaging all distributions considered to be a good fit for a measure based on AIC scores close to the lowest score.[192]
>
> Often, several distributions fit each metric well. The practical implication of having numerous distributions that fit well, is that a small change in the underlying data can change the selected distribution; sometimes with a large impact on the SSB. In some cases, shifting from the best to the second best distribution of fit can result in a 10-20% change in the proposed SSB.[193]
>
> To overcome the volatility introduced by small changes in the data, Western Power proposes averaging all distributions considered to be a good fit. Good fit is determined as having an AIC close to the lowest AIC.[194]

1012. An independent technical review prepared by Analytics+Data Science was also provided by Western Power, which states:

> In the view of a+ds, the methodology as outlined in this section represents an appropriate methodology for the purpose for selecting a statistical distribution for setting SSBs and SSTs using a theoretically consistent and industry standard approach.[195]

1013. Referencing service standard benchmarks specifically, the technical report states:

> We understand that the purpose of averaging the 99th percentile values from multiple distributions is to overcome the instability associated with selecting a single distribution at a particular point in time based solely on the lowest AIC. Relying only on the distribution with the lowest AIC can result in substantial variance in the SSB/SST over time as the relative ordering of distributions (based on their relative AIC value) changes in response to new data. The instability is largely a function of different candidate distributions generating very similar AIC values.[196]

---

[191] Western Power, Access arrangement information, Attachment 6.2 Fitting Distributions for AA4 Service Standard KPIs-Setting the Service Standard Benchmark (SSB) and Service Standard Target (SST), 2 October 2017, page 3.

[192] Western Power, Access arrangement information, Attachment 6.2 Fitting Distributions for AA4 Service Standard KPIs-Setting the Service Standard Benchmark (SSB) and Service Standard Target (SST), 2 October 2017, p. 12.

[193] Western Power, Access arrangement information, Attachment 6.2 Fitting Distributions for AA4 Service Standard KPIs-Setting the Service Standard Benchmark (SSB) and Service Standard Target (SST), 2 October 2017, p. 12.

[194] Western Power, Access arrangement information, Attachment 6.2 Fitting Distributions for AA4 Service Standard KPIs-Setting the Service Standard Benchmark (SSB) and Service Standard Target (SST), 2 October 2017, p. 13.

[195] Western Power, Access arrangement information, Attachment 6.1 Review of service standards methodology, 2 October 2017, p. 5.

[196] Western Power, Access arrangement information, Attachment 6.1 Review of service standards methodology, 2 October 2017, p. 7.

1014. On the proposed method of averaging the percentile values of multiple distributions, GHD stated:

> A suite of probability distributions were fitted to the dataset, and an average of the distributions of best-fit was applied to determine the 99th (or 1st, depending on whether performance improved within an increasing or decreasing metric, respectively) percentile for benchmarks, and the 50th percentile for targets.
>
> There were 11 continuous distributions tested. These included the Weibull, the 3-parameter Weibull and the generalised extreme value distribution, all of which are noted for their accuracy at determining probability at the tails (extreme values). The three distributions mentioned were frequently included in the average of the 99th (or 1st) percentiles, especially for distribution metrics.
>
> The approach taken by Western Power to set service standard benchmarks varies from that typically used by utilities in the NEM under the AER STPIS to set cap and collar values for measures.[197]

1015. While the primary method of fitting candidate distributions to performance data is based upon well-established statistical principles, Western Power has not cited any peer-reviewed publication or regulatory precedent to support the proposed method of averaging percentile values of multiple distributions selected subject to nominated threshold values.

1016. The method of averaging percentile values of distributions selected subject to nominated threshold criteria contrasts with that applied by other network service providers and is not an industry standard approach.

1017. Comparison of benchmarks derived by the proposed method of averaging percentile values of distributions selected subject to threshold values proposed by Western Power with those derived from the single distribution of best fit (Table 124), as applied for AA3, demonstrates:

- the maximum divergence of the benchmarks derived from the average value of selected distributions against the single distribution of best fit is 3.8 per cent at the 99th percentile (SAIFI Urban) and 4.5 per cent at the 97.5th percentile (SAIFI CBD, reflecting a single digit change in the benchmark value); and
- nil difference between the benchmarks derived by each method for all but one of the transmission reliability performance measures, noting that only one theoretical probability distribution is selected within the thresholds proposed by Western Power for the circuit availability and loss of supply event frequency (>0.1 minutes to ≤1.0 minutes) performance measures, while nine distributions are selected for the average outage duration measure.

1018. Additional concerns with the method of averaging percentiles include:

- The process of selecting the nominated AIC threshold value appears to be arbitrary and anecdotal. Some excluded distributions predict a benchmark value closer to the (average or) first-ranked distribution than those which have been included.
- The composition and number of distributions selected within the threshold value are likely to vary with time, introducing volatility and uncertainty.

[197] GHD Advisory, Technical Review of Western Power Proposed AA4 Access Arrangement for 2017/18-2021/22, Draft report, March 2018, page 234.

- There has been no apparent analysis of confidence intervals to demonstrate the improved reliability or robustness of the results of averaging percentile values against those derived from the distribution of best fit.

1019. For these reasons, the ERA does not consider the method of averaging the percentile values of distributions selected according to nominated threshold criteria to be reasonable.

1020. The ERA does not approve the proposed method of deriving service standard benchmarks by averaging the percentile values of probability distributions selected according the threshold criteria proposed by Western Power.

1021. Western Power must derive the service standard benchmarks using the single probability distribution of best fit to historic performance data.

Table 124 Comparison of service standard benchmarks proposed by Western Power for the AA4 period derived by averaging the 99th percentiles and 97.5th percentiles of distributions selected according to nominated threshold criteria with those derived at the respective percentiles of the single distribution of best fit, including proportional differences

	Average multiple distributions		Single distribution of best fit		*Proportional difference*	
Percentiles:	99th (*a*)	97.5th (*b*)	99th (*c*)	97.5th (*d*)	99th (*a*)/(*c*)-1	97.5th (*b*)/(*d*)-1
Distribution reliability performance measures						
System average interruption duration index (minutes)						
- CBD	37.2	34.0	36.7	33.7	*1.4%*	*1.0%*
- Urban	134.7	130.0	135.3	130.6	*-0.5%*	*-0.5%*
- Rural short	226.3	220.2	218.8	215.4	*3.3%*	*2.2%*
- Rural long	902.9	855.7	888.5	848.3	*1.6%*	*0.9%*
System average interruption frequency index (interruptions)						
- CBD	0.23	0.22	0.23	0.21	*0.0%*	*4.5%*
- Urban	1.33	1.30	1.28	1.27	*3.8%*	*2.3%*
- Rural short	2.38	2.32	2.41	2.34	*-1.3%*	*-0.9%*
- Rural long	5.90	5.71	5.88	5.70	*0.3%*	*0.2%*
Calls centre performance (%)	85.3	86.8	85.3	86.8	*0.0%*	*0.0%*
Transmission reliability performance measures						
Circuit availability (%)	97.6	97.8	97.6	97.8	*0.0%*	*0.0%*
Loss of supply event frequency (interruptions)						
- >0.1 and ≤1.0 system mins.	27	25	27	25	*0.0%*	*0.0%*
- >1.0 system minutes	4	3	4	3	*0.0%*	*0.0%*
Average outage duration (minutes)	1333	1236	1313	1234	*1.5%*	*0.2%*

Note: Percentile values for call centre performance and circuit availability are derived at the 1st and 2.5th percentile, where higher values reflect better performance

Setting the service standard benchmarks at the 99th (or 1st) percentile of the distribution of best fit

1022. Western Power proposes to set the service standard benchmarks for the distribution and transmission networks at the average of the 99th percentile of the fitted distributions for AA4 period.[198]

1023. Service standard benchmarks were previously set at the 97.5th percentile of the distribution of best fit for the AA3 period.

1024. In the final decision for AA3, the ERA was satisfied that the proposed new 'minimum standards' service standard benchmarks, corresponding to the 97.5th percentile, were reasonable and sufficiently detailed and complete to enable a user to determine the value represented by the reference service at the reference tariff, in compliance with section 5.6 of the Access Code.[199]

1025. Additional information regarding the expected level of performance was provided by the corresponding service standards targets, which were set at the 50th percentile of the probability distribution fitted to the performance data.

1026. Western Power claims the application of the 99th percentile to set service standard benchmarks during the AA4 period will:

- increase the likelihood of Western Power being compliant with performance requirements under the Access Code and electricity licences;
- maintain current service standards performance over the AA4 period, consistent with customer expectations; and
- provide more stability for volatile measures.[200]

1027. The first point above is a factual consequence of the intent of the service standard benchmark as a minimum performance standard.

1028. Section 11.1 of the Access Code requires a service provider to provide reference services at a service standard at least equivalent to the service standard benchmarks set out in the access arrangement.

1029. Western Power also states the materiality of the difference between the 97.5th and 99th percentiles is more significant for volatile performance measures:

> Where the performance of a measure is relatively consistent over time, the difference between the average of the 97.5th percentile of the distributions of best fit and the average of the 99th percentile is not material. The impact is more significant for volatile measures such as CBD SAIDI. Despite the change, SSBs will be the same or more stringent for all measures except for rural long SAIDI and average outage duration for AA4, compared to AA3.[201]

[198] Western Power, Access arrangement information, Access arrangement revisions for the fourth access arrangement period, 2 October 2017, page 96, paragraph 339.

[199] Economic Regulation Authority, Draft Decision on Proposed Revisions to the Access Arrangement for the Western Power Network, 29 March 2012, p. 258, paragraph 1092.

[200] Western Power, Access arrangement information, Access arrangement revisions for the fourth access arrangement period, 2 October 2017, pages 96-7.

[201] Western Power, Access arrangement information, Access arrangement revisions for the fourth access arrangement period, 2 October 2017, p. 97, paragraph 345.

1030. Western Power has not provided further information to demonstrate the materiality of the difference between benchmarks derived at the 97.5th and 99th percentiles, although data presented in Table 124 shows the difference between the respective percentiles of the single distribution of fit is less than or the same as the difference between the averaged percentiles in all cases except SAIFI CBD.

1031. The proposed service standard benchmark for circuit availability for the AA4 period (97.6 per cent) is also lower than the benchmark set for the AA3 period (97.7 per cent), despite service performance having exceeded the benchmark during the AA3 period. The lower benchmark proposed for the AA4 period is due solely to the selection of the benchmark at the 99th percentile rather than the 97.5th percentile.

1032. Consequently, the ERA considers the alignment of incentives for investment in service performance with customer expectations to be the most relevant factor in setting the service standard benchmark.

1033. Western Power has relied upon the reported results of its customer engagement program in stating an intention to maintain current service levels:

> Customers have told us they are generally satisfied with current levels of performance, and do not necessarily want Western Power to invest to improve service. Though there are areas of the network that perform more poorly than others, and Western Power will target improvement in these areas, there is little appetite among customers for Western Power to invest more to raise overall service levels.
>
> Taking these customer insights and our regulatory obligations into consideration, we propose to maintain the current average level of service provided to reference service customers in AA4.[202]
>
> If the SSBs continue to be set at the 97.5th percentile, Western Power has an incentive to improve reliability to ensure compliance, which is inconsistent with customer expectations.
>
> On the basis that we will maintain the current level of performance on average, we consider it appropriate to choose a percentile for the SSB that ensures we are compliant. Choosing a lower threshold would increase the risk that, in the absence of further investment (in alignment with customer feedback to maintain performance), service standards would not be met and Western Power would be financially penalised.[203]

1034. Western Power also stated, in outlining the proposed method:

> In AA4, Western Power is proposing network investment to maintain service performance. The proposed network investment aligns closely with customer satisfaction analysis, indicating that customers are satisfied with the current level of performance. As such, Western Power proposes the use of the 99th percentile for setting SSBs. With a 1% probability of exceeding each metric, the total result is a 15.7% probability of exceeding at least one per year. The reduced probability better aligns with the goal of maintaining performance and the proposed investment.[204]

[202] Western Power, Access arrangement information, Access arrangement revisions for the fourth access arrangement period, 2 October 2017, pages 88-9, paragraphs 299-301.

[203] Western Power, Access arrangement information, Access arrangement revisions for the fourth access arrangement period, 2 October 2017, pages 96-7, paragraphs 342,344.

[204] Western Power, Access arrangement information, Attachment 6.2 Fitting Distributions for AA4 Service Standard KPIs-Setting the Service Standard Benchmark (SSB) and Service Standard Target (SST), 2 October 2017, p. 11.

1035. An independent technical report provided by Western Power also states, referring to the proposed percentile value at which service standard benchmarks are to be set:

> We note that Western Power's objectives for the coming five-year period is to maintain current service standards performance in line with customer expectations. Given that objective, it is appropriate to choose a percentile value that does not penalise Western Power for not continuing to improve performance. Choosing a lower threshold value would increase the probability that, in the absence of further investment (at the expense of customers), service standards would not be met and Western Power would be financially penalised.[205]

1036. The technical report also states, with reference to the statistical basis for setting the performance benchmark at the 99th percentile:

> We are also not aware of any statistical basis which would suggest the 99th percentile value to be any more or less appropriate than an alternative threshold. Consequently, we concur that the 99th percentile value is an appropriate threshold that aligns with Western Power's longer term strategic objectives for AA4.[206]

1037. The Customer Insights report provided by Western Power, prepared in March 2016 and cited in the access arrangement information, states:

> Approximately three-quarters (74%) of customers thought that the duration of the outages they experience were 'about right' or relatively short. A larger proportion of customers (86%) thought the number of outages they experience was 'reasonable' or better than they would consider acceptable.[207]

1038. These results are cited in the access arrangement information in support of the proposal to implement the service standard benchmark at the average of the 99th percentile of the distributions of best fit.[208,209]

1039. Within submissions received referencing service standard benchmarks, Mr Schubert noted edge of grid customers typically received below standard performance which was not reflected in aggregate reliability indices:

> At present the SAIDI and SAIFI reliability indices and targets that apply to Western Power do not encourage such edge of grid solutions sufficiently for customers to receive acceptable supply reliability that meets the NQRS code.
>
> These existing service standard benchmarks, which are (or have been?) proposed to be transferred into the revised NQRS Code without material modification, are based on average performance in each different category - such as 'Long Rural'. Many edge of grid towns have such low customer numbers that their poor reliability of supply figures do not materially alter the average results of these indices, which can therefore appear acceptable by meeting the (average) target.

---

[205] Western Power, Access Arrangement Information (AAI) for the period 1 July 2017 to 30 June 2022, Attachment 6.1, Review of services standards methodology, 2 October 2017, p. 10.

[206] Western Power, Access Arrangement Information (AAI) for the period 1 July 2017 to 30 June 2022, Attachment 6.1, Review of services standards methodology, 2 October 2017, p. 10.

[207] Western Power, Access Arrangement Information (AAI) for the period 1 July 2017 to 30 June 2022, Attachment 4.1, Customer Insights Report, 2 October 2017, p. 32.

[208] Western Power, Access arrangement information, Access arrangement revisions for the fourth access arrangement period, 2 October 2017, p. 88, paragraphs 299, 300.

[209] Western Power, Access arrangement information, Access arrangement revisions for the fourth access arrangement period, 2 October 2017, p. 96, paragraph 343.

> The indices do not incentivise the network service provider (NSP) to improve the performance for those individual customers or communities whose supply is unacceptable, when their customer[210]

1040. WACOSS, on the other hand, notes that higher service standards increase costs to service provides and consequently households. WACOSS questions whether an appropriate balance has been struck between service quality and price, given the level of reward paid for the AA3 period, recommending a careful examination of customer willingness to pay for improved service standards:

> It may be that the incentives to meet service quality standards are pushing prices too high. We note for example that the settings for the incentive mechanisms under AA3 to provide financial rewards where WP has exceeded its benchmarks means in practice they will be recovering half a billion dollars in profits from customers over AA4 … which will mean in practice an additional $5 per year to the average household bill.[211]

1041. Western Power has also stated that the network reliability investment program is driven by several factors, such that the link between service standard benchmarks and network investment is not straightforward:

> Western Power's AA3 network investment program has a number of fundamental drivers such as safety, growth, security of supply, asset condition and reliability.
>
> Reliability service standards performance is influenced by all of these investment drivers, particularly those activities associated with network asset maintenance and replacement.[212]

1042. Consequently, the ERA considers that, while customers in general have expressed satisfaction with current service levels, a small proportion of customers may be consistently receiving below-standard service. In this context, the ERA does not consider the proposal to set the service standard benchmarks at the 99th percentile, or 1st percentile for call centre performance and circuit availability, to be reasonable.

1043. The ERA does not approve the proposal to set service standard benchmarks at the 99th percentile, or 1st percentile for call centre performance and circuit availability.

1044. Western Power must set service standard benchmarks at the 97.5th percentile, or 2.5th percentile of the single distribution of best fit.

Required Amendment 24

Western Power must set service standard benchmarks at the 97.5th percentile of the single distribution of best fit for all reliability performance measures, except call centre performance and circuit availability for which the service standard benchmark must be set at the 2.5th percentile of the distribution of best fit, to the most recent five-years of performance data.

[210] Mr Noel Schubert, Submission re: Proposed Revisions to the Western Power Network Access Arrangement – AA4, 11 December 2017, p. 14.

[211] Western Australian Council of Social Services, AA4 Access Arrangement Submission 2017, 11 December 2017, pp. 10-11.

[212] Western Power, Electricity Networks Access Code 2004 Service Standards Performance Report for the year ended 30 June 2017, p. 4.

Maintaining the service standard benchmarks set for the AA3 period in the 2017/18 financial year

1045. Western Power is proposing to maintain the service standard benchmarks set during the AA3 period for the 2017/18 financial year, stating:

> We do not expect the ERA to make a final decision on the revised proposed access arrangement until June 2018 at the earliest.
>
> As a result, for 2017/18 and until the AA4 period commences we will continue to operate and invest in the business to meet the current AA3 suite of SSBs. While other aspects of the revised access arrangement such as target revenue and resulting prices will be adjusted and back dated to 1 July 2017, any revised service level benchmarks and targets can only take effect from the time the revised access arrangement is finalised. This is because Western Power would not have the opportunity to manage the network prior to and during 2017/18 to comply with unknown SSBs in 2017/18.
>
> Applying the current suite of SSBs during 2017/18 provides certainty for Western Power and our customers of the minimum service standards that apply during 2017/18. It also ensures that our AA4 forecast capex and opex (see Chapters 7 and 8) are sufficient to allow Western Power to meet those SSBs.[213]

1046. The ERA considers the proposal to maintain service standard benchmarks for the 2017/18 financial year at the level set for the AA3 period to be reasonable and consistent with the Code objective.

1047. The ERA approves the proposal to maintain service standard benchmark levels set for the AA3 period for the 2017/18 financial year.

Implementation of a service standard benchmark for momentary interruptions

1048. In the final decision on AA3, the ERA required Western Power to collect and report data on the average number of momentary interruptions of one minute or less per distribution network customer for each feeder category:

> This would provide a basis for establishing service standard benchmarks and service standard targets for the fourth access arrangement period for a Momentary Average Interruption Frequency Index measure.[214]

1049. The ERA noted Western Power’s submission at the time, which referred to stakeholder engagements:

> During the stakeholder engagements that informed this revisions submission, customers indicated that they would value Western Power reducing the number of momentary interruptions, as even an instantaneous break in electricity supply can lead to machinery having to be reset, significantly disrupting productivity.
>
> We have listened to this feedback and are taking action to reduce the number of momentary interruptions, however, we do not currently have sufficient data to include a measure of momentary interruptions as a service standard benchmark. We will seek to improve monitoring of momentary interruptions during AA3, so that we will be in a

[213] Western Power, Access arrangement information, Access arrangement revisions for the fourth access arrangement period, 2 October 2017, pp. 89-90, paragraphs 307-9.

[214] Economic Regulation Authority, Final Decision on Proposed Revisions to the Access Arrangement for the Western Power Network, , p. 453, paragraph 1960.

stronger position to consider their inclusion as a service standard benchmark for AA4.[215]

1050. The ERA also notes previously referenced submissions from Mr Schubert and Mr Davidson supporting the implementation of a momentary average interruption frequency index, and data reported by Western Power in annual service standards performance reports (refer to Table 125).

Table 125 Momentary interruptions per customer within each feeder category during the AA4 period

Feeder category	2012/13	2013/14	2014/15	2015/16	2016/17
CBD	*Not reported*	0.09	0.01	0.04	0.15
Urban	*Not reported*	0.81	0.80	0.77	1.11
Rural short	*Not reported*	2.61	1.84	2.04	2.36
Rural long	*Not reported*	8.71	6.91	6.90	7.10

Sources: Western Power, Service Standards Performance Reports, respective years

1051. The ERA considers the implementation of a momentary average interruptions frequency index to be reasonable, sufficiently detailed and complete to enable a user or applicant to determine the value of the reference service at the reference tariff.

1052. Western Power must establish service standard benchmarks and targets and report performance for a momentary average interruptions frequency index for the AA4 period.

Required Amendment 25

Western Power must set service standard benchmarks and targets for a momentary average interruptions frequency index for the fourth access arrangement period.

Permitted exclusions

1053. In addition to major events days and momentary interruptions addressed above, Mr Davidson raised objections to the list of exclusions currently permitted from distribution and transmission reliability performance measures within the proposed access arrangement.

1054. Mr Davidson's submissions relating to exclusions from the SAIDI and SAIFI performance measures include:

- Interruptions shown to be caused by a fault or other event on the transmission system:

[215] Western Power 2011, Access Arrangement Information for 1 July 2012 to 30 June 2017, September 2011, p. 88.

It provides disincentive to WP to cost-effectively design switchyards and busbars, to provide design and operational flexibility, in order to minimise supply interruptions to distribution system customers. Western Power has been and still is both transmission and distribution system owner and operator, and should have planned both transmission and distribution system in coordination (with each other) and in order to minimize all distribution system outages planned and unplanned. On the other hand, removal of this exclusion will provide incentive to Western Power to cost-efficiently design and operate the (transmission and distribution) network in order to minimize customer outages (their frequency and durations).[216]

- Interruptions affecting the distribution system shown to be caused by a fault or other event on a third party system:

If third party system connections are compliant with the Technical Rules, there would be no adverse effects on this service standard benchmark (as sufficient design redundancy is embedded in the Technical Rules). Hence this exclusion is not needed and its removal would not adversely affect this measure of performance.

If, however, Western Power failed to enforce Technical Rules compliance of the third party system connections, then we would need a performance measure to capture its impact (not to conceal it, as an exclusion).

Removal of this exclusion would improve this performance measure, by making it more sensitive and capable of clearly and reasonably measuring the impact of any regulatory compliance failure with respect to the Technical Rules on this benchmark.

This exclusion provides disincentive for Western Power to complete works efficiently and to maintain the existing level of service.

On the other hand, removal of this exclusion would provide incentive for Western Power to efficiently conduct own works and demonstrate the degree of its efficiency, as well as efficiency of the past investments. In order words, customers should not be receiving substandard service is they subscribed for the standard service. Under the Australian regime for consumer protection consumers may be entitled to refund and compensation.[217]

- Planned interruptions caused by scheduled works:

It provides disincentive to Western Power to quickly restore supply to customers (instead Western Power could wait “until the end of the festive season” to send a crew and/or (not) to engage backup generators while repairs are done, without any “consequences” and evidence of its consequences. This exclusion is unfair to customers.

Removal of this exclusion, on the other hand, would provide incentive for Western Power to engage professional engineers’ expertise on how to optimize its allocation of capital and resources- provides disincentive to WP to quickly restore supply to customers.[218]

1055. Mr Davidson also considers the following events currently excluded from the circuit availability service standard benchmarks should also be removed:

- Zone substation power transformers:

[216] Mr Stephen Davidson, Submission TWO on Proposed Revisions to the Western Power Network Access Arrangement, 11 December 2017, page 4.

[217] Mr Stephen Davidson, Submission TWO on Proposed Revisions to the Western Power Network Access Arrangement, 11 December 2017, p. 4.

[218] Mr Stephen Davidson, Submission TWO on Proposed Revisions to the Western Power Network Access Arrangement, 11 December 2017, p. 5.

> The purpose of the transmission system is to provide power injection points into the distribution system. The injection points are zone substations. The distribution system emanates from the perimeter fence of zone substations.
>
> The distribution system does not and should not include zone substation equipment, and, certainly not equipment designed to withstand transmission voltages during normal operation, for example zone substation power transformers.
>
> A transmission circuit should encompass all primary (high current) equipment that injects power into the distribution system, including the zone substation transformer.[219]

- Interruptions caused by third party faults:

> If third party system connections were compliant with the Technical Rules, there would be no adverse effects on the circuit availability service standard benchmark (as sufficient design redundancy is embedded in the TR). Hence this exclusion is not needed and its removal would not adversely affect this measure of performance.
>
> If, however, Western Power failed to enforce Technical Rules compliance of the third party system connections, then we would need a performance measure to capture its impact (not to conceal it, as an exclusion).
>
> Removal of this exclusion would improve this performance measure, by making it more sensitive and capable of clearly and reasonably measuring the impact of any regulatory compliance failure with respect to the Technical Rules on this benchmark.[220]

- Hours exceeding 14 days for planned interruptions for major construction work:

> This exclusion provides disincentive for Western Power to complete works efficiently and to maintain the existing level of service.
>
> On the other hand, removal of this exclusion would provide incentive for Western Power to efficiently conduct own works and demonstrate the degree of its efficiency, as well as efficiency of the past investments. In order words, customers should not be receiving substandard service is they subscribed for the standard service. Under the Australian regime for consumer protection consumers may be entitled to refund and compensation.[221]

1056. Mr Davidson also disagrees with the current list of exclusions from the average outage duration benchmark and the proposed benchmark for the AA4 period:

> The definition of the average outage duration service standard benchmark should be amended to include all outages (not only unplanned outages), regardless if these are planned or not, for the same or similar reasons explained in section 4.3.2 Circuit availability application here.
>
> Table 15, row definition, should be amended by deleting eight exclusions: 1st, 3rd, 4th, 5th, 6th, 7th, 8th and 10th, for the reasons explained in section 4.3.2 Circuit availability application here.[222]

1057. The objections raised by Mr Davidson concern the purpose and application of the performance benchmark being measured. The Australian Energy Market Commission recently noted, for example, that it is common practice to exclude

[219] Mr Stephen Davidson, Submission TWO on Proposed Revisions to the Western Power Network Access Arrangement, 11 December 2017, p. 6.

[220] Mr Stephen Davidson, Submission TWO on Proposed Revisions to the Western Power Network Access Arrangement, 11 December 2017, p. 6.

[221] Mr Stephen Davidson, Submission TWO on Proposed Revisions to the Western Power Network Access Arrangement, 11 December 2017, p. 6.

[222] Mr Stephen Davidson, Submission TWO on Proposed Revisions to the Western Power Network Access Arrangement, 11 December 2017, p. 10.

events from reliability performance measures which are beyond the ability of the service provider to control:

> It is common to remove some types of interruptions from the set of reliability data being considered when calculating distribution reliability measures. This will be because these interruptions are not relevant to the aspect of reliability being measured, or the purpose for which it is being measured. The data excluded will depend on the objective of the associated reporting, benchmarking or incentive scheme.[223]

1058. The Australian Energy Market Commission further noted that reliability of supply to the customer is distinct from the measurement of performance of the service provider:

> When distribution reliability is considered (eg reported) purely from the perspective of the service experienced by customers then all interruptions should be included, irrespective of the cause. However, when benchmarking the performance of distributors or applying an incentive scheme, it is common to remove events that are beyond the control of the distributor from the calculation of the reliability measures. Such events include lack of generation or a failure in the transmission network where the distributor can neither act to reduce the probability of such an event occurring nor manage the restoration of supply.
>
> However, exclusion events do not normally include events such as lightning, bushfires or car accidents where the distributor does not necessarily have any control over the cause of the event but is expected to manage the restoration of supply to customers and could plan its network to mitigate the probability and impact of such events.[224]

1059. Referencing major event days, the Australian Energy Market Commission notes that, although events may be excluded from distribution reliability indices, interruptions experienced by customers may still be reported:

> It may not be appropriate to remove interruptions on major event days from the reliability data when considering reporting on the reliability of the service experienced by customers or for distribution planning purposes.
>
> Even though the interruptions that occur on major event days may be removed from the network's database of interruptions, they should not be ignored. Rather, these interruptions should be separately analysed and reported given that they have had a significant impact on the reliability experience by many customers.[225]

1060. The Access Code defines service standards as either or both of the technical standard and reliability of delivered electricity. A service standard benchmark for a reference service must also be reasonable and sufficiently detailed and complete to enable a user or applicant to determine the value represented by the reference service at the reference tariff.

1061. Section 11.2 of the Access Code requires the ERA to publish a report of Western Power's performance against service standard benchmarks annually. Western Power currently reports events excluded from distribution and transmission reliability indices within the annual service standard performance report, including the following:

- Distribution performance:

[223] Australian Energy Market Commission, Review of Distribution Reliability Measures, Final Report, 5 September 2014, p. 21.

[224] Australian Energy Market Commission, Review of Distribution Reliability Measures, Final Report, 5 September 2014, p. 21.

[225] Australian Energy Market Commission, Review of Distribution Reliability Measures, Final Report, 5 September 2014, p. 24.

  - Major event days;
  - Transmission network interruptions;
  - Other third party network interruptions;
  - Planned interruptions; and
  - Force majeure.
- Call centre performance:
  - Major event days; and
  - Extraordinary events.
- Transmission performance:
  - Force majeure; and
  - Planned interruptions for major construction work exceeding 14 days.[226]

1062. The ERA considers the current service standard benchmarks and permitted exclusions, including separate reporting of excluded events to be reasonable and sufficiently detailed and complete to enable a user or applicant to determine the value represented by the reference service at the reference tariff.

[226] Western Power, Service Standards Performance Report for the year ended 30 June 2017, pp. 27-9.

ADJUSTMENTS TO TARGET REVENUE AT NEXT REVIEW

Access Code requirements

1063. Sections 6.6 to 6.32 of the *Electricity Networks Access Code 2004* (**Access Code**) provide for the target revenue for an access arrangement period to include certain amounts "carried over" from the previous access arrangement period, including:

- an amount in respect of costs incurred as a result of a force majeure event under sections 6.6 to 6.8 of the Access Code;
- an amount in respect of costs incurred as a result of changes to the Technical Rules, for which no allowance was made in the access arrangement, under sections 6.9 to 6.12 of the Access Code;
- an amount under an investment adjustment mechanism under sections 6.13 to 6.18 of the Access Code;
- an amount under a gain sharing mechanism under sections 6.19 to 6.28 of the Access Code; and
- an amount under a service standards adjustment mechanism under sections 6.29 to 6.37 of the Access Code.

Current access arrangement

1064. The current access arrangement provides for several revenue adjustment mechanisms to adjust target revenue in the third access arrangement period (**AA3**) to account for unforeseen events or other cost pass-throughs, over or under-recovery of revenue in preceding years or to provide financial incentives to Western Power to be more efficient or perform better. These adjustments occur under the following mechanisms:

- Unforeseen events adjustment – an adjustment to account for costs incurred in AA3 as a result of force majeure events
- Technical rule change revenue adjustment – an adjustment to account for costs incurred as a result of changes to the Technical Rules that could not have reasonably been foreseen at the commencement of AA3
- Investment adjustment mechanism – an adjustment to account for differences between forecast and actual costs of certain classes of new facilities investment
- Gain sharing mechanism – an adjustment to account for the out-performance of the forecast operating expenditure in AA3
- Service standards adjustment mechanism – an adjustment to account for any difference between service standard performance and service standard benchmarks in AA3
- D-factor – an adjustment to account for any additional operating expenditure incurred which was a result of deferring a capital expenditure project and any additional operating or capital expenditure in relation to demand management initiatives

- Deferred revenue from the second access arrangement period (**AA2**) – an adjustment to account for the amount of revenue deferred in AA2 which was to be recovered in subsequent access arrangement periods[227]
- Correction factor – a year-on-year adjustment to allowed revenue to account for under-recover or over-recovery of revenue under the revenue cap.

1065. The *Target Revenue* section of this draft decision (paragraph 99 and following) outlines the proposed adjustments to AA4 target revenue for outcomes and events from the current access arrangement.

Western Power's proposal

1066. Western Power has maintained the adjustment mechanisms included in the current access arrangement, but has proposed amendments to each of them. The proposed amendments are discussed below under Considerations of the ERA.

Public submissions

1067. Submissions received are discussed below under Considerations of the ERA.

Considerations of the ERA

1068. The Economic Regulation Authority (**ERA**) has separately considered Western Power's proposed amendments to each of the following adjustment mechanisms.

- Force majeure
- Technical Rules
- Investment adjustment mechanism
- Gain sharing mechanism
- Service Standard adjustment mechanism
- D-Factor
- Deferred revenue

Force majeure

1069. Western Power proposes to amend the specified force majeure events included in section 7.1.4 of the access arrangement. It proposes to:

- Remove reference to the carbon pricing mechanism that was introduced in 2011 on the basis that it is no longer relevant. Western Power has retained broader reference to "the introduction of any scheme or mechanism" to deal with emissions of greenhouse gases.

[227] The deferred revenue arose due to Western Power changing its treatment of capital contributions in the calculation of target revenue between AA1 and AA2.

- Remove the mandated roll-out of advanced meters as a specified force majeure event. Western Power has instead proposed to include metering costs in the expenditure categories subject to the investment adjustment mechanism.
- Introduce a new specified force majeure event of “government-led reforms”.

1070. Western Power submits electricity market reforms should be included:[228]

> Any Government-led reform, such as those proposed under the [electricity market reforms] some of which have recently been reaffirmed by the Minister for Energy[229], could have a significant impact on Western Power’s expenditure. As these would be mandated and largely outside of Western Power’s control, we should be provided with the opportunity to recover these costs either:
>
> - in-period using the trigger event provision to re-open the access arrangement
> - in the following access arrangement period using the unforeseen event provision.

Submissions

1071. Several submissions to the ERA address Western Power’s proposal to amend section 7.1.4 of the access arrangement, which adjusts target revenue for unforeseen (force majeure) events.

1072. Community Electricity considers the “new government may (and presumably must) trigger Western Power’s Force Majeure proposal”. It supports Western Power's proposal of a new force majeure event of "government energy reforms".[230]

1073. CdL Advisory and Change Energy both indicate that they do not support the proposed changes.

1074. Alinta raises concerns over the broad nature of Western Power’s proposal to include “any other government energy reforms”. It submits the following:[231]

> Western Power has proposed to include any government energy reforms (Alinta emphasis) as a new unforeseen and trigger event. Alinta’s understanding is that these trigger events define when Western Power has to reopen an access arrangement. There could be any number of government energy reforms (i.e. a change to the metering code for example) that could in no way be defined as “so substantial that the advantages of making a variation to this access arrangement before the end of this access arrangement period outweigh the disadvantages”. The proposal that any government energy reform could reopen an access arrangement for reconsideration gives rise to significant and untenable regulatory uncertainty. Alinta values certainty, and as such, we advise caution against including such a broad and undefined trigger event.

1075. Synergy submits Western Power’s proposal is unclear and may result in the matters listed in section 7.1.4 being given force majeure status irrespective of whether the matters actually satisfy the definition of “force majeure” in the Access Code. It submits the following:[232]

---

[228] Western Power, *Access Arrangement Information*, 2 October 2017, p. 112, paragraph 427.

[229] This includes the Minister for Energy’s re-affirmation to extend retail choice and move from an unconstrained to a constrained access regime by 2020.

[230] Community Electricity, *Response to ERA public consultation*, 10 December 2017, p. 1.

[231] Alinta Energy, Alinta Energy submission, 11 December 2017,

[232] Synergy, *Submission No. 5: Western Power’s proposed price control mechanisms*, 11 December 2017, p. 24.

> WP's proposal at section 7.1.4 (as with its AA3 section 7.1.4 predecessor), is unclear, so that it may seem to confer "force majeure" status on the particular matters listed in the section, irrespective of whether they actually satisfy the definition of "force majeure" under the Code. Synergy submits the Code does not allow an event to be a "force majeure" (and hence treated as an "unforeseen event") unless it satisfies the definition of "force majeure" in section 1.3 of the Code; and that definition may not be altered in an access arrangement when used for compliance with a matter required by the Code (such as dealing with adjustments for unforeseen events under sections 6.6 to 6.8 of the Code). In particular, listing of a specific matter in section 7.1.4 does not automatically confer on it the status of "force majeure" (or an "unforeseen event"). It must still satisfy the relevant tests for "force majeure" (and for an "unforeseen event"). Synergy therefore submits the drafting of WP's proposal at section 7.1.4 should be amended to clarify expressly that none of the matters listed in section 7.1.4 are a force majeure event unless they actually satisfy the definition of "force majeure" under the Code. Further, Synergy considers WP's proposed addition of "any other government energy reforms" is so wide in its potential coverage it counteracts the point of WP's proposal at section 7.1.4. The point of section 7.1.4 should be to clarify areas of potential doubt by giving examples of matters which may be "force majeure" if they satisfy the definition of "force majeure" under the Code. Clearly, citing "any" government energy reforms as an example provides little clarification, given the potentially very wide scope of its coverage (subject to the overriding requirement to satisfy the definition of "force majeure" under the Code).

Considerations

1076. Section 6.6 of the Access Code allows target revenue to be adjusted for unforeseen events if:

- during AA3, Western Power incurred capital or operating costs because of a force majeure event;
- Western Power was unable to (or is unlikely to be able to) recover some or all of the costs (“unrecovered costs”) under its insurance policies; and
- at the time of the force majeure event, Western Power had insurance to the standard of a reasonable and prudent person.

1077. The unrecovered costs that can be added to target revenue do not have to be equal to the amount of unrecovered costs (section 6.7 of the Access Code).

1078. Target revenue must not be adjusted by any amount to the extent that the amount exceeds the costs that would have been incurred by a service provider efficiently minimising costs (section 6.8 of the Access Code).

1079. The ERA has considered Western Power’s proposal and the submissions from interested parties and agrees Western Power should be able to recover capital and/or operating costs incurred because of a force majeure event. However, the ERA agrees with Alinta and Synergy that the inclusion of *“any other government energy reforms”* as a force majeure event (under section 7.1.4 of the access arrangement) is very broad and could include both small and large reforms. The broad nature of this term serves little purpose and creates confusion as to what may or may not be a force majeure event – the section should be deleted.

1080. Furthermore, the ERA considers section 7.1.4 of the access arrangement is unnecessary given the definition of “force majeure”, which is the same definition used in the Access Code:

> **"force majeure"**, operating on a person, means a fact or circumstance beyond the person's control and which a reasonable and prudent person would not be able to prevent or overcome.

1081. Any claimed force majeure event would need to be properly assessed to ensure it met the definition of *force majeure* before making any adjustments to target revenue. Section 7.1.1 of the access arrangement provides for such an assessment by requiring Western Power to provide, as part of its proposed revisions for the next access arrangement period, a report to the ERA setting out:

- a description of the nature of the force majeure event;
- a description of the insurance cover that Western Power had in place at the time of the force majeure event; and
- the unrecovered costs borne (or an estimate of the unrecovered costs likely to be borne) by Western Power during the access arrangement period as a result of the force majeure event.

1082. Section 6.8 of the Access Code does not allow target revenue to be adjusted by any amount to the extent that the amount exceeds the costs that would have been incurred by a service provider efficiently minimising costs. The ERA considers the onus to demonstrate efficient costs should be on the service provider, and in the case of Western Power, the demonstration of efficient costs should form part of the report provided under section 7.1.1 of its access arrangement.

Required Amendment 26

Section 7.1.1 of the proposed revised access arrangement must be amended to include a requirement for Western Power to demonstrate that the unrecovered costs are efficient costs and do not exceed the costs which would have been incurred by a service provider efficiently minimising costs.

Required Amendment 27

Section 7.1.4 of the proposed revised access arrangement must be deleted.

Technical Rules

1083. Western Power proposes amending section 7.2.1 of the access arrangement so that it need only report on amendments to the Technical Rules that result in a material change in costs, rather than being required to report on every single amendment.

> 7.2.1 If ~~the~~amendments to the technical rules ~~are amended~~result in a material cost impact during this access arrangement period, Western Power will, as part of its proposed revisions for the next access arrangement period, provide a report to the Authority setting out:
>
> a) a description of the nature and timing of the impact of the technical rule change on Western Power's non-capital costs and new facilities investment for this access arrangement period; and
>
> b) the costs (or cost savings) incurred, or an estimate of the costs (or cost savings) likely to be incurred by Western Power as a result of that technical rule change.

Submissions

1084. Western Power's proposed amendment has created some confusion, as some stakeholders have interpreted it to mean Western Power could make changes to the Technical Rules without public notification if it considers the amendment does not have a material effect on costs.[233]

1085. The current process for approving amendments to the Technical Rules, as set out in chapter 12 of the Access Code, requires all amendments to be approved by the ERA and provides for public consultation on amendments. The proposed amendment, if approved, would not remove the requirement for Western Power to submit Technical Rule amendments to the ERA for approval.

1086. Kleenheat raises concerns regarding the process for approving Technical Rule amendments.[234]

> Kleenheat has concern about the Technical Rules governance and with approval and oversight by Western Power itself, Kleenheat would consider that an independent oversight body would be more appropriate.
>
> Kleenheat considers the lack of independent oversight over the Technical Rules to be a concern at a time when non-network solutions and fringe of grid solutions are becoming more prevalent by evolving on from the traditional distributed model of retailers and network operator, and as such the governance and framework should also become more robust and modernised by removing such governance oversight from the network operator whom enforces the Technical Rules. It is noted that the recent energy market reforms to governance and separation of the rule change function were implemented due to a perceived conflict of interest in the governance of market operations and the rule change body.
>
> A rule change panel should be implemented for independent oversight, with the potential to incorporate this responsibility into the existing Rule Change Panel under the Economic Regulation Authority's remit.

1087. AGL and Synergy expressed further concerns about the proposed amendment.

- AGL highlighted that the cumulative effect of changes to multiple rules could be material even if the individual changes had no material effect. It suggested "some sort of mechanism be put in place to review the changes holistically."[235]
- Synergy points out that the Access Code does not expressly allow for materiality thresholds:[236]

> … sections 6.9 to 6.12 of the Code do not expressly allow for any such materiality threshold, nor does WP indicate how or at what level a cost will be determined to be "material". There is a risk if WP is permitted to set the "materiality" bar as it determines, it may give rise to unintended consequences such as the pass-through into target revenue of cost reductions resulting from a change in the technical rules. For example, by labelling a cost reduction resulting from a change in the technical rules as not "material", WP could prevent the cost reduction being passed on to users (and ultimately customers) even though the cost reduction may in reality be significant (either alone or grouped with similar cost reductions). Synergy submits if this proposed amendment is to be approved the Authority will also need to include safeguards (e.g.

---

[233] See, for example, Mr Stephen Davidson's submission (Submission 1, Issue 15).

[234] Kleenheat Submission, p. 5.

[235] AGL submission, p. 5.

[236] Synergy *AA4 submission No. 5, Western Power's proposed price control mechanisms*, 11 December 2017, p. 25.

an objective definition for assessment of "materiality" and appropriate oversight by the Authority to ensure it is being complied with).

Considerations

1088. The ERA considers Western Power's proposed amendment to only report on "material" amendments is not consistent with the Access Code requirements. The requirements set out in section 6.9 of the Access Code apply to *any* Technical Rule amendments and do not distinguish between "material" and "immaterial" adjustments.

1089. When proposing Technical Rule amendments to the ERA for approval, Western Power must undertake a comprehensive assessment to demonstrate it meets the objectives for Technical Rules as set out in chapter 12 of the Access Code and the Access Code objectives. It is unlikely Western Power would propose amendments without also considering the effect on its costs. The requirement to include a report in an access arrangement proposal on the costs or savings arising from amendments during the period should be straightforward.

Required Amendment 28

Western Power must delete the proposed amendments to section 7.2.1 of the proposed revised access arrangement – the current wording must be retained.

Investment adjustment mechanism

1090. The investment adjustment mechanism allows for the carryover from one access arrangement period to the next period of costs or benefits arising from differences in forecast and actual capital costs. The mechanism currently applies to the following classes of capital expenditure:

- Connecting new generation capacity
- Connecting new loads
- Augmentation of the network to provide covered services
- Augmentation under the Rural Power Improvement Program and State Underground Power Program
- Distribution wood pole management

1091. Western Power proposes amending the categories to:

- remove distribution wood pole management;
- remove the Rural Power Improvement Program; and
- include provision of metering installations on the distribution system from 1 July 2017.

Submissions

1092. CdL Advisory does not support the inclusion of metering in the investment adjustment mechanism because advanced metering infrastructure:

> … delivers efficiencies in terms of meter reading, re-energisation, replacement and refurbishment of meters. These are not factors outside WP control such as demand for energy and the relationship between the new metering technology and new tariff regime.

1093. Although not directly relevant to the form of the investment adjustment mechanism for AA4, Synergy and Kleenheat have raised concerns that under-expenditure on metering during AA3 should be adjusted in the AA4 target revenue. Kleenheat would like to:

> …understand whether the revenue approved by the ERA for advanced metering infrastructure from Western Power's previous Access Arrangement (AA3) (in the order of $91 million) will be carried over to AA4 … as this approved capital expenditure was not spent during AA3 but the AA3 tariffs were set based on the expenditure of this capital. It is our understanding that Western Power has not confirmed that this will occur under AA4. It is understood that the Access Code provides for the ERA to account for the target revenue "true up" between AA3 and AA4.

1094. For AA4, Synergy recommends replacing the investment adjustment mechanism with a capital expenditure incentive scheme. Synergy considers the investment adjustment mechanism limits Western Power's incentive to achieve capital expenditure efficiencies which increases the risk of over-investment in the network and higher prices in the future.

1095. Synergy also considers the interaction between the investment adjustment mechanism and gain sharing mechanism may distort decisions about whether to undertake capital or operating expenditure which may lead to inefficient outcomes. It also considers the interaction between the service standard adjustment mechanism and the investment adjustment mechanism may provide incentives for Western Power to over invest in the network to achieve higher service performance and receive both cost recovery through the investment adjustment mechanism and an incentive payment under the service standard adjustment mechanism.

1096. Synergy does not support adding metering to the investment adjustment mechanism and submits the ERA should ensure metering expenditure is subject to a strict regulatory assessment through other mechanisms. It states:[237]

> Remove distribution wood pole management – In AA3, the Authority stated wood pole replacement should be removed from the IAM once WP has satisfied its obligations under the Energy Safety Order 01-2009. WP notes these obligations have now been satisfied and so is proposing to remove wood pole management in line with the Authority's intention. Synergy supports this change to the IAM.
>
> Remove the RPIP – WP notes it has not undertaken any work in the RPIP since AA2and is not proposing to undertake RPIP work in AA4. Synergy supports this change to the IAM.
>
> Include the provision of metering installations on the distribution network – Synergy opposes the inclusion of this category of expenditure in the IAM. As discussed further in Section 9 of this submission below, there are currently no competitive or regulatory oversights on WP to ensure investment in SMI occurs prudently and efficiently. Inclusion of SMI in the IAM means WP will recover any overspends on advanced meters in subsequent regulatory periods, increasing the risk WP will over invest in its meters and further limits an efficient roll-out of SMI in the SWIS. Synergy submits the Authority should remove SMI from the IAM or, in the alternative, ensure that SMI expenditure is subject to strict regulatory assessment through other mechanisms (e.g.

[237] Synergy *AA4 submission No. 5, Western Power's proposed price control mechanisms*, 11 December 2017, p. 74.

> the regulatory test) to ensure it occurs in a manner that is consistent with the long-term interests of consumers.
>
> More generally, Synergy submits the IAM limits the incentive for WP to pursue capex efficiencies. This is because WP will not be rewarded under the IAM, or any other mechanism in AA4, for efficiently reducing its actual capex to below forecast levels. Equally, WP will face little penalty for overspending its capex allowance, since it will be entitled to recover any revenue difference in the next access period (provided any overspend satisfies the NFIT).
>
> These outcomes may contribute to a lack of capex discipline by WP. It reduces the incentive to identify or pursue capex efficiencies on WP's network and may also increase the risk of over-investing the network. This may, in turn, contribute to higher network investment in the future than if WP was subject to sufficient incentives to reduce capex and commensurately higher network tariffs, to the detriment of the long-term interests of consumers.
>
> In addition, the joint operation of the IAM and the GSM may distort decisions about whether to undertake capex or opex. As noted above, the GSM creates an incentive for WP to reduce its opex below the EIBs. The IAM, on the other hand, provides little incentive for WP to perform better than its capex allowance. It follows the incentives WP faces in relation to its opex differ significantly from the incentives it faces with respect to its capex.
>
> This difference has the potential to impact expenditure decisions and may lead to WP reclassifying costs between capex and opex to achieve artificial benefits. For instance, WP may inefficiently capitalise opex to reduce its actual opex spend (leading to a benefit under the GSM)and recover any overspent capex through the IAM. Synergy submits this outcome is inconsistent with the Code objective, including because it does not promote efficient investment in networks and network services in Western Australia.

1097. Synergy states the following views on the capital expenditure sharing scheme (**CESS**):[238]

> The CESS, that ensures the incentive to pursue capex efficiencies is the same in each year of the regulatory period by allowing networks to retain the financial element of any underspend (the return on capital) for a fixed period of 5 years irrespective of the year in which the underspend occurs. Consumers will then benefit at the end of this period when the RAB is rolled forward to a lower amount than if the full amount of capex had been spent, leading to lower network prices in the future. The CESS also plays a critical role in balancing incentives between opex and capex. That is, equal incentive rates between the EBSS and the CESS address the trade-off between capex and opex and remove the incentive for networks to inefficiently capitalise expenditure.

1098. Synergy recommends replacing the current investment adjustment mechanism with a capex incentive scheme with:

- no ex-post adjustment to target revenue in the next access period to account for differences between forecast and actual capital expenditure in the current period, provided the differences are shown to be economically efficient (eg Western Power's target revenue could be adjusted ex-post where forecast capex for a particular project was not used for the project because the project was not carried out); and
- the provision of continuous and sustained incentives for Western Power to pursue capital expenditure efficiencies, ensuring these incentives are

[238] Synergy *AA4 submission No. 5 Western Power's proposed price control mechanisms*, 11 December 2017, p. 75.

equivalent to the incentives Western Power faces under the gain sharing mechanism.

Considerations

1099. For access arrangements with a price control based on a service provider's approved total costs, which is the case for Western Power, the Access Code requires the inclusion of an investment adjustment mechanism.

1100. The concerns Synergy raises regarding interactions with the gain sharing mechanism and service standard mechanism are offset by the fact that all expenditure is subject to an ex-post review.

1101. Including capacity expansion and customer driven capital expenditure in the investment adjustment mechanism ensures that Western Power's target revenue is adjusted at the next access arrangement review for any forecasting error (which is outside Western Power's control). Higher than forecast expenditure can only be recovered to the extent it is demonstrated to be efficient.

1102. Wood pole expenditure was added to the investment adjustment mechanism for AA3. At the time of the AA3 final decision, the ERA was aware the investment needs for wood pole management might change as Western Power developed its understanding of what was required, including agreeing methodologies with EnergySafety. To ensure Western Power had incentives to resolve these issues in a timely and efficient manner, the ERA decided to include expenditure for distribution wood pole management in the investment adjustment mechanism. This was to enable expenditure higher than forecast to be recovered, to the extent that it was demonstrated to be efficient expenditure, and would provide Western Power with a return on that investment from the date it was incurred.

1103. The decision to include wood poles in the investment adjustment mechanism reflected the circumstances at the time of the AA3 review and was not proposed as a permanent measure. As the requirements for wood pole management have now been resolved, the ERA agrees it is no longer necessary or appropriate to include wood pole expenditure in the investment adjustment mechanism.

1104. The ERA accepts Western Power's proposal to remove the rural power improvement program from the investment adjustment mechanism as the program is no longer used.

1105. The ERA considers that including metering expenditure in the investment adjustment mechanism is not consistent with the Code objective and does not provide appropriate incentives for efficient metering expenditure.

Required Amendment 29

Metering expenditure must be removed from the Investment Adjustment Mechanism

Gain sharing mechanism

1106. Western Power will retain the benefit of any savings on operating expenditure, compared with the forecast operating expenditure approved, during the AA4 period.

If actual expenditure is higher than forecast, Western Power will have to fund the additional expenditure during the AA4 period. However, this means savings (or additional costs) during the first year are retained for five years, while savings achieved during the final year are retained for only one year.

1107. Western Power's gain sharing mechanism allows it to retain benefits for five years from when the efficiency was achieved (i.e. the year it makes the saving plus five years of carry over). The gain sharing mechanism is intended to ensure that Western Power has equal incentives to pursue efficiency throughout the access arrangement period.

1108. The access arrangement must include a gain sharing mechanism[239] unless the ERA determines it is not necessary to achieve the objective in section 6.4(a)(ii) of the Access Code. The objective of 6.4(a)(ii) is to give the service provider an opportunity to earn revenue to reward it for efficiency gains and innovation beyond those assumed in the access arrangement.

1109. The gain sharing mechanism must:[240]

- achieve an equitable allocation over time between users and the service provider of innovation and efficiency gains in excess of efficiency and innovation benchmarks;
- be objective, transparent, easy to administer and replicable from one access arrangement to the next; and
- give the service provider an incentive to reduce costs or otherwise improve productivity in a way that is neutral in its effect on the timing of such initiatives (for example, a service provider should not have an artificial incentive to defer an innovation until after an access arrangement review).

1110. The access arrangement must include efficiency and innovation benchmarks[241] that will be used at the next access arrangement review to determine any above-benchmark surplus under the gain sharing mechanism. The efficiency and innovation benchmarks must:[242]

- be sufficiently detailed and complete to permit the ERA to determine the above benchmark surplus at the next access arrangement review;
- provide an objective standard for assessing Western Power's efficiency and innovation during the access arrangement period; and
- be reasonable.

1111. The Access Code specifies that an above-benchmark surplus does not exist to the extent that a service provider achieved efficiency gains or innovation in excess of the benchmarks during the previous access arrangement period by failing to meet the service standard benchmarks set out in the access arrangement.[243]

1112. Western Power has proposed to amend the gain sharing mechanism to:

---

[239] As required under section 6.20 of the Access Code.

[240] As set out in section 6.21 of the Access Code.

[241] As required under section 5.1(j) of the Access Code.

[242] As set out in section 5.26 of the Access Code.

[243] As set out in section 6.26 of the Access Code.

- apply the mechanism separately to the transmission and distribution services rather than a single mechanism as is currently the case; and
- update the network growth escalation assumptions and uncontrollable cost input values to reflect latest forecasts.

1113. The ERA has considered matters relevant to Western Power's proposed gain sharing mechanism in the following order:

- Requirements for a gain sharing mechanism;
- limitations of the current mechanism;
- Western Power's proposal to set separate benchmarks for transmission and distribution; and
- the efficiency and innovation benchmarks.

Requirements for a gain sharing mechanism

1114. As noted above, the access arrangement must include a gain sharing mechanism unless the ERA determines it is not necessary to achieve the objective in section 6.4(a)(ii) of the Access Code. As the objective of 6.4(a)(ii) is to give the service provider an opportunity to earn revenue to reward it for efficiency gains and innovation beyond those assumed in the access arrangement, the ERA considers the gain sharing mechanism is required.

1115. As set out in stakeholder submissions, the gain sharing mechanism provides benefits to consumers.

1116. Energy Networks Australia notes the benefits:

> Once the regulator has set the revenue allowances, businesses have an incentive to improve efficiency to outperform regulatory benchmarks. If a business is successful in spending less than the efficient expenditure assumed by the regulator, the businesses may keep these savings for a time. However, the short-term rewards that businesses obtain from making such savings are ultimately translated into long-term benefits to consumers. This is because the businesses reveal the true scope for efficiencies to the regulator. In subsequent periods, the regulator can use this information to set more challenging targets, thereby passing on savings permanently to customers.

1117. Synergy supports the use of a gain sharing mechanism to incentivise Western Power to pursue operating expenditure efficiencies. It notes that even though Western Power keeps the benefit of any efficiencies earned during the access arrangement period, its incentive to reduce operating expenditure decreases as it approaches the end of the access arrangement period. It considers the gain sharing mechanism has an important role in ensuring Western Power has a constant and continuous incentive to achieve efficiency gains in operating expenditure regardless of the timing of those efficiencies.

1118. Perth Energy supports the principle that gain sharing can exist, provided that the efficiencies gained by Western Power do not come at the expense of lower service to customers.

Limitations of the current mechanism

1119. Submissions from Synergy and Bluewaters raise concerns regarding the current mechanism.

1120. Synergy notes the current mechanism is not symmetrical. Although Western Power retains the benefits of savings for five years after the year they are made, if it spends more than forecast costs, it does not result in Western Power having to pay a penalty in the next access arrangement period.[244] Synergy submits this is inconsistent with the approach adopted by the Australian Energy Regulator which carries forward all efficiency gains and losses. Synergy considers this constraint should be removed to make the mechanism symmetrical.

1121. The ERA has given consideration to making the gain sharing mechanism symmetrical as proposed by Synergy. This approach has been adopted by the Australian Energy Regulator. The ERA agrees making the mechanism symmetrical would be consistent with the Access Code requirements to achieve an equitable allocation of efficiencies between users and Western Power as Western Power would be subject to symmetrical rewards and penalties. Consequently, the ERA requires section 7.4.8 of the proposed revised access arrangement to be deleted.[245]

Required Amendment 30

Section 7.4.8 of the proposed revised access arrangement must be deleted.

1122. Bluewaters and the ERA's technical consultant have raised concerns regarding the timing of savings and how long they are retained by Western Power under the current gain sharing mechanism.

1123. Bluewaters notes a feature of the current design is that network users do not receive the benefit of any savings made by Western Power until five years after the saving is made. It submits:

> … Western Power will keep 100% of its saving for five years. This may be an expensive option.
>
> For achieving the efficiency gain, Bluewaters questions if there is another way to provide the same incentive to Western Power that: (a) is less expensive; and (b) enables network users to realise the benefits quicker.
>
> A possible alternative is to design a mechanism that: (a) splits the saving on a 50/50 basis between Western Power and network users (b) pays the benefit to network users (in the form of reduced tariff) in financial year following the financial year which the saving was made.

1124. The ERA's technical consultant GHD considers Western Power has not demonstrated ongoing continuous improvement in its management of its operating expenditure during AA3 and notes the step reduction in expenditure in the final year of AA3 coinciding with a significant reduction in staff numbers. GHD considers the current gain sharing mechanism did not provide sufficient incentive for Western Power to capture these efficiencies earlier in the AA3 period and resulted in a benefit to Western Power: It considers the structure of the mechanism is much less

[244] Clause 7.4.5 of the current access arrangement.

[245] Clause 7.4.8 of the proposed revisions states: In any year where the amount of an adjustment to target revenue for the transmission system or the distribution system determined under section 7.4.7 of this access arrangement is a negative value, the amount of the adjustment to target revenue for the transmission system or the distribution system respectively in that year is zero.

generous to a service provider undertaking a continuous improvement program than one that applies a step improvement late in an access arrangement period.

1125. As outlined above, the Access Code requires the gain sharing mechanism to:

- achieve an equitable allocation of any efficiencies over time between users and the service provider;
- be objective, transparent, easy to administer and replicable from one access arrangement to the next; and
- give the service provider an incentive to reduce costs or otherwise improve productivity in a way that is neutral in its effect on the timing of such initiatives.

1126. The current gain sharing mechanism allows Western Power to retain the benefit of any savings for six years, i.e. the year the saving is made plus five years through the gain share mechanism.

1127. Reducing the period that savings are retained under the gain sharing mechanism to four years, would result in Western Power keeping the benefit for five years (i.e. the year the saving is made plus four years through the gain share mechanism). As the access arrangement period is five years, reducing the gain share carry-over period would still ensure Western Power is neutral as to the timing of savings during the access arrangement period. It would also enable users to realise the benefits sooner.

1128. The ERA considers reducing the period to four years would achieve a more equitable allocation of efficiencies between users and Western Power while still ensuring the incentives for Western Power to achieve efficiencies are equal throughout the access arrangement period.

Required Amendment 31

The formula in section 7.4.7 of the proposed revised access arrangement must be amended so that efficiency savings are retained for four years.

Interrelationship with service standards

1129. As noted in Perth Energy's submission, efficiency gains by Western Power should not come at the expense of a lower standard of service to customers. Synergy also notes the trade-off between achieving cost efficiencies and maintaining service standards needs to be considered.

1130. The Access Code specifies that an above-benchmark surplus does not exist to the extent that a service provider achieved efficiency gains or innovation in excess of the benchmarks during the previous access arrangement period by failing to meet the service standard benchmarks set out in the access arrangement.

1131. The current gain sharing mechanism specifies that Western Power must achieve all of its service standard benchmarks in a particular year to be eligible for any gain share surplus in that year.

1132. The current approach could lead to unintended consequences. In particular, as soon as Western Power becomes aware that it has, or is likely to, fail a service standard benchmark, the incentives to achieve efficiencies for that year reduce. It is possible there may even be incentives to increase expenditure in that year in order to achieve savings in future years.

1133. The ERA considers these unintended consequences could be overcome by calculating the gain share for the entire period without adjustments for service standard benchmark failures. An adjustment can then be applied to the total gain share for the access arrangement period based on the proportion of years that service standard benchmarks were not achieved.

Required Amendment 32

Section 7.4.3 of the proposed revised access arrangement must be amended to specify that an adjustment, based on the proportion of service standard benchmark failures over the access arrangement period, will be made to the total above-benchmark surplus.

Separate benchmarks for transmission and distribution

1134. The current gain sharing mechanism includes a single efficiency and innovation benchmark covering the total business. For AA4, Western Power proposes to set separate efficiency and innovation benchmarks for the transmission and distribution businesses. Western Power notes the requirement to link the gain sharing mechanism with service standard performance means Western Power foregoes the total reward for efficiency improvements if it does not meet service standard benchmarks for either service.

1135. Western Power considers separate benchmarks will ensure:[246]

- Each workforce is held accountable for its own performance
- Western Power is provided with an equal incentive to achieve efficiencies in both the distribution and transmission networks
- The incentive to achieve efficiencies in one network is not weakened by poor service performance in the other network
- The current ambiguity regarding the appropriate allocation of GSM rewards between distribution and transmission target revenue requirements is removed.

1136. Submissions from Perth Energy, Synergy and Community Electricity commented on the proposal. All raised concerns that adopting separate efficiency and innovation benchmarks could lead to unintended consequences and the potential for gaming.

1137. Synergy was not opposed to separate benchmarks in principle but considered:

> … the ERA must ensure the incentives between the two networks are consistent. Otherwise WP would have an incentive to simultaneously maximise its opex efficiency gains and minimise its losses across both businesses, to achieve the largest net benefit. In contrast, under separate schemes, the large GSM gain on its distribution business would be carried forward in full, while the GSM loss on its transmission business would be capped (since the current GSM does not allow for an absolute reduction in opex). This creates unintended incentives, particularly an incentive to

[246] Western Power, *Access arrangement information: Access arrangement revisions for the fourth access arrangement period*, 2 October 2017, p. 107.

> localise all expected efficiency losses in one business. Synergy considers this could be addressed by making the GSM symmetrical in operation between efficiency gains and losses and between the transmission and distribution business.

1138. Perth Energy acknowledged the benefits Western Power put forward for adopting separate benchmarks but had concerns similar to Synergy:

> Perth Energy is concerned that by developing GSM benefits in independently within the respective business units of Western Power, there is an incentive for one business unit to act in a manner that maximises their GSM benefits to the detriment of the interests of customers of other business units, and to the Western Power organisation.
>
> If Western Power want to calculate and report GSM benefits by business unit, Perth Energy would propose that it must pass a test that ensures the benefits achieved by the business unit also provided net incremental benefits to the entire organisation prior to it being approved by the ERA. This would stop business units gaining efficiencies at the expense of the other business and potentially at the expense of Western Power as a whole.

1139. Community Electricity considered:

> … the assessment should remain holistic so as prevent gaming through cross-subsidy.

1140. The ERA has considered Western Power's proposal to implement separate measures. Although Western Power has separate revenue targets for transmission and distribution, many costs (particularly corporate and indirect costs) are common to both services and are required to be allocated. Setting separate gain share mechanisms could lead to cost transfers between transmission and distribution to maximise rewards.

1141. The gain sharing mechanism is required to be objective, transparent and easy to administer. The ERA considers the additional controls that would be needed to ensure cost transfers did not occur would add significant complexity to the mechanism. The ERA considers the current single measure provides sufficient incentives.

1142. The ERA considers setting separate measures will add unnecessary complexity to the mechanism and create unintended consequences and would thus be inconsistent with section 6.21 of the Access Code and the Code objective.

Required Amendment 33

Western Power must delete the following tables from the proposed revised access arrangement and include a single table with efficiency and innovation benchmarks for the total business consistent with the ERA's determination of efficient operating costs:

- Table 32: Efficiency and innovation benchmarks for the transmission system
- Table 33: Efficiency and innovation benchmarks for the distribution system

Setting the efficiency and innovation benchmarks

1143. The efficiency and innovation benchmarks for the current gain sharing mechanism are based on the operating expenditure forecasts approved by the ERA in its AA3 decision. Superannuation costs for defined benefit schemes, costs of non-revenue cap services, licence fees, Energy Safety levy and the ERA fees are excluded as these costs are outside Western Power's control.

1144. The forecast operating expenditure for AA3 included forecast network growth and customer growth escalators. These are replaced with the actual growth factors when calculating the above-benchmark surplus at the end of the period. This ensures Western Power will not be rewarded or penalised for variations from forecast operating expenditure that are attributable to differences in the scale factors driving expenditure and that, conversely, customers do not pay more under the gain sharing mechanism because of slower growth.

1145. The forecast network growth escalation assumptions and uncontrollable cost input values Western Power has proposed for AA4 have been considered in the operating expenditure section.

1146. As the ERA has not approved Western Power's proposed operating costs, the Efficiency and Innovation Benchmarks included in section 7.4.11 of the proposed revisions to the access arrangement must be amended to be consistent with the ERA's determination of efficient operating costs set out in this draft decision.

Required Amendment 34

Western Power must amend the efficiency and innovation benchmarks to be consistent with the draft decision on operating expenditure.

Service standard adjustment mechanism

Access Code requirements

1147. Section 6.30 of the Access Code requires an access arrangement to include a service standard adjustment mechanism. Under section 6.32, the adjustment mechanism applies at the next access arrangement review.

1148. A service standard adjustment mechanism is defined in section 6.29 as a mechanism detailing how the service provider's performance against the service standard benchmarks during the access arrangement period is to be treated by the regulating authority at the next access arrangement review.

1149. Section 6.31 requires a service standard adjustment mechanism to be:

> (a) sufficiently detailed and complete to enable the Authority to apply the service standards adjustment mechanism at the next access arrangement review; and
>
> (b) consistent with the Code objective.

1150. The Code objective is specified in section 2.1 of the Access Code:

> The objective of this Code ("Code objective") is to promote the economically efficient:
>
> (a) investment in; and
>
> (b) operation of and use of,
>
> networks and services of networks in Western Australia in order to promote competition in markets upstream and downstream of the networks.

1151. The ERA must also have regard to the service standard adjustment mechanism before determining whether to impose a civil penalty for non-compliance with minimum service standards, under section 11.6 of the Access Code, to minimise the likelihood of Western Power being excessively penalised.

Current access arrangement

1152. In the current access arrangement, the service standard adjustment mechanism comprises an amount which is added to, or deducted from, the target revenue for each of the transmission and the distribution systems for the next access arrangement period.

1153. The service standard adjustment mechanism applies to the following performance measures specified in the access arrangement:

- Distribution network reliability measures:
  - System Average Interruption Duration Index (**SAIDI**) for all feeder categories: Central Business District (**CBD**), Urban, Rural short and Rural long;
  - System Average Interruption Frequency Index (**SAIFI**) for all feeder categories: CBD, Urban, Rural short and Rural long; and
  - call centre performance.
- Transmission network reliability measures:
  - circuit availability;
  - system minutes interrupted – radial networks;
  - loss of supply event frequency for events greater than 0.1 and less than or equal to 1.0 system minutes, and events greater than 1.0 system minutes; and
  - average outage duration.

1154. For each performance measure and each year, a reward or penalty is calculated by multiplying the applicable incentive rate by the difference between the service standard target and actual performance, where above-target performance results in a reward and below-target performance results in a penalty.

1155. If actual performance does not meet the minimum required level of performance at the service standard benchmark, the applicable penalty is capped at the difference between the service standard target and service standard benchmark, multiplied by the penalty rate.

1156. The rewards and penalties for each of the distribution and transmission systems are summed each year. The total reward or penalty for the distribution network performance measures is capped at five per cent of the distribution revenue in each year and the total reward or penalty for the transmission network performance measures are capped at one per cent of the transmission revenue in each year.

1157. Applicable service standard targets and incentive rates applied during the AA3 period for the distribution and transmission networks are shown in Table 126.

1158. During the AA3 period, service standard targets were set at the 50th percentile of the probability distribution fitted to historic performance data.

Table 126 Service standard targets, benchmarks and incentive rates (rewards and penalties) in real dollars at 30 June 2017, applied during the AA3 period

	Service Standard Benchmark	Service Standard Target	Reward rate	Penalty rate	$ unit rate
Distribution reliability performance measures					
System average interruption duration index (minutes)					
- CBD	39.9	20.3	$67,817	$67,817	per minute
- Urban	183.0	136.6	$529,816	$529,816	per minute
- Rural short	227.8	207.8	$223,472	$223,472	per minute
- Rural long	724.8	582.2	$65,219	$65,219	per minute
System average interruption frequency index (interruptions)					
- CBD	0.26	0.14	$87,081	$87,081	per 0.01 events
- Urban	2.125	1.36	$548,988	$548,988	per 0.01 events
- Rural short	2.61	2.27	$222,511	$222,511	per 0.01 events
- Rural long	4.51	4.06	$101,725	$101,725	per 0.01 events
Calls centre performance (%)	77.5	87.6	-$41,495	-$41,084	per 0.1%
Transmission reliability performance measures					
Circuit availability (%)	97.7	98.1	-$817,186	-$408,593	per 0.1%
System minutes interrupted (minutes)					
- Radial networks	5	1.9	$105,443	$172,039	per minute
Loss of supply event frequency (interruptions)					
- >0.1 and ≤1.0 system mins.	33	24	$36,319	$27,240	per event
- >1.0 system minutes	4	2	$163,437	$163,437	per event
Average outage duration (mins.)	886	698	$3,477	$2,495	per minute

1159. During the AA3 period, the following penalty and reward caps were applied:

- the penalty applied to SAIFI Rural long was capped during the 2012/13 and 2013/14 financial years when actual performance exceeded the service standard benchmark of 4.51;
- the penalty applied to average outage duration was also capped in 2015/16 when actual performance of 1,265 system minutes exceeded the service standard benchmark of 886 minutes;
- the total reward applied to the distribution network was capped in 2015/16 and 2016/17 at five per cent of distribution target revenue; and
- the total reward applied to the transmission network was capped in 2014/15, 2015/16 and 2016/17 at one per cent of transmission target revenue.

Proposed revisions

1160. Western Power has proposed the following amendments to the service standard adjustment mechanism during the AA4 period:

- not apply the service standard adjustment mechanism during the 2017/18 financial year;
- set the service standard targets using the average of the 50th percentile of the distributions of best fit selected according to nominated threshold criteria;
- adjust the SAIDI and SAIFI Rural long service standard targets to account for the improvement in service expected to result from the Kalbarri microgrid project;
- use the value of customer reliability estimates from the Australian Energy Market Operator's 2014 study, adjusted to apply to Western Australia, to set distribution reliability incentive rates; and
- use updated revenue at risk, weighted to account for the removal of system minutes interrupted performance measure and forecast revenue during the AA4 period, to set the transmission and call centre incentive rates.

1161. Revised service standard targets and incentive rates (rewards and penalties) proposed by Western Power are shown in Table 127 below. Proposed service standard targets are set at a higher performance standard for all measures except SAIDI and SAIFI rural long, and average outage duration, reflecting below-target performance during the AA3 period.

1162. Reward and penalty incentive rates are also set at a lower level for SAIDI and SAIFI distribution reliability measures, reflecting revised values of customer reliability.

Table 127 Service standard targets, benchmarks and incentive rates (rewards and penalties) in real dollars at 30 June 2017, proposed by Western Power for the period from 2018/19 to 2021/22

	Service Standard Benchmark	Service Standard Target	Reward rate	Penalty rate	$ unit rate
Distribution reliability performance measures					
System average interruption duration index (minutes)					
- CBD	37.2	17.8	$26,734	$26,734	per minute
- Urban	134.7	108.7	$366,800	$366,800	per minute
- Rural short	226.3	190.4	$114,374	$114,374	per minute
- Rural long	902.9	675.6	$41,958	$41,958	per minute
System average interruption frequency index (interruptions)					
- CBD	0.23	0.14	$30,114	$30,114	per 0.01 events
- Urban	1.33	1.12	$366,867	$366,867	per 0.01 events
- Rural short	2.38	2.01	$117,788	$117,788	per 0.01 events
- Rural long	5.90	4.67	$65,982	$65,982	per 0.01 events
Calls centre performance (%)	85.3	92.2	-$43,042	-$99,807	per 0.1%
Transmission reliability performance measures					
Circuit availability (%)	97.6	98.5	-$421,856	-$187,492	per 0.1%
Loss of supply event frequency (interruptions)					
- >0.1 and ≤1.0 system mins.	33	17	$42,186	$52,732	per event
- >1.0 system minutes	4	1	$140,619	$421,856	per event
Average outage duration (mins.)	886	871	$1,826	$2,909	per minute

Submissions

1163. Submissions referring to the service standard adjustment mechanism were received from Perth Energy, Synergy and the Western Australian Council of Social Service (**WACOSS**).

1164. Perth Energy questioned the magnitude of the increase in revenue at risk from the AA3 period, shown in Table 128 below, against the claim by Western Power that the proposed service standard targets are the same or more stringent than those applied during the AA3 period.[247]

[247] Perth Energy, Submission to the Economic Regulation Authority regarding Western Power's Proposed Revisions to the Access Arrangement for the Western Power Network (2018-2022), November 2017.

Table 128: Revenue at risk for the transmission and distribution networks during AA3 and proposed for AA4 at July 2017

Network	AA3	AA4 proposed	Change
Transmission	$3,180,400	$3,374,849	6%
Distribution	$41,381,000	$53,802,089	30%

1165. Synergy questioned the level of capital expenditure forecast by Western Power against the stated aim of maintaining service standards at existing levels, suggesting there may be cross-subsidisation between the transmission, distribution and metering businesses:

> It is unclear to Synergy (and WP has not adequately explained) why service performance capex would need to be so much higher in AA4 than in AA3 just to maintain the same level of service performance.[248]

1166. Synergy also noted the Australian Energy Regulator includes additional performance measures in the service target performance incentive schemes, including momentary interruptions on the distribution networks, and unplanned outage circuit event rate and proper operation of equipment parameters on the transmission circuits.[249]

1167. Synergy also states the service standard targets applied during the AA3 period should be maintained into the AA4 period to ensure Western Power does not overinvest in network reliability and questioned the method applied by Western Power to determine incentive rates on the transmission network.[250]

1168. WACOSS questioned whether an appropriate balance had been struck between service quality and price, suggesting incentives to meet service standards may be pushing prices too high:

> We note for example that the settings for the incentive mechanisms under AA3 to provide financial rewards where WP has exceeded its benchmarks means in practice they will be recovering half a billion dollars in profits from customers over AA4 ($270m on cap ex and $230m on op ex), which will mean in practice an additional $5 per year to the average household bill.[251]

1169. WACOSS recommends careful examination of customer willingness to pay in setting service standard benchmarks and targets.

Considerations

1170. The ERA has considered the following proposed amendments and matters raised in submissions to the access arrangement for the AA4 period:

---

[248] Synergy, *AA4 Submission No. 5: Western Power's proposed price control mechanisms*, 11 December 2017, p. 55.

[249] Synergy, *AA4 Submission No. 5: Western Power's proposed price control mechanisms*, 11 December 2017, p. 77.

[250] Synergy, *AA4 Submission No. 5: Western Power's proposed price control mechanisms*, 11 December 2017, pp. 77-8.

[251] Western Australian Council of Social Service, *Submission to the Proposed Access Arrangement for the AA4 period*, 11 December 2017.

- application of the service standard adjustment mechanism during 2017/18 financial year;
- application of the service standard adjustment mechanism for the remainder of the AA4 period;
- setting service standard targets at the average of the 50th percentile of the distributions of best fit, selected subject to nominated threshold criteria;
- adjust rural long service standard targets to account for the improvement in service expected from the Kalbarri microgrid project;
- use adjusted value of customer reliability estimates derived from the Australian Energy Market Operator's 2014 study to set distribution reliability incentive rates; and
- use updated revenue at risk, weighted to account for the removal of system minutes interrupted and forecast AA4 revenue, to set the transmission and call centre incentive rates

Application of the service standard adjustment mechanism during the 2017/18 financial year

1171. Western Power has proposed that service standard targets not be set for the 2017/18 financial year. This will mean that Western Power will not qualify for rewards or be liable for penalties under the service standard adjustment mechanism during the 2017/18 financial year.

1172. Western Power states that it will continue to operate and invest to meet the service standard benchmarks in effect for the AA3 period as an interim measure until a final decision is made on the access arrangement for the AA4 period.[252]

1173. Western Power states the operation of the service standard adjustment mechanism as an incentive regime should be derived from well-measured and reasoned analysis and should not be:

- a transitional measure based upon proposed service standard targets;
- retrospectively applied; or
- applied in a context in which it was not intended.[253]

1174. In submissions received on this proposal, Synergy invoked the Access Code objective of promoting economically efficient investment as the paramount consideration. Synergy submitted that the service standard adjustment mechanism should continue to be applied during 2017/18 at the same rate as that which applied during the AA3 period:

> Synergy considers it would not be consistent with the Code objective to have a SSAM for 2017/18 that did not have meaningful rewards/sanctions for achieving/failing to achieve SSB. Nor has WP provided sufficient justification for its proposal not to have

[252] Western Power, *Access arrangement information, Access arrangement revisions for the fourth access arrangement period*, 2 October 2017, p. 98, paragraph 356.

[253] Western Power, *Access arrangement information, Access arrangement revisions for the fourth access arrangement period*, 2 October 2017, p. 98, paragraph 357.

> any meaningful rewards/sanctions for achieving/failing to achieve its chosen SSB for 2017/18 is consistent with the Code objective.
>
> In Synergy's view, the need to comply with the Code objective in this case is paramount and overrides any argument WP may have based on ex-post scheme introduction.[254]

1175. Synergy also questioned the context in which the service standard adjustment mechanism would be applied, given the stated intention of Western Power to maintain service levels at those achieved during the AA3 period,:

> Given WP is proposing to continue to apply AA3 SSBs in 2017/18, so that customers "will not be worse-off" Synergy questions why WP considers the context is so different from AA3 the AA3 SST cannot also be applied to those AA3 SSB when they are applied in 2017/18?[255]

1176. Supporting the validity of Synergy's submission, Western Power has previously noted the lag between investment and service performance, suggesting service performance in 2017/18 would reflect several factors, including investments made during the AA3 period:

> It is important to note that there can be a lag of 12 months or more before service levels begin to reflect the benefit of these works. This is particularly true for long feeders.[256]

1177. Western Power has, however, substantially outperformed most of the service standard targets during the AA3 period, reflecting improved performance during that period. Western Power has also achieved the reward limits for the distribution and transmission networks in the final two years of the AA3 period, which would be highly unlikely as a chance occurrence in a mechanism designed to achieve a neutral outcome overall.

1178. Consequently, the ERA considers the continuation of existing rewards and penalties beyond the period in which they were intended to be applied would not be consistent with the Code objective of promoting economically efficient investment in, and operation of, networks and services of networks in Western Australia.

1179. Synergy also submits, should the ERA not require rewards or penalties under the service standard adjustment mechanism in 2017/18, the maintenance of performance reporting against service standard targets to be a necessary minimum requirement:

> If, despite Synergy's above submissions, the Authority considers WP's AA4 need not have a SSAM with any meaningful rewards/sanctions for WP achieving/failing to achieve its chosen SSB for 2017/18, Synergy submits WP should at the very least be required to formally report its service performance in 2017/18, to satisfy the Authority and the industry WP has maintained its service performance in line with existing AA3 SSB levels. Specifically, Synergy proposes WP should at the very least be required to formally report its performance in 2017/18 as against the SST developed for AA3 (even

[254] Synergy, AA4 Submission No. 5: Western Power's proposed price control mechanisms, 11 December 2017, p. 78.

[255] Synergy, AA4 Submission No. 5: Western Power's proposed price control mechanisms, 11 December 2017, p. 78.

[256] Western Power, Electricity Networks Access Code 2004 Service Standard Performance Report for the year ended 30 June 2017, September 2017, p. 4.

if there are no financial rewards or penalties applied for any under or over performance in that year).[257]

1180. Meaningful sanctions for failing to achieve minimum service standards for reference services are available at section 11.6 of the Access Code, which requires the ERA to have regard to the service standard adjustment mechanism before determining whether to impose a civil penalty for non-compliance with service standard benchmarks.

1181. To the extent that penalties or rewards will not be applied under the service standard adjustment mechanism during the 2017/18 financial year, the ERA considers the proposal to be consistent with the Access Code objective and approves this element of the proposal.

1182. Section 11.2 of the Access Code continues to require the ERA report annually on Western Power's actual service standard performance against service standard benchmarks.

1183. For the purpose of reporting service performance, the ERA considers the maintenance of service standard targets from the AA3 period to be consistent with the Access Code objective.

Required Amendment 35

Western Power must maintain service standard targets for the 2017/18 financial year at the level applied during the AA3 period.

Application of the service standard adjustment mechanism during the remainder of the AA4 period

1184. The ERA has also considered the application of the service standard adjustment mechanism for the remainder of the AA4 period.

1185. Section 6.30 of the Access Code requires that an access arrangement include a service standard adjustment mechanism.

1186. In considering the application of the service standard adjustment mechanism for the first access arrangement period, the ERA considered that the Access Code did not necessarily require an access arrangement to include financial incentives for Western Power to meet or outperform service standard benchmarks. The ERA consequently did not approve the application of financial incentives within the service standard adjustment mechanism for the first access arrangement period to avoid Western Power being exposed to undue penalties or deriving windfall gains without having engaged in activities to improve service quality.[258]

[257] Synergy, AA4 Submission No. 5: Western Power's proposed price control mechanisms, 11 December 2017, p. 79.

[258] Economic Regulation Authority, Final Decision on the Proposed Access Arrangement for the South West Interconnected Network, 2 March 2007, page 212.

1187. In the third access arrangement period, service standard benchmarks were configured as minimum performance standards to address the disproportionate penalty effect associated with the failure to achieve a single service standard benchmark in any year resulting in the loss of the entire gain sharing surplus in that year.[259]

1188. Service standard benchmarks were set at the 97.5th percentile of the distribution of best fit to each of the performance measures for the AA3 period and service standard targets were established at the 50th percentile of the probability distribution for each performance measure.

1189. Under the method of establishing service standard targets at the 50th percentile of the probability distribution of best fit, the service standard adjustment mechanism was intended to achieve a neutral outcome if performance was sustained for the AA3 period.

1190. At the end of the AA3 period, Western Power had derived cumulative rewards totalling $255 million. Western Power had also achieved the reward cap for both distribution and transmission networks in two consecutive years at the end of the AA3 period.

1191. WACOSS has noted this imbalance within their submission on the proposed access arrangement and the effect upon household energy costs:

> This raises questions about whether an appropriate balance has been struck between service quality and price. It may be that the incentives to meet service quality standards are pushing prices too high. We note for example that the settings for the incentive mechanisms under AA3 to provide financial rewards where WP has exceeded its benchmarks means in practice they will be recovering half a billion dollars in profits from customers over AA4 ($270m on cap ex and $230m on op ex), which will mean in practice an additional $5 per year to the average household bill.[260]

1192. In proposing to maintain service performance at existing levels, Western Power has cited the results of its customer engagement program throughout the access arrangement information:

> The customer engagement program provided valuable insight on a range of themes from affordability to network safety. Understandably, our research found that customers are sensitive to price increases. As a result, we have been mindful of the impact on electricity prices of all our access arrangement revisions, as well as the proposal as a whole.
>
> However, some of the more revealing insights were that customers are generally satisfied with current levels of reliability and do not necessarily want Western Power to target investment on improving overall network performance. Another valuable insight was that customers value a safe network but do not want Western Power to spend more (or less) to improve safety. They would rather Western Power targets safety expenditure in areas that carry the highest safety risk (for example high bushfire risk areas), where investment would have the greatest impact.[261]

[259] Economic Regulation Authority, Draft Decision on Proposed Revisions to the Access Arrangement for the Western Power Network, 27 March 2012, page 257.

[260] Western Australian Council of Social Service, WACOSS Submission to the Proposed Access Arrangement for the AA4 Period, 11 December 2017.

[261] Western Power, Access arrangement information, Access arrangement revisions for the fourth access arrangement period, 2 October 2017, page xxiv.

1193. In establishing service standard targets for the AA4 period, Western Power has proposed a similar approach to that applied for the AA3 period of deriving the target at the 50th percentile of probability distributions fitted to historic performance data. The result of the application of the service standard adjustment mechanism, should Western Power maintain performance in the AA4 period, would be a material bonus payment to Western Power, as noted by GHD:

> We accept that the 12-month rolling average approach adopted by Western Power generated a dataset of 60 points, which lead [sic] to more statistically significant results. However, it had the effect of removing the month-on-month "noise" inherent in the AA3 performance results, and effectively weighted historic performance against recent performance for measures where year-on-year performance results were either relatively consistent or steadily improving (as for most of the distribution SAIDI and SAIFI measures).
>
> As a result, the targets generated through the statistical analysis of the 60-point datasets generated SSTs that resulted in projected material bonus payments in AA4 should AA3 performance levels be maintained in line with the Western Power stated aim.[262]

1194. Given the stated intention of Western Power to maintain the service standards at levels attained during the AA3 period in accordance with customer expectations, the application of the service standards adjustment mechanism should, in principle, achieve a neutral net outcome.

1195. To eliminate the risk of customers being exposed to increasing costs without commensurate improvements in service performance, the ERA considers the Code objective is satisfied with the removal of penalties and rewards under the service standard adjustment mechanism for the AA4 period.

1196. The ERA considers the continued reporting of actual performance against service standard benchmarks and service standard targets, and the incentive structure implicit within the gain share mechanism to be sufficient and consistent with the Code objective of promoting efficient investment in, and use and operation of, networks and services of networks in Western Australia.

Required Amendment 36

Western Power must remove the financial penalties and rewards from the service standard adjustment mechanism.

Set the service standard target at the average of the 50th percentile of the distributions of best fit, selected subject to nominated threshold criteria

1197. Western Power has proposed to set the service standard targets at the average value of the 50th percentile of the probability distributions selected subject to nominated threshold criteria.

1198. Reflecting improvements in service performance achieved during the AA3 period, Western Power claims this method will result in service standard targets which are

262 GHD Advisory, Technical Review of Western Power Proposed AA4 Access Arrangement for 2017/18-2021/22, Draft report, March 2018, p. 245.

the same or more stringent than those which applied during the AA3 period, except for SAIDI Rural long, SAIFI Rural long and average outage duration.[263]

1199. Supporting this proposed amendment, Western Power has referred to the consistency of the method with that proposed for deriving service standard benchmarks for the AA4 period.[264]

1200. The proposed method of averaging the 50th percentile of probability distributions selected according to nominated threshold criteria contrasts with that applied for the AA3 period in which the 50th percentile of the single probability distribution of best fit was used to derive the service standard targets.

1201. The proposed method also contrasts with that applied by network service providers in the National Electricity Market in which a simple average of five years of annual performance data is used to derive target performance levels under the service target performance incentive scheme, as noted by GHD:

> For setting performance measure targets, Western Power adopted the 50th percentile average of best-fitting probability distributions, in contrast to standard practice for utilities in the NEM, where an average of 5 annual results is used to establish the target for performance measures in the AER STPIS.[265]

1202. Comparison of the benchmarks derived by each of these methods (Table 129) shows:

- service standard targets derived by averaging of the 50th percentile values of distributions selected according to Western Power's proposed threshold criteria are all within one per cent of the 50th percentile of the single distribution of best fit; and
- no difference between the service standard targets derived by the alternative methodologies in eight of the 13 proposed performance measures, noting that only one distribution is selected within the threshold criteria proposed by Western Power for call centre performance, circuit availability and loss of supply event frequency from 0.1 to less than or equal to 1.0 minutes.

1203. Within submissions received on the proposed access arrangement, Synergy and WACOSS have urged caution in the setting of service standard targets that would require investment in improved reliability that is not valued by customers, recommending consideration be given to insights gained from customer feedback.

1204. Synergy recommends the service standard targets for the AA4 period be set at a level that will maintain current performance standards.

[263] Western Power, *Access arrangement information, Access arrangement revisions for the fourth access arrangement period*, 2 October 2017, p. 98, paragraph 354.

[264] Western Power, *Access arrangement information, Access arrangement revisions for the fourth access arrangement period*, 2 October 2017, p. 98, paragraph 353.

[265] GHD Advisory, Technical Review of Western Power Proposed AA4 Access Arrangement for 2017/18-2021/22, Draft report, March 2018, p. 235.

Table 129 Comparison of service standard benchmarks proposed by Western Power for the AA4 period derived by averaging the 50th percentiles of probability distributions selected according to nominated threshold criteria with those derived at 50th percentile of the single distribution of best fit, including proportional differences

	AA3 Service Standard Target	AA3 Average annual performance	Average of 50th percentile of multiple distributions (*a*)	50th percentile of single distribution of best fit (*b*)	*Proportional difference* (*a*)/(*b*)-1
Distribution reliability performance measures					
System average interruption duration index (minutes)					
- CBD	20.3	17.7	17.8	17.9	*-0.2%*
- Urban	136.6	101.8	108.7	108.3	*0.4%*
- Rural short	207.8	175.8	190.4	191.9	*-0.8%*
- Rural long	582.2	649.1	681.3	681.6	*0.0%*
System average interruption frequency index (interruptions)					
- CBD	0.14	0.12	0.14	0.14	*0.0%*
- Urban	1.36	1.06	1.12	1.13	*-0.9%*
- Rural short	2.27	1.90	2.01	2.00	*0.5%*
- Rural long	4.06	4.45	4.73	4.73	*0.0%*
Calls centre performance (%)	87.6	92.1	92.2	92.2	*0.0%*
Transmission reliability performance measures					
Circuit availability (%)	98.1	98.5	98.5	98.5	*0.0%*
Loss of supply event frequency (interruptions)					
- >0.1 and ≤1.0 system mins.	24	16.6	17	17	*0.0%*
- >1.0 system minutes	2	1.0	1	1	*0.0%*
Average outage duration (mins.)	698	860	871	866	*0.6%*

Note: SAIDI and SAIFI Rural long not adjusted for Kalbarri

1205. WACOSS states that service standards are a critical driver of household costs:

> There is no purpose to lifting service standards to the point where significant numbers of customers disconnect due to hardship or unreasonably ration electricity use to the point where customer amenity is significantly impacted.[266]

1206. The ERA considers the proposed method of averaging the 50th percentile of probability distributions selected according to nominated threshold criteria does not satisfy the general Code objective of promoting economically efficient investment in and operation and use of networks and services of networks in Western Australia.

1207. The ERA does not approve the proposed method of setting service standard targets by averaging the 50th percentile of probability distributions selected according to nominated threshold criteria.

[266] Western Australian Council of Social Service, Submission to the Proposed Access Arrangement for the AA4 period, 11 December 2017.

1208. The ERA considers the method of deriving the service standard target at the 50th percentile of the single probability distribution of best fit to be sufficiently detailed and complete, and consistent with the Code objective.

1209. Western Power must set service standard targets at the 50th percentile of the single probability distribution of best fit.

Required Amendment 37

Western Power must set service standard targets at the 50th percentile of the single probability distribution of best fit.

Adjust rural long service standard targets to account for the improvement in service expected from the Kalbarri microgrid project

1210. Western Power proposes to invest in a battery storage and microgrid project during the AA4 period to reduce the frequency and duration of outages experienced in Kalbarri.

1211. Kalbarri has been identified as a reliability hotspot, located at the edge of the network, supplied by a 150 kilometre, 33kV radial feeder from Geraldton (GTN 603) and a significant contributor to the underperformance of the SAIDI and SAIFI Rural long performance measures during the AA3 period. Between November 2014 and November 2015, Kalbarri residents experienced 19 significant power outages lasting between 30 minutes and two days in the worst case.

1212. The Kalbarri microgrid investment is expected to reduce SAIFI on the GTN 603 Kalbarri feeder from 5.31 interruptions per customer in 2016/17 to 4.51 at the end of the AA4 period.[267]

1213. Western Power is proposing to adjust the SAIDI and SAIFI Rural long service standard targets by 5.63 system minutes and 0.06 interruptions respectively in anticipation of improved performance resulting from the investment.

1214. GHD concurs with the manual adjustment of SAIDI and SAIFI Rural long performance measures to account for the improvement in service expected to be achieved on the Kalbarri feeder:

> We have confirmed that Western Power has correctly removed outages on the GTN-KBR feeder from performance results. Given our acceptance of the proposed micro-grid at Kalbarri, we agree with the Kalbarri outages being removed from consideration in setting AA4 targets and benchmarks.[268]

1215. Although several submissions were received from residents and businesses operating in Kalbarri supporting the proposed microgrid project, the ERA did not receive any submissions on the proposal to adjust the service standard target to account for the effect of the investment on service standard performance in the AA4 period.

[267] Western Power, *Detailed Business Case for Approval, Emerging Technology – Kalbarri Microgrid*, November 2017.

[268] GHD Advisory, *Technical Review of Western Power Proposed AA4 Access Arrangement for 2017/18-2021/22, Draft report*, March 2018, page 235.

1216. While the Access Code does not provide specific guidance on the factors which must be included or excluded in setting service standard benchmarks or targets, the service target performance incentive scheme administered by the Australian Energy Regulator requires performance targets to be modified by any reliability improvements completed or planned where the planned improvements are included in the expenditure program.

1217. Considering the similarity of objectives between the Access Code and National Electricity Law of incentives for economically efficient investment, the ERA considers proposed adjustments to the SAIDI and SAIFI Rural long service standard targets to account for the expected improvement in performance from the Kalbarri microgrid project to be consistent with the Code objective of promoting economically efficient investment in networks and network services in Western Australia.

1218. The ERA approves the proposed adjustment to SAIDI and SAIFI Rural long service standard targets resulting from the proposed investment in the Kalbarri migrogrid project.

Use the value of customer reliability estimates from the Australian Energy Market Operator's 2014 study, adjusted to apply to Western Australia to set distribution reliability incentive rates

1219. Western Power has proposed to use the value of customer reliability estimates derived from a study completed by the Australian Energy Market Operator in 2014, adjusted for Western Australia, to set incentive rates for distribution reliability measures.

1220. Following the decision of the ERA to not approve the application of rewards or penalties under the service standard adjustment mechanism during the AA4 period, the ERA similarly does not approve the proposal to use the value of customer reliability estimates derived from the Australian Energy Market Operator's 2014 study.

Use updated revenue at risk, weighted to account for the removal of system minutes interrupted and forecast AA4 revenue, to set the transmission and call centre incentive rates

1221. Following the proposal to remove the system minutes interrupted service standard benchmark and targets for the AA4 period, Western Power proposes to allocate the revenue at risk on the transmission network between the remaining four transmission measures.

1222. Given the decision of the ERA to not approve the application of rewards or penalties under the service standard adjustment mechanism during the AA4 period and the required reinstatement of the system minutes interrupted service standard benchmark, the ERA similarly does not approve the proposal to reallocate revenue at risk to account for the removal of system minutes interrupted and forecast AA4 revenue.

D-factor

1223. The D-factor provides for the recovery, in the next access arrangement period, of operating expenditure incurred as a result of deferring a capital expenditure proposal or for demand-management initiatives.

1224. The Access Code does not include a mechanism for the retrospective recovery of non-capital costs, which could result in Western Power not choosing the overall least cost option. The D-factor scheme was approved to remove this apparent disincentive.

Western Power's proposal

1225. Western Power proposes adding new sections 7.6.6 to 7.6.10 to the access arrangement to enable it to lodge an application during the access arrangement period for a determination on whether expenditure satisfies the D-factor non-capital costs test:

> 7.6.6. Western Power may at any time during this access arrangement period apply to the Authority for the Authority to determine that a business case contains proposed non-capital costs that satisfy the D factor non-capital costs test.
>
> 7.6.7 If an application is made to the Authority under section 7.6.6 the Authority must make a determination within 25 Business Days.
>
> 7.6.8 If the Authority determines that proposed non-capital costs satisfy the D factor non-capital costs test ("approved business case amount") then if D factor incurred costs are not more than the approved business case amount the Authority will add the D factor incurred costs to Western Power's target revenue in the next access arrangement period. If the D factor incurred costs are more than the approved business case amount, the Authority will add the D factor incurred costs to Western Power's target revenue in the next access arrangement period and Western Power may seek the further amount to be added to target revenue for the next access arrangement period by demonstrating to the Authority's satisfaction that the further amount of non-capital costs satisfy the requirements of section 6.40 and 6.41 of the Code.
>
> 7.6.9 A determination of an approved business case amount does not oblige Western Power to proceed with the project that is the subject of the business case.
>
> 7.6.10 If the Authority determines that proposed non-capital costs do not satisfy the D factor non-capital costs test then the Authority will provide reasons for that determination to Western Power and Western Power may make an amended application under section 7.6.6.

Submissions

1226. ATCO considers continuing to provide the D-factor in the access arrangement helps to deal with future uncertainties and the possible effects of new technologies.

1227. Mr Noel Schubert's submission supports Western Power's proposed amendment to enable it to lodge an application during an access arrangement period:

> My many years of experience working in Western Power and its predecessors on alternative (non-network) solutions including demand management, to which the D-factor scheme applies, are that there has often been a 'cultural reluctance' to investigate and implement such solutions. Network solutions have generally been preferred also because of things that make non-network solutions more difficult or less attractive to justify, gain approval for, and implement even when they would be the most economically efficient solution. Having to seek retrospective approval for D-factor (noncapital) expenditure after the access arrangement period in which the expenditure would be incurred is one such 'barrier' that adds to this reluctance.
>
> In my opinion, from experience, these amendments are necessary to help ensure Western Power chooses the overall least cost option when choosing between capital and non-capital solutions.

1228. Synergy considers the proposed D-factor does not entirely address the bias towards network options over non-network options related to demand management. It considers the D-factor should be reworked to "provide stronger incentives for Western Power to pursue demand management activities, drawing in particular on the proposed DMIA and DMIS in the NEM".

1229. Synergy also considers Western Power's proposal that the ERA make a determination within 25 business days may lead to determinations that have to be hastily made without time for public consultation or gathering full information.

Considerations

1230. As set out in the section on adjustments to target revenue for D-factor expenditure during AA3, the ERA considers the D-factor has been effective in enabling Western Power to adopt non-network options without exposing customers to higher costs from inaccurate forecasts of network control service costs.

1231. The D-factor is not intended to provide incentives for Western Power to pursue demand management activities. Rather it was introduced to allow the retrospective recovery of non-capital costs during an access arrangement.

1232. The Access Code includes provisions for Western Power to submit an application for approval of non-operating costs at any time during an access arrangement.[269] The ERA considers there is no need for an additional D-factor non-capital costs test (as proposed by Western Power), and in any case, such a test is not contemplated under the Access Code.

Required Amendment 38

Western Power must delete proposed new sections 7.6.6 to 7.6.10 from the access arrangement.

Deferred revenue

1233. The current access arrangement includes provision for a deferral of revenue from the AA2 period with the deferred amount (escalated for inflation and by the rate of return) to be included in target revenue in subsequent access arrangement periods.

Western Power's proposal

1234. Western Power has updated the values in the access arrangement (sections 7.7.1 to 7.7.3) to reflect the opening balance for the fifth access arrangement period (**AA5**) at June 2017 prices and the remaining time frame for recovering the deferred revenue.

1235. Western Power has calculated the value at the beginning of AA5 as $89.0 million ($ real as at June 2017) for transmission, to be recovered over 40 years and $642.9 million ($ real as at June 2017) for distribution, to be recovered over 32 years.

[269] Sections 6.76 to 6.80 of the Access Code.

Submissions

1236. No submissions to the ERA addressed this matter.

Considerations

1237. Western Power has updated the values of deferred revenue and remaining lives consistent with the current access arrangement.

TRIGGER EVENTS

Access Code requirements

1238. Under section 5.34 of the *Electricity Networks Access Code 2004* (**Access Code**), an access arrangement may specify one or more trigger events. A trigger event is defined in the Access Code as a set of one or more circumstances specified in the access arrangement, the occurrence of which requires a service provider to submit proposed revisions to the Economic Regulation Authority (**ERA**) under section 4.37 of the Access Code.

1239. Trigger events may be either proposed by the service provider or included in an access arrangement by the ERA under section 5.35 of the Access Code.

1240. Under section 5.36 of the Access Code, before determining whether a trigger event is consistent with the Access Code objective, the ERA must consider:

- whether the advantages of including the trigger event outweigh the disadvantages of doing so, in particular the disadvantages of decreased regulatory certainty; and
- whether the trigger event should be balanced by one or more other trigger events.[270]

Current access arrangement

1241. Trigger events are set out in section 8.1.1 of the current access arrangement and are defined as:

> … any significant unforeseen development which has a materially adverse impact on the service provider and which is:
>
> (i) outside the control of Western Power; and
>
> (ii) not something that Western Power, acting in accordance with good electricity industry practice, should have been able to prevent or overcome; and
>
> (iii) so substantial that the advantages of making the variation before the end of the access arrangement period outweigh the disadvantages, having regard to the impact of the variation on regulatory certainty.

1242. Section 8.1.2 of the current access arrangement includes carbon policies, full retail contestability and the mandated roll-out of advanced interval meters as events which may give rise to a trigger event.

1243. Section 8.1.3 of the current access arrangement requires that Western Power must submit proposed revisions to the ERA within 90 business days after a trigger event has occurred.

[270] The Access Code provides the following example: "The *service provider* may wish to include a *trigger event* allowing it to reopen the *access arrangement* if actual *covered service* consumption is more than x% below forecast. However, if the *ERA* were minded to allow such a *trigger event*, it may also require the inclusion of a complementary *trigger event* requiring the *service provider* to reopen the *access arrangement* if *covered service* consumption is more than y% above forecast."

Western Power's proposal

1244. Western Power has proposed to amend section 8.1.2 of the access arrangement as follows:

> A *trigger event* may include without limitation the introduction of any scheme or mechanism with respect, directly or indirectly, to emissions of greenhouse gases and with respect to any activity including pricing, reduction, cessation, offset and sequestration, ~~(including the Carbon Pricing Mechanism announced by the Commonwealth in February 2011), full retail~~ contestability, ~~and the mandated roll-out of Advanced Interval Meters,~~and any other government energy reforms, to the extent that such costs were not included in the calculation of *target revenue* for this *access arrangement period* or otherwise addressed through the unforeseen event provisions in sections 7.1.1 to 7.1.4 of this *access arrangement*.

Submissions

1245. Emergent Energy submits that the broad definition included in section 8 of Western Power's access arrangement would not appear to require the specification of particular triggers. However, it considers it would be preferable if energy market reforms were treated as a defined trigger event, rather than being included as a force majeure event, with any costs recovered in subsequent periods:[271]

> In this way, the Authority has the ability to properly assess the impact of reforms to Western Power, and whether these impacts form part of the expected operational and market risks that are expected to be prudently managed by Western Power.

1246. Alinta Energy (**Alinta**) and ERM Power do not consider government energy reforms should be included as a trigger event.

1247. ERM Power considers government energy reforms are a risk every market participant faces in a changing regulatory environment and each market participant generally bears its own costs. It also considers:[272]

> Western Power is aware and has been aware for some time now of the Government's desire to move to a constrained network access environment. Western Power would have determined as part of its operating cost, the cost of having a regulatory team working on regulatory reforms as part of its business. Therefore, given that Western Power has a team of regulatory specialists already, it is not appropriate for "government energy reforms" to be deemed a trigger event.

1248. Alinta submits that government energy reforms are too broad and undefined to be included as a trigger event:[273]

> There could be any number of government energy reforms (i.e. a change to the metering code for example) that could in no way be defined as "so substantial that the advantages of making a variation to this access arrangement before the end of this access arrangement period outweigh the disadvantages". The proposal that any government energy reform could reopen an access arrangement for reconsideration gives rise to significant and untenable regulatory uncertainty. Alinta values certainty,

---

[271] Emergent Energy, *Western Power AA4 Discussion Paper*, 8 December 2017.

[272] ERM Power (NewGen Neerabup Partnership), *Issues Paper on Proposed Revisions to Western Power's Network Access Arrangement*, 11 December 2017, p. 3.

[273] Alinta Energy, *Alinta Energy Submission*, 11 December 2017, section 12.

> and as such, we advise caution against including such a broad and undefined trigger event.

1249. Alinta also raises concerns about Western Power's proposal to amend the "full retail contestability" trigger event to "contestability":

> Alinta agrees that a move to [full retail contestability] could have a material financial impact on Western Power, specifically in regards to the development of IT systems to facilitate [full retail contestability] (assuming that Western Power retains its role as Retail Market Operator). However, Alinta would question whether a reduction in the contestability threshold would be deemed to be a significant enough event to warrant reopening of the Access Arrangement.

Considerations of the ERA

1250. The Access Code includes a number of provisions which enable an access arrangement to be amended prior to the revision date specified in the approved access arrangement as a result of new developments:

- Section 4.37 requires the service provider to notify the ERA if the conditions of a trigger event specified in its access arrangement are satisfied and submit proposed revisions to the ERA by the designated date. The ERA must consider the proposed revisions in accordance with sections 4.46 to 4.52 and sections 4.2 to 4.36, which is the same process it must follow for a standard access arrangement review.
- Section 4.38(b)(ii) permits the ERA to vary the price control or pricing methods by issuing a notice, if it determines that significant unforeseen developments have occurred that are:
  - outside the control of the service provider;
  - not something the service provider, acting in accordance with good electricity industry practice, should have been able to prevent or overcome; and
  - the effect is so substantial that the ERA considers the advantages of making the variation before the end of the access arrangement period outweigh the disadvantages, having regard to the effect of the variation on regulatory certainty.
- Section 4.41 provides for the ERA to vary the access arrangement by issuing a notice as a consequence of any relevant amendments if there is an Access Code change.
- Sections 4.41A provides a broad remit to Western Power to propose mid-period variations and the ERA to approve them by issuing a notice. When evaluating such proposals, the ERA must determine whether the advantages of making the variation before the end of the access arrangement period outweigh the disadvantages, having regard to the effect of the variation on regulatory certainty.
- In contrast to the full access arrangement review required under a trigger event, when considering and implementing revisions under sections 4.38, 4.41 or 4.41A, the ERA is not obliged to undertake a complete review of the access arrangement. Its decision is published by a notice and it must follow the requirements of Appendix 7 of the Access Code for any public consultation.

1251. Trigger events may be either proposed by the service provider or included in an access arrangement by the ERA under section 5.35 of the Access Code.

1252. Section 8.1.1 of the current access arrangement was approved for the first access arrangement period (**AA1**). The ERA determined a service provider should be entitled to revisit an access arrangement if an event beyond its control had a material effect on its ability to provide covered services. Although Western Power also proposed including specific events that it considered would result in material cost increases,[274] the ERA did not approve them as it considered such costs could be dealt with as a cost pass through under section 4.38 of the Access Code.

1253. In its AA1 decision, the ERA also considered whether "materially adverse impact" should be replaced with "material impact" so the mechanism would apply in the same way to events that decrease Western Power's costs as to those that increase costs. However, it decided the events contemplated by this section are generally events that give rise to disruption to the operations and/or assets of the transmission and distribution networks, and that a disruption is more likely to give rise to an increase in costs than a decrease in costs. Accordingly, the ERA took the view that it was not necessary for the trigger event specified to be balanced by a trigger event for events that give rise to cost reductions to Western Power.

1254. The addition of section 8.1.2 was approved for the second access arrangement period (**AA2**). The ERA accepted the events specified in section 8.1.2 could fall within the scope of the existing 8.1.1, but noted they were simply declaratory in effect and therefore, did not constitute a material change from the AA1 access arrangement.

1255. Consistent with the view it held for AA1, the ERA considers Western Power should be entitled to revisit its complete access arrangement if an event beyond its control has a material effect on its ability to provide covered services.

1256. However, although the events listed in section 8.1.2, including the revisions proposed by Western Power, could fall within the scope of 8.1.1, it is not necessarily the case that they would have a material effect on its ability to provide covered services. In particular, as identified in stakeholder submissions, "government energy reforms" is a very broad term which could include both small and large reforms.

1257. The ERA considers the specification of the trigger event is adequately covered in section 8.1.1 of the access arrangement. Section 8.1.2 is unnecessary and creates confusion – the section should be deleted from the access arrangement.

Required Amendment 39

Section 8.1.2 of the proposed revised access arrangement must be deleted.

1258. The ERA considers the concerns raised by Emergent Energy that costs arising from any reforms need to be properly assessed, rather than being claimed as force majeure costs by Western Power at the next review, could be dealt with, if necessary,

[274] These included a decision by the State Government that imposed costs on Western Power in order to facilitate the development of market rules, or the introduction of contestability, or a government decision by that required Western Power to reorganise or restructure its operations.

by the provisions for mid-period revisions under sections 4.38, 4.41 and 4.41A of the Access Code. As noted above, these are less onerous reviews than required for a trigger event as the ERA is not obliged to undertake a complete review of the access arrangement for mid-period revisions.

SUPPLEMENTARY MATTERS

Access Code requirements

1259. Section 5.1(k) of the *Electricity Networks Access Code 2004* (**Access Code**) requires that an access arrangement include provisions dealing with supplementary matters under sections 5.27 and 5.28. These comprise:

- balancing;
- line losses;
- metering;
- ancillary services;
- stand-by;
- trading;
- settlement; and
- any other matter in respect of which arrangements must exist between a user and a service provider to enable the efficient operation of the covered network and to facilitate access to services, in accordance with the Access Code objective.

1260. Section 5.28 of the Access Code requires that the supplementary matters be dealt with in the access arrangement in accordance with other relevant regulatory requirements including written laws, the Wholesale Electricity Market (**WEM**) Rules and the Technical Rules.

Current access arrangement

1261. Supplementary matters are dealt with in sections 9.1 to 9.7 of the current access arrangement. The requirements of section 5.27 of the Access Code are met by specifying each matter will be in accordance with the WEM Rules, Electricity Industry Metering Code and/or Metering Code Model Service Level Agreement.

Western Power's proposal

1262. Western Power notes:

> … many of the supplementary matters defined in the Access Code now relate to WEM functions rather than Western Power's activities. Several of Western Power's functions such as balancing and trading have transferred to the AEMO. Western Power's functions such as balancing and trading have transferred to the AEMO. Western Power's role is now more that of a traditional network operator and meter data agent under the WEM Rules.
>
> Western Power therefore proposes revisions to the access arrangement to clarify that it:
>
> - does not have any direct requirements to perform balancing, ancillary services, stand-by, trading or settlement functions, but

- will continue to fulfil its obligations as a network operator and meter data agent under the WEM Rules and Technical Rules to support the AEMO in performing its functions, including by providing network and metering information. [275]

1263. Western Power proposes to:

- Delete the following sections from the access arrangement:
  - 9.1 Balancing
  - 9.4 Ancillary services
  - 9.5 Stand by
  - 9.6 Trading
  - 9.7 Settlement
- Insert a new general section (9.1) stating:

  9.1.1 Previous versions of the access arrangement have referred, in the Supplementary Matters chapter, to balancing requirements, ancillary service, trading and settlement requirements.

  9.1.2 Under the Wholesale Electricity Market Rules these functions are now principally undertaken by the Australian Energy Market Operator ("AEMO").

  9.1.3 However Western Power will discharge such obligations in relation to these matters as they are imposed upon Western Power by the Wholesale Electricity Market Rules from time to time and, in accordance with those rules, support AEMO in discharge of its functions including by providing information to AEMO as required by the Wholesale Electricity Market Rules. As at 2 October 2017 this access arrangement is prepared by Western Power, the principal role Western Power will have is to provide network information to AEMO to support settlements and balancing.

- Amend section 9.3.1, which deals with metering, as follows:

  9.3.1 Metering requirements under the access arrangement shall be in accordance with the Electricity Industry (Metering Code) ~~2005~~2012 and the model service level agreement most recently approved by the Authority under the Electricity Industry (Metering Code) 2012.~~Metering Code Model Service Level Agreement.~~

Submissions

1264. The Australian Energy Market Operator (**AEMO**) supports Western Power's proposed amendments to sections 9.1 to 9.7 of the access arrangement, noting that the amendments reflect the market-related functions previously undertaken by Western Power that have been transferred to AEMO, and that Western Power will continue to fulfil its obligations as a Network Operator and Metering Data Agent.[276]

1265. Mr Stephen Davidson considers section 9.4 (ancillary services), should not be removed:

> It is inappropriate to delete this clause, because Western Power should be accountable for any indirect increase of costs of electricity to transmission and distribution

[275] Western Power, *Access arrangement information: Access arrangement revisions for the fourth access arrangement period*, 2 October 2017, p. 272.

[276] AEMO submission p. 5.

consumers it causes, via increasing the aggregate cost of operation of the Wholesale Electricity Market (WEM) under the Wholesale Electricity Market Rules.

1266. Mr Davidson recommends reinstating and amending section 9.4.1 as follows:

9.4.1 Requirements for the treatment of ancillary services under the *access arrangement* shall be in accordance with the Wholesale Electricity Market Rules. Western Power should be accountable for any indirect increase of costs of electricity to transmission and distribution consumers it causes, via increasing the aggregate cost of operation of the Wholesale Electricity Market (WEM) under the Wholesale Electricity Market Rules.

Western Power's obligation includes without limitation any action, inaction or exercise of its discretion granted to Western Power under the Technical Rules the consequences of which result in an increased electricity prices to residential, small business, small commercial and other consumers of electricity that could have been avoided otherwise.

1267. Mr Davidson also recommends amendments to section 9.2.1 to clarify that the obligation is for the whole South West Interconnected Network and Western Power has an obligation to minimise line losses:

9.2.1 For parts of the transmission system covered under the Wholesale Electricity Market Rules, the requirements for the treatment of line losses under the *access arrangement* shall be in accordance with the Wholesale Electricity Market Rules.

It is the obligation of Western Power to minimise line losses on the distribution system and on parts of the transmission system covered under Chapter 5 of the Technical Rules (which is not covered by the Wholesale Electricity Market Rules), in order to minimise the cost of electricity to transmission and distribution users".

Considerations of the ERA

1268. The Economic Regulation Authority (**ERA**) considers that it is consistent with sections 5.27 and 5.28 of the Access Code to delete the sections in the access arrangement referring to the supplementary matters "balancing requirements", "ancillary services" and "trading and settlement requirements".

1269. Western Power has adequately dealt with each supplementary matter in the proposed (new) section 9.1 by describing, consistently with the WEM Rules, the extent to which the WEM Rules confer obligations on Western Power in each supplementary matter and how Western Power proposes to discharge those obligations. However, the ERA considers it would be more appropriate if some of the drafting in section 9.1 is inserted in the form of a note to the section. The ERA recommends replacing Western Power's proposed sections 9.1.1 to 9.1.3 with the following:

9.1.1 Western Power will discharge its obligations for balancing requirements, ancillary services, trading and settlement requirements in accordance with the Wholesale Electricity Market Rules and, in accordance with those rules, support AEMO in discharge of its functions including by providing information to AEMO as required by the Wholesale Electricity Market Rules.

{Note: Previous versions of the access arrangement have referred, in the Supplementary Matters chapter, to balancing requirements, ancillary service, trading and settlement requirements.

Under the Wholesale Electricity Market Rules these functions are now principally undertaken by the Australian Energy Market Operator ("AEMO").

As at 2 October 2017 this access arrangement is prepared by Western Power, the principal role Western Power will have is to provide network information to AEMO to support settlements and balancing.}

Required Amendment 40

Section 9.1 of the proposed revised access arrangement, which sets out general provisions for supplementary matters, must be amended in accordance with paragraph 1269 of this draft decision.

1270. The ERA considers Mr Davidson's submission to reinstate and amend section 9.4.1 is beyond the scope of supplementary matters. This is because Western Power's obligations are confined to those provided for under the Access Code, WEM Rules, Technical Rules and other statutory instruments. Absent any written law that requires Western Power to be accountable for indirect increases of costs of electricity caused by increasing the aggregate cost of operation of the WEM, the proposed drafting is inconsistent with section 5.28 of the Access Code and cannot be accepted.

1271. However the ERA accepts, in principle, Mr Davidson's submission that section 9.2.1 of the access arrangement should be amended to clarify that Western Power has obligations for line losses under the Technical Rules. For the reasons above, the ERA recommends confining the drafting to requiring compliance with the Technical Rules. The ERA recommends amending section 9.2.1 of the access arrangement as follows:

9.2.1 For parts of the transmission system subject to the Wholesale Electricity Market Rules, the requirements for the treatment of line losses under the access arrangement shall be in accordance with the Wholesale Electricity Market Rules.

For parts of the transmission system subject to the Technical Rules, the requirements for the treatment of line losses under the access arrangement shall be in accordance with the Technical Rules.

Required Amendment 41

Section 9.2.1 of the proposed revised access arrangement, which sets out supplementary matters for line losses, must be amended in accordance with paragraph 1271 of this draft decision.

STANDARD ACCESS CONTRACT

Access Code requirements

1272. A standard access contract sets out the terms and conditions under which a user may obtain access to a reference service at the reference tariff. Section 5.1(b) of the *Electricity Networks Access Code 2004* (**Access Code**) requires that an access arrangement include a standard access contract for each reference service.

1273. The specific requirements for a standard access contract are set out in sections 5.3 to 5.5 of the Access Code.

5.3 A standard access contract must be:

(a) reasonable; and

(b) sufficiently detailed and complete to:

(i) form the basis of a commercially workable access contract; and

(ii) enable a user or applicant to determine the value represented by the reference service at the reference tariff.

5.4 A standard access contract may:

(a) be based in whole or in part upon the model standard access contract, in which case, to the extent that it is based on the model standard access contract, any matter which in the model standard access contract is left to be completed in the access arrangement, must be completed in a manner consistent with:

(i) any instructions in relation to the matter contained in the model standard access contract; and

(ii) section 5.3;

(iii) the Code objective;

and

(b) be formulated without any reference to the model standard access contract and is not required to reproduce, in whole or in part, the model standard access contract.

5.5 The Authority:

(a) must determine that a standard access contract is consistent with section 5.3 and the Code objective to the extent that it reproduces without material omission or variation the model standard access contract; and

(b) otherwise must have regard to the model standard access contract in determining whether the standard access contract is consistent with section 5.3 and the Code objective.

Current access arrangement

1274. Appendix A of the current access arrangement includes a standard access contract, referred to by Western Power as the “Electricity Transfer Access Contract” (**ETAC**). The ETAC applies to all reference services offered under the access arrangement.

Western Power's proposal

1275. Western Power proposes to retain a single standard access contract (the ETAC), which outlines the terms and conditions for services, tariffs, invoicing and payment, a customer's provision of financial security, technical compliance and liability.

1276. Various amendments to the ETAC are proposed. Western Power submits the amendments are "to enhance the integrity and development of the network and better achieve the intent of existing provisions".[277]

1277. The proposed changes are set out in Attachment 12.1[278] to the access arrangement information and in a marked-up version of the ETAC provided with the access arrangement.

1278. Western Power advises that the main amendments aim to:[279]

- preserve network integrity by strengthening the provisions that require users to keep within their contracted capacity; and require generators (other than small customers operating small scale generators) to give advance notice to Western Power of material changes to their plant;
- assist with the implementation of new government policies and/or major network changes by allowing Western Power to nominate new services which will be applicable to small customers (for example, a meter upgrade program);
- ensure the liability provisions operate as intended and are not circumvented by large commercial users utilising the services, but electing not to be party to contractual arrangements with Western Power;
- clarify that, where a user provides Western Power with a cash deposit, any excess cash which accrues to Western Power (for example due to interest earned) will be refunded to the user on a monthly basis and within a reasonable time; and
- insert a clearer mechanism (Consumer Price Index (**CPI**) escalation) for the resetting of liability caps.

Submissions

1279. Various submissions[280] address the proposed amendments to the ETAC. The matters raised in these submissions are considered below.

Considerations of the ERA

1280. The Economic Regulation Authority (**ERA**) has considered below each of the proposed amendments to the ETAC in the order in which they appear in the contract. The ERA has also considered whether, in view of practical experience and

[277] Western Power, *Access arrangement information*, 2 October 2017, p. 260, paragraph 1097.

[278] Model ETAC for AA4.

[279] Western Power, *Access arrangement information*, 2 October 2017, p. 261, paragraph 1099.

[280] Submissions from Alinta Energy; Australian Energy Council, Community Electricity; ERM Power (NewGen Neerabup Partnership); Stephen Davidson and Synergy.

submissions, the terms and conditions of the ETAC that remain unchanged are still consistent with the requirements of the Access Code.

Standard access contract

1281. Section 5.3 of the Access Code requires a standard access contract to be reasonable and sufficiently detailed and complete to:

- form the basis of a commercially workable access contract; and
- enable a user (or applicant) to determine the value represented by the reference service at the reference tariff.

1282. The standard access contract may be based in whole or part upon the model standard access contract (refer to section 5.4(a) of the Access Code). It may also be formulated without any reference to the model standard access contract (refer to section 5.4(b) of the Access Code).

1283. Community Electricity notes the requirements of the Access Code (which are summarised above) and submits that:[281]

- It has had the direct experience of applying for a reference service to effect a minor supply. In this instance Western Power offered the full standard access contract (ETAC), which was the same contract it had signed as a retailer.
- Western Power refuses to allow any negotiation of the ETAC, even where this is unreasonable or a barrier to entry. The contractual complexity of the ETAC is a barrier to entry.
- The arrangements in the wholesale electricity market, whereby the market rules apply to any party that registers as a market participant, may assist with the issue of contractual complexity. Under such arrangements, users are contractually bound without the legal administration of a technical contract, and are aware that the terms of the contract are being applied equally to all users.
- There are different versions ("vintages") of the ETAC in use, which creates competitive advantages and impedes competition through discrimination between users.

1284. Other submissions made to the ERA raise concerns about proposed amendments that may not meet the requirements of section 5.3 of the Access Code; that is, the proposed amendments may not form the basis of a commercially workable access contract. The ERA considered the matter of a commercially workable contract as part of its last assessment for the third access arrangement period (**AA3**). The ERA's final decision stated:[282]

> … it is clear from section 5.3 of the Access Code that the [ERA] must ensure that key issues or material terms are addressed in the ETAC in order to form a commercially workable agreement.
>
> A commercially workable contract is one which is based on "business common-sense and commercial reality" and one which "avoid[s] absurdity or inconsistency" or, consequences which appear to be "capricious, unreasonable, inconvenient or unjust".

[281] Community Electricity, *Response to ERA Public Consultation*, 10 December 2017, pp. 11-12.

[282] Economic Regulation Authority, *Final Decision on Proposed Revisions to the Access Arrangement for the Western Power Network*, 5 September 2012, p. 525, paragraphs 2305-2307.

> Accordingly, the [ERA] may decide to insert, amend or delete a term in the ETAC if it considers that to do so will make the contract consistent with business common-sense and commercial reality or avoid an unreasonable or unjust outcome. In deciding whether the ETAC complies with section 5.3 and the Access Code objective, the [ERA] must also have regard to the model standard access contract pursuant to section 5.5 of the Access Code.

1285. The ERA considers there is no reason to vary its position as to what forms a commercially workable contract and the actions it may take, or matters that it regards, when assessing Western Power's proposal for the fourth access arrangement period (**AA4**).

1286. Community Electricity has cited its practical experience in dealing with Western Power. The ERA has a limited role in managing access requirements between Western Power and users. Under the Access Code the ERA, when notified of an access dispute, may settle the dispute by conciliation or refer the dispute to an arbitrator. It may also refer contractual disputes to the arbitrator. For the standard access contract, the ERA's role is to review the proposed amendments and submissions in light of the Access Code requirements and the Access Code objective. The ERA's role is to ensure the ETAC has practical effect and reflects common business practice within this legal framework. Beyond these statutory requirements, the ERA plays no role in managing commercial negotiations between the parties.

1287. Community Electricity's concern with there being different versions of the ETAC in operation, and the competitive advantages and discrimination between users that result, is considered below (at paragraph 1296).

Pre-existing contractual rights

1288. Synergy raises concerns over the primacy of pre-existing contractual rights and notes certain provisions of the Access Code which provide that an access arrangement must not override prior contractual rights. Synergy submits that "for the [ERA] to perform its obligation in accordance with the [Access] Code objective, [it] considers the [ERA] must first consider and identify any relevant pre-existing contractual rights".[283]

1289. Synergy submits that it currently has a number of contractual rights that it considers it will be prevented from exercising if certain proposed changes to the ETAC are approved by the ERA. Synergy does not provide any details of the contractual rights in question because of confidentiality provisions in place between Synergy and Western Power and Synergy's customers.[284] Synergy also submits the following:[285]

> - The [ERA] should not limit its enquiries to considering previous approved standard access contracts or reference services because there will be a number of access contracts and non-reference services that deviate from the [ERA's] approved documents and services. Further, it will be important to determine whether in the case of the:

[283] Synergy, *AA4 Submission Number 2: Western Power's proposed standard electricity transfer access contract*, 8 December 2017, p. 12, paragraphs 38-40.

[284] Synergy, *AA4 Submission Number 2: Western Power's proposed standard electricity transfer access contract*, 8 December 2017, pp. 4 and 12, paragraph 40.

[285] Synergy, *AA4 Submission Number 2: Western Power's proposed standard electricity transfer access contract*, 8 December 2017, p. 13, paragraphs 41-45.

- transfer and relocation policy parties have modified various rights and obligations under that document; and
- applications and queuing policy parties have modified various rights and obligations under that document.
- The principle of freedom to contract enshrined in section 2.4A of the Access Code provides that Western Power and a user or applicant may negotiate regarding, and may make and implement, an access contract for access to any service (including a service which differs from a reference service) on any terms (including terms which differ from a standard access contract). This provision is subject to an applications and queuing policy in an access arrangement, and any applicable technical rules.
- Section 2.6 of the Access Code provides nothing in the Access Code or an access arrangement prevails over or modifies the provisions of a contract for services, except for present purposes the applications and queuing policy and the technical rules. But importantly, this provision does not entitle the [ERA] to approve any proposed revisions that would have the effect, if approved, of depriving a person of a Pre-existing Contractual Right.
- In addition, to give effect to clause 4.34 of the Access Code, it is crucial the [ERA] ensures that all reference services approved by the [ERA] can be obtained by a user based on the pre-existing terms and conditions of access. That is, the new reference services must be compatible with Pre-existing Contractual Rights including in access contracts and retail contracts.

1290. Sections 4.34 and 4.35 of the Access Code state:

> 4.34 Subject to section 4.35, the Authority must not approve a proposed access arrangement which would, if approved, have the effect of depriving a person of a contractual right that existed prior to the earlier of the submission deadline for the proposed access arrangement and the date on which the proposed access arrangement was submitted.
>
> 4.35 Section 4.34 does not apply to protect an exclusivity right which arose on or after 30 March 1995.

1291. Given Synergy's confidentiality concerns, Synergy noted in its submission that it would be able to discuss the pre-existing contractual rights matter with the ERA on receipt of a notice issued under section 51 of *Economic Regulation Authority Act 2003*. Following receipt of Synergy's submission, the ERA wrote to Synergy on 19 December 2017 stating that the ERA generally relies on the service provider or other interested parties to provide relevant documentary evidence to support any submission made by that party to the ERA. Accordingly, the ERA requested Synergy to provide more information on the nature of the alleged relevant rights that it submitted would be deprived by the proposed access arrangement. The ERA also sought confirmation from Synergy that it had made all reasonable attempts to provide supporting evidence of the relevant rights including any written requests made to affected counterparties seeking consent to disclose the relevant contracts to the ERA.

1292. Synergy informed the ERA on 30 January 2018 that it had engaged with Western Power for the purposes of obtaining its consent to disclose the material nature of these contractual rights. The ERA has been informed by Synergy that Western Power requires details of the specific contracts and other information Synergy seeks to disclose to the ERA prior to making this information available. Synergy has indicated that it is preparing a reply to Western Power's request for more information.

1293. Synergy also explained at a general level that the proposed amendments to the following clauses of the access contract, if accepted, would prevent a party from exercising an existing contractual right :

- 3.1(c) in respect of not exceeding contracted capacity;
- 3.2(b) and 3.2(c) in relation to Western Power making unilateral changes to its services applicable to small customers under the access contract;
- 3.3(b) in relation to complying with the eligibility criteria;
- 13(c) in relation to where the user can materially modify any generating plant connected at a connection point;
- 19.11 in relation to the introduction of an obligation in respect of intermediaries; and
- schedule 5 in relation to the capitalisation of the words "claim" and "works".

1294. The ERA does not necessarily agree with Synergy's construction of section 4.34 of the Access Code which appears to extend the reach of the section to circumstances "where an existing contractual right is not extinguished or amended directly but via some indirect means whereby the right or the benefit of that right is effectively, or practically, deprived e.g. by being adversely impacted". The ERA considers that while the words "have the effect of depriving" in section 4.34 of the Access Code suggest the section is intended to operate broadly in circumstances where the deprivation may be indirect, the subject matter of the protection in section 4.34 is the divesting of the right, not any adverse impact, for example, by way of loss or diminution of economic opportunity. In this circumstance, the word "deprive" should be given its ordinary meaning, that is, to "divest, strip or dispossess".

1295. Until the ERA receives information from Synergy on the claimed pre-existing contractual rights, the ERA has no basis on which it can form a view that any proposed changes to the ETAC deprives Synergy or any other party of a pre-existing contractual right.[286]

1296. Community Electricity raises the fact that there are different versions of access contract in use, and a further version is proposed as part of AA4. Community Electricity considers this creates competitive advantages and impedes competition through discrimination between users. The Access Code process is a negotiate-arbitrate model intended to encourage parties to negotiate their own access contract directly. The process is intended to balance the principles of freedom of contract with the fair and non-discriminatory treatment of users.

1297. The evolution of versions of the ETAC is a product of the access arrangement review process under the Access Code, which involves regular review of the access arrangement and the terms of the contract. Overall, each version of the ETAC should represent a commercially workable access contract at the time that it is approved – but the specifics of each will change depending on the access arrangement proposed by Western Power, submissions received and the approval process under the Access Code, which can include consideration of current industry practice.

[286] Synergy provided further information on 26 February 2018. The ERA has reviewed this and is still of the opinion that pre-existing contractual rights have not been adversely affected.

1298. The ERA considers that it would be inconsistent with the freedom of contract principle underlying the negotiate–arbitrate model if only a single version of the ETAC was permitted. A single version would have the effect of overriding any negotiations between the parties. In addition, it would be commercially unworkable if all users' contracts were automatically amended every time a new access arrangement was created.

Operative provisions for CPI adjustment (clause 1.3)

1299. Clause 1.3 of the ETAC contains a provision for CPI adjustment. Under the contract a reference to an amount that is "CPI-adjusted" means that the amount is adjusted using the following formula:

$$N = C\,x\,(1 + \frac{CPIn - CPIc}{CPIc})$$

where:

"N" is the new amount being calculated; and

"C" is the current amount being adjusted; and

"CPI_n" is the CPI applicable at the end of the calendar quarter (quarter $_n$) most recently ended prior to the current adjustment date; and

"CPI_c" is the value of CPI applicable at the previous adjustment date.

1300. Western Power proposes to amend the meaning of CPI_c as follows:

"CPI_c" is the value of CPI applicable~~ at the previous adjustment date~~for the calendar quarter occurring 12 months before the calendar quarter referred to in the definition of CPI_n.

1301. Western Power states that the current meaning of CPI_c causes an interpretation issue in the case of the first adjustment because there is no previous adjustment. The proposed change removes any ambiguity in the meaning of the clause and does not make any substantive variation to the parties' rights under the contract.[287]

1302. No submissions made to the ERA address this proposed amendment.

1303. Western Power's proposal to amend the meaning of CPI_c does clarify how the CPI adjustment operates in practice, and in particular for the first CPI adjustment. The ERA considers the proposal is consistent with the requirements of the Access Code.

Electricity transfer provisions for services (clause 3)

1304. Clause 3 of the ETAC contains provisions for services that cover:

- the provision and use of services (including eligibility criteria) under the contract and any changes to these services;
- the circumstances where increases or decreases to contracted capacity at an existing connection point can occur;
- the circumstances where connection points can be added or deleted; and
- amendments to connection point data.

[287] Western Power, *Access arrangement information: Attachment 12.1*, 2 October 2017, p. 2.

Provision and use of services (clause 3.1)

1305. Clause 3.1(c) of the ETAC currently requires the user to endeavour, as a reasonable and prudent person, to not exceed its contracted capacity. Western Power proposes to amend this clause as follows:

> (c) For each Service at each Connection Point, the User must ~~endeavour, as a Reasonable and Prudent Person, to~~ ensure that the rate at which electricity is transferred into or out of the Network by or on behalf of the User does not exceed the Contracted Capacity for that Service.

1306. Western Power states that the proposed change is to remove the standard of "endeavour to exceed", which it believes is a low standard given the consequences of exceeding contracted capacity – exceeding contracted capacity threatens the integrity of the network.[288] Western Power also notes the following:

- The proposed change protects both Western Power and network users. A network user exceeding its contracted capacity may adversely impact other network users and require curtailments.
- Some users do not control the equipment at a connection point and only supply electricity to a person at the connection point. In this case the user should discharge its obligation through its contract with the person to require the person to keep within the contracted capacity.

1307. Alinta Energy (**Alinta**) does not agree with the proposed change to clause 3.1(c) to strengthen the provisions requiring users to keep within their contracted capacity (from a reasonable endeavour to an absolute obligation). Alinta considers the change does not meet the reasonableness test to form the basis of a commercially workable contract. Noting that the Excess Networks Usage Charges (**ENUCs**) framework provides incentives for a generation facility to keep within its contracted capacity, Alinta submits the following:[289]

> [T]here are scenarios where a user should be able to exceed their contracted capacity. For example, under system abnormal conditions System Management should be able to, and has requested in the past, a generation facility to generate higher than its contracted capacity in order to assist with maintaining power system frequency and security. Alinta notes that Western Power's current ENUCs document allows a generation facility to operate above its contracted capacity twice a year (without incurring ENUCs) for the purposes of Reserve Capacity Testing, this arrangement should continue.

1308. The Australian Energy Council (**AEC**) raises concerns over Western Power's proposal "to impose a strict obligation on retailers to ensure contracted capacity for a connection point is not exceeded". The AEC submits the proposal must be assessed to be consistent with the Access Code. It notes that the regulatory framework requires the ETAC to be reasonable, sufficiently detailed and complete to form the basis of a commercially workable contract.[290]

1309. ERM Power submits that the proposed changes to clause 3.1(c) are not workable, especially for generators. It considers the ENUCs provide sufficient incentive for

---

[288] Western Power, *Access arrangement information: Attachment 12.1*, 2 October 2017, p. 3.

[289] Alinta Energy, *Alinta Energy Submission*, 11 December 2017, section 8.1.

[290] Australian Energy Council, Submission on proposed revisions to Western Power's network access arrangement, 11 December 2017, pp. 1-2.

generators to not exceed their contracted capacity at a connection point. It provides the following information in support of its position:[291]

> Currently generators have capacity contracted at the connection point which it knows if it exceeds it has to pay excess network usage charges (ENUC) but if it has to under a dispatch instruction, it will do so as the system operator must have deemed it to be safe. Generators generally endeavour to not exceed its contracted capacity as it is subject to the penalty of paying the ENUC and will not exceed contracted capacity unless it is required to do so, and in most instances this is to provide support to the system. In these instances it is usually to return the grid to a stable, safe and secure operating state after an incident on the system. In such circumstances, the system operator may require these generators to export its maximum capacity, which depending on weather conditions may exceed its contracted capacity at the connection point. The system operator would have deemed it safe for the generator to exceed its capacity at the connection point; otherwise it would have instructed a generator to return to a level where it does not pose a risk to the system.
>
> The proposed change would disrupt this mode of operation and may limit the system operator's ability to return a stressed system to system normal condition in a timely manner. The proposed change is counterproductive as Western Power who may be the counterparty to the ETAC and which wants the grid to be maintained in a stable operating state could actually be contributing to putting the grid at risk under abnormal conditions.
>
> Further to the above, the threat of ENUC charges is sufficient incentive for generators to not exceed their contracted capacity at the connection point.
>
> Clause 3.1(c) should not be modified as it does not contribute to strengthening and ensuring the safe and reliable operation of the grid but could in fact do the opposite. The magnitude of ENUC charges is currently working to ensure generators do not exceed its contracted capacity under system normal conditions but it still allows generators to provide assistance to the grid when it has to.

1310. Synergy considers Western Power's proposed amendments to clause 3.1(c) are unreasonable for the following reasons:[292]

- The proposed amendments would require retailers to develop comprehensive technical, telemetry and internal monitoring, compliance and enforcement processes to ensure the ongoing compliance of customers. Such processes would be cost prohibitive; and for smaller users (that function as retailers) it may operate as a barrier to entry.
- The proposed amendments seek to externalise existing risk to users and applicants.
- Western Power has not demonstrated any instances during the AA3 period where there have been difficulties with users not meeting the current obligation of clause 3.1(c).

1311. Synergy considers the ERA should not approve Western Power's proposed amendments to clause 3.1(c), having regard to section 5.5(b) of the Access Code and the model standard access contract, because the proposed amendments:[293]

- depart from the standard adopted in the Access Code;

[291] ERM Power (NewGen Neerabup Partnership), *Submission: Issues Paper on Proposed Revisions to Western Power Network Access Arrangement*, 11 December 2017, p. 4.

[292] Synergy, *AA4 Submission Number 2: Western Power's proposed standard electricity transfer access contract*, 8 December 2017, p. 9, paragraphs 23-25.

[293] Synergy, *AA4 Submission Number 2: Western Power's proposed standard electricity transfer access contract*, 8 December 2017, p. 10, paragraph 26.

- externalises risk to users and users' customers that Western Power is better able to manage;
- imposes an onerous performance standard for which there is no clear technical or operational basis; and
- are likely to impact on small retailers entering the retail electricity market via the Western Power network.

1312. Synergy further considers that Western Power's proposed amendments exceed its legitimate business interests, contrary to section 26(1)(d) of the *Economic Regulation Authority Act 2003*, and would not, if approved, promote competitive and fair market conduct as contemplated by section 26(1)(e) of the Act.

1313. The ERA has considered Western Power's proposed amendment to clause 3.1(c) of the ETAC and the submissions received and is of the view the amendment is inconsistent with the requirements of the Access Code. Western Power has not demonstrated by specific examples or data how the current clause has been ineffective, leading to undesirable outcomes for customers or threatening the integrity of the network. Further, Western Power's proposed amendment could lead to unreasonable outcomes, for example, where a generator exceeds contracted capacity as a result of a dispatch instruction from System Management. The existing requirement for a user to *"endeavour, as a reasonable and prudent person"* incorporates a concept of good electricity industry practice. Together with the existing ENUCs, the incorporation of this standard appears to provide a reasonable mechanism to encourage compliance with contracted capacity limits, which appropriately balances the interests of Western Power and users.

Required Amendment 42

Clause 3.1(c) of the electricity transfer access contract must read:

"For each Service at each Connection Point, the User must endeavour, as a Reasonable and Prudent Person, to ensure that the rate at which electricity is transferred into or out of the Network by or on behalf of the User does not exceed the Contracted Capacity for that Service."

1314. Western Power also proposes to add a new clause (3.1(d)) to clarify the recipient of services as follows:

> (d) Western Power provides the Services under this Contract to the User and does not provide any such Services to the Indemnifier. Western Power's sole liability in connection with the provision of the Services (including any failure of, or defect in provision of the Services) is to the User and Western Power has no liability of any nature to the Indemnifier in connection with the provision of the Services.

1315. Western Power submits that it has two contractual counterparties under the contract – the *user* and the *indemnifier*. The indemnifier's sole contractual role is to provide credit support for the user. The proposed new clause aims to make clear that services are only provided to the user and the indemnifier has no rights to claim against Western Power – the liability relationship under the ETAC is between Western Power and the user.

1316. No submissions made to the ERA raised concerns with the proposed new clause. The ERA considers proposed new clause 3.1(d) does as Western Power intends – the clause clarifies that services under the ETAC are provided to the user and not the indemnifier – and is consistent with the requirements of the Access Code.

User may select services (clause 3.2)

1317. Clause 3.2 of the ETAC sets out provisions for the user to make changes to its services under its contract. Western Power proposes to insert two new clauses as follows:

> 3.2 User may select Services
>
> (a) The User may from time to time give notice to Western Power seeking to change the Service in respect of a Connection Point in accordance with the Applications and Queuing Policy.
>
> (b) If Western Power receives a notice from the User under clause 3.2(a), then Western Power must process that request in accordance with the Applications and Queuing Policy.
>
> (c) In respect of Services provided to Small Customers, Western Power may, by notice to the User, change the Service applicable to the Connection Point for that Small Customer where:
>
> (i) Western Power modifies or replaces the equipment at or in proximity to the Connection Point (including the Metering Equipment) and as a result of that modification or replacement Western Power considers the Service should be changed; or
>
> (ii) the change is made in connection with new policies implemented by Western Power in respect of Small Customers (for example changes to the type of Metering Equipment to be used).
>
> (d) Where Western Power changes the Service applicable to a Connection Point for a Small Customer then the User may not, unless Western Power agrees otherwise, request that the Connection Point revert to the prior Service applicable to the Small Customer at that Connection Point.

1318. To support the proposed new clauses above, the term *"small customer"* has been added to the dictionary (at schedule 1 of the ETAC) to mean:

> a customer (as defined in the *Electricity Industry Act 2004*) consuming not more than 160 MWh of electricity per annum.

1319. Western Power states:[294]

> The ETAC does not allow Western Power to initiate a change in the service a customer receives, even if conditions change. Western Power accepts that [this] is appropriate for large customers and changes with them should be negotiated. However for the volume [small] customer market it may be necessary for Western Power to initiate changes to reflect new types of equipment or changes in government policy.
>
> Without [the] ability to vary small customer services Western Power cannot vary services to adapt to the changing configuration and characteristics of the network. This right is becoming more critical in an era of rapid technological change.

1320. First, there is a formatting (numbering) error in the ETAC that is provided at appendix A to the proposed revised access arrangement. Proposed new clause 3.2(c) forms part of existing clause 3.2(b); and proposed new clause 3.2(d) shows as clause

[294] Western Power, *Access arrangement information: Attachment 12.1*, 2 October 2017, p. 4.

3.2(c). The ETAC should be amended to fix this formatting error to show new clauses 3.2(c) and 3.2(d) (as shown in paragraph 1317 above).

Required Amendment 43

The electricity transfer access contract must be amended to correct a formatting (numbering) error to show new clauses 3.2(c) and 3.2(d).

1321. Second, Alinta does not consider the proposed new clause 3.2(c), which gives Western Power a unilateral right to select the reference service (or non-reference service) for a customer, meets the reasonable test to form the basis of a commercially workable contract. Alinta considers the customer is best placed to select the retail tariff it wants, with the retailer selecting the appropriate network/transport tariff.[295]

1322. The AEC raises concerns over Western Power's proposal "to give itself the right (and not the retailer) to determine the transport service a retailer's customer must receive". The AEC submits the proposal must be assessed to be consistent with the Access Code. It notes that the regulatory framework requires the ETAC to be reasonable, sufficiently detailed and complete to form the basis of a commercially workable contract.[296]

1323. Synergy considers the proposed new clauses will:[297]

> [G]ive Western Power an extremely broad right to change the service applicable to the connection point for small customers without the agreement or consent of a user where Western Power:
>
> - modifies or replaces the equipment at or in proximity to the connection point and as a result of that modification or replacement, Western Power considers the service should be changed; or
> - the change is made in connection with new policies implemented by Western Power in respect of small customers (for example changes to the type of metering equipment to be used).

1324. The new clauses will also have the following consequences:[298]

> Western Power's right to unilaterally vary Services as drafted in clauses 3.2(b) and 3.2(c) *[sic]* means Western Power could substitute an existing Service provided to a User's Small Customer under the [ETAC] with a Reference Service or a Non-reference Service, even if that Non-reference Service is developed without the agreement, prior negotiation or engagement with either of the User or those Small Customers. This is because Service is defined with reference to Exit Service and Entry Service and each of these definitions incorporate the defined term Covered Service which can be a Reference Service or a Non- reference Service. Such a unilaterally developed Non-

[295] Alinta Energy, *Alinta Energy Submission*, 11 December 2017, section 8.2.

[296] Australian Energy Council, Submission on proposed revisions to Western Power's network access arrangement, 11 December 2017, pp. 1-2.

[297] Synergy, *AA4 Submission Number 2: Western Power's proposed standard electricity transfer access contract*, 8 December 2017, p. 10, paragraph 29.

[298] Synergy, *AA4 Submission Number 2: Western Power's proposed standard electricity transfer access contract*, 8 December 2017, pp. 10-11, paragraph 31.

> reference Service would obviously be subject to price, service standard and eligibility criteria that may not have been the subject of agreement between WP and the User.
>
> If a User attempted to revert the Small Customer to the previous Service, WP could simply rely on these clauses to again transfer the Small Customer to a different Service.

1325. Synergy submits the (above) approach is unworkable from a contract management point of view. It is also inconsistent with various provisions of the Access Code, including:[299]

- section 5.3, which requires a standard access contract to be reasonable and form the basis of a commercially workable contract;
- appendix 3, which sets out the model standard access contract; and
- section 2.7, which requires Western Power to use reasonable endeavours to accommodate an applicant's requirements to obtain covered services.

1326. Synergy also considers that Western Power's proposed new clauses, if approved, may constitute a breach of section 115 (prohibitions on hindering or preventing access) of the *Electricity Industry Act 2004*. The proposed new clauses are also inconsistent with the matters that the ERA is required to have regard to under section 26(1) of the *Economic Regulation Authority Act 2003*:[300]

> Western Power's proposed [new] clauses:
>
> - exceed Western Power's legitimate business interests and as such is inconsistent with the matter at section 26(1)(d) of the ERA Act;
> - will not promote regulatory outcomes that are in the public interest and as such is inconsistent with the matter at section 26(1)(a) of the ERA Act;
> - [are not in the long-term interests of consumers]. Network charges comprise approximately 45% of a residential customer's bill. It is not in the long-term interests of consumers to enable a monopoly service provider to unilaterally determine a customer's network Service and price without any independent oversight and as such is inconsistent with the matter at section 26(1)(b) of the ERA Act;
> - will not encourage investment in relevant markets compared to the existing regulatory model whereby Users select the Service on behalf of their customers subject to meeting the Service Eligibility Criteria determined by Western Power and as such is inconsistent with the matter at section 26(1)(c) of the ERA Act;
> - [are] counter to the legitimate business interests of Users relative to the current regulatory arrangement whereby the User selects the Reference Service based on the customer's needs. The current model permits a network user to optimise its customers' network costs; on the other hand, Western Power's proposal will optimise its transport revenue without any external review and as such is inconsistent with the matter at section 26(1)(d) of the ERA Act;
> - will substantially increase Western Power's monopoly market power and limit competitive market conduct as a result of the absence of User network Service choice and as such is inconsistent with the matter at section 26(1)(f) of the ERA Act; and

---

[299] Synergy, *AA4 Submission Number 2: Western Power's proposed standard electricity transfer access contract*, 8 December 2017, p. 11, paragraph 32.

[300] Synergy, *AA4 Submission Number 2: Western Power's proposed standard electricity transfer access contract*, 8 December 2017, pp. 11-12, paragraphs 33-37.

- will not promote transparent decision-making processes that involve public consultation as Western Power has no obligation to notify Small Customers of a change in network Service either before or after the change and as such is inconsistent with the matter at section 26(1)(g) of the ERA Act.

1327. Synergy also raises the matter of pre-existing contractual rights, which has been considered by the ERA at paragraph 1288 above.

1328. Both Alinta and Synergy consider Western Power's proposed new clauses 3.2(c) and 3.2(d) fail to meet the requirement of the Access Code to be reasonable and to form the basis of a commercially workable contract. The ERA has considered the matter of a commercially workable contract in general at paragraph 1284 above. As indicated, the ERA may decide to insert, amend or delete a term in the ETAC if it considers that to do so will make the contract consistent with business common-sense and commercial reality or avoid an unreasonable or unjust outcome.

1329. The ERA considers the proposed new clauses (3.2(c) and (d)) do not meet the reasonable test in clause 5.3(a) of the Access Code. The user/retailer should be aware, prior to entering into the standard access contract with Western Power, which services (reference and non-reference services) will be provided to its customers and under what circumstances these services can be unilaterally changed. The proposed amendments may have the effect of depriving the user/retailer, and in turn its customers, of the ability to consent to the new service which may include modified price and eligibility criteria.

1330. Concerning Synergy's other concerns, the ERA has given consideration to the matters listed in section 26(1) of the *Economic Regulation Authority Act 2003.* The ERA agrees that the proposed amendments confer on Western Power a broad power to unilaterally vary the services, which is inconsistent with the requirement to promote competitive and fair market conduct (section 26(1)(e)) and the need to promote transparent decision-making processes (section 26(1)(g)). This is because transparency and fair market conduct requires the user/retailer and in turn its customers to clearly understand the circumstances in which their services may be changed.

1331. Concerning section 26(1)(b), it is possible that a change made by Western Power to a service under the standard access contract with the user/retailer may have flow on effects to the user's customers which may be in the customer's long term best interests, as well as Western Power's legitimate business interests (section 26(1)(d)). This will be the case if in the long term the new services are more cost efficient. It is not clear how the proposed change will affect investment (section 26(1)(c)). Without knowing all of the circumstances when the service under the standard access contract will be unilaterally changed, the likelihood of these effects cannot be accurately predicted.

1332. In the circumstances, the ERA considers the proposed amendments confer on Western Power an unreasonably broad discretion to unilaterally change the services provided under the user/retailer's access contract with Western Power. For this reason, the ERA is of the view that the proposed amendments are inconsistent with the requirements of the Access Code. If Western Power has legitimate concerns which require a change to the services, it should specify in detail in what circumstances the service will be unilaterally changed.

Required Amendment 44

Proposed new clauses 3.2(c) and 3.2(d) must be deleted from the electricity transfer access contract.

Eligibility criteria (clause 3.3)

1333. Clause 3.3 of the ETAC details provisions for eligibility criteria. Western Power proposes to delete clause 3.3(b) from the contract as follows:

> 3.3 Eligibility Criteria
>
> ~~(a)~~ The User must in relation to each Reference Service Point, comply with the Eligibility Criteria applicable to the Reference Service provided, or to be provided, at the Reference Service Point.
>
> ~~(b) Where the User has sought to change the Reference Service in respect of a Connection Point under clause 3.2(a), its obligation under clause 3.3(a) in relation to that Connection Point is subject to compliance by Western Power with clause 3.2(b).~~

1334. Western Power submits that existing clause 3.3(b) means that where a user has sought to change its reference service, then its obligation to comply with the eligibility criteria is subject to Western Power complying with the applications and queuing policy. Western Power states that this is incorrect – the user must comply with the eligibility criteria at all times to preserve network integrity, even if Western Power is in breach of the applications and queuing policy.[301]

1335. Western Power considers its proposal to delete clause 3.3(b) removes a potentially adverse provision from the ETAC and does not adversely impact a user's rights against Western Power. Where Western Power fails to comply with the applications and queuing policy the user can take action against Western Power under clause 3.2(b)[302] of the ETAC for breach of contract.

1336. Synergy states that the removal of clause 3.3(b) from the ETAC will mean that a user may be in breach of its obligation to comply with relevant eligibility criteria even when the breach arises as a result of Western Power's breach of the applications and queuing policy. The removal of the clause has also not been substantiated – Western Power has not provided any commercial, policy or operational evidence why the deletion is necessary to protect its legitimate commercial interests or the safety and security of the network. It has also not demonstrated whether the existing clause has adversely affected it, users or consumers. Additionally, the removal of the clause would require a user to make a legal claim against Western Power to address the breach should Western Power take action or seek to recover under an indemnity under the ETAC – this would increase the likelihood of expensive and time consuming legal proceedings. [303]

---

[301] Western Power, *Access arrangement information: Attachment 12.1*, 2 October 2017, p. 5.

[302] Clause 3.2(b) states that: "*If Western Power receives a notice from the User under clause 3.2(a), then Western Power must process that request in accordance with the Applications and Queuing Policy.*"

[303] Synergy, *AA4 Submission Number 2: Western Power's proposed standard electricity transfer access contract*, 8 December 2017, pp. 13-14, paragraphs 48-51.

1337. The ERA has considered Synergy's concerns over the deletion of clause 3.3(b) of the ETAC and agrees clause 3.3 should be amended to ensure that a user will not be in breach of its obligation to comply with the relevant eligibility criteria in the event that the user's breach arises as a result of Western Power's breach of the applications and queuing policy. Western Power's concerns that the user must comply at all times with the eligibility criteria to preserve network integrity are noted. However, this concern can be addressed whilst still ensuring that the user is not penalised for non-compliance which is caused by Western Power's actions. The ERA recommends the following amended clause 3.3(b), which it considers to be consistent with clause 5.3(a) of the Access Code (i.e. it is reasonable):

3.3 Eligibility Criteria

(a) Subject to clause 3.3(b), the User must in relation to each Reference Service Point, comply with the Eligibility Criteria applicable to the Reference Service provided, or to be provided, at the Reference Service Point.

(b) No breach of clause 3.3(a) occurs where the User is unable to comply with its obligation under clause 3.3(a) as a result of a breach by Western Power of clause 3.2(b).

Required Amendment 45

Clause 3.3 of the electricity transfer access contract should be amended in accordance with paragraph 1337 of this draft decision to ensure that a user will not be in breach of its obligation in the event its breech arises because of Western Power.

Electricity transfer provisions for controllers (clause 6)

1338. Clause 6 of the ETAC contains provisions for controllers[304]. Clause 6.2 applies in instances where the user is not the controller. Western Power proposes several amendments to clause 6.2(b), which covers indirect damage, as follows:

6.2 Where the user is not the controller

…

(b) If the User is not the Controller of a Connection Point, and the Controller of that Connection Point has not entered into a Connection Contract with Western Power in respect of the Connection Point, then the User must ensure that it enters into a Contract with the Controller obliging the Controller to comply with the obligations set out in this Contract (to the extent set out in clause 6.2(a)) and that such ~~any c~~Contract entered into between the User and a Controller relating to Services under this Contract contains a provision:

(i) that neither the User nor Western Power is in any circumstances liable for Indirect Damage suffered by the Controller, however arising, excluding any damage caused by, consequent upon or arising out of fraud; and

(ii) under which the Controller covenants in favour of Western Power (which covenant is expressed to be enforceable by Western Power

[304] As defined in schedule 1 to the ETAC, a *controller* means *"in respect of a Connection Points, a person, including a Customer, who owns, operates, controls or otherwise is responsible for the operation of the Facilities and Equipment at the Connection Point, and includes the Controller's Workers and Visitors."*

in accordance with section 11 of the Property Law Act 1969) that it will not bring a claim against Western Power for such Indirect Damage and will not bring a claim which will result in Western Power's aggregate liability to the Controller and the User, under or in connection with this Contract or the Services provided under or in connection with this Contract, exceeding the monetary cap on Western Power's liability in clause 19.5(a).

The exclusion of Indirect Damage in clause 19.3 does not apply to a failure by the User to ensure that its Contract with the Controller contains the covenant referred to in paragraph (ii) above.

1339. Western Power submits its proposed amendments mitigate the risk for Western Power that a controller can circumvent the limits on Western Power's liability in the ETAC.[305] The proposed amendments:

- Require the user to have a contract with the controller. Western Power considers this requirement should not be an issue for the user because there should be a documented agreement (contract) if the controller has agreed to control the user's facilities.
- Will allow the controller to give a direct covenant in favour of Western Power in its contract with the user. Western Power will then, as a third party beneficiary, be able to enforce the covenant using section 11 of the *Property Law Act 1969*.

1340. No submissions raise any concerns with the proposed changes to clause 6.2 of the ETAC.

1341. The ERA considers the proposed changes are reasonable and consistent with the requirements of the Access Code, subject to a further amendment to the confidentially provisions in the contract.

1342. Western Power's proposed amendments to clause 6.2(b) introduce a requirement for the user to ensure that it enters into a contract with the controller to oblige the controller to comply with the obligations to the extent set out in clause 6.2(a). The ERA considers a user may need to disclose relevant terms of the contract to the controller, so that the controller can agree to the obligations placed upon it. The confidentiality provisions of the ETAC (at clause 33.4) should expressly permit this as follows:

33.4 Permitted disclosure

(a) An Information Recipient may disclose or allow to be disclosed …

(b) A User may disclose or allow to be disclosed a copy of this Contract to a Controller to whom the User will or has entered into a contract with as required by clause 6.

(c)~~(b)~~ Nothing in this clause 33.4 limits Western Power's obligations …

Required Amendment 46

Given the changes to clause 6.2(b) of the electricity transfer access contract, clause 33.4 of contract must be amended in accordance with paragraph 1342 of this draft decision.

[305] Western Power, *Access arrangement information: Attachment 12.1*, 2 October 2017, pp. 6-7.

Electricity transfer provisions for security for charges (clause 9)

1343. Clause 9 of the ETAC contains provisions that cover security for charges. The existing provisions of clause 9(i) provide that the interest accrued on a cash deposit is only remitted to the user when the security is returned. Western Power proposes to amend this clause to remit interest on a monthly basis, which will benefit users who provide security in the form a cash deposit.[306]

1344. The proposed amendments to clause 9(i) include:

- Amendments to the existing clause to split the clause into *three* separate clauses – clauses 9(i),(j) and (k) – and to include new drafting that requires interest earned on a cash deposit to be remitted to the user on a *monthly basis*, if Western Power holds (once interest net of fees and taxes is determined) on behalf of the user cash *in excess of the charges for two months*.
- New clause 9(j) includes updated drafting to require Western Power to return the *whole* security *held as a cash deposit* within a *reasonable time* (where required).
- New clause 9(k) includes updated drafting to make clear that there is no imposing obligation on Western Power to maximise or obtain any return on *cash deposit* amounts that are *held by Western Power as security*.

1345. The amendments are set out as follows:

9. Security for charges

…

(i) Where security is provided to Western Power in the form of a cash deposit, then Western Power shall deposit the amount in an interest bearing account maintained with a financial institution, selected consistently with Western Power's policies, or with the Western Australian Treasury Corporation or other government body. Any interest which accrues on the cash deposit shall form part of the security however where, as at the end of a month, the aggregate amount of cash deposit held by Western Power (including interest and after deducting any fees, charges and taxes associated with maintaining the interest bearing account) exceeds the Charges for two months' services Western Power will, within a reasonable time, pay the excess amount held (above the Charges for two months' Services) to the Customer's nominated bank account. ~~but~~

(j) Where Western Power is required, under this Contract, to return the whole of a security held as a cash deposit then it will, within a reasonable time, return to the User the unutilised balance of the cash deposit and interest accrued less any charges (including fees and charges associated with maintaining the interest bearing account) and ~~T~~taxes attributable to the maintenance of the interest bearing account.

(k) Nothing in this Contract is to be taken as imposing any obligation on Western Power to maximise or obtain any return on cash deposit amounts held by Western Power as security ~~deposited~~.

[306] Western Power, *Access arrangement information: Attachment 12.1*, 2 October 2017, p. 7.

1346. No submissions made to the ERA raise any concerns with the proposed changes to clause 9 of the ETAC.

1347. The ERA agrees with Western Power's submission that the proposed changes will benefit users who provide security in the form of a cash deposit, and are consistent with the requirements of the Access Code.

1348. A consequential change to clause 9(f) is required to reflect the amendments to clause 9(j) that cash deposits will be returned to the user within a reasonable time. Western Power's proposed deletion of the word "expiry" in clause 9(f), and the use of the word "taxes" instead of "Taxes" in clause 9(f) and (j), are discussed respectively at paragraphs 1419 and 1433 (below). Similarly, the reference to the word "services" in clause 9(i) should be capitalised in all instances – this is discussed further at paragraph 1434 (below).

Required Amendment 47

Clause 9(i) of the electricity transfer access contract should be amended to capitalise the term "services" as follows.

" … the aggregate amount of cash deposit held by Western Power (including interest and after deducting any fees, charges and taxes associated with maintaining the interest bearing account) exceeds the Charges for two months' ~~s~~Services Western Power will, within a reasonable time…"

Technical compliance provisions for technical characteristics of facilities and equipment (clause 13)

1349. Clause 13(c) of the ETAC sets out the circumstances where the user can materially modify any generating plant connected at a connection point. Western Power proposes to amend this clause to oblige the user to notify it of a proposed material modification and to only make the modification if it will not adversely impact the safety and security of the network. The proposed amendments are as follows:

(c) The User must not materially modify any Generating Plant connected at a Connection Point unless:

(i) where such modification requires an Application under the Applications and Queuing Policy:

(i)(A) the User makes such an Application ~~to do so under the Applications and Queuing Policy~~; and

~~(ii)~~(B) the Application is processed by Western Power under the Applications and Queuing Policy, resulting in an Access Offer for the change, which the User accepted;

(ii) where such modification does not require an Application under the Applications and Queuing Policy and relates to a Generating Plant owned by a person other than a Small Customer:

(A) the User notifies Western Power of the modifications to the Generating Plant in writing at least 60 days prior to the modifications being made; and

(B) the modified Generating Plant does not adversely impact the safety or security of the Network.

1350. Western Power submits the proposed amendments will protect the integrity of the network by ensuring changes to generating plant are only made where there are no adverse impacts on network integrity. The obligation for the user to notify Western Power of a modification to its generating plant will give Western Power the opportunity to raise any concerns it may have with the user before the modification is made.[307] Western Power also states that the proposed amendments aim to exclude generating plant owned by small customers because it is considered impracticable for a user with small customers to give notice each time a small generator is changed.

1351. Alinta questions whether the proposed changes to clause 13(c) are necessary. It considers the requirement for generators (other than small customers operating small scale generators) to give advance notice to Western Power of material changes to their plant is already adequately provided for under the technical rules and applications and queuing policy processes.[308]

1352. Synergy considers the proposed amendments are unreasonable and are therefore not consistent with section 5.3(a) of the Access Code. The proposed amendments "compound the complexity of how the applications and queuing policy applies" and therefore also fails to form the basis of a commercially workable access contract (as required by section 5.3(b) of the Access Code). Western Power's proposed amendments also do not satisfy the matters that the ERA needs to have regard to under section 26(1) of the *Economic Regulation Authority Act 2003*.[309]

1353. Synergy notes while Western Power has addressed a number of matters it has previously raised, Synergy still has the following concerns:[310]

- The proposed new clause does not specify what "materially modify" means and this compounds current uncertainty about the proper application of the AQP. Synergy suggests the access arrangement review process is an opportune time to provide clarity on this term particularly given the existing residential photovoltaic system (PVs) uptake and the future electric vehicle and battery uptake.

- Western Power has not provided a reason as to why it requires written notice at least 60 days prior to the anticipated modification. Synergy previously advised Western Power that such a notification period will impact Synergy's customers and the small-scale renewable energy industry in the SWIS. Synergy recommends the notification period is shortened.

- Further, the requirement the modified Generating Plant does not "adversely impact" the safety or security of the Network effectively imposes a continuing and strict obligation on the User, the parameters of which are not entirely clear. In particular, there is no settled legal meaning of the phrase "adversely impact" but it is clearly intended to have a broad meaning.

- Synergy's concern is the proposed addition of clause 13(c)(ii) does not restrict the continuing obligation to ensuring a Generating Plant's design or installation is undertaken consistent with Good Electricity Industry Practice; however, the proposed new clause goes to the unreasonable lengths of imposing a continuing obligation on the User to ensure the modified Generating Plant does not adversely impact the safety or security of the Network. This is not an obligation that Users

---

[307] Western Power, *Access arrangement information: Attachment 12.1*, 2 October 2017, p. 8.

[308] Alinta Energy, *Alinta Energy Submission*, 11 December 2017, section 8.4.

[309] Synergy, *AA4 Submission Number 2: Western Power's proposed standard electricity transfer access contract*, 8 December 2017, p. 15, paragraph 56 and 57.

[310] Synergy, *AA4 Submission Number 2: Western Power's proposed standard electricity transfer access contract*, 8 December 2017, pp. 14-15, paragraph 55.

presently have under existing ETACs, so the practical effect of this proposed provision will be that Western Power allocates risk it currently carries to Users with each material modification of Generating Plant, even where such modification does not require processing under the AQP. Synergy contends Western Power is best placed to manage this risk as it is Western Power and not a User who approves (or does not approve) the connection of Generation Plant to its network.

- Further, the strict and continuing obligation is substantially more onerous than the provisions regarding compliance with the Technical Rules. For example, the User is not in breach of the Technical Rules where that breach by the User is caused by another party (except if the User is negligent or has not acted as a Reasonable and Prudent Person). In Synergy's view, Western Power's proposed provision for the ETAC is unreasonable and should not be approved by the Authority.

1354. Synergy considers the matters of proposed clause 13(c) should be addressed in the Technical Rules. Synergy notes that previous amendments to the rules have made clear the requirements for modifications and the party responsible for inspecting and ensuring continued compliance.[311]

Role of Technical Rules

1355. Both Alinta and Synergy question whether the proposed changes to clause 13(c) are necessary and if the matter Western Power is trying to address can be better dealt with in the Technical Rules.

1356. The Technical Rules consist of the standards, procedures and planning criteria governing the construction and operation of an electricity network. The rules also set out performance and technical specifications for user equipment connected to the network. The ERA is required to approve the Technical Rules that apply to the Western Power network.[312] Exemptions from the rules are possible.

- Western Power may apply to the ERA for an exemption from one or more requirements of the Technical Rules for itself and all applicants, users and controller of its network.
- A user, applicant or controller may apply to Western Power for an exemption from one or more requirements of the approved Technical Rules.

1357. As to whether the requirements of clause 13(c) should be in the ETAC or the Technical Rules, provided the requirements are not inconsistent the ERA is of the view that there is no reason why the requirements cannot appear in both places.

Use of the words “materially modify” and “adversely impact”

1358. Synergy raises concerns over the use of the words “materially modify” (in clause 13(c)) and “adversely impact” (in clause 13(c)(ii)(B)).

1359. The ERA considers the words "adversely impact" do not require further clarification or explanation when used in conjunction with the phrase "the safety or security of the Network".

[311] Synergy, *AA4 Submission Number 2: Western Power’s proposed standard electricity transfer access contract*, 8 December 2017, p. 15, paragraph 58.

[312] The approved technical rules for the Western Power network are published on the ERA website at: https://www.erawa.com.au/electricity/electricity-access/western-power-network/technical-rules (accessed 8/1/2018)

1360. Further, the changes to clause 13(i) are not significantly different to the existing clause 13(c)(i), which already includes the phrase "materially modify". However, in the current form of drafting, to understand the meaning of "materially modify" in clause 13(c), the parties must refer to clauses 10.4 and 16.3 of the applications and queuing policy as they set out when an application is required; that is, whenever a modification changes "any of those characteristics of generating plant connected at a connection point required to be provided in the applicable application form".

1361. As the connection application form is not publicly available, the ERA considers that it would be clearer if the provisions in the ETAC and the applications and queuing policy are amended to expressly set out what are the characteristics of generating plant that, if changed, constitute material changes.

1362. The more significant change to clause 13 is the proposed inclusion of clause 13(c)(ii) to deal with material modification to generating plant that does *not* require an application under clause 10.4 of the applications and queuing policy. Given the unclear way in which clause 10.4 is drafted (by reference to an unidentified list of characteristics in an unpublished application form), it is not clear what sorts of modifications might be material but would not require an application. In the circumstances, the ERA requires Western Power to amend clause 13(c)(i) to expressly set out the characteristics of generating plant that, if changed, will constitute material modifications for the purpose of that clause.

1363. Further, unless and until Western Power more clearly identifies what modifications are contemplated by clause 13(c)(ii) that would not fall within clause 13(c)(i), the ERA is of the view that the proposed insertion of clause 13(c)(ii) is contrary to the requirements of the Access Code.

Required Amendment 48

Clause 13(c)(i) of the electricity transfer access contract must be amended to expressly set out the characteristics of generating plant that, if changed, will constitute material modifications for the purpose of that clause.

Proposed clause 13(c)(ii) must be deleted from the electricity transfer access contract unless the modifications that are contemplated by clause 13(c)(ii), which would not fall within clause 13(c)(i), are clearly identified.

Written notification period

1364. Western Power proposes a written notification period of 60 days under proposed clause 13(c)(ii)(A). Synergy notes that Western Power has not substantiated why it needs 60 days notice prior to the anticipated modification and submits that the notification period should be shorter.

1365. Western Power has indicated that the obligation for the user to notify Western Power of a modification of its generating plant is to give Western Power the opportunity to raise any concerns it may have with the user before the modification is made. Accordingly, the notification period must be sufficient to enable Western Power to assess the impact of the proposed modification and to liaise with the user in relation to any concerns it may have.

1366. The ERA agrees with Synergy that Western Power has not substantiated why it needs a 60 day notification period. Similarly, Synergy has not substantiated why it thinks the notification period should be shorter and has not suggested what the shorter notification period should be. Given these circumstances, and subject to clause 13(c)(ii) remaining in the ETAC (refer to paragraph 1363 above), the ERA considers a period of 30 days would be reasonable and that, if Western Power does require a longer period, it should provide more information on what work it is proposing to undertake during the period to justify the length of period.

Required Amendment 49

Subject to clause 13(c)(ii) remaining in the electricity transfer access contract, the notification period in clause 13(c)(ii) must be amended from 60 to 30 days.

Obligations go beyond good electricity industry practice

1367. Synergy is concerned that proposed clause 13(c)(ii) broadens the current obligation of ensuring that a generating plant's design or installation is consistent with good electricity industry practice to an obligation on the user to ensure the modified generating plant does not adversely impact the safety or security of the network. Synergy claims the practical effect of the change will result in Western Power allocating risk to users, which is not appropriate because Western Power is better placed to manage such risk (that is, it is Western Power that approves, or does not approve, the connection of generating plant to the network). The obligation is also substantially more onerous than the compliance provisions for the technical rules, which is unreasonable.

1368. As currently drafted, Western Power's amendments contemplate that a user will be obliged, under proposed clause 13(c)(ii), to notify Western Power of a modification to generating plant prior to the modification being made. Once notified, Western Power's submission suggests that it will then assess whether the modification to generating plant adversely affects the safety or security of the network (but this is not clear within the proposed clause). Western Power further suggests that if it forms the view that the modification will adversely impact the safety or security of the network, Western Power will raise these concerns with the user (but again this is not clear within the proposed clause).

1369. Subject to clause 13(c)(ii) remaining in the ETAC (refer to paragraph 1363 above), clause 13(c)(ii) should contain an express obligation for Western Power to notify the user within the notice period if it forms the view that the modification will have an adverse impact on safety or security, failing which the modification can proceed. Such an obligation is considered reasonable and forms the basis of a workable contract.

Required Amendment 50

Subject to clause 13(c)(ii) remaining in the electricity transfer access contract, clause 13(c)(ii) must contain an express obligation for Western Power to notify the user within the notice period if it forms the view that the modification will have an adverse impact on safety or security, failing which the modification can proceed.

Other matters raised by interested parties

1370. Western Power has not proposed any amendments to clause 13(a) of the ETAC. Mr Stephen Davidson, however, submits that this clause should be amended to include an obligation for the parties to record "all data required in the Technical Rules".[313]

1371. Clause 13(a) currently requires the parties to record:

- in Part 2 of schedule 3 (of the ETAC), any technical information that the user was required to provide to Western Power under the applications and queuing policy; and
- in Part 3 of schedule 3, any exemptions to the Technical Rules given to the user under chapter 1 of the technical rules.

1372. The ERA considers that the intention behind clause 13(a) is to record the material pieces of technical information that form the basis on which the ETAC is agreed. For this reason, the user is required to provide, for example, the type of service (reference or non-reference service), the size or make of the generator (if applicable), the connection point and the facilities and equipment.

1373. Similarly, the agreed exemptions are material to the ETAC as it will affect whether the user is in breach of the Technical Rules and consequently clause 12.1 of the contract, which requires Western Power and the user to each comply with the Technical Rules. The ERA considers that this is all that is required to ensure that the ETAC is sufficiently detailed and complete to form the basis of a commercially workable access contract as required by clause 5.3(b) of the Access Code.

1374. The ERA is of the view that it is not reasonable or necessary to require the parties to record further information beyond what is currently required in clause 13(a) of the ETAC.

Common provisions for limitation of liability and indemnity (clause 19)

1375. Clause 19 of the ETAC contains provisions covering liability and indemnity. Western Power proposes several changes to these provisions in the following areas, each of which are considered in turn below:

- Limitation of liability
- Apportionment of liability
- Intermediary indemnity

1376. Alinta states that it is broadly concerned with Western Power's changes to amend the network liability frameworks in favour of itself. Alinta is concerned that the proposed liability regime is unreasonably increasing the retailer's exposure, and as such, is not consistent with the objectives of the Access Code.[314]

1377. The AEC raises concerns over Western Power's proposal "to amend network liability and insurance requirements in favour of itself". The AEC submits the proposal must

[313] Stephen Davidson, *Submission (Comments on Issue 23 and Issue 24),* 11 December 2017, Issue 23.

[314] Alinta Energy, *Alinta Energy Submission*, 11 December 2017, section 8.3.

be assessed to be consistent with the Access Code. It notes that the regulatory framework requires the ETAC to be reasonable, sufficiently detailed and complete to form the basis of a commercially workable contract.[315]

1378. Community Electricity notes the proposed changes to the liability provisions of the ETAC.[316] Community Electricity submits that the network should be *fit-for-purpose* insured with the level of insurance properly determined. It considers Western Power should administer the insurance centrally and pass through the costs to users, and notes that Western Power largely chooses to self-insure its liabilities (which are deemed to be a much lower figure).

1379. The ERA notes the positions of stakeholders in submissions on Western Power's proposed changes to clause 19 of the ETAC. Detailed considerations of these positions are outlined below.

Limitation of liability (clause 19.5(c))

1380. Clause 19.5(c) covers provisions for the limitation of liability. The existing provisions provide for the maximum liability amounts to be renegotiated every three years from the commencement date. The renegotiation is to be conducted in good faith and have regard to any relevant changed circumstances. Where the parties cannot agree the matter is to be determined as a dispute.

1381. Western Power submits there are a number of problems with the existing provisions of clause 19.5(c):[317]

> Firstly the procedure is cumbersome and does not tend to be invoked. Secondly the provision is silent as to what caps apply pending the completion of negotiations or if the parties fail to agree. Thirdly a court is unlikely to be able to resolve such a dispute – the role of courts is to interpret agreed contracts not to resolve disputes as to failure to agree changes to contracts.

1382. Western Power proposes to change clause 19.5(c) to provide for liability caps to be escalated every three years to reflect the changes in the CPI. Western Power sees this change as "a simple unambiguous procedure for adjusting liability caps to ensure they remain appropriate given changes in the value of money".[318] The proposed change is as follows:

> (c) ~~At the end of each period of three Years from the Commencement Date, the Parties shall negotiate in good faith to re-set the maximum liability amounts applicable under clauses 19.5(a) and 19.5(b) having regard for any relevant changed circumstances in that period. If the Parties are unable to agree on re-setting of the maximum liability amounts, the matter shall be determined as a Dispute. The resolver of the Dispute is required to consider any changed circumstances during the period and adjust the maximum liability limit the subject of the Dispute to a reasonable limit, first having regard to the maintenance of the existing limit and then reducing or increasing the limit by reason of any relevant changed circumstances found to have occurred.~~The monetary caps on liability in this clause 19.5 will be CPI-

[315] Australian Energy Council, Submission on proposed revisions to Western Power's network access arrangement, 11 December 2017, pp. 1-2.

[316] Community Electricity, *Response to ERA Public Consultation*, 10 December 2017, pp. 12-13.

[317] Western Power, *Access arrangement information: Attachment 12.1*, 2 October 2017, p. 9.

[318] Western Power, *Access arrangement information: Attachment 12.1*, 2 October 2017, p. 9.

Adjusted every three years from the Commencement Date provided that for the purposes of such CPI adjustment the following formula will be used:

$$N = C\ x\ (1 + \frac{CPIn - CPIc}{CPIc})$$

where:

"N" is the new liability cap amount being calculated; and

"C" is the current liability cap amount being adjusted; and

"CPI_n" is the CPI applicable at the end of the calendar quarter ($quarter_n$) most recently ended prior to the adjustment date; and

"CPI_c" is the value of CPI applicable for the calendar quarter occurring 36 months before the calendar quarter referred to in the definition of CPI_n.

1383. The ERA considers that, consistent with Western Power's submission, the proposed changes will provide a simple unambiguous procedure for adjusting liability caps. However, the ERA considers that parties should be able to renegotiate the liability caps in the event that there is a material change to the underlying risk. The ERA requires the following amendments to clause 19.5(c) and the insertion of a new clause 19.5(d):

(c) Subject to clause 19.5(d), ~~T~~the monetary caps on liability in this clause 19.5 will be CPI-Adjusted every three years from the Commencement Date provided that for the purposes of such CPI adjustment the following formula will be used:

$$N = C\ x\ (1 + \frac{CPIn - CPIc}{CPIc})$$

where:

"N" is the new liability cap amount being calculated; and

"C" is the current liability cap amount being adjusted; and

"CPI_n" is the CPI applicable at the end of the calendar quarter ($quarter_n$) most recently ended prior to the adjustment date; and

"CPI_c" is the value of CPI applicable for the calendar quarter occurring 36 months before the calendar quarter referred to in the definition of CPI_n.

(d) At the end of each three-year period from the Commencement Date, if there has been a Material Change affecting the liability of a party under this Contract, then the parties must negotiate in good faith to reset the monetary caps on liability in this clause 19.5. If the parties are unable to agree on re-setting the monetary caps on liability, the matter shall be determined by an expert nominated by the parties or, failing agreement, nominated by the Chairperson of the Chartered Institute of Arbitrators (Western Australian Chapter) or their nominee and the determination of the expert shall be final and binding upon the parties.

1384. To support the proposed new clause 19.5(d) above, the term "material change" needs be added to the dictionary (at schedule 1 of the ETAC) to mean:

> any event, condition or change which materially alters or could reasonably be expected to materially alter the risk of a party under this Contract, the nature of any Claim that can be made under this Contract or both.

Required Amendment 51

Clause 19.5 of the electricity transfer access contract must be amended in accordance with paragraph 1383 of this draft decision to amend the drafting of clause 19.5(c) and insert a new clause 19.5(d).

To support new clause 19.5(d) the term "material change" needs to be added to schedule 1 of the electricity transfer access contract in accordance with paragraph 1384 of this draft decision.

Apportionment of liability (clause 19.8)

1385. Clause 19.8 covers provisions for the apportionment of liability. The provisions provide for the apportionment of the indemnifier's liability where loss is partly caused by Western Power.

1386. Western Power proposes to amend the clause to clarify that the provisions (of clause 19.8(a)) do not reduce the indemnifier's liability to indemnify Western Power for liabilities that the user has failed to discharge. The proposed amendments are as follows:

> 19.8 Apportionment of liability
>
> (a) ...
>
> (b) For the avoidance of doubt, where Western Power is liable to, or is to indemnify, either or both of the User or the Indemnifier under this Contract, the liability or indemnity owed by Western Power is limited to the proportion of the damage suffered by either or both of the User or the Indemnifier as a consequence of the Default, negligence or fraud of Western Power giving rise to the liability or indemnity.
>
> (c) For the purposes of the application of the indemnity given by the Indemnifier under clause 19.2(b):
>
> (i) clause 19.8(a) may apply to reduce the User's liability to Western Power and, consequently, the amount of liability for which the Indemnifier must indemnify Western Power;
>
> (ii) except as provided in clause 19.8(c)(i), clause 19.8(a) does not apply to reduce the Indemnifier's indemnification obligation under clause 19.2(b).

1387. Western Power considers the proposed amendments clarify the operation of clause 19.8 and do not disadvantage the indemnifier – the indemnifier gets the benefit of any reduction in the user's liability by virtue of clause 19.8(a).[319]

1388. The ERA considers that, consistent with Western Power's submission, the proposed amendments clarify the operation of clause 19.8 and meet the requirements of the Access Code, subject to minor drafting amendments to delete:

- the word *"the"* in clause 19.8(a), which is considered a typographical error (i.e. "…negligence or fraud of ~~the~~ either or both of the User or the Indemnifier giving rise to the liability or indemnity"); and

[319] Western Power, *Access arrangement information: Attachment 12.1*, 2 October 2017, p. 10.

- the words *"under clause 19.2(b)"* in clause 19.5(c)(ii), which are considered unnecessary.

Required Amendment 52

Clause 19.8 of the electricity transfer access contract must be amended in accordance with paragraph 1388 of this draft decision to make minor drafting amendments.

Intermediary indemnity (clause 19.11)

1389. Western Power proposes to add a new clause (19.11) to require the user, where they are an intermediary, to indemnify Western Power against any claims by the person for whom they act as intermediary. Western Power submits that the new clause "avoids the agreed liability regime in the ETAC being circumvented by negligence claims against Western Power":[320]

> 19.11 Intermediary Indemnity
>
> Where:
>
> (a) the User is the Intermediary (as defined in the Market Rules) of a person; and
>
> (b) that person is not party to this Contract,
>
> then the User must indemnify and keep indemnified Western Power against any costs, expenses, losses or damages suffered or incurred by Western Power due to Claims made by that person against Western Power:
>
> (c) which Claims are in connection with the provision of the Services (including any failure of, or defect in provision of, the Services); or
>
> (d) which Claims relate to a matter for which Western Power's liability to that person would have been limited or excluded had that person been party to this Contract (jointly with the User).

1390. Synergy notes:[321]

> Clause 2.28.16A of the Market Rules provides if a person applies for an exemption from an obligation to register under the Market Rules as a "Rule Participant" in the "Network Operator" class, "Market Generator" class, "Market Customer" class, as an "Ancillary Service Provider", under clause 2.28.16 of the Market Rules, that person may in the application nominate a person to be registered instead of the applicant. That nominee is defined as an "Intermediary".

1391. Synergy submits it has the following concerns with proposed new clause 19.11:[322]

- To be the Intermediary of a person, it is not necessary the application for exemption described above be approved, simply that a nomination be made in an application that is submitted. This means clause 19.11 would operate to capture Users that are not registered on behalf of an exempted party because an application may have been withdrawn or been rejected by the Australian Energy

[320] Western Power, *Access arrangement information: Attachment 12.1*, 2 October 2017, p. 11.

[321] Synergy, *AA4 Submission Number 2: Western Power's proposed standard electricity transfer access contract*, 8 December 2017, p. 16, paragraph 60.

[322] Synergy, *AA4 Submission Number 2: Western Power's proposed standard electricity transfer access contract*, 8 December 2017, p. 16, paragraph 61.

Market Operator. This could give rise to a situation where a User is required to provide this indemnity despite having no contractual or other relationship with that third party.

- The exclusion of Indirect Damage provided in clause 19.3(b) is unlikely to apply to the indemnity because clause 19.11 clearly indicates the subject of the indemnity is "any costs, expenses, losses or damages suffered or incurred", all of which are likely to be costs, expenses, losses or damages in the nature of Indirect Damage. If the exclusion in clause 19.3 applies, then clause 19.11 will have no work to do; it therefore seems the intention is for clause 19.11 to have a similar effect as the phrase "the exclusion of Indirect Damage in clause 19.3 does not apply".

- This means a User would be liable for this class of costs arising in respect of Claims made by the third party against Western Power which are in connection with the provision of the Services or which relate to a matter for which Western Power's liability would have been limited or excluded had that person been party to the ETAC. "Claims" is defined in the ETAC to mean "any claim, demand, action or proceeding made or instituted against a Party". Use of the ETAC defined term "Claim" makes it clear the indemnity will be activated in relation to a broad range of triggers and is intended to cover a broad range of costs, with only the liability cap of $80 million, indexed, set out in clause 19.5 to apply as a cap.

- Finally, Synergy’s position is the Controller provisions contained at clause 6 of the ETAC are not sufficiently robust to address WP's legitimate business interests in respect of third party claims. Those provisions require the User to procure a Controller releases Western Power from claims, which Western Power can then enforce under section 11 of the *Property Law Act 1969 (WA)*.

- The indemnity set out in clause 19.11 is not reasonable, and as such inconsistent with section 5.3(a) of the Access Code. It also fails to form the basis of a commercially workable access contract in breach of section 5.3(b) of the Access Code.

- The provision is also inconsistent with the Access Code objective.

1392. The ERA considers Synergy's concern that the intermediary may not be registered as a rule participant under the Market Rules can be addressed by amending clause 19.11(a) to add the words "and in so far as they are registered as a Rule Participant (as defined in the Market Rules)" after the word "person". That is:

19.11 Intermediary Indemnity

Where:

(a) the User is the Intermediary (as defined in the Market Rules) of a person and in so far as they are registered as a Rule Participant (as defined in the Market Rules); and

Required Amendment 53

Clause 19.11(a) of the electricity transfer access contract must be amended in accordance with paragraph 1392 of this draft decision.

1393. Synergy's secondary concern is that a user acting as an intermediary for a third party under clause 19.11 is liable for any indirect damage caused and that this would not be the position if that third party were a party to the contract. The ERA considers that it is reasonable and consistent with clause 5.3 of the Access Code to accept clause 19.11. This is because, in accordance with section 26(1)(d) of the *Economic Regulation Authority Act 2003*, the ERA considers it to be a legitimate business interest of Western Power to protect itself against third party claims in the instance where the third party is not a party to the contract resulting in Western Power being unable to receive the benefit of any reduced liability under that contract. Synergy's concerns can be addressed by the user requiring the third party to enter into the same exclusion of indirect damage provisions as set out in the contract as a precondition to the user agreeing to act as an intermediary under the Market Rules.

Other matters raised by interested parties

1394. Mr Davidson submits that further changes to clause 19 of the ETAC should be considered:[323]

- The liability limit of $5 million under clause 19.5(a) is too low – it should not be capped below $500 million.
- The negligence under clause 19.10 should be excluded, not included (this is, “including” to be “excluding”).

1395. The ERA considers that there is no reason to vary clause 19 of the ETAC as suggested by Mr Davidson. Without any information provided to the contrary, the current liability limit is reasonable and forms part of a commercially workable access contract in accordance with clause 5.3 of the Access Code. Similarly, the ERA considers there is no reason to change clause 19.10 as the intention of this clause is to apply to claims that include negligence in order to protect the user and the indemnifier from paying Western Power in respect of a claim to the extent Western Power has already recovered its losses under its insurance policy.

1396. Community Electricity submits that the following changes relating to clause 19(5)(b) of the ETAC should be considered:[324]

- The maximum liability limits do not reflect the nature of different users – they are not fit for purpose.
- There is a lack of availability of information as to how Western Power assesses its liability risk.

1397. The current drafting in clause 19.5(b) is consistent with clause 5.3 of the Access Code. The ERA considers that it is reasonable (and forms the basis of a commercially workable access contract) for Western Power to protect its asset profile.

1398. The ERA has also given consideration to the matter in section 26(1)(d) of the *Economic Regulation Authority Act 2003* and considers it to be a legitimate business interest of a service provider to require insurance against the risk of connection to the South West Interconnected System (**SWIS**). Western Power raised concern in the response provided to Community Electricity that "regardless of the size of the contract the risk of a connection into the SWIS remains unchanged".[325]

[323] Stephen Davidson, *Submission (Comments on Issue 23 and Issue 24),* 11 December 2017, Issue 23.

[324] Community Electricity, *Response to ERA Public Consultation*, 10 December 2017, pp. 12-13.

[325] Community Electricity, *Response to ERA Public Consultation*, 10 December 2017, p. 13.

Common provisions for notices (clause 35)

1399. Clause 35 of the ETAC contains provisions for notices. Western Power proposes to make changes to this clause to update:

- the requirements for communications; and
- when communications are deemed to be received.

Requirements for communications (clause 35.1)

1400. Existing clause 35.1 provides for communications to be delivered or sent by *ordinary letter post* and also by *facsimile transmission*. Western Power proposes to:

- update clause 35.1(b)(ii) to change the reference to ordinary letter post to *priority post*, which reflects Australia Post's revised (current) postal services; and
- delete clause 35.1(b)(iv) that currently allows for communications being given by facsimile transmission.

1401. No submissions received by the ERA address this matter. The ERA considers the proposed amendments are reasonable and reflect the changes to the postal system in Australia and the decline in the usage of facsimile transmissions.

Communications sent by fax (existing clause 35.4(c))

1402. Clause 35.4 sets out the circumstances when communications are deemed to be received under the contract. Western Power proposes to delete existing clause 35.4(c), which outlines when a communication sent by facsimile transmission is deemed to be received.

1403. Western Power's proposal to delete existing clause 35.4(c) from the ETAC is a consequential amendment to the deletion of clause 35.1(b)(iv), which is addressed above at paragraph 1400.

Other consequential changes

1404. The ERA requires the following consequential amendments that arise from the deletion of clause 35.1(b)(iv), which is addressed above (at paragraph 1400):

- Clause 1.1(d) provides that the word "copy" includes "a facsimile copy, photocopy or (subject to the Electronic Communications Protocol in Schedule 7) electronic copy". The words "facsimile copy" should be deleted.
- Clause 36 sets out the circumstances when a party may designate a change of email, postal address or facsimile number for the purposes of the notice provisions. The word "facsimile number" should be deleted.
- Schedule 6 sets out the notice details of each party. The words "facsimile number" from Part 1 and Part 2 of the table should be deleted.

Required Amendment 54

The following consequential amendments that arise from the deletion of clause 35.1(b)(iv) must be made to the electricity transfer access contract.

- The words "facsimile copy" should be deleted from clause 1.1(d).
- The word "facsimile number" should be deleted from clause 36.
- The words "facsimile number" from Part 1 and Part 2 of the table in schedule 6 should be deleted.

Miscellaneous provisions (clause 37)

1405. Clause 37 of the ETAC contains various miscellaneous provisions, including remedies. Existing clause 37.13 provides that the rights, powers and remedies under the contract are cumulative with and not exclusive of the rights, powers or remedies provided by law independently of the contract.

1406. Western Power proposes to amend clause 37.13 to clarify that common law termination rights do not apply under the ETAC. It submits that:[326]

> Common law termination rights are vague and difficult to apply. They do not necessarily allow for a cure period which would contradict the direct intent of clause 27 which is to give both parties an opportunity to cure defaults. Reinforcing that rights to terminate are to be solely determined in accordance with clause 27 is consistent with the historical understanding of how the ETACs operate.

1407. The proposed amendments are as follows:

37.13 Remedies

(a) Subject to clause 37.13(b), t~~T~~he rights, powers and remedies provided in this Contract are cumulative with and not exclusive of the rights, powers or remedies provided by L~~l~~aw independently of this Contract.

(b) A Party may only terminate this Contract in circumstances permitted by express provisions of this Contract. Any rights to terminate this Contract at common law are excluded.

1408. No submissions received by the ERA address this matter.

1409. Western Power's proposal to amend clause 37.13 is consistent with the requirements of the Access Code – the proposal is reasonable and reinforces that the right to terminate is confined to the matters listed in clause 27 of the contract (which are acceptable grounds for termination).

[326] Western Power, *Access arrangement information: Attachment 12.1*, 2 October 2017, p. 13.

Dictionary (schedule 1)

1410. Schedule 1 of the ETAC contains the dictionary of defined terms. Western Power proposes to make changes to the defined terms "insolvency event" and "wilful default".

Insolvency event

1411. Western Power submits that the existing definition of "insolvency event" is confusing. It proposes to amend the definition to clarify that a party is insolvent if they are insolvent within the meaning of section 95A of the *Corporations Act* and that the scheme referred to in paragraph (c) is a *solvent* scheme.[327] The proposed amendments are as follows:

Insolvency Event

in respect of a Party, means any one or more of:

(a) ~~any suspension or cessation to payment of all or a class of its debts by an~~ the Party is insolvent within the meaning of section 95A of the Corporations Act; or

(b) any execution or other process of any court or authority being issued against or levied upon any material part of that Party's property or assets; or

(c) a petition or application being presented (and not being withdrawn within 10 Business Days) or an order being made or a resolution being passed for the winding up or dissolution without winding up of that Party otherwise than for the purpose of reconstruction or amalgamation under a solvent scheme; or

(d) …

1412. No submissions received by the ERA address this matter.

1413. The ERA considers Western Power's proposed changes to the defined term "insolvency event" are reasonable and improve the clarity of the definition. The deletion of words in paragraph (a) replicates the language in section 95A of the *Corporations Act* and the addition of the word "solvent" in paragraph (c) clarifies that an "insolvency event" will not arise when an application is made for the purposes of a solvent scheme of arrangement. A solvent scheme of arrangement is used by insurance companies to restructure a business while the business is still solvent.

Wilful default

1414. Western Power proposes to amend the definition of "wilful default" to fix a drafting error – the words "a deliberate and purposeful act or omission carried out with" should form a lead in sentence that applies to both paragraphs (a) and (b) as follows:

Wilful Default

means a deliberate and purposeful act or omission carried out with:

(a) ~~a deliberate and purposeful act or omission carried out with~~ a calculated regard for the consequences of the act or omission; or

(b) a reckless or wilful disregard for the consequences of the act or omission,

but does not include any error of judgment, mistake, act or omission, whether negligent or not, which is made in good faith.

[327] Western Power, *Access arrangement information: Attachment 12.1*, 2 October 2017, p. 13.

1415. The proposed amendment to the definition of wilful default is administrative in nature and corrects an existing drafting error.

Other matters raised by interested parties

1416. Mr Davidson submits that the definition of "force majeure" should be amended to delete the following events or circumstances. Mr Davidson notes that the "ATO disallows speeding fines as taxable deductions to individuals [and] corporations should not be able to pass on the cost of own wrong-doing onto the consumers":[328]

- Delete inclusion "(c) any award of any court or tribunal…"
- Delete inclusion "(i) any application of any law …"

1417. The ERA considers that the current definition of "force majeure" is appropriate, conforms to common business practice and therefore forms the basis of a commercially workable access contract in accordance with clause 5.3(b) of the Access Code. Specifically, the current paragraphs (c) and (i) of the definition of force majeure are reasonable as they protect the parties in the event that performance is prevented due to circumstances beyond the parties' control. As these circumstances are many and varied it is reasonable for the definition to be broad as possible. It is appropriate that paragraph (c) relating to binding decision and paragraph (i) relating to change in law be retained. This is to both parties' benefit.

1418. Mr Davidson's particular concern relates to a party's wrongdoing. This would be a matter in the party's control and therefore would not meet the definition of "force majeure".

Other proposed changes

Deleting references to expiration (clauses 9(f) and 33.8)

1419. Western Power proposes to remove references to *expiration* in the ETAC. There are currently two clauses in the contract that contain such references:

- Clause 9(f) provides for security to be returned to the user upon the *expiry* or termination of the contract.
- Clause 33.8 provides for the return of all documents containing the other party's confidential information to be returned to the other party upon the termination or *expiration* of the contract.

1420. Western Power submits that when referring to the end of the ETAC elsewhere in the contract only the term *termination* is used (see for example clauses 19.7, 28, 33.10 and 37.12). Use of the term *expiration* may suggest the other references are only intended to capture early termination and not expiry, which is incorrect.[329]

1421. Western Power proposes to delete the reference to *expiry* in clause 9(f) and to delete the reference to *expiration* in clause in 33.8 as follows. It considers the amendments are "legal clarification" and "do not make any substantive change to the parties' rights":

[328] Stephen Davidson, *Submission (Comments on Issue 23 and Issue 24),* 11 December 2017, Issue 23.

[329] Western Power, *Access arrangement information: Attachment 12.1*, 2 October 2017, p. 12.

9. Security for Charges

…

(f) Upon the ~~expiry or~~ termination of this Contract…

33.8 Return of materials

Subject to any obligation under any Law relating to records retention and subject to prudent recording – keeping procedures (including, in contemplation of potential legal action), a Party must return all documents containing the other Party's Confidential Information, including all copies, to the other Party on termination ~~or expiration~~ of this Contract, or, upon request by the other Party, destroy all such documents.

1422. No submissions received by the ERA address this matter.

1423. The ERA considers Western Power's proposed changes to remove references to expiration in the ETAC are reasonable and do not substantially alter the parties' rights.

Minor changes

1424. Western Power submits that it has made a number of other corrections throughout the ETAC.[330] These corrections include typographical, grammatical, cross-referencing and other referencing corrections.

1425. Synergy notes that Western Power has made a number of minor amendments throughout the ETAC, including to capitalise certain words/terms. Part 1(a)(i)(A) of schedule 5 includes an amendment to capitalise of the word "claims" in relation to the insurances the user must procure under clause 21 of the ETAC as follows:

Part 1 User insurances

(a) The User must effect and maintain, commencing from the Commencement Date the following policies of insurance:

(i) public and products liability of:

(A) public liability insurance for a limit of not less than $50 million or the maximum liability of the User under clause 19.5 (whichever is greater) in the aggregate of all ~~c~~Claims made in an Insured Year; and

1426. Synergy considers that the capitalisation greatly expands the scope, and consequently the cost, of insurance cover to Western Power's benefit from a "claim" (which applies when the term is not capitalised) to "any claim, demand, action or proceeding made or instituted against a party" (which applies when the term is capitalised). Synergy submits:[331]

> Western Power provided no rationale for making [the] change. Nor is Synergy aware of any legitimate basis for why the scope of Users' insurance obligations and hence Users' liability to Western Power under the ETAC, should be so expanded.
>
> In the absence of any justifiable rationale for the amendment, Synergy considers the proposed clause is not reasonable and is therefore inconsistent with clause 5.3(a) of

[330] The individual corrections made by Western Power are shown in the marked-up copy of the ETAC provided with Western Power's proposed revised access arrangement.

[331] Synergy, *AA4 Submission Number 2: Western Power's proposed standard electricity transfer access contract*, 8 December 2017, p. 17, paragraphs 65-67.

> the Access Code. Nor is Western Power's proposed amendment, being that its basis has not been clarified, consistent with the need to promote transparent decision-making processes that involve public consultation and as such the provision is inconsistent with section 26(1)(g) of the ERA Act.
>
> Other capitalisations of terms give rise to circular definitions or awkward meanings – for example the circular definition created by using the term "Default" in the definition of Default at clause 27.1, or the capitalisation of "Contract" in clause 6.2(b), which amendment means the User and Controller must enter into the ETAC between the User and Western Power, which cannot have been Western Power's intention.

1427. The ERA considers Synergy's concerns in relation to the capitalisation of certain words/terms to be valid. Detailed considerations of each word/term, where such a change has been made, are outlined below.

"Claim"

1428. The ERA agrees with Synergy that without capitalisation the word "claim" is taken to mean a legal assertion or demand. However through capitalisation the word is significantly broadened to also include actions and proceedings. Whether such broadening is appropriate will depend on the clause in which it is used.

1429. The capitalisation of the word "claim" in proposed new clause 19.11 is appropriate. The ERA considers that, similar to clause 19.6 of the standard access contract, Western Power should be entitled to be indemnified against claims, including actions and proceedings. However, the ERA considers that the proposed capitalisation of the word "claim" in Part 1 of schedule 5 of the ETAC to be unfair. This is because Western Power is not also subject to capitalised *claims* in Part 2 of schedule 5. Therefore, the ERA considers that the proposed change is inequitable and unreasonable and does not promote a fair market.

Required Amendment 55

The term "Claims" in Part 1(a)(i)(A) of schedule 5 of the electricity transfer access contract must be amended to correct the use of the word *claims* as follows.

"public liability insurance for a limit of not less than $50 million or the maximum liability of the User under clause 19.5 (whichever is greater) in the aggregate of all ~~C~~claims made in an Insured Year; and"

Clause 6.2 – "contract"

1430. Western Power has incorrectly capitalised the word *contract* in clause 6.2(b). The intention of this clause is to require the user to enter into a contract with the controller that requires the controller to comply with the obligations set out in the ETAC. Accordingly, clause 6.2(b) is required to be amended as follows (and take into account a minor grammatical amendment to include the word *any*):

> 6.2 Where the User is not the Controller
>
> …
>
> (b) If the User is not the Controller of a Connection Point, and the Controller of that Connection Point has not entered into a Connection Contract with Western Power in respect of the Connection Point, then the User must

ensure that it enters into a ~~C~~contract with the Controller obliging the Controller to comply with the obligations set out in this Contract (to the extent set out in clause 6.2(a)) and that any such ~~C~~contract entered into between the User and a Controller relating to Services under this Contract contains a provision:

(i) that neither the User nor Western Power is …

(ii) under which the Controller covenants …

The exclusion of Indirect Damage in clause 19.3 does not apply to a failure by the User to ensure that its ~~C~~contract with the Controller contains the covenant referred to in paragraph (ii) above.

Required Amendment 56

Clause 6.2(b) of the electricity transfer access contract must be amended to correct the use of the word *contract* in accordance with paragraph 1430 of this draft decision.

Clause 7.1 – “tariff” and “consumption”

1431. The proposed changes from the word "tariff/s" to "Tariff/s" in clause 7.1 are incorrect and should not be made. "Tariff" is defined in the standard access arrangement as having the meaning in clause 7.1. For this reason it is appropriate that the word *tariff* is not capitalised in most instances in that clause so that the definition of "tariff" is not circular.

1432. The change to capitalise the word "consumption" is also incorrect and should not be made. The definition of "consumption" in the standard access contract is in relation to the "connection point" which is specific to the parties to the contract. In contrast, the reference to *consumption* in clause 7.1 relates to tariffs in the Price List which applies to the access arrangement as a whole and is not specific to the parties to the contract.

Required Amendment 57

Clause 7.1 of the electricity transfer access contract must be amended to correct the use of the words *tariff/s* and *consumption* in accordance with paragraphs 1431 and 1432 of this draft decision.

Clause 9 – “taxes”

1433. Changing the word "Taxes" to lower case “taxes” in clauses 9(f), 9(i) and 9(j) is appropriate given that *taxes* is not defined in the dictionary at Schedule 1 of the ETAC.

Clause 9 and Schedule 5 Part 1 (a)(iii) – “services”

1434. Changes made to capitalise the word "service/s" in clause 9 of the ETAC are appropriate. Clause 9 requires security equal "to the Charges for two month's services". "Charges" is defined to relate to the capitalised word "services" which includes (entry, exit and bidirectional services). As there are no other services for which a "charge" can apply to, it is appropriate for the word *services* to be capitalised.

As previously discussed (at paragraph 1348 above), there is a drafting error in the proposed amendments to clause 9(i) as the first instance of the word "service" is not capitalised.

1435. Similarly, the capitalisation of the word "services" in Part 1 of schedule 5 is appropriate. It is the intention of Part 1 that the public liability insurance covers the specific services as provided and defined under the contract.

Clause 12.2 – "user" and "party"

1436. The change made to clause 12.2 to capitalise the word "user" is incorrect and is not accepted. The capitalised term "User" refers to the specific parties to the contract. In contrast, the "user" referred to in clause 12.2(e) is to another *user* who is not a "party" to the contract. Similarly the capitalisation of the word "party" in clause 12.2(f) is also incorrect and is not be accepted. Again, the reference to "party" in this clause is to another person (or *party*) who is not subject to the contract.

Required Amendment 58

Clause 12.2 of the electricity transfer access contract must be amended to correct the use of the words *user* and *party* in accordance with paragraph 1436 of this draft decision.

Clause 18.1(a)(iv) – "related bodies corporate"

1437. The changes made to clause 18.1(a)(iv) to capitalise the term "related bodies corporate" is correct and consistent with the dictionary of defined terms at schedule 1 of the ETAC.

Clause 19 and clause 35.4(d) – "party" / "parties"

1438. The changes made to clause 19.1, clause 19.6 and clause 35.4(d) to capitalise the word "party" are incorrect and should not be made. The terms "Party" and "Parties" are defined in schedule 1 of the ETAC to mean "Western Power or the User" and "Western Power and the User" respectively. Clauses 19.1, 19.6 and 35.4(d) are intended to apply to the user, Western Power *and* the indemnifier. It is for this reason the word "party" (or "parties") should not be capitalised in these clauses.

Required Amendment 59

Clauses 19.1, 19.6 and 35.4(d) of the electricity transfer access contract must be amended to correct the use of the word *party* (or *parties*) in accordance with paragraph 1438 of this draft decision.

Clause 27.1 – "defaults"

1439. Changes made to clause 27.1 to capitalise the word "default" are incorrect and should not be made. "Default" is defined to have the meaning in clause 27.1 of the ETAC. It is for this reason that *default* should be left uncapitalised so that the definition is not circular.

Required Amendment 60

Clause 27.1 of the electricity transfer access contract must be amended to correct the use of the word *default* in accordance with paragraph 1439 of this draft decision.

Schedule 5 Part 1 (a)(iii) – "works"

1440. The change made to Part 1(a)(iii) of schedule 5 of the ETAC to capitalise the word "works" is appropriate. It is the intention of Part 1 is that the public liability insurance covers the specific works as provided and defined under the contract.

Other existing clauses

1441. Some submissions made by interested parties comment on other existing clauses of the ETAC, for which no amendments are proposed. The ERA's considerations for these clause are outlined below.

Clause 12.1 – Western Power and the user must comply

1442. Clause 12.1 of the ETAC requires Western Power and the user to each comply with the Technical Rules. Mr Davidson objects that there is no financial penalty provisions in the ETAC for non-compliance with this clause.[332]

1443. The ERA considers that it would be somewhat onerous to attempt to impose a specific financial penalty for a breach of the Technical Rules because there may be more than one user responsible for the breach. The process to ascertain the extent to which any users' breech caused or contributed to a loss and consequently how the penalty should be apportioned would be complex. Furthermore, a breach of the Technical Rules may ultimately cause no *actual* loss to Western Power so a financial penalty may be inappropriate. In these circumstances the usual remedies for breach of contract (including termination or damages) are considered appropriate and reasonable and form the basis of a commercially workable contract.

Clause 18.2 – Western Power's representations and warranties

1444. Mr Davidson submits that clause 18.2(a)(ii) should be amended to include an obligation whereby "Western Power warrants that it has complied with the Technical Rules in respect of the Application" (or to that effect).[333]

1445. Without further explanatory information from Mr Davidson on this point, the ERA has no basis for considering this change or why it is required.

Clause 22 – Force majeure

1446. Synergy submits that clause 22 of the ETAC should be amended as follows:[334]

---

[332] Stephen Davidson, *Submission (Comments on Issue 23 and Issue 24),* 11 December 2017, Issue 23.

[333] Stephen Davidson, *Submission (Comments on Issue 23 and Issue 24),* 11 December 2017, Issue 23.

[334] Synergy, *AA4 Submission Number 2: Western Power's proposed standard electricity transfer access contract*, 8 December 2017, p. 17, paragraph 69.

The reporting standard on the Affected Person in clause 22.3(a) should be amended to read "promptly notify the other Party of the occurrence of the Force Majeure Event and in any event within two days of the occurrence of the Force Majeure Event";

In relation to clause 22.4 of the ETAC, an Affected Person should not be obliged to incur any expenditure in complying with clause 22.3(b) if the Force Majeure Event is constituted by a breach of, or a failure to comply with, either of the ETAC or the Metering Code. Synergy considers that reference to the Metering Code ought to be incorporated into clause 22.4 of the ETAC.

1447. Clause 22 of the ETAC contains various force majeure provisions. The ERA considers that Synergy's proposed amendment to clause 22.3(a) is reasonable and would improve the workability of the access contract. For this reason Synergy's proposed change should be made.

Required Amendment 61

Clause 22.3(a) of the electricity transfer access contract must be amended to read:

"promptly notify the other Party of the occurrence of the Force Majeure Event and in any event within two days of the occurrence of the Force Majeure Event; and".

1448. Without further explanatory information from Synergy on why a failure to comply with the Metering Code should be incorporated into clause 22.3(b), the ERA has no basis for considering this change or why Synergy considers it is required.

Schedule 3 – Details of connection points

1449. Mr Davidson submits that schedule 3 of the ETAC is inconsistent with the data requirements of the Technical Rules. Mr Davidson considers the full schedules of the Technical Rules should be included in schedule 3 of the ETAC for loads and generators, if on-site generation is present.[335]

1450. The ERA has not received sufficient information in Mr Davidson's submission (or from any other interested party) to justify why such an amendment is needed. Absent this information the ERA has no basis for considering such a change. In any case, the ERA considers such a change may be overly onerous.

[335] Stephen Davidson, *Submission (Comments on Issue 23 and Issue 24),* 11 December 2017, Issue 23.

APPLICATIONS AND QUEUING POLICY

Access Code requirements

1451. Section 5.1(g) of the *Electricity Networks Access Code 2004* (**Access Code**) requires that an access arrangement include an application and queuing policy, which is a policy that sets out the access application process.

1452. Sections 5.7 to 5.11 of the Access Code detail the specific requirements for an applications and queuing policy:

5.7 An applications and queuing policy must:

(a) to the extent reasonably practicable, accommodate the interests of the service provider and of users and applicants; and

(b) be sufficiently detailed to enable users and applicants to understand in advance how the applications and queuing policy will operate; and

(c) set out a reasonable timeline for the commencement, progressing and finalisation of access contract negotiations between the service provider and an applicant, and oblige the service provider and applicants to use reasonable endeavours to adhere to the timeline; and

(d) oblige the service provider, subject to any reasonable confidentiality requirements in respect of competing applications, to provide to an applicant all commercial and technical information reasonably requested by the applicant to enable the applicant to apply for, and engage in effective negotiation with the service provider regarding, the terms for an access contract for a covered service including:

(i) information in respect of the availability of covered services on the covered network; and

(ii) if there is any required work:

A. operational and technical details of the required work; and

B. commercial information regarding the likely cost of the required work;

and

(e) set out the procedure for determining the priority that an applicant has, as against another applicant, to obtain access to covered services, where the applicants' access applications are competing applications; and

(f) to the extent that contestable consumers are connected at exit points on the covered network, contain provisions dealing with the transfer of capacity associated with a contestable consumer from the user currently supplying the contestable consumer ("outgoing user") to another user or an applicant ("incoming user") which, to the extent that it is applicable, are consistent with and facilitate the operation of any customer transfer code; and

(g) establish arrangements to enable a user who is:

(i) a 'supplier of last resort' as defined in section 67 of the Act to comply with its obligations under Part 5 of the Act; and

(ii) a 'default supplier' under regulations made in respect of section 59 of the Act to comply with its obligations under section 59 of the Act and the regulations; and

(h) facilitate the operation of Part 9 of the Act, any enactment under Part 9 of the Act and the 'market rules' as defined in section 121(1) of the Act; and

(i) if applicable, contain provisions setting out how access applications (or other requests for access to the covered network) lodged before the start of the relevant access arrangement period are to be dealt with.

5.8 The paragraphs of section 5.7 do not limit each other.

5.9 Under section 5.7(e), the applications and queuing policy may:

(a) provide that if there are competing applications, then priority between the access applications is to be determined by reference to the time at which the access applications were lodged with the service provider, but if so the applications and queuing policy must:

(i) provide for departures from that principle where necessary to achieve the Code objective; and

(ii) contain provisions entitling an applicant, subject to compliance with any reasonable conditions, to:

A. current information regarding its position in the queue; and

B. information in reasonable detail regarding the aggregated capacity requirements sought in competing applications ahead of its access application in the queue; and

C. information in reasonable detail regarding the likely time at which the access application will be satisfied;

and

(b) oblige the service provider, if it is of the opinion that an access application relates to a particular project or development:

(i) which is the subject of an invitation to tender; and

(ii) in respect of which other access applications have been lodged with the service provider,

("project applications") to, treat the project applications, for the purposes of determining their priority, as if each of them had been lodged on the date that the service provider becomes aware that the invitation to tender was announced.

5.9A If:

(a) an access application (the "first application") seeks modifications to a contract for services; and

(b) the modifications, if implemented, would not materially impede the service provider's ability to provide a covered service sought in one or more other access applications (each an "other application") compared with what the position would be if the modifications were not implemented,

then the first application is not, by reason only of seeking the modifications, a competing application with the other applications.

5.10 An applications and queuing policy may:

(a) be based in whole or in part upon the model applications and queuing policy, in which case, to the extent that it is based on the model applications and queuing policy, any matter which in the model applications and queuing policy is left to be completed in the access arrangement, must be completed in a manner consistent with:

(i) any instructions in relation to the matter contained in the model applications and queuing policy; and

(ii) sections 5.7 to 5.9;

(iii) the Code objective; and

(b) be formulated without any reference to the model applications and queuing policy and is not required to reproduce, in whole or in part, the model applications and queuing policy.

5.11 The Authority:

(a) must determine that an applications and queuing policy is consistent with sections 5.7 to 5.9 and the Code objective to the extent that it reproduces without material omission or variation the model applications and queuing policy; and

(b) otherwise must have regard to the model applications and queuing policy in determining whether the applications and queuing policy is consistent with sections 5.7 to 5.9 and the Code objective.

Current access arrangement

1453. The current access arrangement includes the applications and queuing policy at Appendix A.

1454. Significant changes were made at the third access arrangement (**AA3**) review, including the creation of competing applications groups, where applicants are grouped behind common network constraints to assess and tailor joint network solutions to provide access to all applicants in the competing applications group – rather than the previous process that provided one-off, single applicant solutions.

1455. The current applications and queuing policy deals with the following matters:

- procedural requirements for an access application and access offer (Part A);
- procedural requirements specific to an electricity transfer application (Part B); and
- procedural requirements for a connection application (Part C).

1456. The procedural requirements for a connection application include “queuing rules” (clause 24). The queuing rules apply where Western Power receives two or more applications where the service sought in one connection application may affect Western Power’s ability to provide covered services that are sought in other connection applications.

1457. Under the current policy Western Power may:

- manage competing applications by forming them into one or more competing applications groups and assessing a single set of works for shared assets required to meet some or all of the requirements of each competing applications group; and
- form all the competing applications into one competing applications group or two or more competing applications groups as it considers appropriate given the nature of the applications, including how the competing applications impede each other in respect of network constraints, the size of capacity sought in each of the competing applications and the current level of spare capacity.[336]

[336] Spare capacity is defined as the maximum rate at which electricity can be transported through that part of the network in accordance with good electricity industry practice to provide covered services sought by an applicant having regard to Western Power’s contractual obligations in respect of the network.

1458. When determining whether there is spare capacity to provide covered services requested, Western Power must assume that any existing access contract will be renewed in accordance with the terms of that contract.

1459. Applicants may request Western Power to develop an applicant-specific solution, either at the time of application, or at any time after application. Such applicants can choose whether or not to also be included in a competing applications group.

Western Power's proposal

1460. Western Power considered the changes made to the applications and queuing policy for AA3 would lead to more efficient and less costly augmentation of the network over time. In its proposal for this fourth access arrangement (**AA4**), Western Power states:

> The changes resulted in a significant improvement to how our customers connect to the network, and we plan to build on this through the proposed changes …

1461. Western Power has proposed 31 amendments to the policy as well as some administrative changes that it considers improves its application. Western Power notes the amendments have been developed in consultation with stakeholders and through its experience in implementing the policy during AA3.

1462. The proposed changes include:[337]

- Making spare capacity available to non-competing applications group members.
- Withdrawing dormant applications from access queues.
- Providing customers with more options for their connection applications when their circumstances change.
- Providing more clarity around the preliminary access offer process.
- Providing Western Power with the ability to terminate competing application groups when a network access solution is not viable, rather than the group existing in perpetuity.
- Ensuring consistency with the *Electricity Corporations (Prescribed Customers) Order 2007*. Western Power notes the following:

> Currently the applications and queuing policy considers contestability on an exit point by exit point basis. Where the customer consumes (or is reasonably expected to consume) 50 MWh or more at an exit point, the customer is considered contestable. Where consumption is below 50 MWh, the customer is not contestable.
>
> Western Power has identified this is inconsistent with the Prescribed Customers Order, which considers the customer's portfolio of exit points.
>
> The Order provides that a customer is contestable where it has a portfolio of exit points (a hospital or university for example), and one or more of the exit points exceeds the 50 MWh threshold. Under the current AQP, the customer would only be considered contestable (and, therefore, able to purchase electricity from retailers other than Synergy) at the exit point that exceeds 50 MWh, but not at the other sub-50 MWh exit points.

[337] Western Power, *Access arrangement information,* 2 October 2017, pp. 261-267.

> We propose to amend the AQP to align it with the Prescribed Customers Order."

- Clarifying the policy only applies to covered services.
- Clarifying what information provided by customers is confidential and what can be shared with third parties.
- Allowing provisions for both electricity transfer applicants and connection applicants to depart from the policy in progressing an application.

1463. The applications and queuing policy applies to all covered services, including reference and non-reference services.

1464. Most customers are on reference services, but the Economic Regulation Authority (**ERA**) is aware that Western Power has negotiated non-reference services with some customers, including constrained network connections.[338] As discussed earlier, negotiating non-reference services is permitted, and encouraged, under the Access Code.

1465. Prior to March 2016, in order to offer a constrained network connection Western Power had to apply to the ERA for an exemption from the Technical Rules. In November 2016 the ERA approved an amendment to Western Power's Technical Rules. As set out in the final decision[339] published in November 2016:

> Western Power proposed to amend the N-1 criterion[340] in the Technical Rules in order to allow voluntary load shedding and post contingent "run back" generation tripping for user agreed connections. This will allow Western Power, where it has an agreement with a user, to switch off some loads (and some generators), in response to network needs. Western Power considers this amendment will promote more efficient network operation.

1466. However, the Wholesale Electricity Market design is based on an assumption that all generators have unconstrained connections[341] and, therefore, will be able to generate whenever called upon in normal operating conditions. System Management therefore does not have the necessary tools to physically manage significant numbers of constrained generators.

1467. There is also a risk the economic dispatch of energy in the wholesale market will be affected as constraints are not taken into account when developing the merit order.[342]

1468. Plans were being made to introduce a constrained network wholesale market design by July 2018. The State Government has indicated its intention to proceed with this plan but the implementation date is uncertain.

---

[338] That is, under certain agreed circumstances the customer will curtail its load or generation.

[339] Economic Regulation Authority, *Western Power's Proposed Amendments to the Technical Rules Submitted March 2016 Final Decision*, November 2016, p. 12.

[340] Terminology such as "N" or "N-1" is commonly used for describing the level of security of the transmission system. Where loss of a single transmission element (a line, transformer or other essential piece of equipment) could cause a supply interruption to some customers, the level of security of supply is said to be "N" or "N-0". "N-1" is a higher level of security and describes a network built to a standard such that a network element can be out of service without overloading the remaining elements or resorting to load shedding.

[341] That is they will always be able to generate if they are selected in the merit order to be dispatched.

[342] The merit order is the ranking of generator pricing offers to the wholesale electricity market from lowest to highest with the cheapest generators being selected to generate.

1469. The difficulties this causes for the current Wholesale Electricity Market design have restricted the number of constrained connections Western Power has been able to offer. Consequently, Western Power has developed an interim solution which will enable generators in some long-standing groups of competing applicants to connect on a constrained basis over the next year or so.

Submissions

1470. Submissions from Alinta Energy (**Alinta**), the Australian Energy Council (**AEC**), Change Energy, Community Electricity, Emergent Energy, Mr Stephen Davidson, Perth Energy and Synergy address the applications and queuing policy. General views expressed in these submissions are provided below, with the details of specific matters addressed under *Considerations of the ERA*.

1471. Emergent Energy considers the policy (and the competing applications group process in it) has been inadequate. It submits:[343]

> Project proponents have often spent years and large amounts of money navigating the AQP process, often with no evident progression. A problem with the provision of services from a monopoly service provider is that there is no competition to benchmark against; and indeed, no competitive structure to require it to take risks in order to be chosen as the service provider.
>
> While the provision of connection services to customers is not a regulated part of the business, the quality of the services provided would be unlikely to be acceptable, and Western Power would have suffered significant customer leakage, in a truly competitive environment. As it stands, Western Power has received significant revenue through the provision of poor quality connection services. Whether this is performed on a cost-recovery basis or not is irrelevant.[344]

1472. Change Energy expresses similar views:[345]

> It has been Change Energy's experience that end-use customers find the process to trying to connect to the network both frustrating and costly. Initial quotes for connection can vary widely from actual costs. It should be noted that Western Power does not take any commercial risks when offering connections to customers and this should be considered when reviewing the rate of return calculations.

1473. Alinta provides general support for changes that will improve the policy and the ability for new generators to connect to the network in a timely and efficient manner.[346]

1474. The AEC considers the proposed changes to the policy do not necessarily balance the interests of the network operator and a retailer seeking a network connection. It submits Western Power's proposal needs to be considered against the requirements of the Access Code (and the Access Code objective) as to:[347]

- whether the policy applies to all services provided by Western Power under the Access Code or just covered services;

[343] Emergent Energy, *Western Power AA4 Discussion Paper, 8 December 2017*, Issue 3 (connection services).

[344] Emergent Energy submission, p. 13.

[345] Change Energy, *Change Energy's submission on AA4*, Issue 3.

[346] Alinta Energy, *Alinta Energy Submission*, 11 December 2017, section 2.

[347] Australian Energy Council, Proposed Revisions to Western Power's Network Access Arrangement, 11 December 2017, pp. 4-5.

- how confidential information is treated;
- whether dormant applications are dealt with in a legitimate, transparent and consistent manner;
- whether there is a mandatory preliminary connection assessment in all instances;
- what constitutes a modification to equipment and facilities; for example, embedded generation and behind the meter energy efficient appliances; and
- whether there is sufficient clarity on the concept of "multiple trading" relationships.

1475. Perth Energy broadly supports Western Power's proposed changes and provides specific support for the proposed amendments to allow multiple trading relationships at a connection point, clarify the "contestable" definition and remove dormant applications. It raises a concern with an existing requirement for the provision of information on the facilities and equipment seeking connection (clause 3.7(e) of the policy), which is discussed below.

1476. Alinta and Change Energy both note that Western Australia's current Wholesale Electricity Market design has placed restrictions on Western Power's ability to connect new generation:

> Western Australia is an attractive market for renewables investment given the availability of natural resources and the design characteristics. The current Wholesale Electricity Market arrangements are premised on an unconstrained network access design[348]. This has restricted Western Power's ability to connect any large scale new entrant generators to its network because of the cost and timeframes associated with reinforcing its network under the unconstrained access model. As a consequence there has been limited investment in any generation in the SWIS in recent years.[349]
>
> Change Energy understands that there are many issues for generators trying to connect to the network, many of which are a result of the unconstrained access required under the Market Rules.[350]

1477. Alinta further expresses support for the generator interim access solution to enable Western Power to connect customers on a constrained basis under the current electricity market:

> … to allow new generators to connect to the network immediately on a constrained basis, during 2017 the Western Australian Government, the Australian Energy Market Operator (AEMO), Western Power and the Public Utilities Office (PUO) worked with the industry to develop the Generator Interim Access (GIA) solution (including the requisite amendments to the Reserve Capacity Mechanism (RCM) rules to allow certification on a constrained basis). The GIA solution will facilitate network connections before the implementation of a fully constrained network access model, without impacting on the rights of existing generators currently connected on an "unconstrained" basis".
>
> This industry leadership, including the development of the GIA solution and amendments to the RCM, was required to urgently facilitate the changes necessary to

[348] The market design assumes that electricity flows from generators to loads are unrestricted, with each generator able to output to its maximum capacity without threatening system security under normal network operating circumstances (i.e. with no major transmission lines out of service).

[349] Alinta Energy, *Alinta Energy Submission*, 11 December 2017, section 2.

[350] Change Energy, *Submission on AA4*, 11 December 2017, issue 3.

> ensure renewable investment continued to occur in the South West of Western Australia, which will in turn assist with the State's ability to meet its national Renewable Energy Target obligations in coming years.

1478. Community Electricity is also supportive of the development of the generator interim access solution:[351]

> We congratulate Western Power on the cultural adjustment that underpins its Generator Interim Access regime and its industry leadership in one of the most important energy opportunities of recent time – capturing the benefits of the Clean Energy Regulations.

1479. Although Change Energy supports moving to a constrained access model and co-optimised dispatch run by the market operator, it does not support:[352]

> …connection arrangements that result in un-economic, inefficient dispatch of generators in order to satisfy Western Power's obligation to connect.

Considerations of the ERA

Requirements of the Access Code

1480. The ERA is required to assess the proposed revisions to the applications and queuing policy against the requirements of sections 5.7 to 5.11 of the Access Code.

1481. The ERA's considerations are set out in the following order:

- Western Power's process to develop its proposed amendments
- Western Power's proposed amendments
- Suppliers of last resort and default suppliers
- Facilitation of Part 9 of the *Electricity Industry Act 2004*
- Other matters raised in submissions

Western Power's process to develop amendments

1482. Western Power's process for developing its proposed amendments was guided by a two-stage customer consultation process. The first stage was managed by its consultant (GHD) and involved the following steps:

- Assessment of required changes
  - GHD assessed, reviewed, and confirmed with Western Power the required changes to the applications and queuing policy. It documented these changes and produced a briefing paper to guide and inform stakeholders on the proposed changes and the consultation process.
  - Twenty changes were proposed. Detailed drafting of the proposed amendments was not included with the briefing paper.
- Stakeholder engagement

[351] Community Electricity, *Response to ERA Public Consultation*, p. 1, paragraph 3.

[352] Change Energy, *Change Energy's submission on AA4*, Issue 3.

- A stakeholder forum was held on 3 May 2017. Attendees were provided with the briefing paper before the forum and were given the opportunity to provide input to the review process at the structured forum.
- One-on-one interviews were held in person and by telephone to extend the reach to stakeholders in more remote regions of the network geography.
- Written submissions were invited from stakeholders.
- Verbal feedback was received from Lacour Energy and written feedback was received from Perth Energy and Synergy.

1483. A written report was prepared by GHD, detailing stakeholder feedback from the above process.[353] Western Power did not provide GHD's report to stakeholders for review. GHD's recommendations included:

- Specific consideration should be given to the requests for additional clarity raised in the Synergy submission.
- Detailed drafting of proposed changes should be made available to stakeholders.
- Information should be provided that details how the applications and queuing policy will interact with applicants wishing to establish a constrained access offer enabled by the generator interim access solution. Western Power should consider whether any revisions are required to the policy to provide this clarity.

> It appears that elements of the AQP will apply as new connection points will need to be established but it is probably the case that these connections are viewed as not competing and therefore many of the provisions in the AQP may not be triggered. Creating a process flow diagram that demonstrates the path through the AQP process that a GIA enabled connection is expected to take, may add significant value for connection applicants and clarify the need for change to the AQP.

1484. Western Power then prepared an amended applications and queuing policy that took into account stakeholder feedback. Two of the original proposed amendments were deleted[354] and eight new amendments[355] were included. Western Power provided the draft policy, together with a summary of changes, to stakeholders for further comment. Three submissions were received.

1485. Western Power's final proposal, submitted to the ERA on 2 October 2017, included five new amendments[356] making 31 proposed substantive amendments in total. Western Power also included 12 amendments which it described as minor administrative amendments.

1486. Attachment 12.3 to the access arrangement information, summarises the changes made by Western Power in response to the stakeholder consultation or, where applicable, gives reasons why comments made by the stakeholders have not been incorporated into the revised applications and queuing policy.

1487. While Western Power has demonstrated how it has dealt with stakeholder comments in Attachment 12.3, some submissions to the ERA claim that Western Power did not

---

[353] GHD Advisory, *Western Power AQP Review Report [confidential]*, 12 June 2017.

[354] Items (ID) 3 and 17.

[355] Items (ID) 8A, 15A, 21, 22, 23, 23A, 23B and 24.

[356] Proposed amendments to support "Time of use" tariffs and advanced metering (ID 27 to 31).

adequately address some comments that were made. Specific concerns identified in submissions received by the ERA are addressed below.

1488. The ERA considers Western Power undertook an adequate consultation process with interested parties. However, the process would have been more transparent if the report prepared by GHD that summarised stakeholder feedback had been included with the draft amended applications and queuing policy circulated by Western Power to stakeholders in August 2017.

Western Power's proposed amendments

1489. Attachment 12.3 to the access arrangement information sets out Western Power's proposed amendments to the applications and queuing policy. The ERA has considered each of the proposed amendments in turn below, with the "change identification numbers" (or "ID" numbers) used in Attachment 12.3 reproduced for reference purposes.

1490. Where relevant, feedback from Western Power's stakeholder engagement and the ERA's public consultation, has been considered.

Proposed amendments to connection application provisions

Spare capacity (ID 1)

1491. The current applications and queuing policy only supports capacity being provided to members of a Competing Applications Group (**CAG**) where that capacity has been developed by shared works for the group. Occasionally, spare capacity becomes available without any customer funded shared works, for example, through growth driven network augmentation or through a reduction in existing contracted load/generation capacity. As the formation of a CAG relies on the identification of shared works, the CAG mechanism cannot be used to release this capacity to CAG members.

1492. Feedback from Western Power's stakeholder engagement indicated general support for a process that allows spare capacity to be allocated. There were divided views on whether the spare capacity should be allocated based on priority date or those most ready to proceed. Stakeholders also sought clarity on whether capacity would be distributed across all connection applicants or only CAG members.[357]

1493. Taking account of stakeholder feedback, Western Power proposes to introduce a new clause (24.8(b)) to enable spare capacity that becomes available other than by shared works to be offered to applicants on a priority date (i.e. first come, first served) basis until no spare capacity remains.[358] Capacity that becomes available may be offered to applicants who are members of a CAG, or to other applicants who are not members of such a group:

> (b) If, at any time, spare capacity to provide covered services becomes available without the need for any works for shared assets and there are applicants who are competing for such spare capacity, Western Power may allocate that spare capacity to applicants on the basis of priority date until no spare capacity remains without forming a competing applications group.

[357] Western Power, *Access arrangement information: Attachment 12.2: GHD AQP Customer Engagement Report [confidential],* 2 October 2017, section 4, table 4.1 (ID 1).

[358] Western Power, *Access arrangement information: Attachment 12.3 [redacted],* 2 October 2017, p. 3.

To avoid doubt, the spare capacity may be offered to an applicant who is part of a competing applications group and an applicant who is not part of a competing applications group.

1494. The following consequential amendment is made to clause 24.1(a) to confirm that Western Power's obligation to form a CAG is subject to (proposed) clause 24.8(b):

24.1 Formation of Competing Applications Groups

(a) Where Western Power assesses that an application is competing with other applications then Western Power will, subject to clauses 16.5, and 24.8(b), manage competing applications by forming them into one or more competing applications groups and assessing a single set of works for shared assets required to meet some or all of the requirements of each competing applications group. To avoid doubt…

1495. No submissions to the ERA address Western Power's proposal to insert new clause 24.8(b) and make a consequential amendment to clause 24.1.

1496. The ERA agrees that it is in the interests of both applicants and Western Power to make spare capacity available in situations where there is no need for shared works. Western Power's proposed amendment will allow this to occur and for this reason it is considered to be consistent with the requirements of the Access Code.

Dormant applications (ID 2)

1497. Western Power is concerned that applicants can remain in the process indefinitely, in some cases having had no contact with Western Power for many years. It considers this affects the release of capacity to applicants who are ready, willing and able to proceed, but have a later priority date. It also affects the objections process because Western Power is obliged to provide all competing applicants with an opportunity to object to an applicant-specific solution.

1498. The following feedback was reported from Western Power's stakeholder engagement:[359]

- it is important to tidy up the list;
- there should be a mechanism that allows an applicant to stay in the process;
- if there are several applications, there should be a mechanism to determine which are viable;
- financial commitment should be demonstrated to avoid dormancy; and
- criteria should include the applicant's intent to progress the project.

1499. Western Power proposes to introduce a new clause (22) that details the process and criteria to determine whether an application is *dormant*, and whether such an application should be progressed or withdrawn:

22 Dormant applications

(a) Subject to clause 22(b), Western Power may give the applicant in respect of a dormant application a written notice requesting the applicant to show cause in writing why Western Power should continue to process the dormant

[359] Western Power, *Access arrangement information: Attachment 12.2: GHD AQP Customer Engagement Report [confidential],* 2 October 2017, section 4, table 4.1 (ID 2).

application, and stating the work required to be completed to process the dormant application.

(b) Western Power must not issue a notice under clause 22(a) if the failure to undertake any work or failure to agree any work to be undertaken within the relevant 12 month period, as the case may be, is solely due to Western Power's gross negligence or wilful default.

(c) If an applicant does not respond to Western Power in writing within 20 business days of receipt of a notice under clause 22(a), the dormant application, and any associated electricity transfer application, shall be deemed to have been withdrawn and Western Power shall notify the applicant in writing accordingly.

(d) A dormant application, and any associated electricity transfer application, shall also be deemed to have been withdrawn if the applicant responds to Western Power in writing within 20 business days of receipt of a notice under clause 22(a) that it no longer wishes to progress the dormant application to an access offer, upon Western Power's receipt of that response.

(e) If the applicant responds to Western Power within 20 business days of receipt of a notice under clause 22(a) contending that Western Power should continue to process the dormant application:

(i) Western Power must issue the applicant with a processing proposal under clauses 20.2, 20.3 or 24 as soon as practicable; and

(ii) if an access contract has not been entered into in respect of the application within 12 months of the date on which the notice under clause 22(a) was issued, Western Power may provide written notice to the applicant under this clause 22(e)(ii) of that fact upon which the application, and any associated electricity transfer application, shall be deemed to have been withdrawn under this applications and queuing policy.

(f) In issuing a notice under clause 22(e)(ii), Western Power must have regard to the objectives of this applications and queuing policy, the likelihood of the application progressing to an access offer and the existence of any competing applications.

1500. Consequential amendments from the introduction of clause 22 include a new defined term ("dormant application") added to clause 2.1 and drafting changes to clause 3.14:

2.1 Definitions

…

"dormant application" means a connection application in respect of which:

(a) no work has been undertaken by Western Power; or

(b) no work has been agreed by Western Power and the applicant to be undertaken by Western Power,

to progress the application, including a system or other study, the preparation of a detailed cost estimate or other work, under clauses 20.2, 20.3 or 24, for a period of 12 continuous months calculated retrospectively from the date that the assessment as to dormancy is made.

3.14 Applications Do Not Expire

~~An~~Unless expressly provided otherwise by this applications and queuing policy, an application does not expire due to the passage of time.

1501. Synergy's submission to the ERA agrees in principle with introducing a process for withdrawing dormant applications. However, to be consistent with the requirements of the Access Code (section 5.7), Synergy considers further amendments are needed. It submits that Western Power's proposal should:[360]

- Adopt the 3 year time line in the model applications and queuing policy (Appendix 2 to the Access Code). The definition of "dormant application" in the model applications and queuing policy refers to an "application that was lodged by the applicant on a date that is more than 3 years before the date the service provider is considering the application..." Section 5.11(b) of the Access Code requires the Authority to have regard to the model applications and queuing policy in determining whether the AQP is consistent with sections 5.7 to 5.9 and the Access Code objective. The model applications and queuing policy has been determined by the Authority as meeting the requirements of the Access Code. Adopting a 3 year time line in the AQP is then consistent with section 5.7 of the Access Code.
- Be subject to WP meeting its obligations under the AQP (including acting reasonably, expeditiously, diligently and in good faith in relation to the proposed access contract, as required by clauses 3.1 and 3.12). This is consistent with section 5.7(b) of the Access Code (as well as sections 2.8(a) and 2.8(b) of the Access Code).
- Not allow deemed withdrawal where delay is beyond the reasonable control of the applicant. Such a condition is consistent with section 5.7(c) of the Access Code, which requires an AQP to set out a reasonable timeline for progressing access contract negotiations and oblige applicants (and the service provider) to use reasonable endeavours to adhere to the timeline.
- Ensure a notice under clause 22(a) is mandatory, not discretionary. Mandating a notice to be issued in all circumstances will allow users and applicants to understand in advance how the AQP will operate – this ensures consistency with section 5.7(b) of the Access Code. Further, mandating a notice to be issued is consistent with clause A2.78 of the model applications and queuing policy (which, as noted at dot point one above, is a policy which the Authority has determined meets the requirements of the Access Code).
- Ensure clause 22(d)(ii) also has "12 months" amended to "3 years". As noted at dot point one above, adopting a 3 year time line is consistent with the model applications and queuing policy and therefore consistent with section 5.7 of the Access Code.
- [Remove] the words "upon Western Power's receipt of that response" from clause 22(d) – the inclusion of these words in this subclause does not make sense.

1502. Alinta's submission to the ERA supports Western Power's proposal for dormant applications. It considers:[361]

> … inactive applications impact the priority date mechanism and the release of spare capacity to applicants ready, willing and able to proceed to a connection but whose applications have a later priority date.
>
> In noting this support, Alinta urges consideration of whether a 12 month plus 12 month dormant application process is too long, and whether a shorter period would better meet the Access Code objectives.

---

[360] Synergy, *AA4 Submission Number 3: Western Power's proposed application and queuing policy*, 8 December 2017, pp. 15-16, paragraphs 59.1 to 59.5 and 60.

[361] Alinta Energy, *Alinta Energy Submission*, 11 December 2017, section 3.1.

1503. Perth Energy's submission to the ERA also supports the proposal to remove dormant application and considers:[362]

> …this will facilitate competition if the amount of unused capacity can be maximised and made available to the market for investment in. Perth Energy also notes, that the notion of dormant applications should be extended to sites that have contracted capacity but have either been shut or not used for a period of time. Holding onto unused network access should be actively discouraged as it is an effective way to stifle competition upstream of the network and would be in direct contravention of the access code objectives.

1504. The ERA has considered Western Power's proposal to introduce a new process for dormant applications and the submissions from interested parties, which generally support the proposal.

1505. The need to remove dormant applications from the queue suggests that the changes made to the applications and queuing policy during AA3 may not be working as effectively as hoped. When proposing its changes to the policy for AA3, Western Power noted the changes would enable applicants to determine how they progressed through the process. Western Power considered the proposed changes may lessen the need for a queue:[363]

> Applicants determine how they progress through the process through explicit decision stages where they lodge applications, initiate planning studies, accept/decline preliminary offers and decide whether to accept the final access offers that [Western Power] make to them. Beyond these decisions the process is largely mechanical, which removes our need to exercise discretion by classifying customer applications as dormant or initiating bypass of applications to promote other applicants in the queue."
>
> At present there is a single queue where applicants remain in the order they arrive, regardless of their readiness to proceed to connection. Instead … the applicants that are commercially ready with viable projects determine their own willingness to proceed, or alternatively withdraw from the process as they approach decision stages and the payment of associated fees.

1506. However, the proposal to introduce a process for dormant applications appears to be beneficial and supported by stakeholders.

1507. The ERA agrees with some of the suggested amendments raised by Synergy in its submission. Subject to the following amendments, the ERA considers Western Power's proposal to insert a new clause (22) for dormant applications and to make other consequential amendments is consistent with the requirements of the Access Code:

- The time period in the proposed definition of "dormant application" and clause 22(e)(ii) must be changed to three years to be consistent with the model applications and queuing policy in the Access Code. The ERA has not received any information to suggest that a shorter length of time would be more appropriate and warrant a departure from the model policy.
- Clause 22(a) must be changed to require that Western Power "must" rather than "may" give an applicant written notice in respect of dormant applications. This amendment is consistent with clause 5.7(b) of the Access Code as it

[362] Perth Energy, *Submission the ERA regarding Western Power's proposed revisions to the access arrangement for the Western Power network*, November 2017, p. 12.

[363] Western Power, Access arrangement information for 1 July 2012 to 30 June 2017, pp. 325-326.

provides clarity about how the policy will operate in respect of dormant applications.

- Clause 22(b) must be changed to require Western Power to "not issue a notice if the failure... is due to a material breach by Western Power of the applications and queuing policy or due to Western Power's negligence or wilful default." This amendment makes clause 22 subject to compliance with clauses 3.1 and 3.12 of the policy and where the delay is beyond the reasonable control of the applicant due to Western Power's actions.
- Clause 22(d) should remove the words "upon Western Power's receipt of that response" because the inclusion of these words do not make sense.

Required Amendment 62

Clause 22 of the applications and queuing policy, covering provisions for dormant applications, must be amended in accordance with paragraph 1507 of this draft decision.

Options for responding to preliminary access offers (ID 4)

1508. Under the current applications and queuing policy, if a member of a CAG does not want to accept a Notice Of Intention to prepare a preliminary access offer (**NOI**) or a Preliminary Access Offer (**PAO**), it must either progress its application as an applicant-specific solution, or have its application taken to be withdrawn.

1509. Western Power proposes to add a new clause (24.3(c)) to provide members of a CAG another option for responding to a NOI. The proposed new clause allows members to opt out of the CAG and remain eligible for inclusion into another CAG while maintaining the priority date of its application. Western Power submits that "exercising this option is similar in effect to providing written notice to [it] under clause 24.1(b2) prior to the issue of the NOI":[364]

> 24.3 Response to Notice of Intention to Prepare a Preliminary Access Offer
>
> Applicants must respond to the notice issued under clause 24.2 within 30 business days by:
>
> …
>
> <u>(c)</u> <u>advising that they wish to opt out of the competing applications group but that they do not want to make an application for an applicant-specific solution and wish to retain their priority date and be considered for inclusion in another competing applications group, in which case the application shall retain its priority date and may be considered for inclusion in another competing applications group in accordance with clause 24.1(a); or</u>

1510. Synergy submits that the use of the word "may" (between the words "and" and "be considered") in proposed clause 24.3(c) is discretionary – there is no obligation on

[364] Western Power, *Access arrangement information: Attachment 12.3 [redacted],* 2 October 2017, p. 5.

Clause 24.1(b2) states: *"Where Western Power notifies an applicant under clause 24.1(b1) that the application has been sorted into one or more competing applications groups, then the applicant may choose by notice to Western Power at any time that it does not wish to be considered in one or more of the competing applications groups. Western Power will accept the choice of the applicant."*

Western Power to consider the application for inclusion in another CAG. Synergy considers that the word “may” should be change to “will” in this instance. Using the word "will" provides clarity on how such a right to terminate CAGs would be practically implemented, and is consistent with sections 5.7(b) and 5.7(e) of the Access Code.[365]

1511. The ERA agrees with Synergy that use of the word “may” in the proposed clause 24.3(c) implies that the decision to consider the application for inclusion in another CAG in accordance with clause 24.1(a) is discretionary. If the intention of the proposed new clause is to promote fair market conduct by allowing an applicant to opt out of one CAG in order to be considered for another CAG at a later date, changing the word “may” to “will” gives effect and clarity to this intention. For this reason the ERA requires the following amendment to clause 24.3(c):

> … the application shall retain its priority date and ~~may~~will be considered for inclusion in another competing applications group …

Required Amendment 63

Clause 24.3(c) of the applications and queuing policy, dealing with an applicant’s response to a notice of intention to respond to a preliminary access offer, must be amended to replace the word “may” with “will” in accordance with paragraph 1511 of this draft decision.

1512. Western Power proposes to insert a further two new sub-clauses – (B) and (C) – under existing clause 24.5(a)(ii) to provide an equivalent option for members of a CAG to respond to a PAO:

> 24.5 Response to Preliminary Access Offer
>
> (a) Applicants must respond to the preliminary access offers within 30 business days ~~after~~of receipt of the preliminary access offers, by indicating in good faith in writing either:
>
> (i) …
>
> (ii) that it would reject such a preliminary access offer if it were an access offer and would request an amendment to the preliminary access offer. In this case Western Power and the applicant must negotiate in good faith regarding the form of the preliminary access offer, but if Western Power and the applicant have not agreed on the form of the preliminary access offer within 30 business days of the date on which the applicant received the preliminary access offer, then the a~~pplicant will, unless it notifies Western Power that it wishes its connection~~ application and any associated electricity transfer application ~~to~~will be ~~taken~~deemed to ~~be~~have been withdrawn~~,~~ unless:
>
> (A) the applicant has notified Western Power in writing that it wishes to be treated as having made an application for an applicant-specific solution … or
>
> (B) the applicant has notified Western Power in writing that it wishes to opt out of the competing

[365] Synergy, *AA4 Submission Number 3: Western Power’s proposed application and queuing policy*, 8 December 2017, p. 24, paragraphs 111 and 112.

applications group but it does not want to make an application for an applicant-specific solution and wishes to retain its priority date and be considered for inclusion in another competing applications group, in which case the application shall retain its priority date and may be considered for inclusion in another competing applications group in accordance with clause 24.1(a); or

(C) the failure to agree on the form of the preliminary access offer within 30 business days is due to Western Power acting in bad faith, in which case Western Power and the applicant must negotiate in good faith for a further period of 30 business days regarding the form of the preliminary access offer and clauses 24.5(a)(ii)(A) and 24.5(a)(ii)(B) shall apply. If no agreement is reached between Western Power and the applicant during this further period, and the applicant has not notified Western Power in accordance with clauses 24.5(a)(ii)(A) and 24.5(a)(ii)(B), the application and any associated electricity transfer application will be deemed to have been withdrawn; or

(iii) that it would not accept such a preliminary access offer if ...

1513. Synergy submits that the effect of the drafting in proposed clause 24.5(a)(ii)(C) is to have a protracted period over which negotiations must be held if Western Power has acted in bad faith within the first 30 business days. Synergy does not consider this is consistent with Western Power's obligations to act expeditiously and diligently (both under section 2.8(a) of the Access Code, and under clause 3.12 of the policy). Given Western Power’s obligations to act expeditiously and diligently, Synergy requests there also be a deemed withdrawal if Western Power fails to act expeditiously and diligently in agreeing the form of the preliminary access offer.[366]

1514. The ERA considers the proposed clause 24.5(a)(ii)(C) is acceptable because it is consistent with section 5.7(a) of the Access Code. It is in the interests of applicants to allow their access offers to remain active despite any delay due to bad faith on Western Power’s behalf. If an applicant no longer wishes to continue to negotiate with Western Power it can withdraw its application under clause 3.13 of the policy.

1515. Western Power’s proposed amendments to clause 24.5, including new clauses 24.5(a)(ii)(B) and (C) are accepted subject to the following amendments:

- The word “after” should be reinstated in clause 24.5(a) to clarify that the 30 business days commence the day *after* the receipt of the notice. The proposed change (to replace the word “after” with “of”) removes this clarity. Similarly, the following drafting amendments should be made to clause 24(a)(ii) to improve clarity:

  (ii) … within 30 business days from~~of~~ the date on which the applicant received the preliminary access offer, then the application and …

- Consistent with the ERA’s considerations for clause 24.3(c), the word “may” should be amended to “will” in clause 24.5(a)(ii)(B) as follows:

[366] Synergy, *AA4 Submission Number 3: Western Power’s proposed application and queuing policy*, 8 December 2017, p. 24, paragraphs 113 and 114.

(B) … the application shall retain its priority date and ~~may~~will be considered for inclusion in another competing applications group …

Required Amendment 64

Clause 24.5 of the applications and queuing policy, dealing with an applicant's response to a preliminary access offer, must be amended in accordance with paragraph 1515 of this draft decision to:

- clarify that the 30 business days commence *after* the receipt of the notice (clause 24(a)(ii)); and
- replace the word "may" with "will" (clause 24.5(a)(ii)(B)).

Funding studies to prepare a notice of intention (ID 5)

1516. The current applications and queuing policy does not contain any mechanism for funding studies required to prepare a Notice of Intention (**NOI**). Western Power considers studies may be required to provide a reasonable level of information to CAG members so they can make an informed decision about accepting a NOI and funding the subsequent solution.

1517. The following feedback was reported from Western Power's stakeholder engagement:[367]

- The mechanism should only be triggered in the event that Western Power incurs a material amount of additional cost in completing the steps required to prepare the NOI.
- Fees should be presented in advance to the members of the CAG.

1518. Western Power proposes to insert a new clause (24.1(d)) to confirm that where it considers studies are necessary to prepare a NOI, Western Power can issue a processing proposal to the members of a CAG in accordance with clause 20.2 (which covers the processing of a proposal):

(d) To avoid doubt, where Western Power considers that to issue a notice of intention to prepare a preliminary access offer it must perform any system or other studies, Western Power may provide a processing proposal to the applicants within the competing applications group in accordance with clause 20.2.

1519. A consequential amendment is made to clause 20.1(a)(ii) to include a reference to (proposed) new clause 24.1(d). The amendment confirms that an applicant must fund studies under that clause, which it has agreed to Western Power performing.

1520. Synergy submits that Western Power's proposed new clause 24.1(d) should be made subject to the timeline under clause 24.1(b1) to be consistent with the requirements of the Access Code (section 5.7(b)).[368]

[367] Western Power, *Access arrangement information: Attachment 12.2: GHD AQP Customer Engagement Report [confidential]*, 2 October 2017, section 4, table 4.1 (ID 5).

[368] Synergy, *AA4 Submission Number 3: Western Power's proposed application and queuing policy*, 8 December 2017, p. 23, paragraph 102.

> That is, the study proposal and costs must be provided to the applicant, within 30 business days of the application and at the same time they are notified of their CAG. Such a provision would also be consistent with section 5.7(d) of the Access Code (which section obliges the service provider to provide an applicant all commercial information reasonably requested by the applicant to enable the applicant to apply for, and engage in effective negotiation with the service provider).

1521. The ERA has considered Western Power's proposal and Synergy's submission and is of the view that the proposal is consistent with sections 5.7(b) and (c) of the Access Code – the clause:

- is sufficiently detailed to enable users and applicants to understand (in advance) how the applications and queuing policy will operate; and
- sets out a reasonable timeline for the commencement, progressing and finalisation of contract negotiations between Western Power and the applicant, with an obligation to use reasonable endeavours to adhere to the timeline.

1522. Synergy's concern appears to be that the proposed new clause deprives applicants of the ability to apply and engage in effective negotiations with Western Power, which is not the case. If Western Power considers other studies are required it must follow the process in clause 20.2 of the policy – clause 20.2(a) requires Western Power to provide notice to the applicant of timing and cost estimates for the studies. This gives the applicant sufficient information to decide whether to withdraw its application, or seek to apply for an applicant-specific solution.

1523. However, the ERA considers the drafting of clause 20.2(a) could be improved to make explicit the obligation for Western Power to expeditiously provide proposals to applicants consistent with clauses 3.1 and 3.12 of the policy. The ERA requires clause 20.2(a)(i) to be amended as follows:

> (i) Western Power must provide a proposal within a reasonable time to the applicant outlining the scope, timing and a good faith estimate …

Required Amendment 65

Clause 20.2(a)(i) of the applications and queuing policy must be amended to read:

"Western Power must provide a proposal within a reasonable time to the applicant outlining the scope, timing and good faith estimate …"

Forecast natural load growth considerations (ID 6)

1524. Western Power considers that it is able, acting in accordance with good electricity industry practice and the Code objective, to take into account matters such as forecast natural load growth in determining available spare capacity and when undertaking network planning.

1525. Western Power proposes to change clause 3.15(d) of the applications and queuing policy to make clear that forecast natural load growth is a relevant consideration in undertaking network planning:

3.15 Network Planning

…

(d) In undertaking network planning Western Power will have regard to matters including forecast natural load growth and the nature and number of enquiries and applications Western Power has received under this applications and queuing policy, it being acknowledged that in doing so Western Power will need to make a good faith assessment as to the likelihood that specific projects will proceed.

1526. Similar wording changes are proposed to clause 24.8(a) and the definition of "spare capacity" as follows:

24.8 Spare Capacity

(a) In determining whether there is spare capacity to provide covered services requested in a connection application or group of applications, Western Power may have regard to matters including forecast natural load growth and must assume that any existing access contract will be renewed in accordance with the terms of that access contract.

2.1 Definitions

…

"spare capacity" means the capacity, from time to time, of the network, as configured at the time of an application, to provide the covered services sought in the application, having regard to matters including Western Power's contractual obligations in respect of the network and forecast natural load growth.

1527. While Synergy considers forecast natural load growth is fundamental to determining any required work in relation to spare capacity, it submits Western Power's proposed amendments to address this matter are ambiguous – there is ambiguity about how spare capacity is determined, and which amounts are subject to required work funded by a contribution and which amounts are not.

1528. Synergy submits that it is essential for users to be given greater clarity, with the following points needing to be addressed in the applications and queuing policy:[369]

"Forecast natural load growth" should be defined in the AQP.

It should be specified how "forecast natural load growth" is to be determined, including, among other things:

- whose forecast(s) WP should have regard to, for example whether it is required to consider forecasts proposed by AEMO or to prepare its own natural load growth forecasts;
- the extent to which the interests of customers, users and network operator are to be balanced (as contemplated under section 5.7(a) of the Access Code);
- there must be reasonable grounds published supporting any forecast;
- WP must clarify how, given it proposes all connection points will become bidirectional points, increased distributed generation is dealt with in the concept of "forecast natural load growth" and whether capital investment in networks to facilitate distributed generation will be encouraged and if so how; and

[369] Synergy, *AA4 Submission Number 3: Western Power's proposed application and queuing policy*, 8 December 2017, p. 17, paragraph 66.

- clarity should be provided on whether WP considers "forecast growth" includes negative growth.

1529. Synergy also submits that it does not agree with the proposed definition of “spare capacity” and that certain matters should be expressly stated in the policy:[370]

> Synergy does not agree with the proposal to include the words "matters including" in the definition of "spare capacity". These words broaden, without providing any clarity, the scope of what WP may have regard to in determining "spare capacity" and are therefore ambiguous and inconsistent with the Access Code and section 5.7(b) of the Access Code.
>
> For consistency with the Access Code, Synergy recommends clarifying expressly:
>
> - no part of a user's "contracted capacity" (whether utilised or unutilised) can be treated as "spare capacity" (unless otherwise expressly agreed by the user).
>
> So, for example, it needs to be clarified that a "reduction" in contracted capacity (as contemplated in clause 23 of the AQP) does not include unutilised capacity in respect of a user’s contracted capacity and that spare capacity does not "become available" (as contemplated in clause 24.8(b) of the AQP simply because contracted capacity is not utilised.
>
> This clarification could be provided in the definition of "contracted capacity” and is consistent with the existing definition of "spare capacity" …
>
> - determining spare capacity in no way limits WP's obligation under section 2.10 of the Access Code to undertake and fund any required work.

1530. The ERA considers Western Power’s proposed amendments to clause 3.15(d), clause 24.8(a) and the definition of “spare capacity” are unnecessary and contrary to the requirements of the Access Code for the following reasons:

- While forecast natural load growth should be taken into account in network planning, the purpose of clause 3.15(d) in the applications and queuing policy is to explain how applications received under the policy will be taken into account in Western Power’s network planning – it is not intended to explain more generally how network planning is actually undertaken.
- The existing definition of “spare capacity” in the policy is the same as the definition in the model applications and queuing policy under the Access Code.
- The ERA is concerned the proposed amendment to the definition of spare capacity could result in Western Power leaving existing capacity unutilised on the basis that it may one day be required, which is inconsistent with the objectives of the Access Code.

1531. The ERA considers the existing requirement to have regard to existing contractual obligations is sufficient to ensure it does not allocate capacity through the applications and queuing policy that is needed by existing users. Additional capacity required to meet natural load growth in the longer term should be included, as it presumably already is, in Western Power’s network planning.

[370] Synergy, *AA4 Submission Number 3: Western Power’s proposed application and queuing policy*, 8 December 2017, pp. 17-18, paragraphs 67 and 68.

Required Amendment 66

The proposed amendments to include forecast natural load growth in the definition of spare capacity and clause 24.8(a) of the applications and queuing policy must be deleted.

Tender projects (ID 7)

1532. Existing clause 24A.2 of the applications and queuing policy covers provisions for tender projects (i.e. where two or more applicants are competing under a tender process) and allows a successful tenderer to be given the same priority date as the unsuccessful tenderer with the earliest priority date. Western Power submits that this approach is inconsistent with, and difficult to implement in, the CAG regime.[371] The approach can also create inequities because it can result in a successful tenderer with a later priority date receiving access ahead of applicants who lodged their application before the successful tenderer. Western Power indicates that it wants to avoid giving preference to an applicant who is successful in a tender process over other applicants.

1533. Western Power proposes to delete clause 24A.2 from the policy. Related and consequential amendments include the deletion of:

- the term "project" from clause 2.1; and
- clause 3.7(a), which requires the applicant to provide information on whether its connection application is connected with a tender process.

1534. No submissions to the ERA address Western Power's proposal to delete existing clause 24A.2 from the policy.

1535. Section 5.9(b) of the Access Code deals with, but does not require, the applications and queuing policy to provide for tender applications. Western Power's proposal to delete existing clause 24.A2 from the policy is therefore not contrary to the requirements of the Access Code.

Objections to applicant-specific solutions (ID 8)

1536. Western Power submits that the current applications and queuing policy does not require it to give notice of an applicant-specific solution to all applicants who may be impeded by the application-specific solution.[372] Western Power is only obliged to notify competing applicants that were in the same CAG and existing users who may be impeded by the applicant-specific solution. The notification gives applicants an opportunity to object to the applicant-specific solution being considered.

1537. However, under clause 16.5, an applicant may elect for its application to be processed as an applicant-specific solution before being grouped in a CAG. Western Power submits that this can create technical problems and inequities where

[371] Western Power, *Access arrangement information: Attachment 12.3 [redacted],* 2 October 2017, p. 7.

[372] Western Power, *Access arrangement information: Attachment 12.3 [redacted],* 2 October 2017, pp. 7-8.

applicants who may be impeded by the applicant-specific solution do not have a right to object:[373]

> For equity and transparency purposes, all applicants who may be impeded by an applicant-specific solution should have the right to object to that solution being provided. However, in order to ensure that the applicant who has funded works to develop an applicant-specific solution is not unfairly subjected to potential objections from competing applicants with later priority dates, only competing applicants with earlier priority dates are proposed to be given the opportunity to object to the proposed applicant-specific solution.

1538. Western Power proposes to amend clause 20.3(b)(ii) to replace the words "that was within the same competing applications group" with the words "with an earlier priority date". This change will require Western Power to provide any competing applicant that has an earlier priority date with an opportunity to object to an applicant-specific solution after the relevant study is completed. The proposed change and consequential amendments to clauses 20.3(c), (d) and (e) are set out below:

> 20.3 Applicant-specific Solution Option
>
> (a) An applicant may request Western Power to perform a study of the nature and costs of an applicant-specific solution to satisfy the connection application...
>
> (b) Once Western Power has completed the study, it must provide:
>
> (i) existing users that Western Power considers may be impeded; and
>
> (ii) any competing applicant ~~that was within the same competing applications group as the applicant~~with an earlier priority date,
>
> with the opportunity to object to providing the applicant-specific solution to the applicant.
>
> (c) An existing user and competing applicant with an earlier priority date may object to the applicant-specific solution within 30 business days on the grounds that the applicant-specific solution would impede Western Power's ability to provide covered services to that existing user or to provide the covered services that are sought in a competing application~~ to a competing applicant~~ with an earlier priority date compared with what the position would be if the applicant-specific solution were not implemented.
>
> (d) Western Power will evaluate the objection within 40 business days of it being lodged and if it agrees that the applicant-specific solution would impede Western Power's ability to provide covered services to an existing user or to provide the covered services that are sought in a~~the~~ competing~~other~~ connection application ~~to a competing applicant~~with an earlier priority date, then it must either decline to offer an applicant-specific solution to the applicant or modify the applicant-specific solution so that the applicant-specific solution would not impede Western Power's ability to provide covered services to an existing user or the covered services that are sought in ~~another~~that other ~~connection~~ application with an earlier priority date~~to a competing applicant~~. If Western Power elects to modify the applicant-specific solution then it must provide a further opportunity to object under clause 20.3(c) to existing users and competing applicants with an earlier priority date that Western Power considers may be impeded by the applicant-specific solution.
>
> (e) If:
>
> (i) no objections are made to an applicant-specific solution; or

[373] Western Power, *Access arrangement information: Attachment 12.3 [redacted],* 2 October 2017, p. 8.

(ii) Western Power evaluates under clause 20.3(d) that an applicant-specific solution (whether the original applicant-specific solution or a further applicant-specific solution developed following modification under clause 20.3(d)) would not impede Western Power's ability to provide covered services to an existing user or to provide the covered services that are sought in a competing~~nother~~ connection application ~~to a competing applicant~~with an earlier priority date,

then Western Power within 30 business days must make an access offer to the applicant based on the applicant-specific solution identified in this clause 20.3(e).

1539. Western Power also proposes to insert a new clause (16.5(b)) to provide that where an applicant requests an applicant-specific solution, clause 20.3 will apply and the applicant will be deemed to have requested a study concerning an applicant-specific solution:

16.5 Opt-out of Competing Applications Group Process

(a) An applicant may, at the time of making a connection application under clause 16, elect that the connection application is to be processed as an applicant-specific solution and is not to be considered as part of a competing applications group. ~~Western Power will process such a connection application as an applicant-specific solution and will not consider it as part of a competing applications group.~~

(b) If an applicant makes an election under clause 16.5(a), it will be deemed to have made a request for a study under clause 20.3(a) and clause 20.3 shall apply to the processing of that application.

1540. Additional and related amendments to clauses 24.1(c), 24.3(b) and 24.5(a)(ii)(A) are also proposed to confirm that where an applicant opts for an applicant-specific solution under these clauses, the applicant is deemed to have made a request for study under clause 20.3(a).

1541. Synergy submits that Western Power's new clause 16.5(b) does not give the applicant the choice of not proceeding with the study or the application. It requests for the applications and queuing policy to clarify that an applicant may choose to withdraw its application, or not proceed with the proposed applicant-specific solution.[374]

1542. The ERA considers the proposed amendments are acceptable because they balance the interests of the applicant against competing applicants and are, therefore, consistent with section 5.7(a) of the Access Code.

1543. In response to Synergy's concern about the ability of the applicant to withdraw its application or not proceed with the applicant-specific solution, the ERA considers the following provisions in the applications and queuing policy address this matter. These provisions are reasonable because they provide certainty and minimise administrative costs to the application process:

- Clause 20.3A of the policy provides that where an applicant seeks a study for an applicant-specific solution, then its application will continue to be considered as part of the CAG unless clause 16.5 applies.

[374] Synergy, *AA4 Submission Number 3: Western Power's proposed application and queuing policy*, 8 December 2017, p. 22, paragraphs 93 and 94.

- Clause 16.5 operates as an opt out provision from the CAG. The proposed amendments do not amend this position.
- Where an applicant is unsure of whether it wants to opt out it can request a study under clause 20.3 first, and/or can withdraw its application at any time under clause 3.13 of the policy.
- Furthermore, clause 20.3 requires agreement on the costs of the study to be reached prior to the study commencing. If this cannot be agreed upon, then the application is deemed to be withdrawn.

Studies for applicant-specific solutions (ID 8A)

1544. Clauses 24.1(c), 24.3(b) and 24.5(a)(ii)(A) of the applications and queuing policy all state that where an applicant opts for an applicant-specific solution, the application will be processed in accordance with clauses 20.2 and 20.3.

1545. Western Power considers that the current policy is ambiguous as to whether an applicant in this situation must request a study. It submits that:[375]

> A study relating to the applicant-specific solution is always necessary to investigate the potential applicant-specific solution and to support the objections process under clause 20.3. There is a potential ambiguity in the AQP as to whether an applicant who has opted for an applicant-specific solution under these clauses must request a study under clause 20.3(a).

1546. Western Power proposes to amend clauses 24.1(c), 24.3(b) and 24.5(a)(ii)(A) to confirm that where an applicant opts for an applicant-specific solution under these clauses, the applicant is deemed to have made a request for a study under clause 20.3(a). The proposed amendments include:

- adding the words "and the applicant will be deemed to have requested a study under clause 20.3(a)" to clause 24.1(c);
- adding the words *"and the applicant will be deemed to have made a request for a study under clause 20.3(a)"* to clause 24.3(b), along with some other drafting changes to improve readability; and
- adding the words *"and the applicant will be deemed to have made a request for a study under clause 20.3(a)"* to clause 24.5(a)(ii)(A), along with other drafting changes to clarify that notification under this clause is notification in writing.

1547. No submissions to the ERA address these proposed changes to the applications and queuing policy.

1548. The ERA considers the proposed amendments to clauses 24.1(c), 24.3(b) and 24.5(a)(ii)(A) to be acceptable because they balance the interests of the applicant against competing applicants. However, the language used in clauses should be consistent where practicable. Hence, the following amendment should be made to clause 24.1(c) to make it consistent with clauses 24.3(b) and 24.5(a)(ii)(A), which use the words "and the applicant will be deemed to have made a request for a study under clause 20.3(a)":

> (c) … and the applicant will be deemed to have made a request for~~requested~~ a study under clause 20.3(a).

[375] Western Power, *Access arrangement information: Attachment 12.3 [redacted],* 2 October 2017, p. 8.

Required Amendment 67

Clause 24.1(c) of the applications and queuing policy must be amended as follows to make it consistent with other clauses in the policy:

" … and the applicant will be deemed to have made a request for~~requested~~ a study under clause 20.3(a)."

Mandatory preliminary assessments (ID 9)

1549. Western Power considers the current wording in the applications and queuing policy results in applicants thinking that a preliminary assessment may not be required. However, it submits this is not the case:[376]

> In practice, a preliminary assessment is always required, although its nature and scope may vary depending on the nature and constraints affecting a connection application. However, the effect of [current] clauses 18 and 19.1(a) is that a preliminary assessment is optional at the discretion of the applicant. An applicant 'may' request a preliminary assessment when lodging a request for an enquiry under [current] clause 18. Western Power must advise the applicant of the expected completion date of a preliminary assessment if such an assessment has been requested by the applicant under [current] clause 19.1(a).
>
> A preliminary assessment typically provides an assessment of network connection options, and indicative costs and timeframes. Such an assessment is important in the context of an increasingly constrained network as it encourages the early identification of issues that may affect the progression of the applicant's application.

1550. Western Power proposes to amend clause 19.3, and make related amendments to clauses 18.1(a) and 19.1(a)(i), to confirm that a preliminary assessment is mandatory, unless otherwise agreed by Western Power:

> 19.3 Preliminary Assessment
>
> A preliminary assessment with regards to a connection application may consist of an assessment as to:
>
> …
>
> To avoid doubt, a preliminary assessment must be undertaken in relation to a connection application either before that application is submitted in accordance with a request under clause 18.1 or after that connection application is lodged as advised by Western Power under clause 19.1(a)(i), unless otherwise agreed by Western Power.

1551. The related amendments to clauses 18.1(a) and 19.1(a)(i) are to provide that an applicant may elect for the preliminary assessment to be undertaken at the enquiry stage (i.e. before lodging a connection application), or after the connection application has been lodged. The related amendments are as follows:

> 18.1 Compulsory Enquiry Notification
>
> (a) Where an applicant expects, in good faith, to proceed to a connection application, then prior to lodging a connection application with Western Power, the applicant must lodge an enquiry with Western Power to notify Western Power of the proposed connection application, and may request a

[376] Western Power, *Access arrangement information: Attachment 12.3 [redacted]*, 2 October 2017, p. 9.

preliminary assessment under clause 19.3~~, and~~ to occur before lodging the proposed connection application.

(b) Western Power must …

19.1 Initial Response

(a) Subject to clause 19.1(b), Western Power must provide an initial response to the applicant within 20 business days of receiving the applicant's connection application, specifying:

(i) the time by which Western Power will provide a preliminary assessment under clause 19.3 with regards to the connection application (if ~~requested);~~ such an assessment was not undertaken under clause 18.1 before the connection application was submitted and is required under clause 19.3); and

(ii) the time by which ...

1552. Synergy considers that Western Power's proposed change to clause 19.3 (and related amendments to clauses 18.1(a) and 19.1(a)(i)) would make a preliminary assessment compulsory, irrespective of whether there is actually any real need for such an assessment. It also considers that the proposed change, when read together with the related amendments, is ambiguous:[377]

> [T]he proposed drafting in clause 19.3, when read together with the proposed amendments to clauses 18.1(a) and 19.1(a)(i), is ambiguous – it is not clear that an agreement between the parties that a preliminary assessment is not required works with proposed clauses 18.1(a) and 19.1(a)(i). The current wording in the AA3 AQP better reflects that position.
>
> Synergy notes WP's response to Synergy's request for an explanation of why a preliminary assessment is required in almost every case. However, Synergy reiterates the view … that as a preliminary assessment is intended, amongst other things, to determine if there is sufficient spare capacity available to support the connection application, WP's proposed change is insufficiently detailed to enable users and applicants to understand how the AQP will operate and at the very least must exclude routine connection applications where spare capacity won't be an issue – for example, in relation to equipment used by residential and small business customers such as PVs and battery systems and now EVs.

1553. The effect of the proposed amendments to clause 19.3 are to make a preliminary assessment compulsory, except where there is agreement between the parties. The ERA considers that in practice a preliminary assessment would be required more often than not, and would generally always be required to at least determine whether there is sufficient spare capacity. For these reasons, the proposed changes to clause 19.3 (and related changes to clauses 18.1(a) and 19.1(a)(i)) are reasonable and consistent with the requirements of the Access Code and the Access Code objective and therefore are accepted.

1554. However, the ERA considers that the drafting of proposed clauses 18.1(a) and 19.1(a) could be improved to address the ambiguity that was raised by Synergy in its submission to the ERA. The following drafting improvements are required by the ERA:

[377] Synergy, *AA4 Submission Number 3: Western Power's proposed application and queuing policy*, 8 December 2017, p. 22, paragraphs 97 and 98.

18.1 Compulsory Enquiry Notification

(a) Where an applicant expects, in good faith, to proceed to a connection application, then prior to lodging a connection application with Western Power, the applicant:

(i) must lodge an enquiry with Western Power to notify Western Power of the proposed connection application;~~,~~ and

(ii) may request that a preliminary assessment is undertaken under clause 19.3 prior to the applicant~~to occur before~~ lodging the ~~proposed~~ connection application.

(b) In the event of an enquiry under clause 18.1(a)(i) or a request under clause 18.1(a)(ii) Western Power must engage in ~~such~~ discussions with the applicant in good faith and ...

19.1 Initial Response

(a) Subject to clause 19.1(b), Western Power … specifying:

(i) the time by which Western Power will provide a preliminary assessment under clause 19.3 of~~with regards to~~ the connection application (if such an assessment was not provided~~undertaken~~ under clause 18.1 before the connection application was submitted ~~and is required under clause 19.3~~); and

Required Amendment 68

Clauses 18.1 and 19.1 of the applications and queuing policy, setting out provisions for a preliminary assessment and initial response, must be amended in accordance with paragraph 1554 of this draft decision.

Deemed withdrawal (ID 10)

1555. Western Power submits that clause 24.5 sets out how an applicant may reject or accept a PAO, but it does not detail the consequence if an applicant provides no response (i.e. a competing applications group member who has received a preliminary access offer may not respond at all). It submits that:[378]

> Western Power and applicants will benefit from a clear and unambiguous explanation of the consequences of an applicant failing to respond to a PAO within the stated timeframe. An applicant failing to respond to a PAO can create difficulties for Western Power in progressing the applications of other CAG applicants. Western Power cannot compel an applicant to respond. Deemed withdrawal of an application enables Western Power to progress the applications of CAG members who have accepted a PAO without delays caused by considering the position of applicants who failed to respond to the PAO.

1556. Western Power proposes to include a new clause 24.5(c) as follows.

(c) If an applicant does not respond to Western Power within 30 business days of receipt of the preliminary access offer by one of the methods in clause 24.5(a), the application and any associated electricity transfer application shall be deemed to have been withdrawn.

[378] Western Power, *Access arrangement information: Attachment 12.3 [redacted]*, 2 October 2017, pp. 9-10.

1557. No submissions to the ERA address Western Power's proposal to insert new clause 24.5(c).

1558. The proposal to insert new clause 24.5(c) is accepted because it is consistent with the requirements of section 5.7(b) of the Access Code – the clause enables users and applicants to understand how the policy will operate.

Termination of a competing applications group (ID 11)

1559. Western Power submits that there is no mechanism in the current applications and queuing policy to terminate or disband a CAG – once created, the CAG will remain in existence indefinitely. Western Power submits:

> This creates potential issues and uncertainties for Western Power regarding whether it must, and how it can, continue to progress these applications within the CAG. Where the CAG works are not viable, there may be no alternative shared works that could provide the CAG members with access and therefore no possible CAG solution. It can also create uncertainties for applicants regarding when and how their connection application may be satisfied. Such issues may be exacerbated over time if other CAG members seek applicant-specific solutions or withdraw their applications.
>
> This issue cannot be dealt with contractually. Western Power has the contractual right to terminate its competing applications processing contracts with CAG members if it considers that it is unlikely to make PAOs or access offers to CAG members or if it considers that the shared works comprising the CAG solution are no longer viable. However, if Western Power terminates such contracts, the CAG still remains on foot for the purposes of the AQP.

1560. Western Power proposes to insert a new clause (24.7A) into the policy to allow for the termination of a CAG. The proposed clause is as follows:

> 24.7A Termination of a Competing Applications Group
>
> (a) Western Power may terminate a competing applications group by written notice to the applicants within that competing applications group where:
>
> (i) Western Power considers, in accordance with this applications and queuing policy, that it will not issue notices of intention to prepare preliminary access offers or preliminary access offers or access offers, as applicable, in respect of a single set of works for shared assets to any of the applicants within the competing applications group; or
>
> (ii) Western Power considers that a single set of works for shared assets is no longer viable.
>
> (b) To avoid doubt, where Western Power terminates a competing applications group under clause 24.7A, the applications previously within that competing applications group and their priority date shall not be affected and may be considered for inclusion in other competing applications groups.

1561. No submissions to the ERA address Western Power's proposal to insert new clause 24.7A.

1562. The proposal to insert new clause 24.7A is accepted because it is consistent with the requirements of section 5.7(b) of the Access Code – the clause enables users and applicants to understand how the policy will operate.

Exceeding maximum levels (ID 12)

1563. Western Power proposes to amend the title of this clause from "Exceeding Minimum Levels" to "Exceeding ***Maximum*** Levels" (***emphasis*** added). The drafting of the clause remains unchanged.

1564. Western Power submits the change is necessary to correct a drafting error – clause 24.6C relates to circumstances where *maximum levels* for acceptance of access offers are exceeded, not minimum levels. The amendment aligns the title of the clause with the content of the clause.[379]

1565. No submissions to the ERA address this proposed change.

1566. The ERA considers this amendment is of an administrative nature that is required to correct a typographical error.

Notice of intention (ID 13)

1567. Western Power considers the current drafting of clauses 24.2 and 24.4 of the applications and queuing policy is inconsistent.

1568. Western Power submits that to issue a NOI or PAO to members of a CAG it must consider that a single set of works for shared assets may meet some or all of the requirements of the CAG. However, the current drafting of clauses 24.2 and 24.4 are inconsistent. Western Power proposes to amend clause 24.2 to correct the inconsistency as follows:

> 24.2 Notice of Intention to Prepare a Preliminary Access Offer
>
> Where Western Power considers that a single set of works for shared assets may meet some or all of the requirements of ~~the applicants within~~ a competing applications group, it will issue a notice of intention to prepare a preliminary access offer to all applicants within that competing applications group, and charge a preliminary offer processing fee~~ (provided that such~~. To avoid doubt, the preliminary offer processing fee is not payable by an applicant who under ~~clause~~clauses 24.3(b) or 24.3(c) elects to opt out of the competing applications group or who under clause 24.3~~(c)~~(d) withdraws their application~~)~~.

1569. It submits that the proposed amendment mirrors the wording used in clause 24.4, which states:

> 24.4 Western Power's Actions Following Response to the Notice of Intention to Prepare a Preliminary Access Offer
>
> Following the response of applicants under clause 24.3 (if any), Western Power may, if it continues to consider that a single set of works for shared assets may meet some or all of the ***requirements of a competing applications group***, make preliminary access offers to each applicant within the relevant competing applications group at the same time. Western Power will … (***emphasis*** added)

1570. Western Power considers that the wording of clause 24.4 reflects its considerations when deciding whether to issue a NOI or PAO (that is, the proposed CAG solution will meet some or all of the requirements of the group). The CAG solution is assessed on the *collective interests within the group*, rather than the *individual interests of each applicant*. Other applicant-specific issues (i.e. individual connection

[379] Western Power, *Access arrangement information: Attachment 12.3 [redacted],* 2 October 2017, p. 10.

works) should not affect Western Power's assessment of the CAG solution – the CAG solution focuses on the common interests of the members of the group and the desire to share the costs of certain shared works.[380]

1571. Synergy does not agree with Western Power's proposal to amend clause 24.2 and submits the following:[381]

> … an effect of WP's proposed amendment to clause 24.2 is, when deciding whether to issue a notice of intention under clause 24.2, WP would no longer need to have regard to the requirements of individual applicants within a CAG; instead it would need only consider the requirements of the CAG as a whole. This is inconsistent with the Access Code objective and section 5.7(a) of the Access Code.
>
> CAGs are created by WP grouping together competing applicants as it considers necessary. In Synergy's view, there is no guarantee the members of a CAG have common requirements (indeed there are competing applicants with different interests).
>
> Synergy does not consider WP has properly substantiated (consistent with the Access Code objective) why it should be allowed to not take into account the particular requirements of any individual applicant and look only at what (it thinks) are the common requirements of the CAG. Doing so risks denying consideration of individual requirements that are important for an individual applicant within the CAG.
>
> WP [has] noted that use of the word "continues" in clause 24.4 suggests the wording used in both clauses (clauses 24.2 and 24.4) should be the same. Synergy reiterates [that] the word "continue" does not necessarily mean one must choose the clause 24.4 wording over the clause 24.2 wording. Indeed, the word "continues" would seem to more strongly argue for a continuation of the use of the clause 24.2 wording into clause 24.4.
>
> Synergy requests clause 24.4 should be amended to include the words "the applicants within"…
>
> The wording used in clause 24.2 in the AA3 AQP should be retained for AA4 – i.e. the words "the applicants within" should be not removed.
>
> Synergy reiterates the view [that] to the extent the effect of WP's proposed changes allows CAG requirements to prevail over an individual CAG applicant's requirement, [this] would appear to create a form of bypass in relation to how applications are prioritised.

1572. The ERA considers Western Power's proposed amendments are consistent with the requirements of the Access Code and are accepted for the following reasons:

- Deleting the words "the applicants within" (a competing application group) in clause 24.4 changes the emphasis of the clause from considering the interests of the *individual* applicants within the group to assessing the *collective* interests of the group as a whole. Further, any changes to clause 24.2 should be reflected in clause 24.4 (and vice-versa) to make the clauses consistent in drafting (language).
- The intention behind the provisions for the CAG is for applications to be assessed on a *collective* basis. This interpretation is supported by clause 24.1(a) of the policy, which provides that Western Power will *assess* "a single set of works for shared assets required to meet some or all of the requirements of each competing applications group". This enables Western Power to compare the interests of one group against another.

[380] Western Power, *Access arrangement information: Attachment 12.3 [redacted],* 2 October 2017, pp. 11-12.

[381] Synergy, *AA4 Submission Number 3: Western Power's proposed application and queuing policy*, 8 December 2017, pp. 23-24, paragraphs 103 to 110.

- The proposed amendments are consistent with section 5.7(a) of the Access Code, which provides that the policy "must to the ***extent reasonably practicable*** accommodate the interests of the service provider, users and applicants" [***emphasis*** added]. In situations where there are large numbers of applications it is reasonable to consider the applications as a collective. Where an applicant wants to be considered independently it can opt out of the group and apply for an applicant-specific solution.

Payment of fees and contributions policy (ID 22)

1573. Western Power considers that the wording of clause 24.3(a) may be inconsistent with actual practice and should be clarified. It submits that:[382]

> The contributions policy regulates the manner in which contributions are calculated and this does not need to be dealt with in the AQP in any detail. For example, the contributions policy deals with the situation of an applicant paying an amount greater than its contribution determined in accordance with that policy. Further, if the components of a fee paid are not able to be capitalised because they relate to operating expenses, those amounts would not affect the calculation of any contribution. Therefore, the wording of clause 24.3(a) is potentially inconsistent with actual practice and ought to be clarified to enable the contributions policy to take precedence.

1574. Western Power proposes to amend the drafting of clause 24.3(a) as follows:

> **…** Where the applicant subsequently enters an access contract, the preliminary offer processing fee will be counted towards any contribution payable, where permissible under the contributions policy~~, or where it exceeds any contribution payable under the contributions policy, the excess will be offset against amounts payable under that access contract~~; or

1575. A similar amendment is also proposed for clause 24.5(b), which is discussed at paragraph 1579 below.

1576. Alinta submits the following comments in response to Western Power's proposal to amend clause 24.3 of the policy:[383]

> While Alinta agrees in principle that this scenario should be dealt with in the correct policy, and on face value, the contributions policy appears the most appropriate place for it, Alinta considers that it is not immediately clear how an applicant paying an amount greater than its contribution will be dealt with in the contributions policy as it currently stands.
>
> As such, Alinta considers that greater clarity is required in the contributions policy as to how it deals with any [preliminary access offer] fee exceeding any contribution payable under the contributions policy, and whether any excess payments will be offset against amounts payable under an access contract.

1577. The ERA agrees that the contributions policy does not deal with the situation where an applicant pays a greater amount in the processing fees than its contribution. Hence, the proposed deleted words in clause 24.3(a) should be reinstated in the applications and queuing policy, with the word "or" replaced by the word "and" as follows:

> (a) … Where the applicant subsequently enters an access contract, the preliminary offer processing fee will be counted towards any contribution

[382] Western Power, *Access arrangement information: Attachment 12.3 [redacted],* 2 October 2017, p. 12.

[383] Alinta Energy, *Alinta Energy Submission*, 11 December 2017, section 3.2.

payable, where permissible under the contributions policy, and~~or~~ where it exceeds any contribution payable under the contributions policy, the excess will be offset against amounts payable under that access contract; or

Required Amendment 69

Clause 24.3(a) of the applications and queuing policy must be amended in accordance with paragraph 1577 of this draft decision to include the words: "and where it exceeds any contribution payable under the contributions policy, the excess will be offset against amounts payable under that access contract".

Payment of fees and contributions policy (ID 23)

1578. As with the proposed changed to clause 24.3(a) (refer to paragraph 1573 above), Western Power submits that the contributions policy regulates the manner in which contributions are calculated, and hence, this does not need to be dealt with in the applications and queuing policy.[384]

1579. Drafting amendments are proposed for clause 24.5(b) to improve readability, delete some words and clarify that the fee will be counted towards a contribution *where permissible* under the contributions policy:

> (b) Where applicants respond under either clause 24.5(a)(i) or an agreement is reached regarding the form of the preliminary access offer under clause 24.5(a)(ii)~~, they~~ ("preliminary acceptance"), the applicants must pay within 30 business days a preliminary acceptance fee as specified in the price list to Western Power ~~as a demonstration of~~to demonstrate the good faith ~~in~~of their intention to proceed to an access contract. The preliminary acceptance fee is non-refundable but, where the applicant subsequently enters an access contract, the preliminary acceptance fee will be counted towards any contribution payable, where permissible under the contributions policy~~, or where it exceeds any contribution payable under the contributions policy, the excess will be offset against amounts payable under that access contract~~.

1580. No submissions to the ERA address Western Power's proposed amendment to clause 24.5(b).

1581. Western Power's proposed amendments are broadly consistent with the requirements of the Access Code on the basis that the amendments improve drafting and add clarity.

1582. The inclusion of the words "where permissible" is consistent with the words used in clause 24.3(a). However, the ERA considers the language used in clauses should be consistent where practicable. Hence, for clause 24.5(b) the deleted words "where it exceeds any contribution payable under the contributions policy, the excess will be offset against amounts payable under that access contract" should be reinstated for the reasons set out in paragraph 1577 of this draft decision, to make the clause read:

> (b) … The preliminary acceptance fee is non-refundable but, where the applicant subsequently enters an access contract, the preliminary acceptance fee will be counted towards any contribution payable, where permissible under the contributions policy, and where it exceeds any contribution payable under the

[384] Western Power, *Access arrangement information: Attachment 12.3 [redacted]*, 2 October 2017, pp. 12-13.

> contributions policy, the excess will be offset against amounts payable under that access contract.

Required Amendment 70

Clause 24.5(b) of the applications and queuing policy must be amended in accordance with paragraph 1582 of this draft decision to include the words: "and where it exceeds any contribution payable under the contributions policy, the excess will be offset against amounts payable under that access contract".

Modified plant compliance with the technical rules (ID 23A)

1583. Western Power considers amendments are required to ensure an applicant must provide information regarding compliance with the Technical Rules in its connection application. It submits that:

> The compliance of any modifications to generating plant sought in a connection application under clause 16.3 with the Technical Rules is relevant to Western Power's assessment of that connection application. The applicant should be required to provide information relating to such compliance when submitting its connection application, as specified in the application form. As compliance with the Technical Rules is of paramount importance under the Code for Western Power and applicants/users, it is critical that compliance with the Technical Rules is monitored closely. Such information is necessary for Western Power to assess and process the connection application and proposed modification to the generating plant to seek to ensure the safe and reliable operation of the network.
>
> The AQP does not currently include an express requirement for such information to be provided with a connection application to modify generating plant, as specified in the application form. The proposed amendment is consistent with clause 3.7(e) of the AQP which requires connection applicants to provide such information about the facilities and equipment at the connection point to the extent required by the Technical Rules and Western Power acting as a reasonable and prudent person.

1584. Western Power proposes to amend the drafting of clause 16.3 to add the words "and compliance of the modified generating plant with the technical rules" as follows:

> If an applicant seeks to materially change the characteristics of generating plant connected at a connection point, then the applicant must complete those parts of the appropriate application form that deal with those characteristics, and include any additional information specified in the application form (which might include equipment schedules, drawings and computer models) that Western Power, as a reasonable and prudent person, might require to assess the impact of the modification on the network and other users, and compliance of the modified generating plant with the technical rules.

1585. Synergy considers the applications and queuing policy should "be more specific about the scope of the information that could be required by Western Power under this amended clause". It also is concerned about Western Power being able to impose a higher compliance standard:[385]

> Compliance with the technical rules is a very broad concept which could impose obligations on small users to establish complex compliance plans and risk matrix in respect of small generating plant and spend a significant amount of time and cost

[385] Synergy, *AA4 Submission Number 3: Western Power's proposed application and queuing policy*, 8 December 2017, p. 21, paragraph 89.

> managing customer queries in relation to what facilities and appliances materially modifies the network/connection point. Synergy assumes this is not WP's intent and requests this to be reflected in the drafting.
>
> Synergy is also concerned to ensure WP's proposed amendment does not impose a higher compliance standard than parties are currently subject to. For example, the reference to the technical rules in the amendment should be changed to ensure the standard of compliance required is to the technical rules that apply to the user or applicant. This will ensure that grandfathered arrangements can continue to apply and will not impose unreasonably burdensome obligations on users, which could result in necessary or desirable modifications not being made to generating plant.

1586. The ERA considers that, while Synergy has raised a valid point, the clause includes the words "as a reasonable and prudent person might require". This wording provides flexibility to impose a lower information and/or compliance burden on small users where appropriate. For this reason, the proposed amendment to clause 16.3 is consistent with the requirements of the Access Code and the Access Code objective.

Information requirements for connection applications (ID 23B)

1587. Clause 3.7 details the information that the applicant must provide to Western Power at the time of submitting its connection application.

1588. Western Power notes that the facilities and equipment which may ultimately be installed at a connection point may differ from those contemplated at the time that a connection application is made. It considers that clause 3.7(e) should be clarified to confirm that:[386]

> an applicant must provide information about facilities and equipment which are technically required, but it is acknowledged that there may be some additional aspects of facility and equipment which could be subject to change, such as the particular generating plant that a generator may seek to connect.

1589. Existing clause 3.7(e) requires the applicant to provide information about the facilities and equipment to be connected at the connection point to the extent required by the Technical Rules and by Western Power acting as a reasonable and prudent person. Western Power proposes to amend the drafting of clause 3.7(e) to as follows:

> 3.7 Information Required with Connection Applications
>
> The applicant must provide the following information to Western Power in respect of a connection application at the time of submitting the connection application:
>
> …
>
> (e) such information regarding the facilities and equipment <u>likely or required to be connected</u> at the connection point to the extent required by:
>
> (i) the technical rules; and
>
> (ii) Western Power acting as a reasonable and prudent person,

1590. Perth Energy raises the following concerns over the requirements of clause 3.7:

- Whether the requirements are feasible to implement and whether unnecessary restrictions are being placed on potential applicants.

386 Western Power, *Access arrangement information: Attachment 12.3 [redacted],* 2 October 2017, p. 14.

- Existing holders of capacity appear to be able to move access from one location to another, and from one generation type to another, without undertaking the same level of analysis that would be applicable to a new connection.

1591. Perth Energy submits:[387]

> The current clause 3.7(e) requires any proponent wishing to submit an access application to:
>
> “provide information regarding the facilities and equipment at the connection point to the extent required by: i) The technical rules; ii) Western Power acting as a reasonable and prudent person”
>
> Perth Energy notes the requirement to provide information as per the technical rules may not be possible to achieve in practice. Information required in the technical rules can only be provided once a proponent has made a commitment to the specific type and model of generating unit to be installed; which requires the proponent to place an order for the chosen machine. Perth Energy is of the view that placing this obligation on the proponent prior to the negotiation of network connection is excessive.
>
> Rather, Perth Energy would recommend it to be sufficient that the proponent describes the proposed type of plant and provide generic or typical data. Given the long lead times associated with network connection and associated fast rates of technological change in power generation systems, committing to a manufacturer and make of a model early on the application stage will constrain the best investment decisions being made.
>
> If there is a situation where Western Power really does require all of the information required by the technical rules then it is adequately covered by clause (ii). It can rightly advise that, acting as a reasonable and prudent person, in this situation it needs the information set out in the technical rules.
>
> Perth Energy suggests that deletion of 3.7(e)(i) removes an unnecessary obligation on proponents and that Western Power is adequately protected by 3.7(e)(ii).

1592. The ERA considers the proposed amendments are consistent with the requirements of the Access Code because the amendments reinforce the need for compliance by Western Power and the applicant with the Technical Rules (as required under section 12.4 of the Access Code), but also recognise that the facilities and equipment which is ultimately installed at a connection point may differ from those contemplated at the time that a connection application is made. The insertion of the word “likely” combined with the requirement for Western Power to act as a reasonable and prudent person should address the concerns raised by Perth Energy.

Proposed amendments to transfer application provisions

Contestable customers (ID 14)

1593. Western Power considers the current applications and queuing policy is inconsistent with the *Electricity Corporations (Prescribed Customers) Order 2007*. It submits the following in support of its proposed amendments:

> The AQP considers contestability on an exit point by exit point basis for the purposes of customer transfer requests and making access offers. It contemplates that determinations will be made by Western Power as to whether an exit point is contestable by reference to the estimated amount of electricity to be consumed at that exit point (i.e. the contestability threshold).

[387] Perth Energy, *Submission the ERA regarding Western Power’s proposed revisions to the access arrangement for the Western Power network*, November 2017, pp. 11-12.

> This approach is inconsistent with the *Electricity Corporations (Prescribed Customers) Order 2007* which defines a 'prescribed customer' (who therefore cannot be a contestable customer) based on the customer's portfolio of exit points.
>
> This inconsistency creates issues and ambiguities for Western Power and applicants in interpreting and implementing the AQP. Different outcomes could be generated under the order and the AQP regarding who may sell electricity to a customer at a connection point (and therefore be a party to the relevant ETAC).
>
> As a result of the Electricity Corporations (Prescribed Customers) Order 2007, a customer will be 'contestable' if they do not meet the definition of a 'prescribed customer' because the customer consumes, or could reasonably be expected to consume, at an exit point supplying the customer with electricity more than 50MwH per annum.

1594. Western Power proposes to insert "contestable customer" as a new defined term and delete the terms "contestable" and "contestability threshold":

> **"contestable customer"** means a customer to whom the supply of electricity is not restricted under section 54 of the Electricity Corporations Act 2005 or under another enactment dealing with the progressive introduction of customer contestability.
>
> {Note: At the time this applications and queuing policy comes into effect, the relevant instrument under section 54 of the Electricity Corporations Act 2005 was the Electricity Corporations (Prescribed Customers) Order 2007, gazetted 29 June 2007.}
>
> ~~**"contestable"**, with respect to an exit point, means an exit point that Western Power has determined is contestable under clause 13.~~
>
> ~~**"contestability threshold"** in relation to an exit point, means the amount of electricity consumed or the estimated amount of electricity that will be consumed at the exit point, by a customer who is a member of a class of customers declared to be 'prescribed customers' as defined in section 54 of the Electricity Corporations Act 2005 by an order made under and in accordance with section 54(4) of that Act, within the period specified in the declaration.~~

1595. Western Power submits that given its proposed new term *contestable customer*, and related amendments (outlined below), the definitions of "contestable" and "contestability threshold" (which focus on exit points) are no longer necessary or appropriate, and are therefore deleted.

1596. Other related and consequential amendments arising from the inclusion of the term contestable customer include:[388]

- Amendments to clause 13.1 to require Western Power, when it receives a transfer application, connection application or transfer request, to determine if the application or request is being made for the purpose of supplying electricity to a contestable customer at the exit point.
- Amendments to clause 13.3 to require Western Power to reject an application if it is not authorised to make an access offer because the customer who will be supplied electricity is not a contestable customer.
- The deletion of (existing) clause 13.2 – the criteria for whether an application or request relates to a contestable customer is set out in the proposed new definition of "contestable customer".

[388] Western Power, *Access arrangement information: Attachment 12.3 [redacted],* 2 October 2017, pp. 15-16.

- The deletion of (existing) clause 14.4(c) – the approach of considering the contestability of exit points on an exit point-by-exit point basis is inconsistent with the *Electricity Corporations (Prescribed Customers) Order 2007*.
- Consequential amendments to clause 9.1 to provide that customer transfer requests may be made in relation to *exit points at which electricity will be supplied to contestable customers*, not *contestable exit points*.

1597. Alinta acknowledges that it is desirable to amend the relevant provisions of the applications and queuing policy so that the provisions align with the contestability test in section 54 of the *Electricity Corporations Act 2005* and *Electricity Corporations (Prescribed Customers) Order 2007*. However, retailers need to be certain about the contestability status of a customer before an access application is made and once an access contract is entered into. Alinta submits:[389]

> … retailers – other than Synergy, which is not exposed to full competition - need to have confidence and certainty that:
>
> - a customer it proposes to supply is in fact "contestable" under the new definition in clause 2.1 well before it makes any offer to that customer and certainly before it makes an access application to Western Power, and
> - once it enters into an access contract with Western Power (or adds a connection point under an existing access contract) in relation to the supply of electricity to a customer who is assessed by Western Power as being "contestable", the contract will continue for its full term even if that person's electricity consumption subsequently declines.
>
> Alinta is concerned that the proposed amendments may increase the risks faced by electricity retailers who compete to supply electricity to contestable customers, which ultimately leads to the creation of uncertainty for customers. That is because the amended provisions reduce, perhaps inadvertently, the level of confidence that retailers may have in relation to the two points outlined above. Alinta therefore requests that the ERA carefully consider Western Power's proposed changes to ensure that retailers are not faced with unreasonable levels of risk in relation to the assessment of customer contestability, and that the proposed amendments do not lead to undue levels of uncertainty for the customer.

1598. Change Energy supports the revisions to the applications and queuing policy concerning the change in interpretation of *prescribed customers*. It submits there are many customers that at an *aggregate level* are contestable, but due to the current policy are not allowed to enjoy the benefits of competition.[390]

1599. Community Electricity considers Western Power should be held to account for its incorrect interpretation of the prescribed customer order in the past.[391]

1600. Perth Energy supports the clarification of the "contestable" definition and the alignment of the definition with the *Electricity Corporations (Prescribed Customers) Order 2007*. It submits that removing the ambiguity surrounding contestability is a good outcome.[392]

---

[389] Alinta Energy, *Alinta Energy Submission*, 11 December 2017, section 3.3.

[390] Change Energy, *Submission on AA4*, 11 December 2017, p. 3.

[391] Community Electricity, *Response to ERA Public Consultation*, 10 December 2017, p. 5, paragraphs 26 and 27.

[392] Perth Energy, *Submission the ERA regarding Western Power's proposed revisions to the access arrangement for the Western Power network*, November 2017, p. 12.

1601. The ERA has considered the submissions received from interested parties. Alinta highlights a practical risk that retailers need to manage. The ERA considers that this risk should be managed by retailers – it is not for Western Power to manage this risk through the applications and queuing policy.

1602. The issues raised in Community Electricity's submission regarding Western Power's previous interpretation of the prescribed customer order are not a matter for the access arrangement review.

1603. The proposed definition of "contestable customer" is consistent with the requirements of the Access Code and the Access Code objective because it reinforces that whether a customer is contestable (or not) is a factual question and also resolves the ambiguity around the exit portfolio issue. The consequential amendments are also consistent with the Access Code requirements on the basis that the amendments are needed and generally simplify the policy, with the exception of proposed clause 13.3. The ERA considers that clause 13.3 requires amendments to make it easier to understand. The required drafting amendments are set out below:

> 13.3 Rejection of Application
>
> Western Power must reject an application where it~~Where Western Power~~ is not authorised under the *Electricity Corporations Act 2005* or other written law to make an access offer ~~for an application~~ for the purpose of the supply of electricity to a customer because that customer is not a contestable customer~~, Western Power must reject the application~~.

Required Amendment 71

Clause 13.3 of the applications and queuing policy, requiring Western Power to reject an application where the customer is not a contestable customer, must be amended in accordance with paragraph 1603 of this draft decision.

Multiple trading relationships at a connection point (ID 21)

1604. Western Power has proposed amendments to facilitate multiple trading relationships at a connection point. It submits:

> The AQP only allows one [national market identifier or] NMI and one ETAC per connection point, and does not allow multiple NMIs and/or ETACs at the same connection point. It also only allows for one controller, and one type of exit service, entry service or bidirectional service to be provided, at a connection point.
>
> As a result, the AQP does not have the flexibility to allow for multiple trading relationships to exist at connection points if wider regulatory and legislative reforms occur to enable such arrangements to exist. Such arrangements may require or involve multiple NMIs, ETACs, controllers and/or types of services. An example of such an arrangement involves electricity being purchased at a connection point by a customer who may want to transfer into the network, at the same connection point, excess generation for sale to a third party.
>
> Clause 14.4 of the AQP provides for the splitting of connection points into multiple connection points, however this would require the installation of additional metering infrastructure etc. and may be less efficient.
>
> Amendments to support multiple trading relationships at a connection point in the future, should regulatory reform occur to enable such arrangements to exist, were requested and are supported by a number of stakeholders.

Legislative reforms to enable multiple trading relationships may come into effect during the AA4 period. Western Power's preference is to avoid having to make mid-term amendments to the access arrangement to address the reforms. The provisions only operate if the relevant reforms are introduced.

1605. Western Power proposes to insert a new clause (14.5) into the applications and queuing policy to confirm that if multiple trading relationships at a connection point are permitted by law and all approvals have been given, Western Power may agree to depart from the requirements of clause 14 to the extent necessary to facilitate that arrangement:

14.5 Multiple trading relationships at a Connection Point

Notwithstanding clauses 14.1 to 14.5, if multiple trading relationships at a connection point are permitted by law and all necessary approvals have been given for such an arrangement, Western Power and an applicant may agree to depart from the requirements of this clause 14 to the extent necessary to facilitate that arrangement.

1606. An amendment is proposed at clause 3.8 to allow an exception to the requirements for one Electricity Transfer Access Contract (**ETAC**) for each connection point in such circumstances:

3.8 One Electricity Transfer Access Contract per Connection Point

Each connection point must be included in one and only one electricity transfer access contract to allow the transfer of electricity at that connection point, except where multiple trading relationships at a connection point are permitted by law and all necessary approvals have been given for such an arrangement.

1607. Perth Energy supports the extension of clause 3.8 to allow multiple trading relationships at a connection point (subject to necessary legal approvals). [393]

1608. Synergy submits Western Power has not provided any "sound justification" for the proposed amendments to clause 14.5.[394] Synergy provides the following information in response to Western Power's proposal:

In February 2016, the Australian Energy Market Commission (**AEMC**) decided against making the National Electricity Amendment (Multiple Trading Relationships) Rule 2016 and the National Energy Retail Amendment (Multiple Trading Relationships) Rule 2016 (MTR Rules).

The AEMC defined the term "multiple trading relationships" to refer to the ability of a customer to engage with multiple retailers at a premises, noting that a customer who wishes to engage with multiple retailers can do so by establishing a second connection point at a premises.

The AEMC explained in its final rule determination into the MTR Rules (dated 25 February 2016) the costs of establishing new connection points were identified to be much lower while considering the report than was anticipated by the Australian Energy Market Operator when it proposed the MTR Rules to the AEMC.

However, it is not clear to Synergy whether WP has adopted a concept of multiple trading relationships that aligns with that of the AEMC or whether WP instead proposes a broader class of potential traders, possibly including financial contracts and block-chain technology. This lack of specificity is troubling because it gives rise to the possibility WP may simply assert a set of contractual arrangements constitute multiple

[393] Perth Energy, *Submission the ERA regarding Western Power's proposed revisions to the access arrangement for the Western Power network*, November 2017, p. 11.

[394] Synergy, *AA4 Submission Number 3: Western Power's proposed application and queuing policy*, 8 December 2017, pp. 20-21, paragraphs 79 to 86.

> trading arrangements and require a user, applicant or market participant that disagrees with a given proposal to, without certain foundation, refute this position.
>
> This ambiguity is concerning because it is likely to be resolved only through time consuming and expensive dispute resolution arrangements or will see applicants and users agreeing with WP or otherwise settling for sub-optimal outcomes because they wish to avoid delay and expense. In any case Synergy reiterates the concerns expressed in its Initial Submissions that, as drafted by WP, the proposal is vague (e.g. "multiple trading relationships" is not defined) and seeks to give WP a unilateral right to "agree to depart from" clause 14 of the AQP without regard to the interests of applicants or users.

1609. The ERA agrees it would be preferable to have certainty about any regulatory regime that allows multiple trading relationships before amending the applications and queuing policy. However, the ERA considers Western Power's proposed amendment is likely to be sufficient to cover any such regime. The ERA considers the proposed words "Western Power and an applicant may agree to depart from the requirements of this clause 14 to the extent necessary to facilitate that arrangement" allows applicants and users to understand in advance how the policy will operate, and is therefore consistent with the requirements of the Access Code.

1610. In any case, if issues arise or further amendments are required, sections 4.38 and 4.41A of the Access Code allow the ERA to approve mid-period revisions.

Relationship with transfer and relocation policy (ID 15 and 15A)

1611. Western Power considers there is a misconception among users that the applications and queuing policy enables capacity currently contracted to one user being temporarily made available to another user. Western Power considers this is not the purpose of the policy and it has no mechanism to achieve this because capacity transfers and relocations are dealt with under the transfer and relocations policy.

1612. Feedback from Western Power's stakeholder engagement recognised the matter might be best dealt with in the transfer and relocations policy, but suggested any policy should:

- Not inhibit implementation of demand side solutions.
- Not constrain innovation.
- Not impede peer to peer trading.

1613. Western Power proposes to insert a new clause (12A) into the policy as follows:

> <u>12A Relationship with transfer and relocation policy</u>
>
> <u>(a)</u> <u>The transfer and relocation policy applies to bare transfers, and assignments other than bare transfers, of rights under an access contract. To avoid doubt, this applications and queuing policy does not apply to applications for such transfers or assignments, including temporary transfers or assignments.</u>
>
> <u>(b)</u> <u>If a user seeks a relocation under the transfer and relocation policy, it must make an electricity transfer application under this applications and queuing policy by notice in writing to Western Power.</u>
>
> <u>(c)</u> <u>If a relocation the subject of an electricity transfer application under clause 12A(b):</u>

(i) requires an augmentation or any work to be completed to enable the increase or decrease in contracted capacity at the relevant connection point; or

(ii) would result in Western Power's ability to provide a covered service to another user or applicant who has lodged a connection application being impeded,

then the applicant must submit a connection application and the requirements of that application must be satisfied before the relocation can occur.

1614. The following note is added to clause 10.2, which refers to the new proposed clause (12A):

10.2 Increase or Decrease in Contracted Capacity

(a) An electricity transfer application to increase or decrease contracted capacity with respect to an existing covered service under the applicant's access contract may be made by notice to Western Power.

{Note: clause 12A concerns the application of the transfer and relocation policy to relocations.}

1615. Definitions of "assignment" and "bare transfer" have been added to clause 2.1:

- "Assignment" has the meaning given to 'assignment' in the transfer and relocation policy.
- "Bare transfer" has the meaning given to 'bare transfer' in the transfer and relocation policy.

1616. Western Power submits that:[395]

- New clause 12A(a) is included to confirm that the transfer and relocation policy (and not the applications and queuing policy) applies to bare transfers and assignments of rights under an access contract, including temporary transfers.
- New clauses 12A(b) and (c) are included to confirm that if a user wishes to seek a relocation under the transfer and relocation policy, it must lodge an electricity transfer application. A connection application must also be lodged if the relocation requires any augmentation or works, or would result in Western Power's ability to provide covered services to another user or applicant being impeded.
- The new clauses reflect the existing principle in clause 10.2 – that if a change (i.e. relocation or increase in contracted capacity) requires works to augment the network or will impede another user or applicant, a connection application is required.

1617. Synergy submits: [396]

The AQP is intended to deal with "access applications" by "applicants" and by definition, they relate only to modification to an existing contract for services or the establishment of a new one. In Synergy' regulatory view, it needs to be made clear in the AQP that clause 10.2(a) only applies if the increase/decrease involves a modification to an existing contract for services or the establishment of a new service.

---

[395] Western Power, *Access arrangement information: Attachment 12.3 [redacted],* 2 October 2017, pp.17-18.

[396] Synergy, *AA4 Submission Number 3: Western Power's proposed application and queuing policy*, 8 December 2017, pp. 18-19, paragraphs 69 to 71.

It is therefore premature for the AQP to assume all or any increases, decreases or relocations of capacity will necessarily require an access application to be made.

1618. The ERA agrees with the points raised by Synergy – by definition, the applications and queuing policy is intended to deal with new or modified services. As currently drafted, Western Power's proposed new clause (12A) ignores this distinction and for this reason is not accepted.

Required Amendment 72

Proposed new clause 12A ("Relationship with transfer and relocation policy") must be deleted from the applications and queuing policy.

Connection point configuration (ID 16)

1619. Western Power submits that existing clause 14.3, which covers the combination of multiple connection points into a single connection point, does not expressly state that the consent of an existing retailer is required.[397]

1620. Western Power proposes to insert a new clause (14.3(d)) into the applications and queuing policy to confirm where an application to combine multiple connection points within a single connection point is made by an applicant, who is not the retailer in relation to all relevant connection points, the applicant must obtain the consent of the retailer:

> (d) Where an application is made under clause 14.3(a) by an applicant who is not the retailer in relation to a relevant connection point, the applicant must obtain the consent of the retailer.

1621. Similar to existing clause 14.3, existing clause 14.4, which covers the splitting of a single connection point into multiple connection points, does not expressly state that the consent of an existing retailer is required.

1622. Western Power proposes insert a new clause (14.4(c)) to confirm that where an application to split a single connection point into multiple connection points is made by an applicant, who is not the retailer for the connection point, the applicant must obtain the retailer's consent.

> (c) Where an application is made under clause 14.4(a) by an applicant who is not the retailer in relation to the connection point, the applicant must obtain the consent of the retailer.

1623. No submissions made to the ERA address Western Power's proposed new clauses 14.3(d) and 14.4(c).

1624. Western Power's proposed new clauses are consistent with section 5.7(a) of the Access Code because they accommodate the interests of the existing retailer at a connection point.

[397] Western Power, *Access arrangement information: Attachment 12.3 [redacted]*, 2 October 2017, p. 19.

Proposed revisions to common provisions

Covered services (ID 18)

1625. Western Power considers the current applications and queuing policy does not specifically state that it is only applicable to applications for covered services. Western Power considers this may create confusion for property developers not seeking a covered service.

1626. Western Power submits that:[398]

> Uncertainties and ambiguities can arise for Western Power and property developers regarding how Western Power should process requests by property developers seeking augmentations to the network to service a subdivision but who do not seek an identified covered service. As such applications do not relate to a covered service to be provided to a developer or a third party or seek capacity on the network, a developer is not capable of receiving an 'access offer' or entering an 'access contract', as those terms are currently defined by the AQP. Western Power has other processes in place for processing such applications outside the AQP.

1627. Western Power proposes to insert a new clause (2.2(c)) and make amendments to the definitions of "connection application" and "electricity transfer application" (in clause 2.1) to confirm that the policy only applies to applications seeking a covered service and to ensure there are no inconsistencies between the defined terms: *connection application*, *access offer* and *access contract*:

> (c) To avoid doubt, this applications and queuing policy only applies to applications in relation to covered services.
>
> **"connection application"** means an application in relation to a covered service lodged with Western Power under this applications and queuing policy that has the potential to require a modification to the network, including an application to:
>
> (a) connect facilities and equipment at a new connection point; or
>
> (b) increase consumption or generation at an existing connection point; or
>
> (c) materially modify facilities and equipment connected at an existing connection point; or
>
> (d) augment the network for any other reason,
>
> ~~{Note: this might be, for example, to service a subdivision.}~~
>
> and includes any additional information provided by the applicant in regard to the application.
>
> …
>
> **"electricity transfer application"** means an application in relation to a covered service lodged with Western Power under this applications and queuing policy seeking to …

1628. Amendments are also proposed to clause 16.4, which covers connection applications to modify or augment the network. Western Power proposes to amend clause 16.4(a) to confirm that the clause applies only to applicants who seek to

[398] Western Power, *Access arrangement information: Attachment 12.3 [redacted],* 2 October 2017, p.20.

modify or augment the network *for the purposes of receiving a covered service*. The note to the clause will also be deleted:

(a) An applicant who seeks to modify or augment the network for the purpose of receiving a covered service other than under clause 16.1 must submit a connection application on the applicable connection application form.

~~{Note: This might apply to, for example, a developer seeking to service a subdivision, a builder seeking a temporary supply, or a person seeking to relocate network assets.}~~

1629. Synergy considers that Western Power's proposed amendments to clause 2.2(c) and the definition of "connection application" are inconsistent with the requirements of the Access Code. It submits the following:[399]

The definition of *covered service* in the Access Code expressly excludes an *excluded service*. Therefore, the effect of specifying in the AQP that a connection application applies only to *covered services* would, along with other changes throughout the proposed AQP, be to exclude the requirement that an *applicant* must submit a connection application in respect of *excluded services* and WP would have no obligation to comply with the AQP in respect of *excluded services*. To the extent WP decided *excluded services* applied, they would therefore be unregulated.

This is contrary to the Access Code because the Access Code is drafted on the basis the AQP applies to *excluded services* and *covered services* alike.

The state government's intent is very clear given the drafting of the definition of *covered services*. This is because the definition of *excluded service* provides the supply of the *service* must be subject to effective competition and the cost of the service ***is able to be excluded*** from consideration for *price control* purposes without departing from the Access Code objective *[**emphasis** added]*. Assessing whether a *service* is an *excluded service* is therefore a question of fact and a question of law, neither of which requires the *service* must be the subject of a determination by the Authority under section 6.33 of the Access Code.

Under section 6.33 of the Access Code, the Authority may determine a *service* to be an *excluded service* for the purpose of review or approval of *price control* in an *access arrangement* (section 6.34 of the Access Code).

The upshot of this is disagreement may arise between WP and *users* about whether or not a particular *service* is an *excluded service* and whether as a consequence the AQP does not apply. Services could, in the estimation of WP and one or more *users* during the course of an *access arrangement period* become *excluded services* and then cease being *excluded services* either because supply of the *services* ceases being subject to effective competition or the *service* is no longer able to be excluded from consideration for *price control* purposes without departing from the Access Code objective.

Further, WP could form a view for the purposes of the AQP that a *service* is an *excluded service* without that same *service* being the subject of a determination under section 6.33 of the Access Code. The formation of such a subjective view, which could lead to a dispute between WP and one or more users could then only be resolved by means of time consuming and costly disputes. Further, in such an event, if the Authority is to *approve* WP's proposed amendments to the definition of "connection application", the effect would be WP could depart from the AQP while the *excluded services* remained, at least for a time, a component of WP's *target revenue*.

Synergy contends either outcome is inconsistent with the Access Code objective, section 5.7(a) and section 5.7(b) of the Access Code.

[399] Synergy, *AA4 Submission Number 3: Western Power's proposed application and queuing policy*, 8 December 2017, pp. 12-14, paragraphs 34 to 43.

> Further, the AQP does not provide sufficient detail in relation to when *applicants* must make a connection application because it is not clear what constitutes the "…potential to require a modification to the network, including an *application* to … materially modify *facilities and equipment* connected at an *existing connection point*…".
>
> Synergy notes the *reference services*, relevantly, specify the technical eligibility criteria for a person to use *a service*. Therefore, a person could connect and use equipment if they continue to satisfy this criterion. However, based on Synergy's discussions with WP it appears that this is not always the case. In some circumstances WP may require a connection application to be made even if a person's *facilities and equipment* comply with the eligibility criteria for the *reference service (or covered service*). This unilateral and ad-hoc determination does not provide regulatory certainty or clarity to *applicants* and it can be a very costly and time consuming exercise to get a position from WP that is applied consistently to all *users* and *applicants*.
>
> Therefore, Synergy requires the AQP to define and clarify the matters that require a connection application including setting timelines for WP to diligently and expeditiously respond to a *user's/applicant's* queries as to whether a connection application is required in relation to connecting and operating particular equipment or appliances. In Synergy's view, this change will significantly assist Synergy's customers to connect new appliances such as PV, EV and battery as it will remove uncertainty as to what can and cannot be connected without WP's approval, and such a change is consistent with the objective in clause 1.2(c) of the AQP – that is, to facilitate joint solutions for connection applications.

1630. The ERA has considered the matters raised by Synergy and has decided Western Power's proposed amendments are consistent with the requirements of the Access Code, subject to an additional amendment:

- The proposed drafting is consistent with the requirements of the Access Code. Sections 5.7(d) and (e) of the Access Code specifically provide that the applications and queuing policy is to apply to applications relating to the terms for an access contract for covered services and the process for priority disputes in relation to access for covered services. The term "covered services" as defined in the Access Code expressly excludes *excluded services*. By extension the applications and queuing policy is intended to only apply to covered services.
- The applications and queuing policy does provide sufficient information about when applicants must make a connection application. The definitions "connections application" and "electricity transfer application" indicate when an application is required (i.e. when an application has the potential to require modification to the network or modification to a service).
  - Synergy submits that the criterion to "materially modify facilities and equipment connected at an existing connection point" is unclear in the definition of "connection application". Synergy argues that if a change to the facilities or equipment meets the eligibility criteria it should not amount to a material modification.
  - To address Synergy's concern, the ERA considers the words "in a way that means they no longer meet the eligibility criteria" can be added to the end of criterion (c) in the definition of "connection application".
- Additional timeframes for Western Power to respond to queries do not need to be inserted. The process for submitting enquiries and acting expeditiously is already provided for in clause 3.2 and clause 3.12 of the applications and queuing policy. These clauses are sufficiently detailed to enable users and applicants to understand how the policy will operate, and hence, satisfy section 5.7(b) of the Access Code.

1631. For the reasons set out above, Western Power's proposed amendments to (new) clause 2.2(c), the definition of "electricity transfer application" and clause 16.4(a) are consistent with the requirements of the Access Code. The proposed amendment to the definition of "connection application" is accepted subject to the following drafting amendment to address Synergy's submission:

> **"connection application"** means an application in relation to a covered service lodged with Western Power under this applications and queuing policy that has the potential to require a modification to the network, including an application to:
>
> …
>
> (c) materially modify facilities and equipment connected at an existing connection point <u>in a way that means they no longer meet the eligibility criteria</u>; or

Required Amendment 73

The definition of "connection application" (at clause 2.1) in the applications and queuing policy must be amended in accordance with paragraph 1631 of this draft decision to add the words *"in a way that means they no longer meet the eligibility criteria"*.

Confidentiality (ID 19)

1632. Western Power notes that, although applicants consider project-specific information to be confidential as a matter of course, the policy's definition of confidential information requires that the applicant specifies which of the information it provides is confidential. From time to time Western Power has been requested to disclose certain project information to third parties. Western Power proposes to make clearer what project information is not confidential.

1633. Clause 6 of the applications and queuing policy contains provisions for confidentiality:

- Clause 6.1 indicates that information that is required to be disclosed under clauses 18.2A, 24.9(a), 24.9(b) and 24.9(c) is not confidential information.
- Clause 6.2 details the circumstances when confidential information can be disclosed.

1634. Western Power considers that the policy should be clearer about the types of information which it can disclose to competing applicants and the circumstances in which such disclosure may be made. Western Power proposes to amend clause 6.2 to enable it to disclose:

- confidential information to the market operator (i.e. the Australian Energy Market Operator); and
- the information described in clause 29.4(d) to competing applicants in an anonymised format in accordance with that clause and clause 24.10.

1635. Western Power also proposes to amend the definition of "confidential information" (at clause 2.1) to confirm that the information, which is deemed not to be confidential under clause 6.1, does not fall within the definition of confidential information.

1636. The proposed changes to clause 6.2 are set out as follows:

6.2 Confidential Information Must Not be Disclosed

Western Power, an applicant or a disclosing person must not disclose confidential information unless:

(a) the disclosure is made ~~to the Authority~~ on a confidential basis~~; or~~:

(i) to the Authority;

(ii) to the market operator; or

(iii) where necessary for the performance of Western Power's functions; or

(b) the disclosure, where it is made by an applicant or a disclosing person, is made to a worker of Western Power who is bound by an adequate confidentiality undertaking; or

(c) the disclosure is made with the consent of the disclosing person; or

(d) the disclosure is required or allowed by law, or by the Arbitrator or another court or tribunal constituted by law; or

(e) the information has entered the public domain other than by breach of this clause 6.2; or

(f) the information could be inferred by a reasonable and prudent person from information already in the public domain~~.~~; or

(g) the disclosure is made in accordance with clauses 24.9(d) or 24.10.

1637. To give effect to the proposed amendments, Western Power proposes to:

- insert a new definition of "market operator" (at clause 2.1) as follows.

  "market operator" has the meaning given to the term 'operator' in the *Electricity Industry (Wholesale Electricity Market) Regulations 2004*, which, as at the date this applications and queuing policy comes into effect, is the Australian Energy Market Operator Limited.

- amend clause 24.9(d) to enable it to disclose certain information to a competing applicant in an anonymised format as follows.

  24.9 Types of Information

  Western Power must make known to any applicant that has lodged an application with Western Power, or to any existing user with an access contract with conditions precedent which have not yet been satisfied or waived:

  …

  (d) ~~except to~~where the ~~extent that it~~application is ~~prevented from doing so by clause 6.2, in respect of each~~ a competing connection application, in respect of each connection application which is competing with that connection application:

  (i) the capacity requirements of the competing connection application; and

  (ii) the geographic location at which the competing connection application seeks the capacity; and

  (iii) reasonable details regarding any augmentation required by the competing connection application~~.~~;

  (iv) any zone substation relevant to providing the covered service sought in the application;

  (v) where the applicant is a generator, the fuel type involved; and

  (vi) the priority date,

in an anonymised format without details of the applicant's name or physical address of any connection point relevant to the application.

- insert a new clause 24.10(a) to confirm that it can disclose the information in clause 24.9 when issuing notice of intentions, preliminary access offers and access offers as follows.

  24.10 When Western Power Must Update Information

  Western Power must provide the information in clause 24.9:

  (a) ~~unused;~~when issuing notices of intention to prepare preliminary access offers under clause 24.2, preliminary access offers under clause 24.4 and access offers under clause 24.6;

  (b) at any time …

1638. Consequential amendments are also made to:[400]

- clause 17A.4(a)(ii) to give effect to the intent that Western Power can disclose the confidential information described in clause 29.9(d) for an application that would compete with a prospective application to the prospective applicant; and
- clause 24.10(c) to capture circumstances in which information under clause 24.9(d) is no longer required to be provided in an anonymised format.

1639. Synergy submits that the disclosure of information under clause 6 should only be made if Western Power has procured the agreement of the recipient to keep such information confidential.[401] It also believes that the proposed changes are contrary to the requirements of the Access Code (namely section 5.7(b) and (d)) and to the legitimate business interests of applicants and users (as contemplated by section 26(1)(d) of the *Economic Regulation Authority Act 2003*.

1640. Synergy submits the following comments in response to Western Power's proposed amendments to clause 6.2(a):[402]

> On the current AQP drafting, the provision applies only to disclosure to the Authority. Use of the phrase "confidential basis" makes sense because it enlivens the Authority's obligations with respect to such information set out in section 55 of the ERA Act. Disclosure of confidential or commercially sensitive information to the Authority carries a number of protections in addition to those in section 55 of the ERA Act, including in relation to current or former staff members and members of the Authority (section 57 of the ERA Act).
>
> In contrast, Synergy does not understand how requiring disclosure "on a confidential basis" to the system operator or any person provided it is necessary for the performance of WP's functions, does not enliven any comparable statutory obligations in respect of disclosure by WP in general. Nor does the provision require WP to ensure the party to whom confidential information is provided, maintains the confidentiality of the information. This is troubling in the context of disclosure to any person where necessary for the performance of WP's functions because the class of potential disclosures is unusually broad and includes parties to whom disclosure may cause material commercial harm to the party to whom the confidential information pertains.

[400] Western Power, *Access arrangement information: Attachment 12.3 [redacted],* 2 October 2017, p. 22.

[401] Synergy, *AA4 Submission Number 3: Western Power's proposed application and queuing policy*, 8 December 2017, p. 11, paragraphs 25 and 30.

[402] Synergy, *AA4 Submission Number 3: Western Power's proposed application and queuing policy*, 8 December 2017, p. 11, paragraphs 27 to 29.

Further, there is no objective test against which to assess whether the disclosure is necessary for the performance of WP's functions.

1641. The ERA considers that confidential information should not be provided to third parties unless prior consent is obtained or disclosure is required by law. It also notes that if information is provided in an anonymised format under 24.9(d), as proposed by new clause 6.2(g), the information will not by its nature be considered confidential information and hence is capable of being disclosed. Similarly, clause 24.10 applies where anonymity is no longer required.

1642. The ERA agrees with Synergy that proposed new clause 6.2(a)(iii), which allows the disclosure of confidential information "where necessary for the performance of Western Power's functions", is overly broad and should not be accepted.

Required Amendment 74

Proposed amendments to clause 6.2(a) of the applications and queuing policy, which allows the disclosure of confidential information to the market operator or where necessary for the performance of Western Power's functions, must be deleted.

1643. While Western Power proposes that the information specified in clause 24.9(d) will be disclosed in an *anonymised* format without details of the applicant's name or location of any connection point relevant to the application, Synergy suggests that a recipient of such information could "back-calculate" the information in particular situations where it may become self-evident that the information pertains to a particular generator.[403]

1644. As indicated at paragraph 1441 (above), information given in an anonymised format (under clause 24.9(d)) is by its nature not confidential information and can be disclosed. However, as suggested by Synergy, there may be circumstances where it is self-evident which generator the anonymised information relates to. To address such circumstances clause 24.9(d) should be amended to provide that Western Power must not make known confidential information under the clause if it is possible from the anonymised information to determine the identity of the competing connection applicant. The following amendments are required by the ERA:

(d) where the application is a competing connection application, in respect of each connection application which is competing with that connection application:

(i) the capacity requirements of the competing connection application; and

…

(vi) the priority date,

in an anonymised format without details of the applicant's name or physical address of any connection point relevant to the application.

<u>Western Power must not make known confidential information under this clause if it is possible from the anonymised information to determine the identity of the competing connection applicant.</u>

[403] Synergy, *AA4 Submission Number 3: Western Power's proposed application and queuing policy*, 8 December 2017, p. 11, paragraph 25.

Required Amendment 75

Clause 24.9(d) of the applications and queuing policy must be amended in accordance with paragraph 1644 of this draft decision to provide that Western Power must not make known confidential information under the clause if it is possible from the anonymised information to determine the identity of the competing connection applicant

1645. Synergy further submits that proposed clause 6.2 of the applications and queuing policy would entitle Western Power to disclose confidential information set out in clause 24.9 in a non-anonymised basis if disclosure is necessary for the performance of Western Power's functions. Western Power's proposed changes to clause 6.2 are considered at paragraphs 1641 and 1642 (above) – the changes concerning disclosure of confidential information that is "necessary for the performance of Western Power's functions" have not be approved.

1646. No submissions to the ERA address Western Power's proposal to insert new clause 24.10(a) to confirm that it can disclose the information in clause 24.9 when issuing notice of intentions, preliminary access offers and access offers.

1647. Updating information provided to applicants under proposed clause 24.10(a) is consistent with section 5.7(a) of the Access Code because it allows applicants to know (in advance) how the policy will apply to them and gives greater clarity as to the status of their application or preliminary offer.

Agreement between applicant and Western Power (ID 20)

1648. Western Power notes that the current applications and queuing policy only allows transfer applicants (and not connection applicants) to mutually agree to depart from the policy subject to no impediment to other applicants.

1649. Western Power submits that:[404]

> Clause A2.101 of the Model AQP [in the Access Code] allows the service provider and an applicant to agree to deal with a matter in connection with an electricity transfer application or connection application in a manner different to that set out in the AQP so long as the service provider's ability to provide a covered service to another applicant is not impeded.
>
> Clause 7.4 of the [existing] AQP reflects this by allowing applicants to agree with Western Power to depart from the AQP in progressing an electricity transfer application, provided that doing so causes no impediment to other applicants. This clause is located within Part B of the AQP which only applies to electricity transfer applications.
>
> However, unlike the Model AQP, there is no equivalent provision in relation to connection applications in the AQP.
>
> This flexibility should also apply to connection applications. Western Power receives a number of requests for simple connections (e.g. households) which do not compete with other applications and which do not require the procedural rigour of the AQP to be satisfied.

[404] Western Power, *Access arrangement information: Attachment 12.3 [redacted]*, 2 October 2017, pp. 22-23.

1650. Western Power proposes to insert a new clause (2.2(d)) to allow it and applicants to agree to deal with any matters in connection with an electricity transfer application *or* connection application in a manner different to what is set out in the applications and queuing policy. Existing clause 7.4 of the policy will be deleted:

> (d) An applicant and Western Power may agree to deal with any matter in connection with an application in a manner different to the treatment of the matter in this applications and queuing policy as long as the ability of Western Power to provide a covered service that is sought by another applicant is not impeded.

1651. Synergy considers proposed new clause 2.2(d) would allow Western Power and an applicant to agree to the different treatment of an application under the policy as long as the application was not a *competing application*. Synergy is concerned the approach could lead to a situation where applicants forego protections or provisions (which are in an applicant's best interests) to expedite arrangements.[405] It also considers the approach could result in the discriminatory treatment of applicants, given the relative bargaining power of an applicant and Western Power in such circumstances.

1652. Western Power's proposed new clause (2.2(d)) replicates section A2.10 of the model applications and queuing policy in the Access Code, which states:

> A2.101 An applicant and the service provider may agree to deal with any matter in connection with the applicant's application in a manner different to the treatment of the matter in this applications and queuing policy as long as the ability of the service provider to provide a covered service that is sought by another applicant is not impeded.

1653. The term "application" under the model policy applies to both connection and transfer applications.

1654. The ERA has considered Synergy's submission and is of the view that the intention of the clause is to allow an applicant and Western Power to *agree* to treat any matters in connection with the applicant's application differently to what is required in the policy. It would be up to the applicant to decide whether or not it wanted to forego particular provisions and/or protections to expedite arrangements, and whether or not it accepted any perceived discriminatory treatment. Where the applicant and Western Power cannot agree, the standard provisions of the policy would apply.

1655. Nevertheless, the proposed new clause replicates the same clause in the model applications and queuing policy and hence meets the requirements for such a policy. This is consistent with section 5.11(a) of the Access Code, where the ERA:

> must determine that an applications and queuing policy is consistent with sections 5.7 to 5.9 and the Code objective to the extent that it reproduces without material omission or variation the model applications and queuing policy.

Conditions precedent (ID 24)

1656. Western Power proposes to amend clause 4.8 as follows:

> 4.8 Conditions Precedent Not Longer Than 8 Months

[405] Synergy, *AA4 Submission Number 3: Western Power's proposed application and queuing policy*, 8 December 2017, p. 15, paragraphs 55 to 58.

(a) Western Power and an applicant ~~may~~must not enter into an access contract that contains a condition precedent for which a period of longer than 8 months from the date the access contract was entered into is allowed for its fulfilment, unless a longer period is reasonably necessary, including due to the nature of works to be conducted.

(b) If, after 8 months or such other period of time agreed under clause 4.8(a), a condition precedent in an access contract has not been fulfilled, then:

(i) if there is no competing application, Western Power and the relevant user may agree within 20 business days to extend the period in the access contract allowed for the satisfaction of ~~conditions~~the condition precedent by up to a further 6 months; or

(ii) if …

1657. Western Power considers the proposed amendments more accurately reflect the operation of the clause and that flexibility to allow for a longer period of time is required. It submits:[406]

> Often conditions precedent in access contracts require the completion of works. In some cases, due to the nature of the works it is reasonable and necessary to have a period longer than 8 months for the completion of the works and therefore the satisfaction of the condition precedent.
>
> The [existing] AQP provides that Western Power and an applicant 'may not' (which in this context has the effect of 'must not') enter into an access contract containing a condition precedent with a period for satisfaction longer than 8 months. Additional flexibility is required to enable Western Power to agree to conditions precedent with a period for satisfaction longer than 8 months where reasonably necessary.

1658. No submissions made to the ERA address Western Power's proposed amendments.

1659. Western Power's proposed changes are consistent with the requirements of section 5.7(a) of the Access Code to accommodate the interests of users and applicants. However, the ERA considers:

- there should be a fixed upper limit on the period allowed in sub-clause (a); and
- further drafting amendments should be made to better link sub-clauses (a) and (b).

1660. The ERA requires the following further amendments:

4.8 Conditions Precedent Not Longer Than 8 Months

(a) Western Power and an applicant must not enter into an access contract that contains a condition precedent ~~for which a period of longer than~~that may be fulfilled more than 8 months from the date the access contract was entered into ~~is allowed for its fulfilment,~~ unless the applicant and Western Power agree that a longer period is reasonably necessary due to the nature of works to be conducted, in which case the period of 8 months may be extended by up to 4 months but the total time for fulfilment must not exceed 1 year~~, including due to the nature of works to be conducted~~.

(b) If, after 8 months or ~~such other~~after expiry of a longer period of time agreed under clause 4.8(a), a condition precedent in an access contract has not been fulfilled, then:

[406] Western Power, *Access arrangement information: Attachment 12.3 [redacted],* 2 October 2017, p. 23.

Required Amendment 76

Clause 4.8 of the applications and queuing policy, containing provisions for conditions precedent, must be amended in accordance with paragraph 1660 of this draft decision to:

- set a fixed upper limit on the period allowed in sub-clause (a); and
- better link sub-clauses (a) and (b).

Proposed amendments to support "time of use" tariffs and advanced metering (ID 27 to 31)

1661. Western Power is proposing to introduce Advanced Metering Infrastructure (**AMI**) and time of use tariffs for AA4. The ERA has given consideration to Western Power's proposal for AMI expenditure at paragraph 450 (and following) of this draft decision and time of use tariffs at paragraph 848 (and following).

1662. Based on its proposal for AMI and time of use tariffs, Western Power is proposing a number of amendments to the applications and queuing policy comprising:[407]

- A new clause 10.1(f) to require a user to make an electricity transfer application to change the user's reference service if an AMI meter is installed at the user's connection point.
- Drafting changes to clause 14.1(c) to make the requirement for revenue meters applicable to AMI meters.
- Drafting changes to clause 8 to confirm that applications for a reference service made by an electricity transfer application are made under Part B of the policy and that clause 8 applies to all applications made under Part B.
- New subclauses to clause 3.6 to require the applicant to provide information about:
  - its eligibility for the covered service sought (new clause 3.6(a)(iv)); and
  - any facilities and equipment likely or required to be connected at the connection point in circumstances where the application relates to a new connection point (new clause 3.6(b)(ii)(B)).
- Consequential changes to insert and/or amend definitions under clause 2.1 of the policy, including a new definition for "AMI meter".

1663. The ERA has not approved the introduction of mandatory time of use tariffs or expenditure for advanced metering communication infrastructure. Consequently, the proposed changes to support mandatory time of use tariffs and advanced metering are not required and have not been approved.

[407] Western Power, *Access arrangement information: Attachment 12.3 [redacted],* 2 October 2017, pp. 27-28, Table 2.5.

Required Amendment 77

The proposed amendments to support "time of use" tariffs and advanced metering (change identification numbers 27 to 31) must not be made to the applications and queuing policy.

Other minor amendments to the policy

1664. Western Power proposes various other minor amendments to the applications and queuing policy as set out in Table 2.4 of Attachment 12.3 to the access arrangement information.[408] The ERA has considered these amendments in turn below.

Notes to defined terms (minor amendments 1 and 2)

1665. Western Power has either inserted or amended the "notes" that accompany the following definitions at clause 2.1 of the policy:

- access dispute
- customer transfer request
- generating plant
- loss factor
- market participant
- meter
- relocation
- revenue meter
- verifiable consent

1666. Western Power proposes to change the definition of relocation as follows:

> **"relocation"** has the meaning given to ~~it~~'relocation' in the ~~Code~~transfer and relocation policy.
>
> {Note: under the transfer and relocation policy, 'relocation' has the meaning given to it in clause 6.1. That clause provides that a 'relocation' occurs when a user:
>
> (a) decreases its contracted capacity at a connection point (a "retiring point"); and
>
> (b) makes a corresponding increase in its contracted capacity at another connection point the user is entitled to use under its access contract (a "destination point")}

1667. While Western Power acknowledges the proposed definition of "relocation" in the applications and queuing policy and Access Code do differ, it considers there is no substantive difference between the definitions set out in the Access Code, transfer

[408] Western Power, *Access arrangement information: Attachment 12.3 [redacted]*, 2 October 2017, pp. 25-26, Table 2.4.

and relocation policy, or proposed applications and queuing policy that would lead to (or produce) any inconsistencies in practice.

1668. Synergy notes the different definitions of relocation in the proposed applications and queuing policy and Access Code[409], and Western Power's views. Synergy submits that:[410]

> It is not open to WP (or the Authority) to establish definitions in regulatory documents forming part of an access arrangement that are not consistent with the intent set out in the Access Code. Further, clear alignment with the Access Code in matters such as defined terms is required for consistency and certainty. It is the Access Code (not the [transfer and relocations policy] or the AQP) that sets the requirements for the AQP (including what is meant by "relocation"). The Authority should reject WP's proposed amendment to the definition of "relocation" in the AQP and instead require the definition provided for in the Access Code.

1669. Amendments to the "notes" that accompany the defined terms listed in paragraph 1665 (above) are accepted because the amendments have been made to reflect changes to definitions in other legislative instruments.

1670. However, in line with Western Power's proposed changes to keep definitions in the applications and queuing policy consistent with other legislative instruments, the ERA considers the definition of "Customer Transfer Code" should be amended to refer to the *Electricity Industry Customer Transfer Code 2016*, which replaced the 2004 Code that the policy currently refers to.

1671. Western Power's proposed changes to the defined term "relocation" make it consistent with the definition of relocation in clause 6.1 of the transfer and relocation policy, which is not inconsistent with the definition in the Access Code.

Required Amendment 78

The definition of "Customer Transfer Code" in clause 2.1 of the applications and queuing policy must be amended to refer to the *Electricity Industry Customer Transfer Code 2016* (and not the Electricity Industry Customer Transfer Code 2004).

Defined terms (minor amendment 3)

1672. Western Power has inserted the defined term "final notice" to clause 2.1 of the applications and queuing policy, which has the meaning given in clause 20A.

1673. The ERA considers the proposed addition of the term "final notice" to be administrative in nature and is necessary to reference the term defined in clause 20A.

---

[409] The Access Code defines *"relocation"* to mean *"a relocation of capacity from one connection point in a user's access contract to another connection point in the user's access contract under a transfer and relocation policy"*.

[410] Synergy, *AA4 Submission Number 3: Western Power's proposed application and queuing policy*, 8 December 2017, pp. 14-15, paragraph 53.

Redundant terms (minor amendment 4)

1674. Western Power has deleted the term "reserve capacity auction" from clause 2.1 of the applications and queuing policy because the term is longer used.

Improving clarity (minor amendment 5)

1675. Western Power has made several amendments to the applications and queuing policy for clarification. The definitions of "applicant-specific solution", "application form" and "competing applications group" have been changed. Drafting amendments have also been made to clause 17A.4(a)(ii).

1676. The ERA considers the proposed amendments have been made for clarification purposes – the amendments clarify the policy and improve readability.

Order of defined terms (minor amendment 6)

1677. Western Power has reordered the definitions of "contributions policy" and "connection point" so that the terms appear in clause 2.1 in alphabetical order. This change is administrative in nature and corrects a formatting error.

Drafting improvements (minor amendment 7)

1678. Western Power has made various drafting improvements throughout the applications and queuing policy, which it considers do not affect the substantive meaning of the relevant clauses. The amendments include changes to the definition of "connection application" and changes to clauses 3.6(b)(iii), 3.9(b), 3.13(b), 3.15(a), 3.15(b), 3.15(d) (regarding the insertion of the word "that'), 4.5, 4.8(b)(i), 7.2(a), 14.3(a), 24.2 (regarding the insertion of the words "to avoid doubt"), 24.3(b), 24.5(a), 24.5(b), 24.5(d), 24.6, 24A.3(d) and 26.

1679. The ERA has considered the proposed amendments and is of the view that the majority of the amendments do improve the drafting of the policy and do not materially affect the intent of the relevant clause with the exception of:

- Clause 3.15(a) – the word "whether" should be reinstated (and the proposed word "including" deleted). The original drafting is considered clearer. That is, the words "in processing applications (**whether**~~including~~ as applicant-specific solutions or competing applications groups) Western Power must …" [**emphasis** added].
- Clause 4.8(b)(i) – the words "conditions precedent" should be reinstated because there may be more than one condition precedent in an access contract.
- Clause 24.3(b) – the drafting of this clause could be improved by removing the word "to" to read: "advising that they do not wish to opt out of the competing applications group and ~~to~~ make an application for an applicant-specific solution, in which case…".
- Clause 24.5(a) – the word "after" should be reinstated, which is consistent with the ERA's considerations at paragraph 1515 of this draft decision.
- Clause 24.6 – the drafting of this clause can be improved to clarify when the 30 business day timeframe starts by amending the clause as follows. The words "it will" should also be reinstated in clause 24.6(a) as follows:

24.6 Subsequent Access Offers

After reviewing the responses by applicants to preliminary access offers under clause 24.5, Western Power will endeavour, within 30 business days from the last date on which responses are required~~of the expiry of the period under that clause for responses~~ to be provided to Western Power under clause 24.5, to complete the following:

(a) if Western Power considers it can make access offers to applicants within the competing applications group collectively for the costs nominated in the access offers, it will make access offers to applicants within the competing applications group conditional on sufficient acceptance of the access offers by applicants to ensure that access can be provided to the applicants collectively for the costs nominated in the access offers; or

Required Amendment 79

Clauses 3.15(a); 4.8(b)(i); 24.3(b); 24.5(a) and 24.6 of the applications and queuing policy should be amended to improve drafting clarity in accordance with paragraph 1679 of this draft decision.

Grammar and formatting (minor amendments 8 and 9)

1680. Western Power has made punctuation and cross-referencing changes throughout the applications and queuing policy (see for example clauses 3.6(b), 3.10(d) and 3.11(c)). These amendments are considered administrative in nature and do not affect the substantive meaning of the relevant clauses.

Statutory terminology (minor amendment 10)

1681. Western Power has amended clause 5.4(b) to remove the word “stamp” before “duty” to reflect changes in the statutory terminology regarding duty. The amendment reflects current statutory terminology.

Process overview (minor amendments 11 and 12)

1682. The current applications and queuing policy includes a figure in clause 1.1 that illustrates how the policy operates. Western Power proposes to amend the clause to remove the figure and replace clause 1.1 with new drafting that refer to the appendices of the policy:

1.1 Operation of this Applications and Queueing Policy

~~This applications and queuing policy operates in the manner shown in Figure 1 (next page).~~

1.1 Status of Appendices

Appendix A and Appendix B contain additional explanatory material regarding information provided to applicants and the processes contemplated by this applications and queuing policy. To avoid doubt, Appendix A and Appendix B are included for explanatory purposes and do not form part of the operative provisions of this applications and queuing policy.

1683. The proposed changes that have been made to the appendices (A and B) are summarised below:

- Appendix A – Competing Applications Group Process Description

- A reference to Figure 1 has been deleted, along with tables outlining what primary information Western Power will provide to applicants and how the competing applications group will be managed.

- Appendix B – Timelines for Applicant-specific Solutions and for Competing Applications Group

  - An additional action item (for Western Power to issue a preliminary access offer) has been added to the timeline for the competing applications group process.

  - *"Studies, design and cost estimates for the solution"* has been added to the list of variable components that may affect the timeframes.

1684. Western Power submits that the proposed changes to clause 1.1 and appendices A and B of the applications and queuing policy:[411]

- do not detract from the rights and obligations of parties under the policy;

- provide additional explanation about the processes under the policy; and

- clarify that the appendices do not form part of the operative provisions of the policy and are for explanatory purposes only.

1685. No submissions to the ERA address the proposed changes outlined above. However, section 3.3 of Western Power's Attachment 12.3 to the access arrangement information indicates that stakeholders raised concerns about the proposed changes during Western Power's stakeholder engagement sessions.[412]

1686. The stakeholder engagement feedback indicated that:

- stakeholders were not convinced about Western Power's justification for removing the detailed process overview (Figure 1) from the applications and queuing policy;

- the "high level steps" process diagram in Appendix A to the applications and queuing policy is neither binding nor detailed enough to disclose to applicants the true process Western Power is proposing under the policy;

- a detailed process overview, as a binding part of the applications and queuing policy, is a valuable explanatory tool that is consistent with section 5.7(b) of the Access Code; and

- the detailed process overview (Figure 1) should be retained with amendments made, if required, to remove the complexity that Western Power cites as a reason to remove the figure from the policy.

1687. Western Power responded to the stakeholder feedback with the following comments:

- Figure 1 does not enhance the policy nor does it add to its written provisions. The removal of Figure 1 would also not detract from the rights and obligations of parties under the policy.

- Figure 1 was intended to be illustrative only and readers of the policy should have regard to the written provisions in understanding the rights and obligations of parties under the policy. If an issue were to arise under, parties would rely on the written provisions of the policy, not Figure 1.

---

[411] Western Power, *Access arrangement information: Attachment 12.3 [redacted],* 2 October 2017, p. 26.

[412] Western Power, *Access arrangement information: Attachment 12.3 [redacted],* 2 October 2017, pp. 54-56.

- The Access Code does not require the policy to contain a 'process overview' diagram. The written provisions of the policy satisfy the requirements of the Access Code for the policy to be sufficiently detailed to enable users and applicants to understand in how advance how the policy operates.
- Since AA3 was introduced, Figure 1 has not been used in discussions with applicants, and hence, the figure is of no practical value. Figure 1 may actually confuse applicants.

1688. Given the complexities of the current applications and queuing policy, particularly the processes for competing applications groups, the ERA considers a flowchart setting out the entire process is necessary to enable users to understand how the policy operates. This understanding is supplemented by the tables listing the information Western Power must provide to applicants during the process and how the competing applications group will be managed. Based on the feedback provided during Western Power's stakeholder engagement sessions, the information appears to be valued by stakeholders.

1689. The ERA considers that Figure 1 and the tables outlining the primary information Western Power will provide to applicants and how the competing applications group will be managed, are necessary to meet the requirements of section 5.7(b) and 5.7(e) of the Access Code. If necessary, Western Power should amend Figure 1 and the primary information tables to ensure consistency with the policy, enhance understanding of the process and remove any unnecessary complexities or confusion. Information on the generators interim access solution process should also be included.

Required Amendment 80

The applications and queuing policy must retain Figure 1 ("Access, Connection and Transfer Applications Policy – Process Overview").

Suppliers of last resort and default suppliers

1690. Section 5.7(g) of the Access Code requires that an applications and queuing policy must establish arrangements to enable a user who is a:

- "supplier of last resort" as defined in section 67 of the *Electricity Industry Act 2004* to comply with its obligations under Part 5 of the Act; and
- "default supplier" under regulations made in respect of section 59 of the *Electricity Industry Act 2004* to comply with its obligations under section 59 of the Act and the regulations.

1691. Clause 24A.5 of the current applications and queuing policy specifies that priority must be given to applications to the extent necessary to enable a supplier of last resort or default supplier to meet its obligations. No amendments have been proposed for this clause and no submissions made to the ERA raise concerns regarding these provisions. On that basis, the ERA considers the clause continues to meet the requirements of section 5.7(g) of the Access Code.

Facilitation of Part 9 of the Act

1692. Section 5.7(h) of the Access Code requires that an applications and queuing policy must facilitate the operation of Part 9 of the *Electricity Industry Act 2004*, any enactment under Part 9 of the Act and the "market rules" as defined in section 121(1) of the Act.

1693. Part 9 of the Act deals with establishing a wholesale electricity market and provides the head of power for the Market Rules. Section 7.7(h) requires, in practical terms, that the applications and queuing policy facilitate the operation of the wholesale electricity market.

1694. In its final decision for AA3 the ERA noted:

> … any deficiencies of the wholesale electricity market and reserve capacity mechanism cannot be fully resolved through the queuing rules in the applications and queuing policy. As noted in the ERA's final decision for [AA2], this requires consideration in a broader review of regulatory arrangements for the electricity market that considers network planning processes, the functioning of the wholesale electricity market, the treatment of new investment under the Access Code, as well as the [applications and queuing policy].

1695. The ERA considers this still to be the case. For example, as raised in stakeholder submissions, Western Australia's current wholesale electricity market design has placed restrictions on Western Power's ability to connect new generation.

Other matters raised in submissions about the policy

Information required with all applications

1696. Clause 3.5 of the applications and queuing policy details the information that must be provided by applicants to Western Power when making an application. Western Power has not proposed any amendments to this clause.

1697. Mr Stephen Davidson submits that the requirements of the existing clause are inconsistent with the data requirements of the Technical Rules (for example, the facility's minimum load is not included). The full schedules contained in the Technical Rules should be included in the requirements of clause 3.5 for loads and generators (if on-site generation is present). Mr Davidson submits:[413]

> The proposed is a shortcut that would amount to, effectively, having no paperwork in place. A similar practice of taking shortcuts in the banking sector (low documentation loans) have been detrimentally affecting customers. I do not believe that low documentation access applications will be beneficial for any business activity, including engineering, legal, commercial, financial, regulatory and auditing.
>
> Residential and small business customers will be best protected from the rising electricity prices by a paper trial of the full set of the access application information data stipulated in the Technical Rules. The process will be more straightforward, efficient and there would be no need for the Western Power to assume the data not supplied by the applicant. The applicant must be responsible for own plant (on site load and generation) data supplied to the WP, and the WP must be responsible for the network data supplied to the applicant.

[413] Stephen Davidson, *Submission (Comments on Issue 23 and Issue 24),* 11 December 2017, Issue 24.

> [Clause] 3.5(d) Include the full schedules of the [technical rules] into the requirements of section 3.5, as it is not appropriate for Western Power to have discretionary power to choose which data to request from different applicants.

1698. The ERA considers that the purpose of clause 3.5 is to require applicants to provide only the necessary information needed for Western Power to conduct a *preliminary assessment* of an application. If any further information is required, Western Power can request additional information under clause 3.11 of the policy. For connection applications, more extensive information must be provided by the applicant under clause 3.7(e) that concerns the facilities and equipment at the connection point "to the extent required by the technical rules; and Western Power acting as a reasonable and prudent person". Given these provisions, the ERA considers it is not necessary to require applicants to provide additional information beyond what is currently required in clause 3.5.

Electricity transfer application for a new connection point

1699. Clause 9 of the applications and queuing policy is titled "electricity transfer application for a new connection point" and contains two sub-clauses:

- Clause 9.1 – customer transfer request
- Clause 9.2 – creating a new connection point or connecting new generating plant

1700. Mr Stephen Davidson submits that sub-clause 9.2 should read "creating a new connection point" (that is, the words "or connecting new generation plant" should be deleted).[414]

1701. The ERA considers the title for sub-clause 9.2 reflects the subject matter of the clause as clause 9.2(a) applies to applicants who seek to create a new connection *or* to install new generation plant at an existing connection point.

Increase or decrease in contracted capacity

1702. Clause 10.2 of the applications and queuing policy details provisions concerning the increase or decrease in contracted capacity.

1703. Mr Davison submits that clause 10.2 should be modified as follows.[415]

> Modify the clause to the effect that a new access application is required, and that the applicant must provide the full set of data as required in the Technical Rules.
>
> Time period of 5 days is unfair to Western Power engineers, it puts unnecessary pressure to quickly make unreasonable decisions. 5 days should be sufficient to check if the application is complete.

1704. If Western Power determines that it cannot make a decision about increasing or decreasing an applicant's contracted capacity, it can request the applicant, under clause 10.2(e), to submit a connection application.

1705. Clause 10.2(c) requires Western Power to notify the applicant of whether or not it accepts the increase or decrease in contracted capacity within five business days of receiving the applicant's notice to change its contracted capacity, "or such further

---

[414] Stephen Davidson, *Submission (Comments on Issue 23 and Issue 24)*, 11 December 2017, Issue 24.

[415] Stephen Davidson, *Submission (Comments on Issue 23 and Issue 24)*, 11 December 2017, Issue 24.

time as a prudent service provider would reasonably require to consider such [an] application". Given Western Power has not proposed any changes to clause 10.2(c), it is assumed that the five business day timeframe is reasonable for it and its engineering staff. In any case, there is an allowance for Western Power to take additional time in circumstances where it is reasonably required.

More than one change or modification within 12 months

1706. Synergy submits that it has experienced operational difficulties with the provisions of clause 10.3(c) and requests the following changes:

> If Western Power receives:
>
> (a) more than 1 application or notice under clause 10.1; or
>
> (b) more than 1 application or notice under clause 10.2,
>
> seeking to change the covered service, including to decrease or increase the contracted capacity, with respect to a single connection point in any rolling period of 12 months, then in relation to each additional application or notice Western Power:
>
> (c) must~~may, subject to this clause 10,~~ accept the change of covered service, where ~~Western Power is satisfied, as a reasonable and prudent person, that~~ the new covered service will be sufficient to meet the actual requirements of the applicant, and that it is required by reason of one or more of the following circumstances:
>
> (i) a change …

1707. In support of its proposal, Synergy submits the following information:[416]

> In the past, WP has only permitted Synergy to change the covered service in relation to a connection point once in a 12 month period. WP has rejected any additional application Synergy has made even though the reason for the change is consistent with clause 10.3(c) of the AQP. WP's proposal is therefore inconsistent with sections 5.7(a), 5.7(b) and 5.7(c) of the Access Code. For example:
>
> - A customer on an anytime energy tariff will seek a time-of-use tariff from Synergy.
> - Synergy will change the network service to a time-of-use service and WP will approve this change.
> - The customer, within a 12 month period, may purchase a PV system and Synergy will apply to WP to change the network service to a bi-directional service. However, in this case WP will reject the change but will approve the connection of the PV system.
>
> Synergy notes the Authority's obligation under section 26 of the ERA Act to have regard to the need to promote competitive and fair market conduct and the need to prevent abuse of monopoly or market power. Synergy submits that clause 10.3(c) of the AQP must be amended to be consistent with both section 5.7(b) of the Access Code (that is, allowing users to understand in advance how the AQP will operate) and the Access Code objective to promote competition in markets upstream and downstream of the networks – for example competition in the provision of battery, photovoltaic systems (PVs) and electric vehicles (EVs).

1708. Synergy's proposed amendment is consistent with section 26 of the *Economic Regulation Authority Act 2003* and the Access Code objective for the reasons set out in its submission (and reproduced above). Synergy also provided a real example of why the change is needed. The ERA agrees that clause 10.3(c) should be

[416] Synergy, *AA4 Submission Number 3: Western Power's proposed application and queuing policy*, 8 December 2017, p. 19, paragraphs 76 and 77.

amended to require Western Power to accept the change of covered service, where the new covered service is sufficient to meet the actual requirements of the applicant, and is required for one of the circumstances listed in clauses 10.3(c)(i) to (vii).

Required Amendment 81

Clause 10.3(c) of the applications and queuing policy must be amended as follows, to require Western Power to accept the change of covered service, where the new covered service is sufficient to meet the actual requirements of the applicant.

"(c) must~~may~~, subject to this clause 10, accept the change of covered service, where ~~Western Power is satisfied, as a reasonable and prudent person, that~~ the new covered service will be sufficient to meet the actual requirements of the applicant, and that it is required by reason of one or more of the following circumstances:"

Reporting during the processing of the connection application

1709. Mr Stephen Davidson submits that existing clause 19.3(d) should be deleted from the applications and queuing policy because such a decision cannot be made without conducting proper power system studies.

1710. Western Power has not proposed any amendments to clause 19.3(d) of the policy. The existing clause states:

> A preliminary assessment with regards to a connection application may consist of an assessment as to:
>
> …
>
> (d) if it is likely that works will be required — a good faith estimate of the likely time required for the planning, designing, approving, financing, construction and commissioning, as applicable, of any necessary augmentation or works; and

1711. Clause 19.3(d) of the applications and queuing policy is consistent with clause A2.93(c) of the model applications and queuing policy in the Access Code, which requires the service provider to give the applicant a preliminary assessment that includes "a good faith estimate of the likely time required for the undertaking of any required work".

1712. As clause 19.3(d) of Western Power's applications and queuing policy has materially reproduced clause A2.93(c) of the model policy it can and should be retained. The clause is reasonable as it only requires an estimate of likely time required, which Western Power's past experience should enable it to do.

Connection application costs

1713. Clause 20 of the applications and queuing policy details provisions for connection application costs and includes the following sub-clauses:

- Clause 20.1 – applicant must pay costs
- Clause 20.2 – processing proposal
- Clause 20.3 – applicant-specific solution option

- Clause 20.3A – interaction between applicant-specific solutions and competing applications groups
- Clause 20.4 – disputes may be referred to arbitrator
- Clause 20.5 – use of engineering firms to provide studies

1714. Mr Stephen Davidson submits that the clause is inconsistent with the consumer protection regime in Australia.[417]

> The proposed is inconsistent with the Consumer Protection regime in Australia. Western Power should provide the Scope of Works (SOW) for power system studies and let the Applicant decide who will conduct the work, unless Western Power does the studies free of charge. Western Power should not demand forced trading.

1715. Mr Davidson further submits that:

- The technical and commercial matters are mixed up in clause 20.2.
- The provisions in clause 20.5 are anti-competitive, forced trading; not transparent and open ended.

1716. Clause 20 is consistent with clauses A2.13 to A2.19 of the model applications and queuing policy in the Access Code and, therefore, must be accepted. Clause A2.13 provides that an applicant must pay reasonable costs to process the application. It is therefore not unreasonable to require the applicant to pay for any costs reasonably incurred by Western Power for studies and cost estimates agreed with the applicant under clauses 20.2 and 20.3 of the applications and queuing policy.

1717. Clause 20.2 sets out provisions for processing a proposal, which are considered standard provisions for a policy of this nature. The ERA has not been able to identify any problems with the clause.

1718. The ERA considers clause 20.5 is to the applicant's benefit as it allows the applicant to request that an engineering firm conduct the studies as required under the policy. This gives the applicant the ability to satisfy itself that any studies conducted for its application are unbiased. This is consistent with clause 5.7 of the Access Code as it accommodates the interests of both the service provider and applicant.

[417] Stephen Davidson, *Submission (Comments on Issue 23 and Issue 24)*, 11 December 2017, Issue 24.

CONTRIBUTIONS POLICY

Access Code requirements

1719. The contributions policy sets out the principles and processes for determining when a contribution will be required from a user, including for a network augmentation, and for determining the amount of the contribution.

1720. A "contribution" is defined in section 1.3 of the *Electricity Networks Access Code 2004* (**Access Code**) as a capital contribution, a non-capital contribution or a headworks charge.

1721. Section 5.1(h) of the Access Code requires that an access arrangement include a contributions policy, defined in section 1.3 of the Access Code as a policy in an access arrangement under section 5.1(h) dealing with contributions by users.

1722. The particular requirements for a contributions policy are set out in sections 5.12 to 5.17D of the Access Code:

Contributions policy

5.12 The objectives for a contributions policy must be that:

(a) it strikes a balance between the interests of:

(i) contributing users; and

(ii) other users; and

(iii) consumers;

and

(b) it does not constitute an inappropriate barrier to entry.

5.13 A contributions policy must facilitate the operation of this Code, including:

(a) sections 2.10 to 2.12; and

(b) the test in section 6.51A; and

(ba) sections 5.14 and 5.17D; and

(c) the regulatory test.

5.14 Subject to section 5.17A and a headworks scheme, a contributions policy:

(a) must not require a user to make a contribution in respect of any part of new facilities investment which meets the new facilities investment test; and

(b) must not require a user to make a contribution in respect of any part of non-capital costs which would not be incurred by a service provider efficiently minimising costs; and

(c) may only require a user to make a contribution in respect of required work; and

(d) without limiting sections 5.14(a) and 5.14(b), must contain a mechanism designed to ensure that there is no double recovery of new facilities investment or non-capital costs.

5.15 A contributions policy must set out:

(a) the circumstances in which a contributing user may be required to make a contribution; and

(b) the method for calculating any contribution a contributing user may be required to make; and

(c) for any contribution:

(i) the terms on which a contributing user must make the contribution; or

(ii) a description of how the terms on which a contributing user must make the contribution are to be determined.

5.16 A contributions policy may:

(a) be based in whole or in part upon the model contributions policy, in which case, to the extent that it is based on the model contributions policy, any matter which in the model contributions policy is left to be completed in the access arrangement, must be completed in a manner consistent with:

(i) any instructions in relation to the matter contained in the model contributions policy; and

(ii) sections 5.12 to 5.15; and

(iii) the Code objective;

and

(b) be formulated without any reference to the model contributions policy and is not required to reproduce, in whole or in part, the model contributions policy.

5.17 The Authority:

(a) must determine that a contributions policy is consistent with sections 5.12 to 5.15 and the Code objective to the extent that it reproduces without material omission or variation the model contributions policy; and

(b) otherwise must have regard to the model contributions policy in determining whether the contributions policy is consistent with sections 5.12 to 5.15 and the Code objective.

Contributions for certain Western Power Network work

5.17A Despite section 5.14, Electricity Networks Corporation may require a contribution for *Appendix 8* work of up to the maximum amount determined under Appendix 8 for the relevant type of *Appendix 8 work*.

5.17B From 1 July 2007 until the first revisions commencement date for the Western Power Network access arrangement, section 5.17A prevails over any inconsistent provisions of the Western Power Network access arrangement.

Headworks scheme

5.17C Despite section 5.14, the Authority may approve a contributions policy that includes a “headworks scheme” which requires a user to make a payment to the service provider in respect of the user’s capacity at a connection point on a distribution system because the user is a member of a class, whether or not there is any required work in respect of the user.

5.17D A headworks scheme must:

(a) identify the class of works in respect of which the scheme applies, which must not include any works on a transmission system or any works which effect a geographic extension of a network; and

(b) not seek to recover headworks charges in an access arrangement period which in aggregate exceeds 1 per cent of the distribution system target revenue for the access arrangement period; and

(c) identify the class of users who must make a payment under the scheme; and

(d) set out the method for calculating the headworks charge, which method:

(i) must have the objective that headworks charges under the headworks scheme will, in the long term, and when applied across all users in the class referred to in section 5.17D(c), recover no more than the service provider's costs (such as would be incurred by a service provider efficiently minimising costs) of any headworks; and

(ii) must have the objective that the headworks charge payable by one user will differ from that payable by another user as a result of material differences in the users' capacities and the locations of their connection points, unless the Authority considers that a different approach would better achieve the Code objective; and

(iii) may use estimates and forecasts (including long term estimates and forecasts) of loads and costs; and

(iv) must contain a mechanism designed to ensure that there is no double recovery of costs in all the circumstances, including the manner of calculation of other contributions and tariffs; and

(v) may exclude a rebate mechanism (of the type contemplated by clauses A4.13(d) or A4.14(c)(ii) of Appendix 4) and may exclude a mechanism for retrospective adjustments to account for the difference between forecast and actual values.

Current access arrangement

1723. The contributions policy is contained in Appendix C of the current access arrangement. It comprises three documents:

- Contributions policy (Appendix C.1)
- Distribution headworks methodology (Appendix C.2)
- Distribution low voltage connection headworks scheme methodology (Appendix C.3)

1724. The contributions policy applies if it is necessary for Western Power to perform certain works to provide covered services. "Works" is defined in the policy to include:[418]

> distribution headworks and distribution low voltage connection headworks scheme works and all works required to be undertaken to provide an applicant with the covered services sought by the applicant in a connection application, including works associated with:
>
> (a) augmentation of connection assets;
>
> (b) augmentation of shared assets;
>
> (c) alternative options; and
>
> (d) other non-capital works.

1725. Distribution headworks covers enhancements required to the existing high voltage three-phase distribution system that provides for an increase in capacity of that system. The distribution headworks methodology applies if Western Power

[418] Western Power, Amended proposed revision to the Access Arrangement for the Western Power Network: Appendix C.1 (Contributions Policy), June 2015, p. 11.

considers the forecast costs of distribution headworks required for a relevant area over a 25 year period exceeds the amount of new revenue likely to be gained from providing covered services to applicants over that period and:

- the relevant connection point is less than 160 kilometres (**kms**) from a zone substation and the nominated capacity is less than 2,000 kilo-volt-ampere (**kVA**); or
- the relevant connection point is greater than 160 kms from the zone substation and the nominated capacity is less than 1,000 kVA.[419]

1726. The distribution low voltage connection headworks scheme methodology was proposed and approved as part of the third access arrangement **(AA3)** review. It applies to upgrades to power supply in rural and regional areas situated 25 kms or more from the nearest Western Power substation. The scheme allows the cost of infrastructure required for connection upgrades to be shared more evenly by all customers using the installed network. Charges are based on requested capacity, rather than whether or not the current network needs to expand because of the upgrade application.[420]

Western Power's proposal

1727. The contributions policy is included at Appendix C of the proposed access arrangement, and comprises two documents: the contributions policy (Appendix C.1) and the distribution low voltage connection scheme methodology (Appendix C.2).

1728. Western Power is proposing a number of changes to the contributions policy to improve clarity and accessibility. The proposed changes are set out in Attachment 12.4[421] to the access arrangement information and in marked-up versions of the documents provided with the access arrangement (at Appendix C).

1729. The proposed amendments to the contributions policy include:

- changes to security provisions to assist customers in understanding when, and for how long, security may be held by Western Power;
- introducing a 15-year revenue offset for residential customers connecting to the network to bring residential customers into line with commercial customers (who are already eligible for an offset of up to 15 years depending on the nature of the commercial project);
- deleting the distribution headworks scheme from the contributions policy; and
- expanding the distribution low voltage connection headworks scheme to include all new capacity connections (but to exclude the connection of gifted assets).

[419] Western Power, Amended proposed revision to the Access Arrangement for the Western Power Network: Appendix C.1 (Contributions Policy), June 2015, clause 6.

[420] Western Power, Access arrangement information, 2 October 2017, p. 269, section 12.3.3.

[421] Contributions Policy for AA4 Change Summary.

Submissions

1730. Submissions from CdL Advisory, Community Electricity and the Western Australian Local Government Association **(WALGA)** address the contributions policy.

1731. CdL Advisory's submission questions Western Power's forecasting of capital contributions for works under the State Underground Power Program **(SUPP)**:[422]

> Issue 25: Contributions policy
>
> How does the following statement on page [183] of Western Power's Access Arrangement Information report correlate with the changes in criteria for Round 6 of the SUPP whereby a larger percentage of contributions (above 50%) from local councils (and their ratepayers) was considered for the first time in project selection?
>
> Western Power assumes a 54 per cent contribution rate for distribution customer driven works. This reflects the AA3 average recovery rate for contributions for the SUPP program.
>
> How does it also reflect the findings by the ERA in 2011 that 'Western Power should contribute an amount equal to its avoided costs when a particular project area is undergrounded (on average between 15 and 35 per cent but could be more or less than this).'

1732. Community Electricity supports Western Power's proposal to amend the contributions policy to expand the revenue offset provision to include residential customers:[423]

> Contribution policy - revenue offset for residential customers
>
> We note that in assessing the initial capital contributions payable by commercial users for connecting to the network, Western Power offsets 15 years' of usage payments to reduce the amount. Western Power is now proposing to apply that same discount to residential customers in order to make the initial cost of connection "...more affordable for more people".
>
> We support this initiative as being self-evident. We welcome that Western Power has eventually been compelled to this realisation and note that they successfully resisted it for a decade. We cite this as evidence of Western Power's culture that end-users are parasites to be deterred from accessing the network. We suggest that the motive behind their new insight is the realisation that customers now [have] the choice of whether to connect and can no longer be sustainably gouged.

1733. WALGA is concerned with the approach used to recover tax on gifted assets and asset relocations. WALGA submits that local governments are affected because "it is common for local governments to make capital contributions to utility infrastructure providers as a result of asset relocations, which are required when local governments seek to improve the safety or efficiency of the road network through installation of roundabouts, traffic signals, turning lanes or road widening".[424] While it supports the use of upfront charges for new developments, it does not support the tax costs from capital contributions being recovered from the entity making the contribution:

> Generally, [WALGA] supports the use of upfront charges for the costs of infrastructure built specifically for new developments. This ensures the application of the user pays

[422] CdL Advisory, *Submission on proposed revisions to the Western Power Network Access Arrangement*, 4 December 2017, p.4, Issue 25.

[423] Community Electricity, *Response to ERA Public Consultation*, 10 December 2017, p. 5.

[424] WALGA, Submission to the Economic Regulation Authority, December 2017, pp. 11-12.

> principle and the achievement of efficient outcomes since development proponents will choose the most cost-effective areas for development.
>
> However, [WALGA] does not support the tax costs resulting from capital contributions being recovered from the entities that make such contributions. In doing so, the entire incidence of the tax is borne by these entities and their customers. This is not necessarily an efficient outcome and is likely to have significant distortions on activity.

1734. WALGA concludes that:[425]

- The current approach to tax recovery on gifted assets and relocations means that the entire incidence of the tax is borne by a single entity, and can have significant distortionary effects.
- For Local Governments, the viability of projects with significant public benefits, such as street lighting upgrades and asset relocations (particularly those that are initiated as a result of road safety upgrades), is affected by the inclusion of tax recovery costs.
- WALGA supports recovering the tax liability as a cost of business from all customers.
- The ERA should examine the merits of adopting the same approach used in the AER jurisdictions.

Considerations of the ERA

1735. The Economic Regulation Authority (**ERA**) has considered the proposed changes to the contributions policy in the order in which they appear. The ERA has also considered whether, in view of practical experience and submissions, the provisions of the contributions policy that remain unchanged are still consistent with the requirements of the Access Code.

Contributions policy

Definitions

1736. Western Power is proposing to delete some defined terms from clause 1.1 (definitions) of the contributions policy. The deletions are considered consequential to Western Power's proposal to delete the headworks scheme (existing clause 6) from the policy, which is addressed at paragraph 1751 below.

Provision of security for new revenue

1737. Western Power has redrafted the security provisions in the contributions policy (at clause 4.3) to assist connecting customers to better understand when, and for how long, security may be held by Western Power.[426] The proposed redrafting is as follows:

> 4.3 Applicant Must Provide Security for New Revenue
>
> For the purposes of this clause 4.3:
>
> "estimated new revenue" means the amount calculated under clause 5.2(d).

[425] WALGA, Submission to the Economic Regulation Authority, December 2017, p.13.

[426] Western Power, *Access arrangement information: Attachment 12.4,* 2 October 2017, p. 2.

"allocated forecast costs" means the amount of the forecast costs allocated to the applicant under clause 5.4.

(a) Western Power may require an applicant to provide a bank guarantee under this clause if Western Power determines there to be a risk of not receiving the estimated new revenue.

(b) Western Power may require the applicant to procure an unconditional, irrevocable bank guarantee in terms acceptable to Western Power guaranteeing new revenue in the amount of:

   (i) the estimated new revenue (where the estimated new revenue is less than the allocated forecast costs); or

   (ii) the allocated forecast costs (where the estimated new revenue is more than the allocated forecast costs).

(c) Where Western Power requires a security under clause 4.3(b), the applicant must provide it before the commencement of the works the subject of the connection application.

(d) Where an applicant has provided security under clause 4.3(c), then 24 months after the commencement of the associated exit service, entry service, or bidirectional service Western Power will reconsider the risk of not receiving the estimated new revenue (based on the then expected use of those services) and if that risk:

   (i) no longer remains, Western Power will return the security,

   (ii) remains, but has abated, Western Power may reduce the amount of the security by requiring a new bank guarantee for the reduced amount, or

   (iii) has crystallised (such that some or all of the estimated new revenue will not be recovered), Western Power will re-determine the contribution under this contributions policy and recover from the applicant any difference from the amount of any original contribution and, after that recovery, return the security.

(e) In applying this clause Western Power will act as a reasonable and prudent person.

~~(a) Where the forecast costs with respect to a connection application are greater than $50,000, but less than $15,000,000, Western Power may require the applicant to procure before the commencement of the works, and maintain for a period of 18 months after the commencement of the associated exit service, entry service, or bidirectional service, an unconditional, irrevocable bank guarantee, or equivalent financial instrument, in terms acceptable to Western Power (acting as a reasonable and prudent person), guaranteeing the portion of new revenue that was used to calculate the contribution and is expected to come from providing an exit service, entry service, or bidirectional service using the works.~~

~~(b) Where an applicant has provided security under clause 4.3(a), then after 12 months, Western Power may:~~

   ~~(i) re-determine the contribution under this contributions policy, and recover from, or rebate to, the applicant any difference from the amount of the original contribution; or~~

   ~~(ii) require the applicant to maintain the bank guarantee or equivalent financial instrument for a further 12 months before re-determining the contribution in accordance with clause 4.3(b)(i).~~

~~(c) Where the forecast costs with respect to a connection application are equal to or greater than $15,000,000, Western Power may require the applicant to procure before the commencement of the works, an unconditional, irrevocable bank guarantee, or equivalent financial instrument, in terms~~

~~acceptable to Western Power (acting as a reasonable and prudent person), guaranteeing the portion of new revenue that was used to calculate the contribution and is expected to come from providing an exit service, entry service, or bidirectional service, using the works.~~

1738. No submissions made to the ERA comment on the proposed changes to clause 4.3.

1739. The ERA considers that the proposed changes are consistent with the requirements of the Access Code. The ERA agrees with Western Power that the proposed changes assist connecting customers to better understand their security obligations. The ERA recommends additional minor amendments to this clause to add further clarity and to make the terminology consistent:

For the purposes of this clause 4.3:

...

(a) Western Power may require an applicant to provide security~~a bank guarantee~~ under this clause if Western Power determines there to be a risk of not receiving the estimated new revenue.

(b) Western Power may require the applicant to ~~procure~~provide security in the form of an unconditional, irrevocable bank guarantee, or equivalent financial instrument, in terms acceptable to Western Power guaranteeing new revenue in the amount of:

(i) the estimated new revenue (where the estimated new revenue is less than the allocated forecast costs); or

(ii) the allocated forecast costs (where the estimated new revenue is more than the allocated forecast costs).

(c) Where Western Power requires ~~a~~ security under clause 4.3(b), the applicant must provide it before the commencement of the works the subject of the connection application.

(d) Where an applicant has provided security under clause 4.3(c), then 24 months after the commencement of the associated exit service, entry service, or bidirectional service Western Power will reconsider the risk of not receiving the estimated new revenue (based on the then expected use of those services) and if that risk:

(i) no longer remains, Western Power will return the security,

(ii) remains, but has abated, Western Power may reduce the amount of the security by requiring a new ~~bank guarantee~~security for the reduced amount, or

(iii) has crystallised (such that some or all of the estimated new revenue will not be recovered by Western Power), Western Power will re-determine the contribution under this contributions policy and recover from the applicant any difference from the amount of any original contribution and, after that recovery, return the security.

(e) In applying this clause Western Power will act as a reasonable and prudent person.

Required Amendment 82

The drafting of clause 4.3 of the contributions policy must be amended in accordance with paragraph 1739 of this draft decision to add further clarity and to make the terminology consistent throughout the policy.

Revenue offset for residential customers

1740. Western Power proposes to expand the contributions policy to make the provision of revenue offset available to residential customers. By making this change, Western Power will estimate the amount of incremental revenue from a new residential connection over a 15 year period and deduct this amount from the upfront capital contribution payable by the customer(s). Western Power states the change to include residential customers:[427]

- brings residential customers into line with commercial customers, who are already eligible for an offset of up to 15 years, depending on the nature of the commercial project;
- recognises that residential customers making a new connection to the distribution network will incrementally contribute to Western power's network tariff revenues over time;
- makes the initial cost of connection for residential customers more affordable by lowering the upfront costs that are payable at the time of connection; and
- provides greater alignment with policies mandated in other Australian jurisdictions under the national regulatory framework.

1741. Western Power believes the change, to include revenue offset for residential customers, "can be given effect without any specific wording change within the contributions policy".[428]

1742. As indicated above (at paragraph 1732) Community Electricity supports Western Power's proposal to expand the revenue offset provision in the contributions policy to include residential customers.

1743. The provision for revenue offset is applied under clause 5.2 (calculation of contribution) of the contributions policy.

1744. There are several proposed changes to the wording of clause 5.2 of the contributions policy. Given Western Power's comments about not needing "any specific wording change" in the policy, these changes are considered consequential to Western Power's proposal to delete the headworks scheme (existing clause 6) from the policy, which is addressed at paragraph 1751 below.

1745. Subject to clause 6 being deleted from the contributions policy, clause 5.2 reads as follows:

> 5.2 Calculation of Contribution
>
> The contribution payable in respect of any works to which this policy applies is calculated by:
>
> (a) determining the appropriate portion of any of the forecast costs of the works (excluding distribution low voltage connection headworks scheme works, but including any works relating to a distribution low voltage connection headworks scheme application excluded from clause 6 by clause 6.5), which do not meet the new facilities investment test or the alternative option test (as applicable) to allocate to the applicant under clause 5.4; and

[427] Western Power, *Access arrangement information*, 2 October 2017, p. 268, section 12.3.1 and *Access arrangement information: Attachment 12.4,* 2 October 2017, p. 4.

[428] Western Power, *Access arrangement information: Attachment 12.4,* 2 October 2017, p. 4.

(b) adding any applicable amount calculated under clause 6.3 (distribution low voltage connection headworks scheme base charge), and

(c) adding any applicable amount calculated under clause 7.41.1(a), and

(d) deducting the amount likely to be recovered in the form of new revenue gained from providing covered services to the applicant, or, if the applicant is a customer, to the customer's retailer, as calculated over the reasonable time, at the contributions rate of return; and

(e) adding any applicable amount calculated under clauses 7.1, 7.3 and 7.5; and

(f) adding any tax liability (of the nature referred to in clause 4.4) which Western Power forecasts it will incur due to the receipt of the amount payable under paragraphs (a) to (e) of this clause 5.2, as calculated in accordance with clause 5.5; and

(g) adding any applicable amount calculated under clause 7.2.

1746. The proposed wording of clause 5.2(c) contains a cross-referencing error. The reference to "clause 7.41.1(a)" should be a reference to "clause 7.4(a)".

1747. The ERA considers Western Power's proposal to expand the revenue offset to residential customers is consistent with section 5.12(a) of the Access Code as it achieves the objective of striking the balance between the interests of contributing users, other users and consumers (which includes residential customers). While the ERA agrees that clause 5.2 of the contributions policy is not required to be amended in order to give effect to this "change", the ERA is of the view that the revenue offset in clause 5.2 should always have been applicable to residential customers. The ERA therefore considers that this proposal is not a *change* nor an *expansion*. However, in order to make that position express the following amendment to clause 5.2(d) is required:

Calculation of Contribution

The contribution payable in respect of any works to which this policy applies is calculated by:

...

(d) deducting the amount likely to be recovered in the form of new revenue gained from providing covered services to the applicant, or, if the applicant is a customer (including residential customers), to the customer's retailer, as calculated over the reasonable time, at the contributions rate of return; and

...

Required Amendment 83

Clause 5.2(d) of the contributions policy must be amended in accordance with paragraph 1747 of this draft decision to expressly state that the revenue offset in clause 5.2 is applicable to residential customers.

A cross-referencing error in clause 5.2 must be also be corrected – the reference to *"clause 7.41.1(a)"* in clause 5.2(c) should be a reference to *"clause 7.4(a)"*.

Other amendments

1748. A number of other amendments to the contributions policy are shown (as mark-ups to the policy), including wording changes to clause 5.4, clause 6.3 (previously clause 7.3) and the meaning of "distribution low voltage connection headworks scheme application" in clause 1.1. Other amendments also include the deletion of all terms and references relating to the distribution headworks scheme and the updating of clause numbering and cross-references throughout the policy.

1749. Western Power proposes to add the words "acting as a reasonable and prudent person" to clause 5.4(c)(ii) of the contributions policy. These words mirror the existing wording used in clause 5.4(c)(i) of the policy.

1750. Unless stated otherwise, the other proposed amendments are considered consequential and/or administrative amendments to:

- expand the distribution low voltage connection headworks scheme and associated methodology document (at Appendix C.2); and
- give effect to the proposed deletion of the distribution headworks scheme.

Distribution headworks scheme

1751. Western Power proposes to delete the distribution headworks scheme (including associated references and methodology) from the contributions policy, noting that it is not a mandatory requirement of the Access Code to include such a scheme. Western Power's reason for deleting the scheme is as follows:[429]

> The distribution headworks scheme was introduced for the AA3 period, with the purpose of providing a levelised $/kVa charge for upgrades to power supply in rural and regional areas situated 25 kilometres or more from the nearest Western Power substation. Under the scheme, Western Power recovers only a portion of the cost for supply upgrades upfront, with future connections forecast to contribute the balance.
>
> The outstanding costs rarely meet the NFIT (due to being outside natural load growth scenarios) and, given the lack of growth in regional areas, the upgrade costs are rarely recovered from the actual customer or customers served. Instead, these costs are being recovered from all customers (where the costs meet NFIT) or borne by Western Power directly (where the costs do not meet NFIT). For this reason we propose to remove the scheme.

1752. Western Power further notes:[430]

- while it had made a commitment to the State Government not to charge for headworks in the 2012-13 financial year, the distribution headworks scheme (and methodology) has not been applied since; and
- the charges for customers that may have previously been subject to the distribution headworks scheme will be determined consistent with the methodology applied to supply upgrades in regional areas. That is, Western Power will charge the forecast cost of the works required to connect the customer, minus any portion of the costs deemed to meet the new facilities investment test.

[429] Western Power, *Access arrangement information*, 2 October 2017, pp. 268-269, paragraphs 1131 and 1132.

[430] Western Power, *Access arrangement information: Attachment 12.4*, 2 October 2017, p. 2.

1753. No submissions made to the ERA comment on the proposal to delete the distributions headworks scheme from the contributions policy.

1754. Provisions for the distribution headworks scheme are set out in clause 6 of the current contributions policy, with the scheme methodology set out in Appendix C.2 of the current access arrangement.

1755. The ERA agrees with Western Power there is no requirement in the Access Code to include such a scheme. Hence, Western Power's proposal to delete the distributions headworks scheme (existing clause 6); methodology (existing Appendix C.2); and all associated references to the scheme (which are considered consequential amendments) is not inconsistent with the requirements of the Access Code.

Distribution low voltage connection headworks scheme

1756. Western Power proposes to expand the Distribution Low Voltage Connection Headworks Scheme (**DLVCHS**) to include all new capacity connections (but to exclude the connection of gifted assets). Currently the scheme applies only to connection upgrades ("brownfield works") and not to new connections ("new lots").

1757. Western Power states that the expansion of the scheme to include new connections will:[431]

- enable the development industry to more accurately forecast charges
- implement consistent charging across customers
- provide customers with more predictable and transparent prices
- streamline the processes for determining charges by providing a simpler approach to charging customers

1758. The proposed amendments to the DLVCHS are outlined in a marked-up copy of the *distribution low voltage connection scheme methodology* (at Appendix C.2) and in Attachment 12.5[432] to the proposed access arrangement. The amendments include:

- changes to some clauses in the methodology to extend the application of the DLVCHS to all new capacity connections (excluding the connections of gifted assets);
- a new section (1.1) to insert information for interpretation; and
- other drafting amendments, including amendments to terminology, to ensure consistency between the scheme's methodology and contributions policy.

Expansion of the DLVCHS (sections 1; 2.3; 4; 5.1; and 6)

1759. Western Power's proposal to expand the DLVCHS means that the definition of the scheme must be amended. The DLVCHS methodology document (at Appendix C.2 of the proposed access arrangement) states that the:

> **"distribution low voltage connection scheme"** means the scheme described in clause 6[433] of the *contributions policy*.

[431] Western Power, *Access arrangement information*, 2 October 2017, p. 269, paragraph 1136.

[432] Distribution Low Voltage Connection Scheme Change Summary.

[433] Previously clause 7 of the contributions policy.

1760. Proposed amendments to the contributions policy to give effect to the expansion of the DLVCHS are discussed at paragraph 1748 above. Amendments to the DLVCHS methodology document (Appendix C.2) include changes to:

- some defined terms used in the methodology (at section 1);
- the drafting of section 2.3, which provides an overview of the scheme;
- section 4, which provides an overview of the methodology used to determine the scheme's prices;
- section 5.1, which provides additional detail about the price determination process; and
- section 6, which provides details about when an application is excluded from the provisions of the scheme.

Section 1 – definitions

1761. Section 1 of the DLVCHS methodology contains a list of defined terms that are used. Western Power proposes to amend several terms and delete some others.

- Amendments are proposed for the following terms:
    - "applicant"
    - "distribution low voltage connection scheme application"
    - "distribution low voltage connection scheme base charge"
    - "distribution low voltage connection scheme works"
- The terms "headworks"; "headworks charge"; "headworks scheme"; "scheme"; and "street feed" will be deleted.

1762. The proposed amendments to the abovementioned terms all make reference to the terms used in the contributions policy. That is, *the defined term has the same meaning given to it in the contributions policy*. To assist the reader, notes to the definition reproduce the meaning as contained in the contributions policy; for example:

> **"applicant"** has the same meaning given to it in the *contributions policy*.
>
> {Note: Under the contributions policy "applicant" means "a person (who may be a user, a customer or a developer) who has lodged, or intends to lodge, a connection application, and includes a person who does so on behalf of another person".}

1763. The proposed amendments simply refer to (and reproduce) terms and meanings in the contributions policy. The proposed terms to be deleted are consequential to the deletion of the distribution headworks scheme (which has been addressed at paragraph 1751 above).

1764. Due to the insertion of a new interpretation section (see paragraph 1775 below) the ERA requires section 1 to be renamed "defined terms and interpretation" and insertion of a new section 1.1 ("defined terms").[434] The ERA considers that this will make the DVLHS methodology consistent with the format of the contributions policy.

[434] Proposed new section 1.1 (interpretation) will become section 1.2.

Required Amendment 84

The distribution low voltage connection scheme methodology must be amended to rename the following sections:

- 1 ~~Introduction~~ Defined Terms and Interpretation
- 1.1 ~~Definitions~~ Defined Terms

Section 2.3 – overview of the distribution low voltage connection scheme

1765. Western Power proposes to change the drafting of section 2.3, which provides an overview of the scheme. The proposed changes are as follows:

> 2.3 Overview of the Distribution Low Voltage Connection Scheme
>
> (a) The distribution low voltage connection headworks scheme and associated prices apply to the provision of distribution low voltage connection headworks scheme works only. The class of applicants must meet the following criterion~~a~~:
>
> (i) T~~t~~he proposed or existing connection point for a new or upgraded connection is to the distribution system low voltage network and is within 25 kms of the relevant zone substation~~, and~~
>
> ~~(ii) the applicant's required electrical capacity is in excess of:~~
>
> ~~(A) the original design capacity for a greenfield development on an existing electricity serviced lot, or~~
>
> ~~(B) the existing capacity in respect of that connection point for a brownfield development.~~
>
> (b) The prices are in terms of $/kVA.
>
> (c) The ~~headworks charge~~price that an applicant pays depends on their incremental capacity requirement~~required electricity demand~~ and whether the location of the connection point is on a land lot separate from the relevant distribution transformer~~there will be a distribution transformer on the lot where the connection point is located~~.

1766. As indicated, Western Power is proposing to expand the DLVCHS to include new connections. The proposed drafting changes to section 2.3 of the DLVCHS methodology document reflects this expansion. The ERA requires some minor amendments to section 2.3(a) to reflect common drafting conventions as follows.

> (a) The distribution low voltage connection headworks scheme and associated prices apply to the provision of distribution low voltage connection headworks scheme works only. The class of applicants must meet the ~~following criterion~~criteria that:
>
> (i) The proposed or existing connection point for a new or upgraded connection is to the distribution system low voltage network and is within 25 kms of the relevant zone substation.

Required Amendment 85

The drafting of section 2.3(a) of the distribution low voltage connection scheme methodology must be amended in accordance with paragraph 1766 to reflect common drafting conventions.

Section 4 – methodology overview

1767. Section 4 of the DLVCHS methodology document provides an overview of the methodology used to determine the scheme's prices. Several drafting changes are proposed:

> 4 Methodology Overview
>
> This section provides an overview of the methodology used in determining the distribution low voltage connection scheme prices. It is noted that the cost of the provision of electricity capacity at a particular location is a function of:
>
> (i) the incremental capacity requirement~~amount of capacity~~ sought by an applicant; and
>
> (ii) whether the location of the connection point is on the same land lot as the relevant distribution transformer~~whether the location of the connection point is contiguous to the location of the transformer~~, or whether the connection point is supplied from the low voltage street network.
>
> On this basis, the approach taken to develop the distribution low voltage connection scheme prices is as follows.
>
> (a) Western Power determines the costs of distribution low voltage connection scheme works for connection of applicants that meet the eligibility criterion~~a~~ for the distribution low voltage connection scheme over a period of 12 months.
>
> (b) The costs of distribution low voltage connection scheme works determined under (a) have been allocated to categories as follows:
>
> (i) whether the incremental capacity requirement at the connection point determined under clause 6~~7~~.3(a) of the contributions policy is:
>
> - less than 216 kVA or
> - between 216 kVA and 630 kVA or
> - greater than 630 kVA, and
>
> (ii) whether the location of the connection point on the same land lot as the relevant distribution transformer~~whether the location of the connection point is on a lot separate from the location of the transformer~~, or whether the connection point is supplied from the low voltage street network.
>
> (c) From the costs of distribution low voltage connection scheme work and the incremental ~~electricity demand~~capacity requirement associated with the categories defined in (b) above, the total costs of supply for each tranche can be determined in terms of $ per kVA.
>
> (d) The price structure and prices are then derived to reflect the average costs derived under (a) and (b) above. Prices are expressed in a block structure that provides for a continuous price path. Note that there is a separate price path for a connection point on the same land lot as the relevant distribution transformer~~connections with a contiguous transformer~~ to those with a connection point supplied from~~connected to~~ the low voltage street network.

1768. The proposed drafting changes to section 4 of the DLVCHS methodology are for the purpose of adding clarity and do not make any substantive changes to the meaning of section 4. The ERA has made the following additional changes to clause 4 in order to correct some formatting and typographical errors:

> 4 Methodology Overview
>
> This section provides an overview of the methodology used in determining the distribution low voltage connection scheme prices. It is noted that the cost of the provision of electricity capacity at a particular location is a function of:
>
> (a)~~(i)~~ the incremental capacity requirement sought by an applicant; and
>
> (b)~~(ii)~~ whether:
>
> (i) the location of the connection point is on the same land lot as the relevant distribution transformer;~~,~~ or
>
> (ii) ~~whether~~ the connection point is supplied from the low voltage street network.
>
> On this basis, the approach taken to develop the distribution low voltage connection scheme prices is as follows.
>
> (a) Western Power determines the costs of distribution low voltage connection scheme works for connection of applicants that meet the eligibility criterion for the distribution low voltage connection scheme over a period of 12 months.
>
> (b) The costs of distribution low voltage connection scheme works determined under (a) have been allocated to categories as follows:
>
> (i) whether the incremental capacity requirement at the connection point determined under clause 6.3(a) of the contributions policy is:
>
> - less than 216 kVA; or
> - between 216 kVA and 630 kVA; or
> - greater than 630 kVA, and
>
> (ii) whether
>
> (A) the location of the connection point is on the same land lot as the relevant distribution transformer;~~,~~ or
>
> (B) ~~whether~~ the connection point is supplied from the low voltage street network.

Required Amendment 86

The drafting of section 4 of the distribution low voltage connection scheme methodology must be amended in accordance with paragraph 1768 to correct some formatting and typographical errors.

Section 5.1 – price tranche thresholds

1769. Section 5 of the DLVCHS methodology provides details on the price determination process, with section 5.1 outlining the price tranche thresholds. Western Power proposes to amend the drafting of the section as follows:

> 5.1 Price Tranche Thresholds
>
> Western Power has developed standard distribution low voltage connection scheme prices based on modelling of connections over the ~~past~~ 12 month period since the

most recent review of prices. Costs per unit of capacity (kVA) reduce as the demand increases due to economies of scale. Those economies reflect the following factors;

- fixed costs including cable trenching, reinstatement, traffic management, mobilisation costs and installation costs are incurred regardless of capacity supplied,
- increased utilisation of installed assets, and
- reduction in the per unit cost of transformers in terms of dollars per kVA of capacity. (transformers are purchased in standard sizes, typically 315 kVA, 630 kVA and 1000 kVA and on a per kVA basis the costs of these transformers reduce significantly as the size increases).

In order for these economies of scale to be recognised in the pricing structure thresholds are set that reflect both the cost of plant and the nature of the network required to provide the requested capacities. For example, in general customers seeking less than 216 kVA are supplied from the low voltage street network~~distribution network~~, customers seeking demand between 216 kVA and 630 kVA require installation of a new transformer and may require that transformer to be installed on their lot, and in almost all circumstances customers seeking loads in excess of 630 kVA will require direct connection to a new transformer on their lot. Consequently the thresholds identified are:

(a) Tranche 1 - ~~for the~~less than ~~first~~ 216 kVA of ~~requested load~~incremental capacity requirement,

(b) Tranche 2 - between 216 kVA and 630 kVA~~for additional units~~ of incremental capacity requirement~~load from 216 kVA to 630 kVA~~, and

(c) Tranche 3 - greater than 630 kVA~~for additional units~~ of incremental capacity requirement~~load above 631 kVA~~.

1770. The proposed changes amend the time period for modelling connections from "the past 12 month period" to "the 12 month period since the most recent review of prices". The ERA considers this change to be ambiguous because “the 12 month period since” could be interpreted as forward looking. The ERA considers that the amendment has the effect of altering the original meaning of the clause. On the basis that Western Power's proposed changes are for the purposes of adding clarity, the ERA requires the current drafting be reinstated, which is considered clearer.

1771. The ERA considers that the other proposed changes made to clause 5.1 can be accepted on the basis that they are considered improvements to the drafting and do not alter the meaning of the clause.

Required Amendment 87

Section 5.1 of the distribution low voltage connection scheme methodology must be amended to reinstate the words: "the past 12 month period" (and delete the proposed words “the 12 month period since the most recent review of prices”).

Section 6 – exclusion

1772. Western Power proposes to amend some wording in section 6 of the DLVCHS methodology, which outlines the method for determining the exclusion threshold for the scheme:

6 Exclusion

A distribution low voltage connection scheme application …

The methodology for determining the exclusion threshold is as follows:

(a) For all works in the ~~last twelve months~~12 month period since the most recent review of prices Western Power will:

(i) determine the amount of the forecast costs of the works applied to the ~~customer~~applicants as per section 5.4 of the contributions policy,

(ii) subtract from the amount in section (a) the distribution low voltage connection scheme base charge,

(b) The exclusion threshold is equal to two standard deviations of all instances where the value in section (ii) is positive.

Western Power will publish the amount of the exclusion threshold as detailed in this document.

1773. The proposed changes amend the time period for determining the exclusion threshold from "the last twelve months" to the "12 month period since the most recent review of prices." For the reasons given at paragraph 1770 above, the ERA considers this change to be ambiguous and should not be made.

1774. The ERA considers the proposed change to replace the word “customer” with the word “applicant” clarifies that the determination of the forecast costs of the works applies to applicants (rather than customers), and is consistent with section 5.4 of the contributions policy.

Required Amendment 88

Section 6 of the distribution low voltage connection scheme methodology must be amended to reinstate the words: "the last twelve months" (and delete the proposed words “the 12 month period since the most recent review of prices”).

Interpretation (proposed section 1.1)

1775. Western Power proposes to insert a new interpretation section (section 1.1) into the DLVCHS methodology as follows to ensure consistency with other instruments (including the contributions policy) and clearer interpretation:[435]

1.1 Interpretation

(a) Unless the contrary intention is apparent:

(i) a rule of interpretation in the Code; and

(ii) the Interpretation Act 1984,

apply to the interpretation of this methodology document.

(b) Unless:

(i) the contrary intention is apparent: or

(ii) the term has been redefined above or in the contributions policy,

[435] Western Power, *Access arrangement information: Attachment 12.5*, 2 October 2017, p. 2.

a term with a defined meaning in the Code has the same meaning in this methodology document.

1776. The ERA considers that inserting an interpretation clause will add clarity to the methodology document by explaining how the methodology and defined terms in the methodology are to be interpreted. In addition it is standard practice for an interpretation clause to be inserted into a document of this nature. However, the ERA considers that paragraph 1.1(b)(ii) is ambiguous. The ERA requires the following amendments to clarify that if a term is defined in the methodology document (at section 1.1) or in the contributions policy then the term will be given that meaning. Consistent with the ERA's requirement to rename section 1 and introduced a new section 1.1 (refer to paragraph 1764 above), proposed section 1.1 is now section 1.2:

1.2~~1.1~~ Interpretation

(a) Unless the contrary intention is apparent:

(i) a rule of interpretation in the Code; and

(ii) the Interpretation Act 1984,

apply to the interpretation of this methodology document.

(b) Unless:

(i) the contrary intention is apparent: or

(ii) the term has been redefined ~~above~~in clause 1.1 or in the contributions policy,

a term with a defined meaning in the Code has the same meaning in this methodology document.

Required Amendment 89

Section 1.1(b)(ii) of the distribution low voltage connection scheme methodology must be amended to clarify that if a term is defined in the methodology document (at section 1.1) or in the contributions policy then the term will be given that meaning.

Illustrative pricing (section 5.4)

1777. The price structure under the DLVCHS is based on a set of per kVA rates that reflect the average cost of supply per unit of load (kVA). Section 5.4 of the DLVCHS methodology provides illustrative prices for the scheme, with actual prices being published separately on Western Power's website.[436]

1778. Western Power notes that the pricing under the scheme has not been updated since October 2012.[437] As part of its review of policies and schemes for AA4, Western Power has reviewed this pricing and is proposing new prices, to commence from 1 July 2018. The proposed prices (charges) compared with current prices are set out in Table 130 below.

[436] Information on the DLVCHS, including pricing can be found at: https://westernpower.com.au/technical-information/distribution-low-voltage-connection-headworks-scheme-dlvchs/ (accessed 12/02/2018)

[437] Western Power, *Access arrangement information: Attachment 12.5*, 2 October 2017, p. 4.

Table 130 Western Power's proposed distribution low voltage connections headworks scheme pricing

	Current charge $	Proposed charge $	Change $	% change
Tranche 1 TX charge	448.00	546.61	98.61	22%
Tranche 2 TX charge	224.00	273.31	49.31	22%
Tranche 3 TX charge	112.00	136.65	24.65	22%
Tranche 1 LV charge	496.00	602.55	106.55	21%
Tranche 2 LV charge	272.00	329.24	57.24	21%

Source: Western Power, Access arrangement information: Attachment 12.5, 2 October 2017, p.4, section 3.

1779. Western Power states that it has conducted an internal review of the average costs based on compatible unit costs for works issued to construction. Included in its assessment is the application of Consumer Price Index and labour rate escalators to the equivalent of 2.75 per cent per annum from 2012 rates to those proposed for 2018-19.

1780. The ERA considers that the illustrative prices in clause 5.4 are consistent with the requirements in section 5.17D of the Access Code. This is because the indicative pricing is for the purpose of giving additional detail to the methodology that is used to calculate the headworks charge.

Other matters raised by interested parties

Approach to tax recovery

1781. In its submission, WALGA raises concerns over the treatment and recovery of tax on capital contributions. It notes the following:[438]

> Under the Australian Accounting Standards, gifted assets are treated as assessable income. As a result, gifted assets increase Western Power's National Tax Equivalent Regime payments to the State Government. As part of Western Power's Third Access Arrangement, the ERA ruled that it is more appropriate for these costs to be passed onto the customer requesting the work. Western Power has since commenced recovery of the tax on capital contributions from 5 January 2015 at a rate of 13.9% for industrial and commercial projects.

1782. WALGA submits that local governments are affected by this policy to recover the tax on capital contributions because local governments pay for the cost of asset relocations and gift street lights to Western Power. While WALGA generally supports the use of upfront charges for infrastructure specifically built for new developments, it does not support the tax costs resulting from capital contributions being recovered from the entity (or entities) making the contribution.

1783. WALGA states that recovering tax costs from those making a contribution "is not necessarily an efficient outcome and is likely to have significant distortions on

[438] WALGA, Submission to the Economic Regulation Authority, December 2017, p. 11.

activity".[439] A street lighting project in the Shires of Esperance and Leonora is provided to illustrate the magnitude of the potential tax implications.[440] It further states that it:

> … understands the ERA's decision on the treatment of capital contributions is not consistent with what occurs in other jurisdictions. For example, the Australian Energy Regulator (AER) makes an allowance for tax costs in the infrastructure provider's overall revenue requirement, which potentially enables these costs to be recovered from all users.
>
> The ERA should examine the merits of adopting the same approach used in the AER jurisdictions.

1784. The ERA considered the treatment and recovery of tax on capital contributions as part of its assessment of Western Power's access arrangement for AA3. In its AA3 final decision the ERA explained how capital contributions lead to a tax liability for Western Power, the potential value of such a liability and how it should be recovered:[441]

> Under tax law, a capital contribution which relates to an asset that meets the required definitions becomes revenue for Western Power in the year of receipt, which is matched to a 'fair value' entry in Western Power's tax asset base (TAB).
>
> Western Power then becomes liable for tax at 30 per cent on that revenue in the first year, and for deductions from its tax liabilities in the out-years tax reflecting the depreciation of the TAB contributed asset.
>
> Given that Western Power's tax account is in nominal terms, the net present value (NPV) of the stream of future depreciation tax liability deductions is less than the upfront cost of the tax liability. This 'time value of money' is significant, and could result in a substantial cost for Western Power. It therefore may be reasonable for Western Power to pass this cost on to the developer.
>
> The Authority accepts that a capital contribution could lead to a tax liability for Western Power of 25 per cent of the value of contributed assets.
>
> The Authority considers that rather than customers funding these costs, it would be more appropriate for Western Power to obtain recompense for these costs as part of the commercial negotiations or evaluation of charges related to any contribution.

1785. The ERA concluded that:[442]

> - the tax costs associated with capital contributions may not necessarily be associated with efficient costs – as is the case where a contribution is required for an augmentation that does not meet the NFIT;
> - to allow tax costs that are not associated with efficient costs to be charged to all customers would be inconsistent with the objectives of the [Access] Code;
> - Western Power does have a tax liability associated with a contribution, but given the objective of economic efficiency and the associated principal of 'user pays',

[439] WALGA, Submission to the Economic Regulation Authority, December 2017, p. 12.

[440] WALGA states that for the street light project within the Shires a tax of 13.9% would have had an impost of almost $800,000.

[441] Economic Regulation Authority, *Final Decision on Proposed Revisions to the Access Arrangement for the Western Power Network*, 5 September 2012, pp. 248-249, paragraphs 1087 to 1091.

[442] Economic Regulation Authority, *Final Decision on Proposed Revisions to the Access Arrangement for the Western Power Network*, 5 September 2012, p. 250, paragraph 1103.

this should be recovered from the contributor – to do otherwise would lead to a subsidy from the existing customer base to the contributing entity;[443]

- Western Power and the contributor are best placed to work out the commercial terms of the tax implications of any contribution, taking into account their business interests and tax positions;
- the analysis provides support for the [ERA] taking a different position to that of other regulators.

1786. The ERA considers there is no reason to vary its position on the treatment and recovery of tax on capital contributions when assessing Western Power's proposal for AA4.

State Underground Power Program

1787. CdL Advisory's submission on the contributions policy questions the percentage of contributions that Western Power assumes for the SUPP and how it corresponds to the ERA's 2010 inquiry into the program.[444]

1788. Western Power states in the access arrangement information that:[445]

> SUPP contributions are forecast in accordance with a capital and operating cost sharing agreement between State Government, local government and Western Power. Typically, local governments will contribute at least 50 per cent of costs, with Western Power and/or State Government contributing the balance.
>
> Western Power assumes a 54 per cent contribution rate for distribution customer driven works. This reflects the AA3 average recovery rate for contributions for the SUPP.

1789. The ERA undertook an inquiry into the costs and benefits of the SUPP in April 2010. In its final report, the ERA reported that:[446]

> The costs of retrospective underground power should be recovered from the following beneficiaries, based on the variable proportion of quantifiable and qualitative benefits that they each receive:
>
> - Western Power should contribute an amount equal to its avoided costs when a particular project area is undergrounded (on average between 15 and 35 per cent but could be more or less than this);
> - The State Government could contribute between 5 and 40 per cent, depending on the median house price and socio-economic indicators of a project area; and
> - Local governments (through ratepayers) could contribute the residual amount (total costs less Western Power's avoided costs and the contribution from the State Government), which may be between 25 and 80 per cent.

1790. The Western Australian State Government last invited local governments to submit proposals for round six of the SUPP in December 2015. New funding arrangements

[443] Generally the contributor would pay the value arising from the timing difference of the tax payment and subsequent recovery, not the total tax payment.

[444] See: https://www.erawa.com.au/inquiries/energy-inquiries/costs-and-benefits-of-the-state-underground-power-program-2010 (accessed 12/02/2018)

[445] Western Power, *Access arrangement information,* 2 October 2017, p. 182, paragraphs 717 and 718.

[446] Economic Regulation Authority, *Inquiry into State Underground Power Program Cost Benefit Study: Final Report*, 30 September 2011, p. 79, finding #25.

for round six were introduced to reflect the priorities of the State Government, experience gained in previous funding rounds and the ERA's inquiry findings:[447]

2.1 New Project Funding Arrangements

2.1.1 Local Government Funding Contribution

For Round Six of the Program, local governments will nominate the proportion of project funding they are willing to pay. The minimum contribution from local governments will be 50 per cent.

Project proposals offering a greater contribution share will receive a higher score in the selection process and be more competitive.

This arrangement will allow for more projects to be implemented within the approved Program budget. It will also better align funding contribution shares with the proportionate benefits received by Program participants. This approach is consistent with the findings made by the Economic Regulation Authority in a report titled Inquiry into State Underground Power Program Cost Benefit Study (the Inquiry Report).

2.1.2 Western Power Funding Contribution

Western Power's project funding contributions will vary according to the costs that it avoids through undergrounding of distribution systems. These avoided costs are determined through the New Facilities Investment Test and are reviewed by the Economic Regulation Authority under the Electricity Networks Access Code 2004 (the Code). This approach is consistent with the findings of the Economic Regulation Authority in its Inquiry Report.

The New Facilities Investment Test is established under the Code and provides a method to assess the justification of each new network augmentation and the efficiency of proposal expenditure. It is the measure used to determine whether Western Power is following good business practice in efficiently minimising its capital investments to meet forecast demand.

Horizon Power is not subject to the Code and does not use the New Facilities Investment Test. If a submission is received that relates to Horizon Power's electricity network, the specific circumstances relating to the project will be used to determine Horizon Power's project funding contribution.

2.1.3 Determining Contribution Amounts

Funding requirements for each project will be determined by the following sequence:

- Local governments will contribute between 50 and 100 per cent of the project cost as specified in the project proposal.
- Western Power's project funding contributions will vary according to the project costs that meet the New Facilities Investment Test.
- Where the sum of the local government contribution and the Western Power contribution exceeds 100 per cent of the expected project value, the Western Power contribution will reduce by the amount that exceeds 100 per cent.
- The remaining balance (if any) will be provided by the Government of Western Australia through the Department of Finance, Public Utilities Office.

A total cost cap of $11 million will be applied to individual project funding to maximise the number of projects the Program is able to deliver. If a project will cost more than this amount, the local government will be required to pay 100 per cent of the additional costs.

[447] Government of Western Australia, Department of Finance, Public Utilities Office, *State Underground Power Program: Major Residential Projects Round Six Guideline*, December 2015, pp. 3-4, section 2.1.

1791. Consistent with the ERA's 2010 inquiry findings, the round six SUPP funding arrangements require Western Power to contribute an amount equal to its avoided costs as determined by the new facilities investment test under the Access Code. At the time of the inquiry, the ERA estimated this amount to be on average between 15 and 35 per cent, noting that the amount could be more or less than this.

1792. The round six SUPP guidelines set out the process for determining contribution amounts. Under the process local governments are required to contribute somewhere between 50 and 100 per cent of the project cost. Western Power will contribute an amount equal to the project costs that meet the new facilities investment test. In instances where the total contribution from local government and Western Power exceeds the expected project value (100 per cent), Western Power's contribution will be reduced by the amount that exceeds 100 per cent. Any remaining balance (if any) will be met by the State Government.

1793. The way in which the SUPP is administered, including how contribution amounts from program participants are determined, is a matter for the State Government. Western Power's assumptions for the SUPP (including a 54 per cent contribution rate) are considered appropriate for its budgeting and planning purposes, noting that Western Power's project (capital) costs are assessed by the ERA either:

- during the access arrangement period, where Western Power makes an application to the ERA for it to determine whether actual (or forecast) capital costs meet (or is forecast to meet) the new facilities investment test; or
- as part of Western Power's access arrangement proposal for the next access arrangement period.

1794. The ERA's assessment of Western Power's actual capital costs for the AA3, and forecast capital costs for AA4, is detailed elsewhere in this draft decision (see *Total Revenue Requirement* chapter).

TRANSFER AND RELOCATION POLICY

Access Code requirements

1795. Section 5.1(i) of the *Electricity Networks Access Code 2004* (**Access Code**) requires that an access arrangement include a transfer and relocation policy, which is a policy that:

> specifies a user's rights to transfer its access rights to another person and relocate capacity from one connection point in its access contract to another connection point in its access contract.

1796. The particular requirements for a transfer and relocation policy are set out in sections 5.18 to 5.24 of the Access Code as follows:

5.18 A transfer and relocation policy:

(a) must permit a user to make a bare transfer[448] without the service provider's consent; and

(b) may require that a transferee under a bare transfer notify the service provider of the nature of the transferred access rights before using them, but must not otherwise require notification or disclosure in respect of a bare transfer.

5.19 For a transfer other than a bare transfer, a transfer and relocation policy:

(a) must oblige the service provider to permit a user to transfer its access rights and, subject to section 5.20, may make a transfer subject to the service provider's prior consent and such conditions as the service provider may impose; and

(b) subject to section 5.20, may specify circumstances in which consent will or will not be given, and conditions which will be imposed, under section 5.19(a).

5.20 Under a transfer and relocation policy, for a transfer other than a bare transfer, a service provider:

(a) may withhold its consent to a transfer only on reasonable commercial or technical grounds; and

(b) may impose conditions in respect of a transfer only to the extent that they are reasonable on commercial and technical grounds.

5.21 A transfer and relocation policy:

(a) must permit a user to relocate capacity at a connection point in its access contract to another connection point in its access contract, (a 'relocation') and, subject to section 5.22, may make a relocation subject to the service provider's prior consent and such conditions as the service provider may impose; and

(b) subject to section 5.22, may specify in advance circumstances in which consent will or will not be given, and conditions which will be imposed, under section 5.21(a).

5.22 Under a transfer and relocation policy, for a relocation a service provider:

[448] A *bare transfer* is a transfer where the user's obligations under the contract for services and all other terms of the contract for services remain in full force and effect after the transfer.

(a) must withhold its consent where consenting to a relocation would impede the ability of the service provider to provide a covered service that is sought in an access application; and

(b) may withhold its consent to a relocation only on reasonable commercial or technical grounds; and

(c) may impose conditions in respect of a relocation only to the extent that they are reasonable on commercial and technical grounds.

5.23 An example of a thing that would be reasonable for the purposes of sections 5.20 and 5.22 is the service provider specifying that, as a condition of its agreement to a transfer or relocation, the service provider must receive at least the same amount of revenue as it would have received before the transfer or relocation, or more revenue if tariffs at the destination point are higher.

5.24 Section 5.23 does not limit the things that would be reasonable for the purposes of sections 5.20 and 5.22.

Current access arrangement

1797. The current access arrangement includes a transfer and relocation policy at Appendix D. The policy applies to any access contract unless otherwise explicitly stated in the access contract, and includes:

- definitions of terms and rules of interpretation;
- an indication that the transfer and relocation policy applies to any access contract unless otherwise explicitly stated in the access contract and prohibition of any transfer of rights under an access contract except as allowed for under the transfer and relocation policy;
- provision for bare transfers of rights under an access contract;
- provision for assignments of rights under an access contract other than a bare transfer, subject to consent of Western Power; and
- provision for a relocation by a user of contracted capacity at one connection point to another connection point, where the user has an access contract for both connection points.

Western Power's proposal

1798. Western Power has proposed changes to the transfer and relocation policy which it states will:[449]

- more closely align the policy with the provisions of the Access Code;
- make defined terms consistent with other policies and documents (such as the applications and queuing policy);
- distinguish and clarify the boundaries and relationships between other regulatory policies and contracts;
- clarify the criteria for consent for a requested transfer or relocation under the policy; and
- ensure the obligations and rights of involved parties are transparent.

[449] Western Power, *Access arrangement information,* 2 October 2017, p. 271, paragraph 1140.

1799. The proposed amendments to the policy include:

- A new clause (2.3) to make clear that the transfer and relocation policy is subordinate to the Access Code and is subject to any changes made to the Access Code.
- Changes to clause 5, which has provisions that apply to an assignment other than a bare transfer, to:
  - make clear that Western Power may only withhold consent for the assignment of access rights on reasonable grounds (clause 5.1a); and
  - place the onus on the assignee to demonstrate and provide relevant information to Western Power about its capacity to take on an assignment, including its financial position (clause 5.3).
- Changes to clause 6, which has provisions for relocations of contracted capacity, to:
  - clarify the meaning of relocation to make clear that a relocation involves the user moving capacity from one connection point to another connection point under its access contract (clauses 6.1 and 6.2);
  - insert a new clause (6.4) to detail the circumstances and conditions for the consent of relocations, which are consistent with the requirements of the Access Code; and
  - insert a new clause (6.5) to make clear that a relocation is subject to capacity being available at the connection point and that the relocation will (if required) be processed in accordance with the applications and queuing policy.
- Amendments to some defined terms (assignee, assignor and connection point) for clarity and other administrative drafting changes to correct drafting errors.

Submissions

1800. Submissions from Alinta Energy **(Alinta)**, the Australian Energy Council **(AEC)**, Perth Energy and Synergy address the transfer and relocation policy.

1801. Alinta notes that the transfer and relocation policy gives customers with existing contracts the right to transfer their access (transport) rights to another person and to relocate their contracted capacity at a connection point to another connection point. While Alinta has not commented on the specific changes to the policy it submits that:[450]

> While the [transfer and relocation policy] is changing, Alinta strongly considers that any existing rights agreed under a customer's existing contracts should be retained, and if, in the move to a security constrained network design, new connections agreements need to be entered into, these existing rights should be grandfathered.

1802. The AEC also notes the purpose of the transfer and relocation policy as a policy required under the Access Code to allow the transfer of access rights and the relocation of contracted capacity from one connection point to another. It further

[450] Alinta Energy, *Alinta Energy Submission*, 11 December 2017, section 11.

submits that “novation is a standard practice in commercial agreements”.[451] Similar to Alinta, no specific comments are provided on the proposed changes to the policy.

1803. While Alinta and the AEC do not provide any specific comments on Western Power’s proposed changes to the transfer and relocation policy, both parties note the role of the Economic Regulation Authority (**ERA**). That is, the ERA’s determination will include an assessment of whether the updated policy meets the requirements of the Access Code and specifically whether:

- the changes are a reasonable apportionment of risk between a customer/retailer and network operator;
- the changes provide the network operator with excessive discretion in determining the extent to which a customer/retailer may be permitted to exercise its transfer and relocation rights;
- the requirement for the policy to be subservient to the applications and queuing policy is consistent (or contrary) to the Access Code; and
- the proposed changes replicate commercial market conduct.

1804. Perth Energy submits the following:[452]

> Perth Energy is concerned that existing holders of capacity appear to be able to move access from one location to another and from one generation type to another without going through the depth of analysis that a new connection would have to undertake. The transfer and relocation policy should apply the same rigour to increasing capacity as a result of a relocation when compared to a new connection.
>
> Perth Energy is of the view that in absence of a constrained network model, the transfer and relocation policy is fundamentally unfair, as it treats the transfer of generation capacity around network as like for like. Perth Energy believes this provides too much power to the incumbent capacity holder and may stifle competition upstream of the network. Perth Energy would prefer to see the Transfer and Relocation Policy abolished in its entirety.

1805. Synergy states that it has concerns with a number of Western Power’s proposed amendments to the transfer and relocation policy.[453] Synergy’s’ submission includes comments on the following matters:

- primacy of pre-existing contractual rights;
- defined terms;
- assignment to financially and technically competent persons (clause 5.3);
- consent to relocations (new clause 6.4); and
- process for relocations (new clause 6.5).

1806. The matters raised in submissions are addressed (below) as part of the ERA’s considerations.

---

[451] Australian Energy Council, *Submission on proposed revisions to Western Power’s network access arrangement*, 11 December 2017, p. 4.

[452] Perth Energy, *Submission the ERA regarding Western Power’s proposed revisions to the access arrangement for the Western Power network*, November 2017, p. 12.

[453] Synergy, *AA4 Submission Number 1: Western Power’s proposed transfer and relocation policy*, 8 December 2017.

Considerations of the ERA

Pre-existing contractual rights

1807. Synergy submits that it has a number of rights that it will be prevented from exercising if certain proposed changes to the transfer and relocation policy are approved. It raises the following points in its submission:[454]

- The Access Code (section 4.34, read in conjunction with section 4.52) provides that the ERA must not approve proposed revisions that would, if approved, have the effect of depriving a person of a contractual right that existed prior to the proposed revisions being submitted (a pre-existing contractual right).
- For the ERA to perform its obligations in accordance with the Access Code objective, the ERA must first consider and identify any relevant pre-existing contractual rights. Given Synergy's confidentiality concerns, it would be pleased to discuss the pre-existing contractual rights matter with the ERA on receipt of a notice issued under section 51 of *Economic Regulation Authority Act 2003*.
- The Access Code (section 4.34) is not limited to effectively grandfathering pre-existing contractual rights of a user or an applicant, nor are contractual rights limited to a right contained in an access contract or a contract for services.
- The transfer and relocation policy is intended to provide for certain basic rights and obligations for the transfer and relocation of access rights under the Access Code. Western Power and users are not obliged to comply with the policy in circumstances where parties enter into contractual arrangements that displace or otherwise amend those basic rights and obligations.
- The "freedom to contract" provisions of the Access Code (section 2.4A) provide that Western Power and a user or applicant may negotiate, and may make and implement, an access contract for access to any service (including a service which differs from a reference service) on any terms (including terms which differ from a standard access contract). This provision is subject to an applications and queuing policy in an access arrangement, and any applicable technical rules.
- The Access Code (section 2.6) provides that nothing in the Access Code or an access arrangement prevails over or modifies the provisions of a contract for services, except for present purposes the applications and queuing policy and the technical rules. This provision does not entitle the ERA to approve any proposed revisions that would have the effect, if approved, of depriving a person of a pre-existing contractual right.

1808. The ERA has addressed the matter of pre-existing contractual rights as part of its considerations on the standard access contract at paragraph 1288 (and following) of this draft decision.

1809. Until the ERA receives information from Synergy on the claimed pre-existing contractual rights, the ERA is of the view it has no basis on which it can form a view that any proposed changes to the transfer and relocations policy deprives Synergy or any other party of a pre-existing contractual right.

---

[454] Synergy, *AA4 Submission Number 1: Western Power's proposed transfer and relocation policy*, 8 December 2017, p. 8, paragraphs 20 to 26.

1810. The ERA has considered Perth Energy's view that, in the absence of a constrained network model, the transfer and relocations policy is fundamentally unfair as it treats the transfer of generation capacity around the network as like for like. The Access Code expressly attempts to address any unfairness by requiring the service provider to withhold its consent to a relocation, where it would impede the ability of the service provider to provide a covered service that is sought in an access application (section 5.22(a)). The ERA also notes that consent to a relocation may be withheld on technical grounds, which the ERA understands generally involves an assessment of the generation type and impacts on the network.

Defined terms

1811. Synergy notes several of the defined terms used in the transfer and relocation policy (at clause 1.1) have different meanings to the same terms used in the Access Code.[455] While Synergy accepts there are circumstances where variations between terms used in the Access Code and the transfer and relocation policy are necessary, it submits the differences in meaning should be "perfunctory and minimal".[456]

1812. Synergy refers to a specific example in the use of the term *bidirectional point*, which is a term defined in the transfer and relocation policy but is not a term defined (or used) in the Access Code. Synergy submits the following:[457]

> [T]he term "bidirectional point" is defined and used in the [transfer and relocation policy] but is not defined or used in the Access Code. Its use in the [transfer and relocation policy] therefore introduces a new concept to the access regime by varying the definition of connection point.
>
> In relation to this approach, Synergy considers that adopting the definition of connection point in the Access Code and not applying a new definition of bi-directional point need not preclude Western Power from offering bi-directional services because the definitions of exit point and entry point are, in Synergy's view, not inconsistent with the bi-directional service concept.
>
> Synergy therefore considers the Authority must determine whether approval of the [transfer and relocation policy] with the amended Connection Point definition is consistent with the Authority's powers under the Access Code.

1813. Synergy notes the other defined terms in the transfer and relocation policy that differ from the defined terms in the Access Code do not give rise to material differences in meaning. However, as a matter of practice, Synergy considers the ERA should insist upon a strict application of Access Code definitions in the transfer and relocation policy and other access arrangement documents.[458]

1814. The ERA has reviewed the other defined terms in Synergy's submission and considers that, to the extent these defined terms differ from the defined terms in the Access Code, they do not give rise to material differences in meaning. Furthermore, the ERA considers the defined terms are appropriate to the context of the transfer

---

[455] Synergy has identified ten terms where this applies (see Attachment 2 of Synergy's submission: *AA4 Submission Number 1: Western Power's proposed transfer and relocation policy*, 8 December 2017, pp.15-19).

[456] Synergy, *AA4 Submission Number 1: Western Power's proposed transfer and relocation policy*, 8 December 2017, p. 9, paragraph 28.

[457] Synergy, *AA4 Submission Number 1: Western Power's proposed transfer and relocation policy*, 8 December 2017, p. 9, paragraphs 29-31.

[458] Synergy, *AA4 Submission Number 1: Western Power's proposed transfer and relocation policy*, 8 December 2017, p. 9, paragraph 32.

and relocation policy and are not required to mirror the definitions in the Access Code.

1815. Concerning the definition of the term "bidirectional point" (which does not exist in the Access Code), the ERA considers that this definition adds clarity to the transfer and relocation policy and therefore should be retained. The term "bidirectional point" is used in the definition of "connection point". The term "connection point" is defined in the transfer and relocation policy to include "in respect of a user, an exit point or an entry point or a bidirectional point under the user's access contract".

1816. The ERA considers, consistent with Synergy's submission, that the term "bidirectional point" is not inconsistent with the definitions of entry and exit point in the Access Code. However, the ERA disagrees that including the term "bidirectional point" introduces a new concept into the access regime. Rather, the ERA considers that it more appropriately articulates the intended concept of a bidirectional point that is a point which permits electricity to be transferred both into and out of the network.

1817. The defined terms listed in Synergy's submission were introduced as part of the proposed revisions to the access arrangement relating to the AA3 period. Synergy did not make any submissions regarding the consistency of these definitions with the Access Code as part of that review process. In addition, the ERA is not aware of any interpretation or other disputes arising as a result of the existing definitions. As such, the ERA considers that there are no reasonable grounds for revisiting these definitions as part of this proposed access arrangement.

Application of the transfer and relocation policy (clause 2)

1818. Western Power proposes to include a new clause (2.3) to make clear that the transfer and relocation policy is subordinate to the Access Code and is subject to any changes made to the Access Code:

> 2.3 Access Code
>
> This transfer and relocation policy is based on the Code as in force as at the date this transfer and relocation policy is approved by the Authority. If there is an amendment to the Code after this date then the application of this transfer and relocation policy is subject to any varied or additional requirements imposed or required by those amendments.

1819. No submissions address Western Power’s proposal to insert new clause 2.3.

1820. A transfer and relocation policy is required to be included in an access arrangement pursuant to section 5.1(i) of the Access Code. The Access Code is made by the Minister under part 8 of the *Electricity Industry Act 2004* and may be amended from time-to-time in accordance with the procedures set out in the Act. The Act also requires the Access Code to be reviewed every five years. Given these provisions, changes to the Access Code that change the requirements for a transfer and relocation policy are possible. Any changes to such requirements would need to be adhered to. For this reason Western Power’s proposed amendment to make clear that the transfer and relocation policy is subject to any varied or additional requirements imposed or required by any subsequent amendments to the Access Code is consistent with the requirements of the Access Code.

Assignments other than bare transfers (clause 5)

1821. Western Power's proposes to make two changes to clause 5 of the transfer and relocation policy as follows:

> 5.1 Western Power's consent required
>
> For an assignment other than a bare transfer, the following provisions apply.
>
> a. A user may not assign all or any access rights without Western Power's prior written consent which consent may be withheld on reasonable commercial and technical grounds and which consent may be subject to conditions which are reasonable on commercial and technical grounds.
>
> …
>
> 5.3 Assignment to financially and technically competent persons
>
> Western Power is not required to give its consent to an assignment under clause 5.1 if, in Western Power's reasonable opinion, ~~it can reasonably demonstrate that~~ such an assignment would have the effect of materially increasing Western Power's ~~its~~ financial or technical risk under the relevant access contract. Western Power's reasonable opinion may be based on, without limitation, credit reference information available to Western Power and in forming its opinion Western Power will take into account any relevant information, if any, provided by the proposed assignee.

Clause 5.1

1822. Western Power states the proposed change to clause 5.1a of the transfer and relocation policy has been made to more accurately reflect the drafting in section 5.20 of the Access Code, which states that:

> for a transfer other than a bare transfer, a service provider:
>
> (a) may withhold its consent to a transfer only on reasonable commercial or technical grounds; and
>
> (b) may impose conditions in respect of a transfer only to the extent that they are reasonable on commercial and technical grounds.

1823. No submissions address the proposed change to clause 5.1a.

1824. Proposed clause 5.1a substantially reproduces the requirements of the Access Code (as intended by Western Power).

Clause 5.3

1825. Western Power submits the current drafting of clause 5.3 of the transfer and relocation policy places the onus on it to demonstrate that an assignment (of a user's access rights under an access contract to another person) would increase its financial or technical risk. Western Power believes the onus should be on the assignee (and not Western Power) to demonstrate its financial and technical position.

1826. Synergy states that clause 5.3 of the transfer and relocation policy "greatly enhances Western Power's right of refusal in respect of assignments other than bare transfers compared to what is generally the case with respect to assignments under most commercial contracts". Synergy also submits that:[459]

- Clause 5.3 exceeds the standard approach to assignments and novation in commercial contracts and therefore exceeds Western Power's legitimate business interests and is not consistent with matters that the ERA must have regard to under section 26(1)(d) of the *Economic Regulation Authority Act 2003*.
- Clause 5.3 limits Synergy's ability to enter into assignments of its access rights with third parties, whether they be customers or competitors, because any proposed assignee will have a lower credit rating than Synergy (given Synergy's position as a state government owned business). The clause would entitle Western Power to, in every case, reject a proposed assignment. There may also be incentives for Western Power to reject proposed assignments to obtain more commercially beneficial terms for itself.
- The approval of clause 5.3 would be contrary to the Access Code objectives.
- Clause 5.3 should be deleted from the policy and replaced with a more commercially standard provision that entitles Western Power to reject a proposed assignment in circumstances where it can demonstrate the proposed assignee lacks the financial or technical capacity to perform the proposed assignor's obligations that are proposed to be assigned.

1827. The Access Code (section 5.20) permits a service provider to withhold its consent to a relocation on reasonable commercial or technical grounds. The current transfer and relocation policy provides for this by stating (at clause 5.1c) that:

> Western Power's consent shall not be unreasonably withheld or delayed where the user can satisfy Western Power (acting on reasonable commercial and technical grounds) that the proposed assignee is financially and technically capable of performing the user's obligations in respect of the assigned access rights.

1828. Consistent with clause 5.1c, it is reasonable to require Western Power to give consent to an assignment where it is shown that the proposed assignee is financially and technically capable of meeting obligations for the assigned access rights. Similarly, where appropriate financial and technical capabilities cannot be shown it is reasonable for Western Power to be able to withhold its consent to an assignment.

1829. The ERA disagrees with Synergy that the clause is inconsistent with the standard approach to assignment and novation in commercial contracts. This is because it is usual practice for the party requesting assignment to demonstrate the incoming party's financial and technical capabilities as it has direct access to all the relevant information. Further, the proposed drafting is consistent with clause 5.20 of the Access Code because Western Power is only permitted to withhold consent if in its "reasonable" opinion there is a "financial or technical risk". This language mirrors the requirement in clause 5.20(a) of the Access Code that permits consent to be withheld where there are "reasonable commercial or technical grounds".

1830. For the reasons set out above, the ERA considers that the proposed amendments to clause 5.3 are consistent with the requirements of the Access Code, subject to deleting the redundant text ", if any," in the last line of the clause.

---

[459] Synergy, *AA4 Submission Number 1: Western Power's proposed transfer and relocation policy*, 8 December 2017, pp. 9-10, paragraphs 33-37.

Required Amendment 90

Clause 5.3 of the transfer and relocation policy must be amended to remove the redundant words ", if any," as follows.

"… Western Power's reasonable opinion may be based on, without limitation, credit reference information available to Western Power and in forming its opinion Western Power will take into account any relevant information~~, if any,~~ provided by the proposed assignee."

Relocations (clause 6)

1831. Western Power proposes several changes to clause 6 of the transfer and relocation policy, which covers the provisions for the relocation of contracted capacity.

Clause 6.1

1832. A drafting change to clause 6.1 to clarify the meaning of "relocation" is proposed:

> 6.1 Occurrence of relocation
>
> A "relocation" occurs when a user:
>
> a. decreases its contracted capacity at a connection point (a "retiring point"); and
>
> b. makes a corresponding increase in its contracted capacity at another connection point under the user's access contract (a "destination point").

1833. Western Power states the change is to make clear that a relocation occurs when the user decreases its contracted capacity at a connection point (a "retiring point"); and makes a corresponding increase in its contracted capacity at another connection point (a "destination point") *under the user's access contract*.

1834. No submissions address the proposed change to clause 6.1.

1835. The change to clause 6.1 is considered an administrative drafting change, which makes clear that a relocation involves the user moving capacity from one connection point (the "retiring point") to another connection point (the "destination point") under its access contract. The change does not materially alter the meaning of the clause.

New clause 6.4

1836. A new clause (6.4) is proposed for the transfer and relocation policy to set out the circumstances and conditions for the consent of relocations:

> 6.4 Consent
>
> a. A relocation may not be made where it would impede the ability of Western Power to provide a covered service sought in an access application.
>
> b. A relocation is conditional upon the user obtaining the consent of Western Power, which consent Western Power may withhold on reasonable commercial or technical grounds and which consent may be subject to conditions required on reasonable commercial and technical grounds.
>
> c. Without limiting the conditions Western Power may impose, on reasonable commercial or technical grounds, as a condition of consent those conditions

may include that Western Power must receive at least the same amount of revenue as it would have received before the relocation or more revenue if the tariffs at the destination point are higher.

1837. Western Power states the purpose of the new clause is "to better link the transfer and relocation policy to the provisions of the Access Code, specifically [sections] 5.21 to 5.23".[460]

1838. Synergy submits additional amendments should be made to the proposed new clause to make the drafting more accurately reflect the provisions of the Access Code. A requirement for Western Power to provide the user with an explanation of the commercial or technical grounds that consent is withheld should also be added. Synergy's suggested drafting amendments are as follows:

6.4 Consent

a. Western Power:

i. must withhold its consent to a~~A~~ relocation ~~may not be made~~ where it would impede the ability of Western Power to provide a covered service sought in an access application;~~.~~

ii~~b~~. may only withhold its consent to a~~A~~ relocation ~~is conditional upon the user obtaining the consent of Western Power, which consent Western Power may withhold~~ on reasonable commercial or technical grounds and that~~which~~ consent may be subject to conditions only to the extent that they are ~~required on~~ reasonable on commercial and technical grounds, in which case Western Power must provide the user on the user's written request with a detailed explanation of such commercial and technical grounds.

b~~c~~. Without limiting the conditions Western Power may impose, on reasonable commercial or technical grounds, as a condition of consent those conditions may include that Western Power must receive at least the same amount of revenue as it would have received before the relocation or more revenue if the tariffs at the destination point are higher.

1839. The ERA has considered Western Power's proposed new clause and Synergy's suggested amendments to the clause. While Western Power's proposed new clause is substantially consistent with the provisions of the Access Code, the drafting of the clause could be improved. A requirement for Western Power to provide the user with a written explanation of the commercial and/or technical grounds on which consent is being withheld or the conditions imposed is reasonable. Such an explanation will allow the user to address the commercial and/or technical grounds that are causing consent to be withheld or the conditions imposed.

1840. For the reasons above, the ERA recommends that clause 6.4 of the transfer and relocation policy be amended to read:

6.4 Consent

a. A relocation is conditional upon the user obtaining the consent of Western Power. Western Power:

i. must withhold its consent to a relocation where it would impede the ability of Western Power to provide a covered service sought in an access application;

[460] Western Power, *Access arrangement information: Attachment 12.6*, 2 October 2017, p. 7.

ii. may withhold its consent to a relocation on reasonable commercial or technical grounds; and

iii. may consent to a relocation subject to conditions provided that the conditions are required on reasonable commercial and technical grounds.

b. Without limitation, a condition of consent under clause 6.4a.iii. may include that Western Power must receive at least the same amount of revenue as it would have received before the relocation or more revenue if the tariffs at the destination point are higher.

c. If Western Power withholds its consent to a relocation, or imposes a condition in respect of a relocation, Western Power must provide the user, on the user's written request, with an explanation of the grounds relied upon.

Required Amendment 91

Clause 6.4 of the transfer and relocation policy must be amended in accordance with paragraph 1840 of this draft decision.

New clause 6.5

1841. A new clause (6.5) is proposed for the transfer and relocation policy to make clear that a relocation is subject to capacity being available at the connection point:

6.5 Process for Relocation

a. Nothing in this clause 6 limits the requirements of the applications and queuing policy.

b. Without limiting clauses 6.2 and 6.3, the user must also, as part of requesting a relocation, if required by the applications and queuing policy, apply for approval of the relocation. Any such application will be processed in accordance with the applications and queuing policy and the user's access contract.

1842. Western Power submits that:[461]

> A relocation may only occur, without jeopardising system integrity and the rights of other users, if there is capacity available at the new point. Where there are multiple requests to use capacity, priority is determined in accordance with the Applications and Queuing Policy. Relocations are therefore subject to that policy.

1843. Synergy does not agree with the proposed new clause 6.5 or Western Power's rationale for introducing it. Synergy submits the following:[462]

> Synergy accepts there may be circumstances where some users will be required to make an application under the applications and queuing policy in connection with a relocation under the [transfer and relocation policy]. However, section 5.22(a) of the Access Code makes it clear Western Power can withhold consent in circumstances where a relocation would impede the ability of Western Power to provide a covered service that is sought in an access application.

[461] Western Power, *Access arrangement information: Attachment 12.6*, 2 October 2017, p. 8.

[462] Synergy, *AA4 Submission Number 1: Western Power's proposed transfer and relocation policy*, 8 December 2017, p. 11, paragraphs 40-44.

> In such circumstances an application under the applications and queuing policy will be required, but Synergy considers this would be the only occasion in respect of which such an application would be required.
>
> Further, the Access Code provisions that set out the requirement for the contents of the [transfer and relocation policy] are exhaustive rather than permissive, in which sense they do not entitle Western Power to use the [transfer and relocation policy] to expand the scope of the applications and queuing policy. In Synergy's view, while there is the potential for cross-over as described [above], the applications and queuing policy and the [transfer and relocation policy] are, and must remain, distinct. This is because the [transfer and relocation policy] deals with capacity decreases and relocations while the applications and queuing policy deals with the assessment of plant and equipment to connect to Western Power's network, assess connection applications and make network access offers.

1844. The applications and queuing policy is required by the Access Code and is a policy setting out the access application process for customers seeking access to the Western Power Network. Proposed amendments to this policy are considered elsewhere in this draft decision (see paragraph 1451 and following).

1845. Given the constrained nature of the Western Power Network, relocations can only occur where there is available capacity at the destination point. Where capacity is unavailable, or there are multiple requests for capacity at a particular connection point and where there is an existing access application for that connection point, Western Power must consider its applications and queuing policy to process the relocation request(s). The proposed new clause 6.5 reflects the process and procedures Western Power must consider when accessing a relocation request.

Other amendments

1846. Other amendments to the transfer and relocation policy are proposed, including amendments to some defined terms (assignee, assignor and connection point) for clarity and administrative drafting changes to correct drafting errors.[463]

1847. The ERA has given consideration to the defined terms in the transfer and relocation policy that have different meanings to the same terms used in the Access Code (refer to paragraph 1811 above). Subject to the ERA's considerations of these defined terms, the other proposed amendments are minor in nature and do not materially alter the transfer and relocation policy.

[463] These amendments are shown in the marked-up version the transfer and relocation policy provided with the proposed access arrangement (at Appendix D).

APPENDICES

Appendix 1 Summary of required amendments

Required Amendment 1

The revisions submission date must be amended to 1 January 2021.

Required Amendment 2

Western Power must amend its proposed revised access arrangement to:

- Remove the correction factor for under or over-recovery of target revenue for prior periods from the price control formula; and
- Add a requirement that the forecast customer numbers, energy volumes and any other charging parameters for each reference service must be consistent with the demand forecast approved with the access arrangement decision.

Required Amendment 3

A clause should be added to 5.12 of the proposed revised access arrangement stating that prices for access applications will be consistent with the applications and queuing policy and prices for extended metering services will be consistent with the model service level agreement.

Required Amendment 4

The proposed revised access arrangement values for TR_t and DR_t must be amended to reflect the ERA's draft decision of target revenue. Western Power should review its smoothing profile to avoid price shocks and ensure the final year reduces the likelihood of price shocks in the next access arrangement period.

Required Amendment 5

The proposed revised access arrangement must be amended to reflect the forecast operating expenditure set out in Table 31.

Required Amendment 6

The proposed access arrangement revisions must be amended to incorporate the forecast capital expenditure, depreciation and capital asset base values set out in this draft decision.

Required Amendment 7

Western Power must amend the (nominal after-tax) weighted average cost of capital to 6.00 per cent, based on the parameters set out in Table 75 of this draft decision and reasoning detailed in Appendix 5 of this draft decision.

Required Amendment 8

The values of smoothed target revenue, forecast new facilities investment, forecast non-capital costs and weighted average cost of capital used to calculate working capital must be adjusted to be consistent with this draft decision.

Required Amendment 9

Forecast taxation costs must be updated to be consistent with the draft decision and must be allocated between services based on the proportion of revenue. The K-factor must not be included in the calculation.

Required Amendment 10

Western Power must update the Investment Adjustment Mechanism value to reflect the ERA's draft decision on AA3 capital expenditure.

Required Amendment 11

Western Power must update the Gain Share Mechanism to reflect the ERA's draft decision on wood pole expenditure and unforeseen events and must allocate the value between services based on revenue proportions.

Required Amendment 12

Western Power must adjust target revenue to remove its proposed unforeseen event adjustment.

Required Amendment 13

The proposed new time of use reference services must not be mandatory.

Required Amendment 14

Western Power must unbundle metering services from reference services and specify separate metering services as reference services based on the meter reading services required by users.

Required Amendment 15

Western Power must amend Appendix E of the access arrangement in line with Table 117 of the draft decision.

Required Amendment 16

Western Power must amend the 2018/19 Price List and Price List Information to be consistent with the target revenue approved by the ERA in this draft decision.

Required Amendment 17

Western Power must expand Table 16 and Table 18 in Appendix F.4 ("2018/19 Price List Information") to include transmission tariffs.

Required Amendment 18

Western Power must amend the side constraint formula to remove the correction factor for under or over recovery of target revenue from prior periods.

Required Amendment 19

Western Power must amend the 2018/19 Price List and Price List Information to include tariffs for each metering service. Evidence must be provided to demonstrate the proposed charges are cost reflective.

Required Amendment 20

Western Power must demonstrate the proposed new reference tariffs meet the requirements of the Access Code including that they recover the forward looking efficient costs of providing reference services and are set between the incremental and stand-alone cost of service.

Required Amendment 21

Western Power must provide cost information to support its proposed Excess Network Usage Charges, including the factors applied for different geographical areas.

Required Amendment 22

Western Power must reinstate the system minutes interrupted performance measures disaggregated for radial and meshed networks as service standard benchmarks.

Required Amendment 23

For the purpose of monitoring the service provider's actual performance against actual service standard performance and in accordance with sections 11.2 and 11.3 of the

Access Code, Western Power must amend section 4.5 of the access arrangement as follows:

4.5.3 Where Western Power has applied a Box-Cox transformation of the daily unplanned SAIDI data set to determine the major event day threshold, Western Power must:

Required Amendment 24

Western Power must set service standard benchmarks at the 97.5th percentile of the single distribution of best fit for all reliability performance measures, except call centre performance and circuit availability for which the service standard benchmark must be set at the 2.5th percentile of the distribution of best fit, to the most recent five-years of performance data.

Required Amendment 25

Western Power must set service standard benchmarks and targets for a momentary average interruptions frequency index for the fourth access arrangement period.

Required Amendment 26

Section 7.1.1 of the proposed revised access arrangement must be amended to include a requirement for Western Power to demonstrate that the unrecovered costs are efficient costs and do not exceed the costs which would have been incurred by a service provider efficiently minimising costs.

Required Amendment 27

Section 7.1.4 of the proposed revised access arrangement must be deleted.

Required Amendment 28

Western Power must delete the proposed amendments to section 7.2.1 of the proposed revised access arrangement – the current wording must be retained.

Required Amendment 29

Metering expenditure must be removed from the Investment Adjustment Mechanism

Required Amendment 30

Section 7.4.8 of the proposed revised access arrangement must be deleted.

Required Amendment 31

The formula in section 7.4.7 of the proposed revised access arrangement must be amended so that efficiency savings are retained for four years.

Required Amendment 32

Section 7.4.3 of the proposed revised access arrangement must be amended to specify that an adjustment, based on the proportion of service standard benchmark failures over the access arrangement period, will be made to the total above-benchmark surplus.

Required Amendment 33

Western Power must delete the following tables from the proposed revised access arrangement and include a single table with efficiency and innovation benchmarks for the total business consistent with the ERA's determination of efficient operating costs:

- Table 32: Efficiency and innovation benchmarks for the transmission system
- Table 33: Efficiency and innovation benchmarks for the distribution system

Required Amendment 34

Western Power must amend the efficiency and innovation benchmarks to be consistent with the draft decision on operating expenditure.

Required Amendment 35

Western Power must maintain service standard targets for the 2017/18 financial year at the level applied during the AA3 period.

Required Amendment 36

Western Power must remove the financial penalties and rewards from the service standard adjustment mechanism.

Required Amendment 37

Western Power must set service standard targets at the 50th percentile of the single probability distribution of best fit.

Required Amendment 38

Western Power must delete proposed new sections 7.6.6 to 7.6.10 from the access arrangement.

Required Amendment 39

Section 8.1.2 of the proposed revised access arrangement must be deleted.

Required Amendment 40

Section 9.1 of the proposed revised access arrangement, which sets out general provisions for supplementary matters, must be amended in accordance with paragraph 1270 of this draft decision.

Required Amendment 41

Section 9.2.1 of the proposed revised access arrangement, which sets out supplementary matters for line losses, must be amended in accordance with paragraph 1272 of this draft decision.

Required Amendment 42

Clause 3.1(c) of the electricity transfer access contract must read:

"For each Service at each Connection Point, the User must endeavour, as a Reasonable and Prudent Person, to ensure that the rate at which electricity is transferred into or out of the Network by or on behalf of the User does not exceed the Contracted Capacity for that Service."

Required Amendment 43

The electricity transfer access contract must be amended to correct a formatting (numbering) error to show new clauses 3.2(c) and 3.2(d).

Required Amendment 44

Proposed new clauses 3.2(c) and 3.2(d) must be deleted from the electricity transfer access contract.

Required Amendment 45

Clause 3.3 of the electricity transfer access contract should be amended in accordance with paragraph 1338 of this draft decision to ensure that a user will not be in breach of its obligation in the event its breech arises because of Western Power.

Required Amendment 46

Given the changes to clause 6.2(b) of the electricity transfer access contract, clause 33.4 of contract must be amended in accordance with paragraph 1343 of this draft decision.

Required Amendment 47

Clause 9(i) of the electricity transfer access contract should be amended to capitalise the term “services” as follows.

“ … the aggregate amount of cash deposit held by Western Power (including interest and after deducting any fees, charges and taxes associated with maintaining the interest bearing account) exceeds the Charges for two months’ ~~s~~Services Western Power will, within a reasonable time…”

Required Amendment 48

Clause 13(c)(i) of the electricity transfer access contract must be amended to expressly set out the characteristics of generating plant that, if changed, will constitute material modifications for the purpose of that clause.

Proposed clause 13(c)(ii) must be deleted from the electricity transfer access contract unless the modifications that are contemplated by clause 13(c)(ii), which would not fall within clause 13(c)(i), are clearly identified.

Required Amendment 49

Subject to clause 13(c)(ii) remaining in the electricity transfer access contract, the notification period in clause 13(c)(ii) must be amended from 60 to 30 days.

Required Amendment 50

Subject to clause 13(c)(ii) remaining in the electricity transfer access contract, clause 13(c)(ii) must contain an express obligation for Western Power to notify the user within the notice period if it forms the view that the modification will have an adverse impact on safety or security, failing which the modification can proceed.

Required Amendment 51

Clause 19.5 of the electricity transfer access contract must be amended in accordance with paragraph 1384 of this draft decision to amend the drafting of clause 19.5(c) and insert a new clause 19.5(d).

To support new clause 19.5(d) the term “material change” needs to be added to schedule 1 of the electricity transfer access contract in accordance with paragraph 1385 of this draft decision.

Required Amendment 52

Clause 19.8 of the electricity transfer access contract must be amended in accordance with paragraph 1389 of this draft decision to make minor drafting amendments.

Required Amendment 53

Clause 19.11(a) of the electricity transfer access contract must be amended in accordance with paragraph 1393 of this draft decision.

Required Amendment 54

The following consequential amendments that arise from the deletion of clause 35.1(b)(iv) must be made to the electricity transfer access contract.

- The words "facsimile copy" should be deleted from clause 1.1(d).
- The word "facsimile number" should be deleted from clause 36.
- The words "facsimile number" from Part 1 and Part 2 of the table in schedule 6 should be deleted.

Required Amendment 55

The term “Claims” in Part 1(a)(i)(A) of schedule 5 of the electricity transfer access contract must be amended to correct the use of the word *claims* as follows.

“public liability insurance for a limit of not less than $50 million or the maximum liability of the User under clause 19.5 (whichever is greater) in the aggregate of all ~~C~~claims made in an Insured Year; and”

Required Amendment 56

Clause 6.2(b) of the electricity transfer access contract must be amended to correct the use of the word *contract* in accordance with paragraph 1431 of this draft decision.

Required Amendment 57

Clause 7.1 of the electricity transfer access contract must be amended to correct the use of the words *tariff/s* and *consumption* in accordance with paragraphs 1432 and 1433 of this draft decision.

Required Amendment 58

Clause 12.2 of the electricity transfer access contract must be amended to correct the use of the words *user* and *party* in accordance with paragraph 1437 of this draft decision.

Required Amendment 59

Clauses 19.1, 19.6 and 35.4(d) of the electricity transfer access contract must be amended to correct the use of the word *party* (or *parties*) in accordance with paragraph 1439 of this draft decision.

Required Amendment 60

Clause 27.1 of the electricity transfer access contract must be amended to correct the use of the word *default* in accordance with paragraph 1440 of this draft decision.

Required Amendment 61

Clause 22.3(a) of the electricity transfer access contract must be amended to read:

“promptly notify the other Party of the occurrence of the Force Majeure Event and in any event within two days of the occurrence of the Force Majeure Event; and”.

Required Amendment 62

Clause 22 of the applications and queuing policy, covering provisions for dormant applications, must be amended in accordance with paragraph 1508 of this draft decision.

Required Amendment 63

Clause 24.3(c) of the applications and queuing policy, dealing with an applicant’s response to a notice of intention to respond to a preliminary access offer, must be amended to replace the word “may” with “will” in accordance with paragraph 1512 of this draft decision.

Required Amendment 64

Clause 24.5 of the applications and queuing policy, dealing with an applicant’s response to a preliminary access offer, must be amended in accordance with paragraph 1516 of this draft decision to:

- clarify that the 30 business days commence *after* the receipt of the notice (clause 24(a)(ii)); and
- replace the word “may” with “will” (clause 24.5(a)(ii)(B)).

Required Amendment 65

Clause 20.2(a)(i) of the applications and queuing policy must be amended to read:

"Western Power must provide a proposal within a reasonable time to the applicant outlining the scope, timing and good faith estimate …"

Required Amendment 66

The proposed amendments to include forecast natural load growth in the definition of spare capacity and clause 24.8(a) of the applications and queuing policy must be deleted.

Required Amendment 67

Clause 24.1(c) of the applications and queuing policy must be amended as follows to make it consistent with other clauses in the policy:

" … and the applicant will be deemed to have made a request for~~requested~~ a study under clause 20.3(a)."

Required Amendment 68

Clauses 18.1 and 19.1 of the applications and queuing policy, setting out provisions for a preliminary assessment and initial response, must be amended in accordance with paragraph 1555 of this draft decision.

Required Amendment 69

Clause 24.3(a) of the applications and queuing policy must be amended in accordance with paragraph 1578 of this draft decision to include the words: "and where it exceeds any contribution payable under the contributions policy, the excess will be offset against amounts payable under that access contract".

Required Amendment 70

Clause 24.5(b) of the applications and queuing policy must be amended in accordance with paragraph 1583 of this draft decision to include the words: "and where it exceeds any contribution payable under the contributions policy, the excess will be offset against amounts payable under that access contract".

Required Amendment 71

Clause 13.3 of the applications and queuing policy, requiring Western Power to reject an application where the customer is not a contestable customer, must be amended in accordance with paragraph 1604 of this draft decision.

Required Amendment 72

Proposed new clause 12A ("Relationship with transfer and relocation policy") must be deleted from the applications and queuing policy.

Required Amendment 73

The definition of "connection application" (at clause 2.1) in the applications and queuing policy must be amended in accordance with paragraph 1632 of this draft decision to add the words *"in a way that means they no longer meet the eligibility criteria"*.

Required Amendment 74

Proposed amendments to clause 6.2(a) of the applications and queuing policy, which allows the disclosure of confidential information to the market operator or where necessary for the performance of Western Power's functions, must be deleted.

Required Amendment 75

Clause 24.9(d) of the applications and queuing policy must be amended in accordance with paragraph 1645 of this draft decision to provide that Western Power must not make known confidential information under the clause if it is possible from the anonymised information to determine the identity of the competing connection applicant

Required Amendment 76

Clause 4.8 of the applications and queuing policy, containing provisions for conditions precedent, must be amended in accordance with paragraph 1661 of this draft decision to:

- set a fixed upper limit on the period allowed in sub-clause (a); and
- better link sub-clauses (a) and (b).

Required Amendment 77

The proposed amendments to support "time of use" tariffs and advanced metering (change identification numbers 27 to 31) must not be made to the applications and queuing policy.

Required Amendment 78

The definition of “Customer Transfer Code” in clause 2.1 of the applications and queuing policy must be amended to refer to the *Electricity Industry Customer Transfer Code 2016* (and not the Electricity Industry Customer Transfer Code 2004).

Required Amendment 79

Clauses 3.15(a); 4.8(b)(i); 24.3(b); 24.5(a) and 24.6 of the applications and queuing policy should be amended to improve drafting clarity in accordance with paragraph 1680 of this draft decision.

Required Amendment 80

The applications and queuing policy must retain Figure 1 (“Access, Connection and Transfer Applications Policy – Process Overview”).

Required Amendment 81

Clause 10.3(c) of the applications and queuing policy must be amended as follows, to require Western Power to accept the change of covered service, where the new covered service is sufficient to meet the actual requirements of the applicant.

“(c) must~~may~~, subject to this clause 10, accept the change of covered service, where ~~Western Power is satisfied, as a reasonable and prudent person, that~~ the new covered service will be sufficient to meet the actual requirements of the applicant, and that it is required by reason of one or more of the following circumstances:”

Required Amendment 82

The drafting of clause 4.3 of the contributions policy must be amended in accordance with paragraph 1740 of this draft decision to add further clarity and to make the terminology consistent throughout the policy.

Required Amendment 83

Clause 5.2(d) of the contributions policy must be amended in accordance with paragraph 1748 of this draft decision to expressly state that the revenue offset in clause 5.2 is applicable to residential customers.

A cross-referencing error in clause 5.2 must be also be corrected – the reference to *“clause 7.41.1(a)”* in clause 5.2(c) should be a reference to *“clause 7.4(a)”*.

Required Amendment 84

The distribution low voltage connection scheme methodology must be amended to rename the following sections:

- 1 ~~Introduction~~ Defined Terms and Interpretation
- 1.1 ~~Definitions~~ Defined Terms

Required Amendment 85

The drafting of section 2.3(a) of the distribution low voltage connection scheme methodology must be amended in accordance with paragraph 1767 to reflect common drafting conventions.

Required Amendment 86

The drafting of section 4 of the distribution low voltage connection scheme methodology must be amended in accordance with paragraph 1769 to correct some formatting and typographical errors.

Required Amendment 87

Section 5.1 of the distribution low voltage connection scheme methodology must be amended to reinstate the words: "the past 12 month period" (and delete the proposed words "the 12 month period since the most recent review of prices").

Required Amendment 88

Section 6 of the distribution low voltage connection scheme methodology must be amended to reinstate the words: "the last twelve months" (and delete the proposed words "the 12 month period since the most recent review of prices").

Required Amendment 89

Section 1.1(b)(ii) of the distribution low voltage connection scheme methodology must be amended to clarify that if a term is defined in the methodology document (at section 1.1) or in the contributions policy then the term will be given that meaning.

Required Amendment 90

Clause 5.3 of the transfer and relocation policy must be amended to remove the redundant words ", if any," as follows.

"… Western Power's reasonable opinion may be based on, without limitation, credit reference information available to Western Power and in forming its opinion Western Power will take into account any relevant information~~, if any,~~ provided by the proposed assignee."

Required Amendment 91

Clause 6.4 of the transfer and relocation policy must be amended in accordance with paragraph 1841 of this draft decision.

Appendix 2 Glossary

AA1	first access arrangement period
AA2	second access arrangement period
AA3	third access arrangement period
AA4	fourth access arrangement period
AA5	fifth access arrangement period
AAI	access arrangement information
AASB	Australian Accounting Standards Board
AEC	Australian Energy Council
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
AIC	Akaike information criterion
AMI	advanced metering infrastructure
AOD	average outage duration
AQP	Applications and Queuing Policy
ATMD	any time maximum demand
ATO	Australian Tax Office
AWOTE	average weekly ordinary time earnings
BTM	behind the metre
CAG	competing applications group
CBD	central business district
CESS	capital expenditure sharing scheme
CMD	contract maximum demand
CPI	consumer price index
DLVCHS	distribution low voltage connection headworks scheme
DMIA	demand management innovation allowance
DMIS	demand management incentive scheme
DNSPs	distribution service network providers

EBSS	efficiency benchmark service standard
EGWWS	electricity, gas, water and wastewater services
EIB	efficiency innovation benchmark
EMR	electricity market review
ENUC	excess network usage charges
ERA	Economic Regulation Authority
ESC	Essential Service Commission Victoria
ETAC	Electricity Transfer Access Contract
EV	electric vehicles
GIA	generator interim access
GSM	gain sharing mechanism
GST	goods and services tax
GWh	giga watt hours
HR	human resources
HV	high voltage
IAM	investment adjustment mechanism
ICT	information communications and technology
IEAust	Institute of Engineers Australia
IEEE	Institute of Electrical and Electronic Engineers
IMO	Independent Market Operator
IT	information technology
kV	kilo volts
kVa	kilo volt amps
kWh	kilo watt hours
LEDs	light emitting diodes
MAIFI	momentary average interruption frequency index
MED	major event days
MW	mega watts
MWh	mega watt hours

MTR	multiple trading relationships
NEM	national electricity market
NFIT	new facilities investment test
NMI	national market identifier
NOI	notice of intention
NPV	net present value
NQRS	network quality and reliability of supply
NSP	network service provider
ODP	optimised deprival value
PAO	preliminary access offer
POE 10	probability of exceedance 10%
POE 50	probability of exceedance 50%
PV	photovoltaic
PUO	Public Utilities Office
Q-Q	quantile-quantile
RAB	regulated asset base
RCM	reserve capacity mechanism
RT [x]	reference tariff [x]
SAIDI	system average interruption duration index
SAIFI	system average interruption frequency index
SCADA	supervisory control and data acquisition
SMI	system minutes interrupted
SSAM	service standard adjustment mechanism
SSBs	service standard benchmarks
SSD	service standard difference
SST	standard service target
STPIS	service target and performance incentive scheme
SUPP	state underground power program
SWIN	south west interconnected network

SWIS	south west interconnected system
TEC	tariff equalisation contribution
TNSPs	transmission network service providers
WA	Western Australia
WACC	weighted average cost of capital
WACOSS	Western Australian Council of Social Services
WALGA	Western Australian Local Government Authority
WEM	wholesale electricity market
WP	Western Power
WPI	wage price Index

Appendix 3 Submissions received

The following submissions were received by the ERA in response to the invitation for submissions (notice) published on 6 October 2017. These submissions are published on the ERA's website.

AGL Energy

Alinta Energy

ATCO Australia

Australian Energy Council

Australian Energy Market Operator

Bluewaters

Carnegie Clean Energy

CdL Advisory

CEO, Shire of Northampton

Change Energy

Community Electricity

Emergent Energy

Energy Networks Australia

Kalbarrri Development Association

Kleenheat

Mid West Development Commission

Mr Craig Hosking

Mr Errol Haskell

Mr John Laverack

Mr Noel Schubert

Mr Stephen Davidson

Mr Stewart Smith

Ms Margaret Taylor

Ms Peta Crogan

NewGen Neerabup Partnership (ERM Power)

NewGen Power Kwinana

Perth Energy

RAC

Synergy

Vector Ltd

Western Australian Council of Social Services

Western Australian Local Government Association

Appendix 4 Revenue model

This Appendix is published as a separate publication on the ERA's website.

The revenue model sets out the ERA's calculation of the target revenue and, in the event of inconsistency, the numbers in the revenue model prevail over any other statement of these values in this decision.

Appendix 5 Return on regulated capital base

This Appendix is published as a separate publication on the ERA's website.

Appendix 6 GHD Advisory technical review of Western Power's proposed access arrangement

This Appendix is published as a separate publication on the ERA's website.

Appendix 7 Geoff Brown and Associates technical review of Western Power's proposed access arrangement

This Appendix is published as a separate publication on the ERA's website.