



**AA4 submission No. 5:
Western Power's proposed price control mechanisms**

11 December 2017

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GLOSSARY

AA3	Refers to the third access arrangement period from 2013-2017
AA4	Refers to the fourth access arrangement period from 2017-2022
AAI	WP's Access Arrangement Information for AA4, 2 October 2017
AAI Guidelines	Economic Regulation Authority, <i>Electricity Networks Access Code 2004; Guidelines for Access Arrangement Information</i> , 6 December 2010
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
Authority	Economic Regulation Authority
BHM	Brailsford-Handley-Maheswaren
Capex	Capital expenditure
CESS	Capital expenditure sharing scheme
CGS	Commonwealth government securities
Chapter 6 Requirements	the requirements of Chapter 6 of the Code – see section 3.1.1 of this submission
Code	<i>Electricity Networks Access Code 2004</i>
CRAM	Cost and revenue allocation method
DEA	Data envelopment analysis
DBNGP decision	Economic Regulation Authority, <i>Final Decision on Proposed Revisions to the Access Arrangement for the Dampier to Bunbury Natural Gas Pipeline 2016-2020, Submitted by DBNGP (WA) Transmission Pty Limited</i> , 30 June 2016
DGM	Dividend growth model
DMEGCIS	Demand management and embedded generation connection incentive scheme
DMIA	Demand management innovation allowance
DMIS	Demand management incentive scheme

DNSPs	Distribution network service providers
DRP	Debt risk premium
EBSS	Efficiency Benefit Sharing Scheme
EIB	Efficiency and innovation benchmark
EMR	Electricity market review
ERA Act	<i>Economic Regulation Authority Act 2003 (WA)</i>
GSM	Gain sharing mechanism (as defined in the Code)
IAM	Investment adjustment mechanism (as defined in the Code)
MAIFI	Momentary average interruption frequency index
Metering Code	<i>Electricity Industry (Metering) Code 2012 (WA)</i>
Model SLA	Model service level agreement (as defined in the Metering Code)
MPFP	Multilateral partial factor productivity
MRP	Market risk premium
MSLA Submission	<i>Synergy, AA4 Submission to the Economic Regulation Authority: Western Power's proposed model service level agreement, 20 November 2017</i>
MTFP	Multilateral total factor productivity
NEM	National Electricity Market
NER	National Electricity Rules
NFIT	New Facilities Investment Test (as defined in the Code)
NGL	National Gas Law (as defined in the <i>National Gas Access (WA) Act 2009</i>)
Opex	Operating expenditure
RAB	Regulated asset base
Reference Services Request Submission	<i>Synergy, AA4 Submission to the Economic Regulation Authority No 4: Synergy reference services request, 11 December 2017.</i>

RPIP	Rural power improvement program
SE Consulting	Synergies Economic Consulting
SFA	Stochastic frontier analysis
SMI	Smart metering infrastructure
SSAM	Service standard adjustment mechanism (as defined in the Code)
SSB	Service standard benchmarks (as defined in the Code)
SSD	Service standard difference
SST	Service standard targets
STPIS	Service target performance incentive scheme
SUPP	State underground power program
SWIS	South West Interconnected System
TAB	Taxation asset base
TEC	Tariff equalisation contribution
TNSPs	Transmission Network Service Providers
Treasury	Department of Treasury
WACC	Weighted average cost of capital (as defined in the Code)
WP	Western Power
WP's network	WP's electricity transmission and distribution network forming part of the SWIS
WP's proposal	Refers to Western Power's proposed revisions to the access arrangement for the Western Power Network for AA4, 2 October 2017

1 EXECUTIVE SUMMARY

<p>Matter</p>	<p>Synergy welcomes the opportunity to make a submission to the Authority commenting on the price control components of WP’s proposed revisions to its access arrangement. Synergy wishes to acknowledge the significant contribution of Frontier Economics and HFW Australia in preparing this submission.</p>
<p>Context</p>	<p>WP’s network is a "covered network" under the Code.</p> <p>On 2 October 2017, WP submitted its proposed access arrangement, detailing the proposed prices, terms and conditions for users of WP’s network during AA4.</p> <p>On 31 October 2017, the Authority released an issues paper to further inform interested parties about WP’s proposal and identify key issues for consideration.</p> <p>The Authority must review WP’s proposal, consider whether WP’s proposal meets the requirements of the Code and on that basis decide whether to approve the proposed revisions. In addition to the Code’s overarching objectives (section 2.1) and specific requirements relevant to price control and pricing methods (Chapters 6 and 7), the Code requires WP’s proposal to contain sufficient information to enable the Authority and interested parties to make an informed view about its Code compliance (sections 4.1, 4.2, 4.3 and 4.4). In performing its functions, the Authority is also required to have regard to certain matters described in section 26(1) of the ERA Act.</p> <p>As an electricity generator and retailer to one million customers, Synergy is the largest user of WP’s network. This submission presents Synergy’s comments on the price control components of WP’s proposal.</p>
<p>Scope</p>	<p>Synergy’s submission considers the key price control elements of WP’s proposal in turn, in each case:</p> <ul style="list-style-type: none"> ▪ Identifying the relevant Code requirements. ▪ Outlining our understanding of WP’s proposal based on the information available. ▪ Presenting our views on the extent to which WP’s proposal is consistent with the Code requirements. ▪ Recommending additional information and analysis where required.
<p>Key issues</p>	<p>In this submission, Synergy identifies a number of key elements of WP’s proposal that do not comply with the Code and requests additional information and analysis in a number of other areas to enable Synergy and other interested parties to make an informed view about the extent to which WP’s proposal complies with the Code. In its current form, Synergy considers WP’s proposal does not comply with the Code and as such, the Authority may not approve WP's proposal.</p>

Synergy proposes to the Authority a number of matters Synergy considers would result in WP's proposal better meeting the Code's requirements. In that regard Synergy submits:

- The Authority should consider whether the operation of the IAM, as proposed by WP, provides sufficient incentive for efficient capex to justify rolling forward the RAB using forecast depreciation.
- WP has not provided adequate justification for further deferring the recovery of transmission revenue or bringing forward deferred distribution revenue and submits WP's proposal for further deferral and bringing forward of revenue should be rejected.
- The Authority should require WP to update the analysis used to establish the weightings for opex growth factors.
- The incentive for WP to pursue opex efficiencies will be greatly improved by making the GSM symmetrical (both as regards gains and losses and as between distribution and transmission systems) and, for this reason, Synergy submits WP's currently proposed GSM should be rejected unless it is re-worked to be made symmetrical.
- A capex incentive scheme should be included within AA4 in place of WP's currently proposed IAM.
- 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.
- The Authority should amend the SST to ensure WP will maintain current levels of overall reliability, rather than unnecessarily and inefficiently improve upon current levels via over investment.
- All residential and small use customers should be given the option whether to face time of use network tariffs and more information be provided relating to customer demand and customer impacts. Consequently Synergy submits WP's current proposal for compulsory time of use network tariffs should be rejected. Further Synergy does not support WP's current residential and business customer demand based network tariff design based on the single highest peak demand in a billing period. .
- That by not undertaking a regulatory test in relation to SMI, WP is in contravention of the Code. For this reason, Synergy submits that a regulatory test should be undertaken.
- WP has departed from the Authority's approach when deriving its estimate of the MRP using historical excess returns in two respects. Synergy recommends adopting the Authority's approach to estimating the MRP.
- The recovery of TEC via reference tariffs should be distributed equitably between all distribution customers (as required by the Code), not just those with demand less than 7,000 kVa (as currently proposed by WP).

- An adjustment should be made to WP's target revenue for AA4 in respect of unutilised AA3 SMI investment.

Synergy also submits the Authority should require WP to provide further information in the following areas:

- WP 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.
- WP should provide more detail to support its capex proposal, including in relation to capex to maintain service levels, capex to meet forecast growth and capex to improve efficiency.
- Synergy considers benchmarking can be an appropriate tool for establishing whether WP's proposed base year opex is efficient, but has questions about the application and use of benchmarking by WP. Synergy submits the Authority should require WP to provide more detail to support its opex proposal.
- WP should explain in detail how it has developed its EIBs and demonstrate why its proposed EIBs are consistent with the Code objective.
- WP should provide information to allow for an adequate assessment of whether WP's metering capex and opex forecasts are consistent with the Code.
- WP should provide more information to justify why its proposed use of the DBNGP WACC methodology represents (consistently with section 6.66) an effective means of achieving the Code objective in section 2.1 and the price control objectives in section 6.4 of the Code.

In addition, Synergy submits:

- WP has not provided sufficient information to establish WP's proposed price control for "non-revenue cap services" is consistent with the Code. The Authority should require WP to provide that information and the Authority should undertake a detailed review of the form of price control adopted by WP for non-revenue cap services, including to determine whether it complies with Chapter 6 of the Code and is consistent with the Code objective; and
- the Authority should undertake a detailed review of WP's building block model to ensure WP's approach to revenue modelling, including the treatment of the RAB, TAB, TEC, AA3 SMI investment and depreciation, is consistent with the Code.

2 INTRODUCTION

Synergy welcomes the opportunity to make a submission to the Authority commenting on the price control components of WP's proposed access arrangement for AA4. Synergy acknowledges the significant contribution of Frontier Economics and HFW Australia in preparing this submission. The level of detail contained within (this) Synergy's fifth AA4 submission reflects the importance of the price control mechanism in ensuring Synergy's one million electricity customers pay a fair and reasonable transport charge as part of their total electricity bill

2.1 Background

On 2 October 2017 WP submitted its proposed revisions for its access arrangement for WP's network for AA4. WP's proposal sets out the proposed prices, terms and conditions for users of WP's regulated electricity network during AA4. Synergy is the largest user of WP's network.

In addition to the proposed revisions to the access arrangement, WP's proposal contains an overview of the relevant provisions of the Code, a description of the services proposed and associated incentive schemes and adjustment mechanisms, opex and capex forecasts, WACC estimate and forecasts of revenue and the associated transmission and distribution tariffs. A series of appendices to this submission provide supporting information.

The Authority is required to review WP's proposal and determine whether to approve the proposed revisions. When making its decision (including any draft decision), the Authority must determine whether WP's proposal meets the Code objective (section 2.1) and the requirements set out in Chapter 5 (and Chapter 9, if applicable) of the Code (see section 4.28 of the Code, as modified for access arrangement reviews by section 4.52 of the Code). In performing its functions, the Authority is also required to have regard to the matters set out in section 26(1) of the ERA Act.

WP's proposed price control for AA4 is mostly unchanged from what the Authority previously approved for AA3. However, that does not mean it necessarily meets the requirements of or is consistent with the Code. The Authority must review the proposal and assess afresh the extent to which it meets the requirement of and is consistent with the Code. Further, Synergy submits changed circumstances and past experience indicate what was approved for AA3 is not necessarily adequate for Code compliance for AA4. In addition, the changes WP is proposing for AA4 and WP's implementation of its proposed price control mechanism (e.g. via its methodologies and calculations for determining target revenue and tariffs) must themselves be assessed for Code compliance. Synergy therefore submits the Authority should assess afresh WP's proposed price control for AA4 in its entirety (including WP's methodologies and calculations for determining target revenue and tariffs) against the relevant legal requirements and in light of past experience and the circumstances considered likely to apply for AA4. There should be no assumption that what applied for AA3 is necessarily appropriate for AA4.

In this context, on 31 October 2017 the Authority released an Issues Paper¹ to further inform interested parties about WP's proposal and identify the key issues the Authority will consider in making its determination.

This submission presents Synergy's comments on the price control components of WP's proposal.

¹ Synergy notes the Issues Paper was later amended on 14 November 2017.

2.2 Key legal requirements

In preparing this submission Synergy has had particular regard to the following key provisions of the Code, the Metering Code and the ERA Act:

- Section 2.1 of the Code – setting out the Code objective, being 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.
- Section 2.2 of the Code – requiring the Minister, the Authority and the arbitrator to have regard to the Code objective when performing a function under the Code whether or not the provision refers expressly to the Code objective.
- Sections 2.3 and 2.4 of the Code – which in effect provide that where the Code objective is specified in the Code as a specific criterion and it is in conflict with any other specific criterion, the Code objective is to prevail.
- Sections 4.1, 4.2, 4.3 and 4.4 of the Code – which in effect require WP's AAI to provide sufficient information to enable the Authority and interested parties to understand how various elements of the proposal were derived and form an opinion about the extent to which the proposed arrangement complies with the Code.
- Sections 4.5 and 4.6 of the Code – which in effect require WP to comply with the AAI Guidelines.
- Section 4.28 of the Code, as modified for access arrangement reviews by section 4.52 of the Code – which in effect requires the Authority, when making a draft decision, final decision or further final decision concerning WP's proposal, to determine whether WP's proposal meets the Code objective and the requirements set out in Chapter 5 (and Chapter 9, if applicable) of the Code. These section 4.28 criteria are specific criteria as defined in section 1.3 of the Code. As noted above regarding sections 2.3 and 2.4 of the Code, where the Code objective is a specific criterion and it is in conflict with any other specific criterion, the Code objective is to prevail. So if the specific criterion in section 4.28 of the Code WP's proposal must meet the Code objective is in conflict with any requirement in Chapter 5 (including any requirement of price control under Chapter 6 or pricing methods under Chapter 7, that is required by Chapter 5 to be included in an access arrangement), then the Code objective is to prevail. That is, the need for WP's proposal to meet the Code objective will prevail over any conflicting requirement of price control under Chapter 6 or pricing methods under Chapter 7.
- Sections 4.28 and 4.29 of the Code, as modified for access arrangement reviews by section 4.52 of the Code – also set out specific situations where the Authority must approve, may approve and must not approve proposed revisions to an access arrangement.
- Chapter 5 of the Code – setting out the requirements for the content of an access arrangement. These include, among other things, the things listed in section 5.1 which requires that an access arrangement must include, among other things:
 - (a) "price control" under Chapter 6 (see section 5.1(d));

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- (b) "pricing methods" under Chapter 7 (see section 5.1(e)); and
 - (c) provisions dealing with supplementary matters under sections 5.27 and 5.28 (see section 5.1(k)).
- Section 5.28 of the Code – which in effect requires an access arrangement must deal with metering (which is a supplementary matter) in a manner which is consistent with and facilitates the treatment of the supplementary matter in the Metering Code (which is a written law). In Synergy's view, this includes that to the extent WP's proposal deals with any metering (i.e. metrology), including to the extent it sets any pricing for metering, it must do so consistently with and so as to facilitate the treatment of metering in the Metering Code – including the requirements relating to charging for metering services in clause 6.6(1)(e) of the Metering Code (see below).
 - Chapter 6 of the Code – setting out the requirements for price control for covered services. These include, among other things, that an access arrangement must contain a form of price control that meets the price control objectives set out in section 6.4 (see section 6.1).
 - Chapter 7 of the Code – setting out the requirements for pricing methods for reference services. These include, among other things, section 7.6 (concerning fixed and variable tariff components) and section 7.12 (concerning inclusion of TEC as a reference tariff component for distribution network users).
 - Chapter 9 of the Code – setting out a regulatory test that applies for major network augmentations.
 - Clause 6.6(1)(e) of the Metering Code – requiring a model service level agreement approved by the Authority under the Metering Code to provide 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 and in accordance with good electricity industry practice, seeking to achieve the lowest sustainable costs of providing the relevant metering service.
 - Section 26(1) of the ERA Act – listing the following matters the Authority must have regard to when performing, among other things, the functions it is given by or under any "other enactment" (see section 25(f) of the ERA Act), which would include, among others, its functions under the Code, the Metering Code and the EI Act and the Electricity Industry Act 2004 (WA):
 - (a) the need to promote regulatory outcomes that are in the public interest;
 - (b) the long-term interests of consumers in relation to the price, quality and reliability of goods and services provided in relevant markets;
 - (c) the need to encourage investment in relevant markets;
 - (d) the legitimate business interests of investors and service providers in relevant markets;
 - (e) the need to promote competitive and fair market conduct;
 - (f) the need to prevent abuse of monopoly or market power;
 - (g) the need to promote transparent decision-making processes that involve public consultation.

In Synergy's view, it is necessary for the Authority to apply these provisions to its own functions under the Code and to also require WP's strict compliance with these provisions, in each case to the extent legally binding.

2.3 Synergy's approach to this submission

Synergy has undertaken a review of the price control components of WP's proposal to identify the implications for Synergy and more importantly its customers. This submission reviews whether the price control components of WP's proposal:

- are consistent with the Code objectives and other requirements; and
- are consistent with the matters the ERA must have regard to under section 26(1) of the ERA Act.

Synergy has also had regard to reasonableness and best regulatory and industry practice to the extent relevant to assessing the above legal requirements.

As noted in Section 2.2 above, the overarching Code objective (section 2.1) is to promote economically efficient investment in and operation and use of, the electricity network in Western Australia, in order to promote competition in upstream and downstream markets.

The Code contains several provisions relevant to the price control components of WP's proposal, for example the form of price control for covered services (Chapter 6) and pricing methods for reference services (Chapter 7). In some cases,² the Code's provisions are not prescriptive about the particular form, method or manner to be used in an access arrangement to do or achieve something.

In such cases, however, the access arrangement must still use a form, method or manner that is consistent with the Code objective and complies with any other requirements specified by the Code. Further, as noted above, in determining whether WP's proposal meets the Code objective and the requirements set out in Chapter 5 (and Chapter 9, if applicable), the Authority must have regard not only to the requirements of the Code, but also the matters listed in section 26(1) of the ERA Act.

Synergy considers the key elements of the price control components of WP's proposal in turn, in each case:

- Identifying the relevant Code requirements.
- Outlining Synergy's understanding of WP's proposal based on the information available.
- Presenting Synergy's comments and conclusions.

To assist the Authority consider this submission Synergy has included a 'traffic light' system that clearly highlights key aspects of the price control components of WP's proposal that Synergy considers are either:

- **Acceptable** ('green light' symbol: ) – where Synergy considers the relevant price control component of WP's proposal is consistent with the Code and with relevant matters in section 26(1) of the ERA Act to which the Authority must have regard;
- **Unclear** ('amber light' symbol: ) – where Synergy has been unable to assess if the relevant price control component of WP's proposal is consistent with the Code or relevant matters in

² For example, see sections 6.1, 6.2 and 6.48 of the Code.

section 26(1) of the ERA Act to which the Authority must have regard due to insufficient information (which is itself a breach of sections 4.1, 4.2, 4.3 and 4.4 of the Code); or

- **Unacceptable** ('red light' symbol: ) – where Synergy considers the relevant price control component of WP's proposal is **not** consistent with the Code or relevant matters in section 26(1) of the ERA Act to which the Authority must have regard.

2.4 About this submission

This submission is structured as follows:

- Section 3 discusses the form of the price control and the annual revenue requirement.
- Section 4 comments on the forecasts of customer connections, energy and peak demand underlying WP's proposal.
- Sections 5 and 6 consider WP's forecasts of capex and opex in turn.
- Section 7 considers the application of incentive schemes.
- Section 8 addresses the issues associated with reference services and tariff structure.
- Section 9 considers the treatment of advanced metering.
- Section 10 considers the WACC.

3 FORM OF PRICE CONTROL AND ANNUAL REVENUE REQUIREMENT

In this section Synergy outlines its response to WP's proposal on the form of price control and the calculation of the annual revenue requirement.

Table 1 summarises Synergy's response to these aspects of WP's proposal, using the 'traffic light' system discussed in Section 2.3 of this submission. The rest of this section provides greater detail around the material issues Synergy has identified.

It should be noted this section only addresses the aspects of the annual revenue requirement that are not covered elsewhere in Synergy's submissions.

Table 1: Synergy's response on the form of price control and the calculation of the annual revenue requirement

Area	Our assessment	Decision/Rationale	Relevant section
Form of price control - "revenue cap services"		<p>WP proposes to retain the revenue cap form of price control for its transmission and distribution "revenue cap services".</p> <p>Synergy considers this approach is theoretically consistent with the Code and with relevant matters in section 26(1) of the ERA Act to which the Authority must have regard.</p> <p>However Synergy submits the Authority should (having regard to the relevant Chapter 6 Requirements, the Code objective and other matters referred to in this submission, including the matters listed in section 26(1) of the ERA Act) undertake a detailed review of WP's application of the form of price control adopted by WP for revenue cap services, including determining whether it meets the price control objectives in section 6.4 of the Code and otherwise complies with Chapter 6 (as required by section 6.1) and is consistent with the Code objective so WP's proposal can meet the Code objective (as required by section 4.28). In particular, Synergy submits the Authority should determine if WP is correctly implementing its revenue cap form of price control in respect of charging for the non-reference services comprised in its "revenue cap services".</p>	3.1

Area	Our assessment	Decision/Rationale	Relevant section
<p>Form of price control - "non-revenue cap services"</p>		<p>WP proposes to retain its "charging criteria" form of price control for its transmission and distribution "non-revenue cap services".</p> <p>WP has not provided sufficient information to enable Synergy to assess if WP's proposed price control for "non-revenue cap services" is consistent with the Code. Synergy notes that:</p> <ul style="list-style-type: none"> • whatever form of price control is adopted by WP for non-revenue cap services, it must still meet the price control objectives in section 6.4 and otherwise comply with the Chapter 6 Requirements (section 6.1); and be consistent with the Code objective so WP's proposal can meet the Code objective (section 4.28); • among other things, target revenue for all covered services (which would include non-revenue cap services, as WP states they are non-reference services) must be determined in accordance with section 6.4 of the Code (including being based on "forward looking and efficient costs"); and • the Code contemplates that price control "consists of a limit on the level of tariffs" for all covered services ("through the control of overall revenue").³ <p>WP has not clearly shown if or how the above requirements are met in relation to "non-revenue cap services". Synergy submits:</p> <ul style="list-style-type: none"> • WP's failure to provide sufficient information is inconsistent with its requirements under sections 4.1, 4.2, 4.3 and 4.4 of the Code and the Authority should require WP to provide far more detail about how the above Code requirements are met in relation to "non-revenue cap services" and that information should be made available for public comment; and • the Authority should (having regard to the relevant Chapter 6 Requirements, the Code objective and other matters referred to in this submission, including the matters listed in section 26(1) of the ERA Act) undertake a detailed review of the form of price control adopted by WP for non-revenue cap services, including to determine whether it meets the price control objectives in section 6.4 and otherwise complies with Chapter 6 of the Code (as required by section 6.1) and is consistent with the Code objective so WP's proposal can meet the Code objective (as required by section 4.28). 	<p>3.1</p>

³ See the note to the definition of "price control" in section 1.3 of the Code.

Area	Our assessment	Decision/Rationale	Relevant section
Use of building block method		<p>WP proposes to adopt the building block methodology to calculate target revenue, in line with the methodology adopted in prior access arrangement periods and used previously by the Authority and the AER.</p> <p>Synergy considers this approach is theoretically consistent with the Code and with relevant matters in section 26(1) of the ERA Act to which the Authority must have regard.</p> <p>However, Synergy has not undertaken a detailed review of WP's implementation of the building block method and thus cannot comment on the appropriateness of its implementation by WP. Synergy submits the Authority should (having regard to the relevant Chapter 6 Requirements, the Code objective and other matters referred to in this submission, including the matters listed in section 26(1) of the ERA Act) undertake a detailed review of WP's implementation of the building block method.</p>	3.2
Revenue modelling		<p>WP proposes to move to a post-tax modelling approach, consistent with the approach taken by the Authority in its recent gas decisions and the AER in all recent gas and electricity decisions.</p> <p>While WP's building block model has been publicly released, Synergy has not undertaken a detailed review of this building block model and thus cannot comment on the appropriateness of the implementation of the revenue modelling adopted by WP.</p> <p>Synergy submits the Authority should (having regard to the relevant Chapter 6 Requirements, the Code objective and other matters referred to in this submission, including the matters listed in section 26(1) of the ERA Act) undertake a detailed review of the building block model and its implementation by WP.</p>	3.2
Regulated Asset Base (RAB)		<p>WP states it calculates RAB in line with the requirements of the Code, however, there is insufficient information in its submission to assess whether the calculations are consistent with the Code.</p> <p>While WP's building block model has been publicly released, Synergy has not undertaken a detailed review of this building block model and thus cannot comment on the appropriateness of the calculation of the RAB by WP. However, Synergy is concerned about the apparent inclusion of "non-network assets" and depreciation for "non-network assets" in the RAB (which should only include the value of network assets (i.e. assets used to provide covered services) as is required by the definition of capital base in section 1.3 of the Code.</p> <p>Synergy submits the Authority should (having regard to the relevant Chapter 6 Requirements, the Code objective and other matters referred to in this submission, including the matters listed in section 26(1) of the ERA Act) undertake a detailed review of the building block model and WP's calculation of the RAB.</p>	3.3

Area	Our assessment	Decision/Rationale	Relevant section
Tax Asset Base (TAB)		<p>WP states it has calculated the TAB using the roll-forward method, however, there is insufficient information in its submission to assess whether its calculations are compliant with the Code.</p> <p>While WP's building block model has been publicly released, Synergy has not undertaken a detailed review of this building block model and thus cannot comment on the appropriateness of the calculation of the TAB by WP. Synergy recommends the Authority undertake a detailed review of the building block model.</p>	3.4
Return of capital (depreciation)		<p>WP proposes straight-line depreciation for the RAB. Synergy accepts this is reasonable.</p> <p>Synergy considers this is consistent with the Code and in customers' long-term interests. However, Synergy is concerned about the apparent inclusion of depreciation for "non-network assets" in the RAB (which should only include the value of network assets i.e. assets used to provide covered services) as is required by the definition of capital base in section 1.3 of the Code.</p> <p>Also, 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 forward the RAB using forecast depreciation.</p>	3.5
Tariff equalisation contribution		<p>WP proposes to include a tariff equalisation contribution of \$822 million in the AA4 target revenue which it proposes charging in the fixed tariff component (previously variable) and only to distribution customers with demand less than 7,000 kVa.</p> <p>Synergy notes WP's proposal to recover the TEC through reference service fixed charges rather than (as is currently the case) through reference service variable charges. Subject to verification by the Authority of WP's methodologies and calculations for achieving this outcome, Synergy considers this aspect of WP's proposal is consistent with section 7.6 of the Code and unlikely to be inconsistent with relevant matters in section 26(1) of the ERA Act.</p> <p>However, Synergy considers WP's proposal to charge the TEC only to customers below a certain threshold is not consistent with the Code (section 7.12) or with relevant matters in section 26(1) of the ERA Act to which the Authority must have regard (sections 26(1)(a), (b), (e) and (f)).</p> <p>Synergy therefore submits the current form of WP's proposal for TEC must be rejected.</p>	3.6

Area	Our assessment	Decision/Rationale	Relevant section
Deferred revenue		<p>WP proposes to defer the recovery of \$234.1 million of AA4 transmission target revenue to future access arrangement periods and to bring forward the recovery of the same amount of deferred distribution revenue from future access arrangement periods to the AA4 period.</p> <p>WP's proposal to defer \$234.1 million of AA4 transmission target revenue to future access arrangement periods is not permitted by the Code (there is no provision for doing it in section 6.4(a) of the Code), has the potential to weaken economic efficiency contrary to the Code objective and is inconsistent with the Authority's pre-determined schedule for the recovery of the original AA2 deferred revenue. WP's proposed justification (based on avoiding price shocks to transmission users) does not appear to outweigh the potential adverse effects on economic efficiency and may, contrary to WP's position, even create future price shocks.</p> <p>WP's proposal to allocate an equivalent amount of AA2 distribution deferred revenue to AA4 to offset the deferral of the \$234.1 million of AA4 transmission target revenue to future access arrangement periods has no sound basis under the Code. This proposal is inconsistent with the Authority's pre-determined schedule for the recovery of the original AA2 deferred revenue (which was determined by the Authority in its AA3 decision as being best aligned with the long-term interests of consumers) and would not arise if there were a separate transmission and distribution service provider in the SWIS. There is nothing to suggest an accelerated recovery profile for deferred distribution revenue will result in better outcomes for consumers. If anything, this decision will result in a larger price increase for customers in AA4 than if the original recovery path was maintained.</p> <p>Synergy therefore submits WP has not provided adequate justification for further deferring the recovery of transmission revenue or for bringing forward deferred distribution revenue and Synergy therefore submits WP's proposal for further deferral and bringing forward of revenue should be rejected.</p>	3.7
Unutilised AA3 SMI investment		<p>WP has made no adjustment to its target revenue for AA4 to exclude the capex and opex allowances approved by the Authority in AA3 in respect of SMI investment which WP did not utilise for its designated purpose.</p> <p>Synergy submits that such an adjustment to WP's target revenue for AA4 in respect of unutilised AA3 SMI investment is required (and should be made) under the IAM (for capex) and, in addition or as an alternative, is required (and should be made) by the Code objective (for both capex and opex).</p> <p>If no such adjustment is made to WP's target revenue for AA4 then Synergy submits WP's proposal is legally flawed as regards to its calculation of target revenue and (having regard to the relevant Chapter 6 Requirements, the Code objective and other matters referred to in this submission, including the matters listed in section 26(1) of the ERA Act) should be rejected by the Authority.</p>	3.8

Area	Our assessment	Decision/Rationale	Relevant section
K-factor adjustment for 2017-18		<p>Due to the one year delay in commencement of the AA4 revenue recovery, the revenue caps for 2017/18 are treated slightly differently. The 2017/18 version of the price list is the 2016/17 Price List reproduced, without any adjustment of the k-factor due to the delay to the AA4 process. To ensure the addition of the revenue adjustment doesn't result in a lumpy price outcome, the revenue model has been run with the k-factor for 2017/18 included as a building block.</p> <p>Synergy considers this is consistent with the Code and in customers' long-term interests.</p>	N/A

3.1 Form of price control

3.1.1 Code requirements

The purpose of price control is to "determine target revenue" (see definition of price control in section 1.3 of the Code). Target revenue is the revenue a service provider is to have the opportunity to earn for an access arrangement period from the provision of covered services (see section 6.4(a) of the Code).

Section 6.1 of the Code allows WP to adopt any form of price control for its covered services provided the form of price control adopted must satisfy the following requirements – the Chapter 6 Requirements:

- it must meet the **price control objectives** in section 6.4 of the Code, including:
 - the objective of ensuring WP (as service provider) has the opportunity to earn target revenue comprising (it would appear) only the following amounts:
 - an amount⁴ that "meets the forward-looking and efficient costs of providing covered services, including a return on investment commensurate with the commercial risks involved" (section 6.4(a)(i)); plus
 - the various adjusting amounts that are permitted for inclusion in target revenue by sections 6.4(a)(ii)-(vii);
 - the objective of enabling users to predict likely annual changes in target revenue during AA4 (section 6.4(b)); and
 - the objective of avoiding price shocks (section 6.4(c)); and
- it must otherwise comply with **Chapter 6** of the Code, including, where relevant, the requirements relating to:
 - gain sharing mechanisms and surpluses (sections 6.19-6.28);
 - excluded services (sections 6.33-6.37);⁵ and

⁴ This amount "is a target, not a ceiling or a floor" (section 6.5 of the Code).

-
- approved total costs (sections 6.38-6.80).⁶

Further, as noted above, section 4.28, as modified by section 4.52, requires WP's proposal (including the form of price control adopted by WP for non-revenue cap services) must also meet the **Code objective**, which is a "specific criterion"⁷ that is to prevail over any conflicting requirement set out in Chapter 5 of the Code.⁸ For example, if the requirements in Chapter 5 for WP's proposal to include price control under Chapter 6 or pricing methods under Chapter 7 were to give rise to any conflict with the Code objective, then compliance with the Code objective is paramount.

Synergy considers the price control required by the Code is intended to limit the level of tariffs for all covered services (both reference and non-reference services) through the control of overall target revenue (which is limited to the amounts listed in section 6.4(a) of the Code comprising forward-looking and efficient costs plus specific permitted adjustments). Synergy submits this is evident from the price control objectives in section 6.4 of the Code, including the definition of target revenue in section 6.4(a) of the Code and from the Code objective in section 2.1 (which requires efficient investment in and operation and use of the network and services) and the note⁹ to the definition of price control in section 1.3 which relevantly states "Price control can consist of direct or indirect limits and consists of a **limit on the level of tariffs** through the control of overall revenue" (**emphasis added**).¹⁰ Synergy submits, therefore, that whatever form of price control a service provider adopts, the Code aims to limit the revenue for covered services (both reference and non-reference services) by reference to the forward-looking and efficient costs of providing those covered services (subject only to the specific adjustments permitted in section 6.4 of the Code). At least as regards non-revenue cap services, it is not clear how WP does this.

Section 6.2 of the Code provides (without limiting the forms of price control that may be adopted), that price control may set target revenue:

1. by reference to the service provider's approved total costs; or
2. by setting tariffs with reference to tariffs in previous access arrangement periods and changes to costs and productivity growth in the electricity industry.

3.1.2 WP's proposal

WP proposes to retain for AA4 essentially the same forms of price control for its covered services (both transmission services and distribution services) as applied for AA3.¹¹

For its "revenue cap services",¹² WP adopts an approved total costs form of price control as described in section 6.2(a) of the Code, using separate "revenue caps" for the transmission and distribution systems and the "building block method" contained in a "revenue model".¹³

⁵ "There are no excluded services at the revisions commencement date of this access arrangement." (WP's proposal at section 3.2.1). WP states: "The ERA has not declared any services as excluded services under sections 6.33 to 6.37 of the Access Code. Further, Western Power does not propose to provide, or seek to have the ERA determine, any service as an excluded service in AA4." (AAI, [248]).

⁶ The provisions in Code sections 6.38-6.80 relating to approved total costs are relevant to WP's "revenue cap services" (as WP has chosen an approved total costs form of price control for them under section 6.2(a) of the Code), but not for WP's "non-revenue cap services" (where WP has apparently chosen a different form of price control under section 6.2(b) of the Code).

⁷ A "specific criterion" is defined in section 1.3 of the Code as "an objective, requirement or factor specified in this Code in relation to a thing (including the making of any decision or the doing, or not doing, of any act)".

⁸ See sections 2.3 and 2.4 of the Code.

⁹ However, the Code provides that such notes have no interpretative force - see section 1.5(e) of the Code).

¹⁰ The definition of tariff in section 1.3 of the Code states: "tariff, for a **covered service**, means the criteria that determine the charge that is payable by a user to the service provider" (**emphasis added**).

¹¹ AAI, [872].

¹² WP defines "revenue cap services" to include all reference services and some non-reference services (see WP's proposal at section 5.1.1 and AAI, [873], [874]).

For its "non-revenue cap services",¹⁴ WP states that "the revenue associated with these services are not covered by the revenue cap".¹⁵ Instead, WP adopts a set of "charging criteria", which WP describes as being the charges are to be:

- "negotiated in good faith",
- "consistent with the Code objective"; and
- "reasonable",¹⁶

and which WP appears to claim¹⁷ is based on the past tariffs plus changes to costs and productivity growth in the electricity industry form of price control described in section 6.2(b) of the Code. However, it is not clear from WP's "charging criteria" themselves (or otherwise) how WP actually implements that form of price control in practice especially in relation to new SMI network services that did not exist in previous access arrangements.

WP states that:

- as per the AA3 period, the revenue cap will apply to all services WP provides to transmit and distribute electricity, whether they are reference or a non-reference service. The revenue cap will also cover some metering services required under the Metering Code, such as scheduled meter reading, but not "extended metering services" under the Metering Code Model Service Level Agreement, such as de-energising a metering point, which WP considers to be non-revenue cap services.¹⁸
- its "charging criteria" form of price control for non-revenue cap services "is consistent with sections 2.8(b) and 6.1 of the Code and is the same approach that was applied to non-revenue cap services in the AA3 period".¹⁹

3.1.3 Synergy's comments

(a) Generally

Revenue cap

At this time, Synergy does not oppose a revenue cap form of price control for WP's transmission services and distribution services. Synergy notes the use of a revenue cap is consistent with the approach adopted by the AER in the NEM.

¹³ Compare AA3, sections 5.1.2(a), 5.1.3 and 5.1.4 with WP's proposal at sections 5.1.2(a), 5.1.3 and 5.1.4; and see AAI [883]-[889]; and AAI Attachment 10.1.

¹⁴ WP defines "non-revenue cap services" to include the remaining non-reference services that are not "revenue cap services". WP states they include: "ancillary services (such as high load escorts)" and "extended metering services under the Metering Code Model Service Level Agreement, such as de-energising a metering point" (see WP's proposal at section 5.1.1 and AAI, [875] and [873] footnote 187).

¹⁵ AAI, [875].

¹⁶ See AA3, section 5.1.2(b), WP's proposal at section 5.1.2(b) and AAI, [879]-[882]

¹⁷ WP claims that it has adopted price control methods for "revenue cap services" and "non-revenue cap services" "in accordance with sections 6.1 and 6.2(c) of the Code" (see WP's proposal at section 5.1.2). The reference to section 6.2(c) of the Code would therefore mean it has adopted a combination of the price control methods outlined in sections 6.2(a) and (b) of the Code. As WP has already adopted the section 6.2(a) method (approved total costs) for "revenue cap services", that means the only other remaining price control option referred to by section 6.2(c) of the Code section 6.2(b) form of price control based on past tariffs plus changes to costs and productivity growth in the electricity industry. It therefore appears WP is claiming that its "charging criteria" are a section 6.2(b) form of price control based on past tariffs plus changes to costs and productivity growth in the electricity industry.

¹⁸ AAI, [873] including footnote 187.

¹⁹ AAI, [880].

However, Synergy does note a revenue cap form of price control means WP'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. As discussed further in Section 4 of this submission, Synergy considers WP has not adequately substantiated its demand forecasts or provided reasonable opportunity for customers and stakeholders to review and comment on its demand forecasts. Synergy considers this does not allow users to understand how WP has derived the elements of the proposed access arrangement and is contrary to sections 4.1, 4.2(a), 4.3 and 4.4 of the Code. Further, Synergy notes the Authority under section 4.8 of the Code can require WP to provide this information. Synergy considers it is important this information is made available to users, applicants and the Authority, so they can form a view as to whether the proposed revisions comply with the Code, as required by section 4.2(b).

Synergy's more detailed comments on WP's proposed price control for its revenue cap services are set out below at paragraph (b) of this section.

Non-revenue cap

Where WP is proposing a non-revenue cap form of price control (i.e. for its "non-revenue cap services"), Synergy considers the Code requires the Authority ensure whatever form of price control is adopted, the pricing for these services is controlled so WP's charges cannot exceed the relevant portion of target revenue for these covered services.

Synergy's more detailed comments on WP's proposed price control for its non-revenue cap services are set out below at paragraph (c) of this section.

Metering as a *supplementary matter*

Synergy also submits WP (and the Authority) need to consider if any metering (i.e. metrology) services under WP's proposed model service level agreement are to be charged for as covered services under AA4. If so, then the price control for those covered services will need to take into account and be consistent with and facilitate²⁰ the requirement in clause 6.6(1)(e) of the Metering Code to the effect that a model service level agreement approved by the Authority under the Metering Code must provide 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 and in accordance with good electricity industry practice, seeking to achieve the lowest sustainable costs of providing the relevant metering service.

For more detailed discussion of this issue refer to Synergy's MSLA Submission.

(b) Price control for "revenue cap services"

Price control for the "revenue cap services" must meet the relevant Chapter 6 Requirements (including the price control objectives in section 6.4 (and expanded on in sections 6.5A to 6.37A), the approved total costs provisions in sections 6.38 to 6.70 and the requirements for gain sharing mechanisms and surpluses in sections 6.19 to 6.28). In addition it must be consistent with the Code objective in section 2.1.

²⁰ This is required by section 5.28 of the Code – which in effect requires an access arrangement must deal with metering (which is a supplementary matter) in a manner which is consistent with and facilitates the treatment of the supplementary matter in the Metering Code (which is a written law). In Synergy's view, this includes that to the extent WP's proposal deals with any metering (i.e. metrology), including to the extent it sets any pricing for metering, it must do so consistently with and so as to facilitate the treatment of metering in the Metering Code – including the requirements relating to charging for metering services in clause 6.6(1)(e) of the Metering Code.

Synergy considers two important issues for the Authority to consider here are:

- whether any of WP's proposed changes for AA4 from the AA3 price control (approved by the Authority) are themselves not consistent with the Chapter 6 Requirements or the Code objective; and
- whether WP's methodologies and calculations are correctly implemented in practice.

For example:

1. **Efficiency of costs:** WP states it's "target revenue recovers the forward-looking efficient costs of providing revenue cap services" (AAI [1066]), that "reference tariffs for the AA4 period recover the forward-looking costs associated with reference services" and that "non-reference tariffs recover the efficient costs of non-reference services" (AAI [1067]). Further investigation is required to determine how in practice WP proposes ensuring the tariffs for its "revenue cap services" (which include both reference and non-reference services) are actually determined in accordance with the Code's efficiency requirements and do not exceed the relevant portion of target revenue attributable respectively for them (as reference or non-reference services). In this regard, for example, Synergy has concerns with WP's approach to benchmarking (refer to Sections 5.2, 6.3 and 6.8 of this submission, below).
2. **Gain sharing mechanism (GSM)** (WP's proposal, at section 7.4): Refer also to Section 7.1 below. In addition, Synergy notes:
 - WP is seeking to increase AA4 target revenue for "revenue cap services" by \$272.6 million (in present value terms) as a result of the AA3 GSM.²¹ Synergy submits the Authority should critique WP's methodologies and calculations in detail to ensure the amount of this increase in target revenue is correctly calculated and is justified.
 - WP's proposed 'updates' (AAI [408]) to the inputs used to determine the network growth factors and efficiency and innovation benchmarks, which are used to calculate the GSM reward should be critiqued in detail. For example, to what extent are WP's "uncontrollable costs"²² really are in respect of forecasting errors associated with the cost of activities WP cannot influence (AAI [415]) and to what extent are "ERA costs (including licence fees and charges, standing charges, audits and specific costs)" all beyond WP's influence or do some of them actually depend on WP's conduct (e.g. its compliance performance)?
3. **Deferred revenue** (WP's proposal, at sections 5.5 and 7.7): Refer to Section 3.7 below.
4. **Unforeseen events** (WP's proposal, at section 7.1): WP is seeking to increase target revenue (revenue cap services) by \$19.7 million²³ (in present value terms), for "unforeseen event" costs it states it incurred in AA3 for Phase 2 of the State Government-led EMR initiative (AAI [937]-[945]). Synergy submits the Authority should critique WP's methodologies and calculations in detail to ensure that the amount of this increase in target revenue is correctly calculated, allocated and is justified.
 - For example, WP has arguably not justified the EMR costs it is claiming as an "unforeseen event" resulted from an event of force majeure (which is a prerequisite

²¹ See AAI, [916] and [924]-[928] and AA3, section 7.4.

²² See AAI, [417] Tables 6.11 and 6.12.

²³ WP states AA4 target revenue includes \$5.5 million for transmission and \$14.2 million for distribution, for 'unforeseen events', comprising AA3 costs associated with the EMR initiative (AAI, [864], [916] and [944]).

for an "unforeseen event" under section 6.6 of the Code). In this regard, WP has quoted the wrong definition of "force majeure" (see AAI [939]), apparently using the definition taken from the Model Standard Access Contract in Appendix 3 to the Code, rather than the correct definition for these purposes, which is the one given in section 1.3 of the Code. The two definitions are similar although the Code definition does not expressly include government acts or omissions. Both definitions, however, effectively require that a "reasonable and prudent person" would not be able to "prevent or overcome" the matter that is beyond their control if they exercised reasonable "skill, diligence, prudence and foresight". It is reasonable that, WP acting as a "reasonable and prudent person" operating in comparable conditions and circumstances should have set aside a reasonable amount in its budget for AA3 to allow for anticipated costs in dealing with issues arising from government-led initiatives (such as the EMR). On that basis, WP should only be permitted to claim in AA4 as an "unforeseen event", that portion of its Phase 2 EMR expenditure that was in excess of the amount that it should (reasonably and prudently) have included in its AA3 budget for such matters. Further, even if these EMR Phase 2 costs were caused by "force majeure" (which is not conclusively shown), they must not be included in target revenue if they exceed the costs which would have been incurred by a service provider "efficiently minimising costs" (section 6.8 of the Code).

- Further, 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).

5. Technical rules changes (WP's proposal at section 7.2):

- WP is not seeking to make any adjustment to target revenue (for revenue cap services) for AA3 technical rule changes (AAI [916] and [946]). However, while this zero adjustment may appear beneficial for users, Synergy submits the Authority should critique WP's methodologies and calculations in detail to ensure that a **reduction** in target revenue is not required.

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- Further, WP has proposed that only technical rules changes that "result in a material cost impact" would trigger the pass-through of costs to target revenue (WP's proposal, at section 7.2.1). However, 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. an objective definition for assessment of "materiality" and appropriate oversight by the Authority to ensure it is being complied with).
6. **Investment adjustment mechanism (IAM)** (WP's proposal, at section 7.3): Refer also to Section 7.2 below. In addition, Synergy notes that while WP is seeking a reduction in target revenue as a result of the AA3 IAM, Synergy submits the Authority should critique WP's methodologies and calculations in detail to ensure that a **greater reduction** in target revenue is not required.
7. **Service standards adjustment mechanism (SSAM)** (WP's proposal, at section 7.5): Refer also to Section 7.3 below. In addition, Synergy notes that:
- WP is seeking an increase in target revenue as a result of the AA3 SSAM which it describes as an amount of either \$252 million or \$255.1 million²⁴ (AAI [198], [916] and [929]-[933]). Synergy submits the Authority should critique WP's methodologies and calculations in detail to verify the correct amount of this proposed increase in target revenue and ensure it is justified.
 - WP proposes removing "system minutes interrupted – radial" from the SSAM SSBs that were in AA3 (see AA3 sections 7.5.3, 7.5.4 and 7.5.6(d)). WP states transmission network performance is already covered by other transmission measures, so 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 (see AAI [279]-[292]). Synergy submits the Authority should conduct a detailed investigation to determine if the proposed removal of "system minutes interrupted – radial" from the SSAM SSBs is consistent with the requirements of the Code (including section 5.6 of the Code and the Code objective) and the matters listed in section 26(1) of the ERA Act.
8. **Tariff equalisation contribution (TEC)** (WP's proposal, at section 5.7.6): Refer also to Section 3.6 below. Synergy notes WP is seeking to increase AA4 target revenue (for revenue cap services) for the distribution system²⁵ by \$822 million (nominal) as a result of the TEC (AAI [863], [947]). WP proposes to increase the fixed component of all network tariffs (offset by decreases in variable components) to recover the TEC amount from the fixed component rather than the variable component. WP states the TEC is effectively a fixed and unavoidable cost, determined by State Government and that recovering the TEC from fixed tariff components would also mean the regional subsidy is shared equally by **all WP's customers** and in most cases, customers will be **no worse off** as a result of the increased fixed charges, because there would be an offsetting

²⁴ There is an apparent discrepancy between the amount of the increase which is stated as \$255.1 million in AAI [916] and as \$252 million in AAI [198] (both stated to be in present value terms).

²⁵ By definition, no TEC adjustments can apply to target revenue for the transmission system.

decrease in variable charges. (AAI [1044]-[1047]). Synergy submits the Authority should critique WP's methodologies and calculations in detail to ensure the amount of this increase in target revenue is justified and that application of the TEC adjustment via the fixed component of all network tariffs is indeed shared in a way that customers are mostly "no worse off". Further, Synergy considers WP's proposal to charge the TEC only to consumers below a certain threshold is not consistent with section 7.12 of the Code.

9. **Calculation of capital base and depreciation:** Refer to Sections 3.3 and 9.3.4 below.
10. **New facilities investment** (AA3 capex used in determining target revenue for AA4): Synergy is concerned WP has not adequately shown how all new facilities investment incurred during AA3 passed the NFIT. In particular, it is not clear WP has adequately justified how the requirement in section 6.52(a) of the Code for efficiently minimising costs was met in every case. For example:
- 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.
 - WP also notes the EnergySafety Western Power Order 01-2009 required WP to undertake specific replacement and reinforcement activities with respect to its wood pole asset population (AAI Attachment 5.1 [8]) and that EnergySafety reviewed WP's wood pole management program finding the principal public safety objectives set out in EnergySafety Order 01-2009 had been achieved (AAI Attachment 5.1 at page 1 and [41]). However, that does not necessarily mean the works done by WP in response to the EnergySafety Order 01-2009 automatically satisfy the NFIT. While section 6.54 of the Code requires in applying the NFIT, the Authority must "have regard to whether the new facilities investment was required by a written law or a statutory instrument", the Authority must also determine whether the works were implemented WP by WP in the best way to efficiently minimise costs (section 6.52 of the Code).
 - Refer to Sections 9.3.2 and 9.3.4 below regarding SMI expenditure.
11. **D factor adjustment:** Refer also Section 7.4 below. In addition, Synergy notes that: WP is seeking to increase target revenue by an amount which it describes²⁶ as an amount of either \$8.8 million (in present value terms) or \$8.9 million (nominal) in respect of the AA3 D factor scheme²⁷ to recover costs associated with the Ravensthorpe and Bremer Bay network control services (NCS) (AAI [916] and [934]-[936] and AA3 s 7.6). Synergy submits the Authority should critique WP's methodologies and calculations in detail to ensure the target revenue increase is correctly

²⁶ There appear to be some discrepancies in the figures given for the amount of this adjustment. WP states at AAI, [916] (Table 10.14) and at [934] the AA3 D-factor adjustment for AA4 distribution system target revenue is \$8.8 million. However, at AAI, [973] (Table 10.36), WP states the D-factor figure is \$8.9 million (nominal) for AA4 distribution system target revenue. Further, the figures for AA4 D-factor revenue adjustment given in Table 10.22 only add up to \$7.7 million (real at 30 June 2017) and the figures given in that Table for each line item for 2016/17 (i.e. \$0.6m and \$0.1m) don't add up to the total given for that year (\$0.6m).

²⁷ The AA3 D factor scheme essentially provides for the Authority to add to WP's target revenue for AA4 an amount so WP is financially neutral as a result of: (a) any additional non-capital costs incurred by WP as a result of deferring a new facilities investment project during AA3, net of any amounts previously included in target revenue in relation to the deferred new facilities investment and (b) any additional non-capital costs incurred by WP in relation to demand management initiatives or NCS (see AA3, section 7.6.3). However, an amount will only be added to target revenue for AA4 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 the proposed non-capital costs satisfy the requirements of sections 6.40 and 6.41 of the Code (see AA3, section 7.6.5).

calculated and is justified under AA3s 7.6 and the Code requirements including the requirements of sections 6.40 and 6.41 of the Code regarding efficiently minimising costs.

(c) Price control for "non-revenue cap services"

Price control for "non-revenue cap services" must also meet the relevant Chapter 6 Requirements (including the price control objectives in section 6.4 (and expanded on in sections 6.5A to 6.37A) and the requirements for gain sharing mechanisms and surpluses in sections 6.19 to 6.28). In addition it must be consistent with the Code objective in section 2.1.

If, as WP appears to claim,²⁸ WP is adopting the form of price control in section 6.2(b) of the Code, then WP should also show how its target revenue for "non-revenue cap services" is based on the past tariffs plus changes to costs and productivity growth in the electricity industry and how this applies to new network and metering services.

WP therefore needs to show how its proposed charges for "non-revenue cap services":

- will satisfy its chosen form of price control in section 6.2(b) of the Code of being based on past tariffs plus changes to costs and productivity growth in the electricity industry; and
- will meet the relevant Chapter 6 Requirements and be consistent with the Code objective.

However, it is unclear how WP's "charging criteria" for "non-revenue cap services" reflect the form of price control under section 6.2(b) of the Code (i.e. past tariffs plus changes to costs and productivity growth in the electricity industry) that it has apparently chosen. Nor is it clear how they will meet the relevant Chapter 6 Requirements and be consistent with the Code objective.

For example:

1. **Efficiency of costs:** WP states: "The efficient costs we incur during the provision of non-revenue cap services are recovered on a fee-for-service basis" (AAI [1067]). Synergy submits the Authority should conduct further investigation to determine how in practice WP will ensure the tariffs for its "non-revenue cap services" are actually determined in accordance with the Code's efficiency requirements and do not exceed the relevant portion of target revenue attributable for them.
2. **Compliance with price control objectives:** While WP's AA4 material concentrates heavily on its price control mechanism for "revenue cap services", WP has provided no adequate indication how its price control method²⁹ for non-revenue cap services will comply with the price control objectives (as is required by section 6.1 of the Code). For example:
 - WP does not appear to include revenue for non-revenue cap services in its calculation of target revenue (see AAI chapter 10). For example, WP's calculation of AA4 target revenue seems to be limited to amounts for its "revenue via reference services" (AAI [861]) which would include revenue for only those revenue cap services that are

²⁸ WP claims it has adopted price control methods for "revenue cap services" and "non-revenue cap services" "in accordance with sections 6.1 and 6.2(c) of the Code" (see WP's proposal at section 5.1.2). The reference to section 6.2(c) of the Code would therefore mean it has adopted a combination of the price control methods outlined in sections 6.2(a) and (b) of the Code. As WP has already adopted the section 6.2(a) method (approved total costs) for "revenue cap services", that means the only other remaining price control option referred to by section 6.2(c) of the Code is the section 6.2(b) form of price control based on past tariffs plus changes to costs and productivity growth in the electricity industry. It therefore appears WP is claiming that its "charging criteria" are a section 6.2(b) form of price control based on past tariffs plus changes to costs and productivity growth in the electricity industry.

²⁹ WP describes its price control method for non-revenue cap services as the "charging criteria" listed in WP's proposal at section 5.1.2(b) (AAI, [879]), which require that charges are: "negotiated in good faith"; "consistent with the Code objective"; and "reasonable" (see WP's proposal at section 5.1.2(b)).

reference services and none at all for non-revenue cap services. So it is unclear if/how any target revenue is being determined for non-revenue cap services. If no target revenue is being determined for non-revenue cap services then WP's proposal is not consistent with the price code objectives in section 6.4 of the Code (which require target revenue to be set for all covered services).

- Further, WP's "charging criteria" for "non-revenue cap services" do not refer to the Code's price control objectives, nor does WP explain how it will comply with the price control objectives in practice in respect of its non-revenue cap services.
3. Synergy submits the Authority must require WP to show more clearly how it determines target revenue for its non-revenue cap services and how its target revenue for non-revenue cap services meets the price control objectives under section 6.4 of the Code. In particular, WP needs to show how its target revenue for non-revenue cap services meets the price control objectives of including in target revenue:
- an amount that meets the forward-looking and efficient costs of providing non-revenue cap services, including a return on investment commensurate with the commercial risks involved (section 6.4(a)(i) of the Code);
 - an amount to reward WP for efficiency gains and innovation relating to non-revenue cap services (section 6.4(a)(ii) of the Code) – WP does not include a GSM for its non-revenue cap services. However, the Code allows a GSM to apply to any covered services (e.g. see definition of "surplus" in section 6.23 of the Code). If having a GSM for non-revenue cap services would promote better economic efficiency and regulatory oversight of WP's pricing for non-revenue cap services, then it should be considered;
 - any amount for unforeseen events (section 6.4(a)(iii) of the Code);
 - adjustments for technical rules changes (section 6.4(a)(iv) of the Code);
 - any amount determined under an IAM for non-revenue cap services (section 6.4(a)(v) of the Code) – WP does not include an IAM for its non-revenue cap services. While an IAM is only mandatory for an approved total costs form of price control such as the revenue cap services (see section 6.15 of the Code), that does not prevent WP voluntarily adopting a (separate) IAM for its non-revenue cap services. If having an IAM for non-revenue cap services would promote better economic efficiency and regulatory oversight of WP's pricing for non-revenue cap services, then it should be considered; and
 - any TEC amount reasonably attributable to non-revenue cap services (section 6.4(a)(vii)). The objective of including any TEC amount in target revenue applies to all covered services (sections 6.4(a)(vii) and 6.37A of the Code) and so could be applied for both revenue cap services and non-revenue cap services. However, the requirements in section 7.12 of the Code would not apply to non-revenue cap services (as none of them are reference services).³⁰ However, Synergy submits the recovery of any TEC amount from users of non-revenue cap services must still be consistent with the Code objective.

³⁰ WP states "Non-revenue cap services are always non-reference services." (AAI, [875]).

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4. Also, Synergy submits the Authority should require WP to evidence how its price control method for non-revenue cap services will comply with the price control objectives of:
- enabling a user to predict the likely annual changes in target revenue during the access arrangement period (section 6.4(b) of the Code); and
 - avoiding price shocks (that is, sudden material tariff adjustments between succeeding years) (section 6.4(c) of the Code).
5. **Compliance with Code s 6.2(b) form of price control:** WP does not clearly show how its proposed target revenue for non-revenue cap services under its "charging criteria" is based on the form of price control under section 6.2(b) of the Code (past tariffs plus changes to costs and productivity growth in the electricity industry) which WP effectively claims to have adopted for these covered services.³¹ Synergy submits the Authority should require WP to justify its claim in WP's proposal at section 5.1.2 that its charging criteria" is based on the form of price control under section 6.2(b) of the Code.
6. **Confusing treatment of "non-revenue cap services":** Synergy notes WP proposed treatment of "non-revenue cap services" is confused. For example:
- WP refers to non-revenue cap services as "regulated" services³² (which is correct as they are covered services regulated under the Code), but elsewhere claims they are not regulated by the Authority.³³ Given this, on what basis does WP assert they are regulated and by whom?
 - WP claims non-revenue cap services are "restricted to operating works" and "do not include work that is capitalised",³⁴ but elsewhere WP states that "where capital contributions have been received for projects later cancelled, the contributions are subsequently recognised as non-revenue cap."³⁵ Given this, how can WP claim that "non-revenue cap services" are restricted to operating works?
 - WP's charging criteria for non-revenue cap services (WP's proposal at section 5.1.2(b)) state that charges for them are to be "negotiated in good faith", yet WP also claims that "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" (AAI [882]). It appears the opportunity to "negotiate in good faith" the charges for non-revenue cap services is a default option that does not apply in every case. Synergy considers WP's proposal at section 5.1.2(b) does not make this clear and submits that it should be amended to clarify what the actual position is.

³¹ WP claims it has adopted its "charging criteria" in accordance with sections 6.1 and 6.2(c) of the Code (see WP's proposal at section 5.1.2). The reference to section 6.2(c) of the Code indicates WP is proposing that target revenue for non-revenue cap services be set by reference to tariffs in previous access arrangement periods and changes to costs and productivity growth in the electricity industry (i.e. the price control method in section 6.2(b) of the Code).

³² See AAI Attachment 7.1 at Table 4.2 on p 10 and at Appendix C, Item 2 on p 30.

³³ See AAI Attachment 7.1 at section 5.1.2 on p 12.

³⁴ See AAI Attachment 7.1 at section 5.1.2 on p 12.

³⁵ See AAI Attachment 7.1 at Appendix C, Item 3 footnote 1 on p 31.

In addition to the above and more generally, Synergy submits:

- WP has not provided sufficient information is inconsistent with WP's obligations under sections 4.1, 4.2, 4.3 and 4.4 of the Code; and
- the Authority should undertake a detailed review of the form of price control adopted by WP for non-revenue cap services, including to determine whether it meets the price control objectives in section 6.4 and otherwise complies with Chapter 6 of the Code (as required by section 6.1) and is consistent with the Code objective so WP's proposal can meet the Code objective (as required by section 4.28). In doing so, the Authority should also have regard to the matters listed in section 26(1) of the ERA Act, including, but not limited to:
 - (a) the need to promote regulatory outcomes that are in the public interest;
 - (b) the long-term interests of consumers in relation to the price, quality and reliability of goods and services provided in relevant markets;
 - (c) the need to encourage investment in relevant markets;
 - (d) the legitimate business interests of investors and service providers in relevant markets;
 - (e) the need to promote competitive and fair market conduct;
 - (f) the need to prevent abuse of monopoly or market power;
 - (g) the need to promote transparent decision-making processes that involve public consultation.

In this regard, Synergy submits that if there is no efficient and effective price control with appropriate regulatory oversight for WP's non-revenue cap services, then Synergy is concerned WP's charges for non-revenue cap services (which are non-reference services provided by means of a covered network) will or may lead to results that:

- are not economically efficient;
- are not in the public interest;
- are not in the long-term interests of consumers;
- do not reflect **legitimate** business interests of WP (as a service provider);
- do not promote conduct that would be expected in a competitive or fair market; and/or
- do not prevent abuse of monopoly or market power.

3.2 Revenue modelling

3.2.1 Code requirements

While the Code does not contain any specific requirements relating to the revenue modelling methodology, whatever form of revenue modelling methodology is adopted, it must be consistent

with the Chapter 6 Requirements (including, but not limited to, the price control objectives in section 6.4) and the overarching Code objective in section 2.1.

3.2.2 WP's proposal

WP proposes to move to a post-tax modelling approach, consistent with the approach taken by the Authority in its recent gas decisions and the AER in all recent gas and electricity decisions.

WP's revenue model determines a revenue requirement for each building block:

- required return on assets (including a return on working capital);
- depreciation;
- forecast opex;
- deferred revenue recovery;
- regulatory adjustments (incentives and forecast vs actual adjustments);
- forecast tax calculation; and
- the TEC.

A smoothed average price path is then applied to determine the annual revenue caps, such that the revenue caps are equal (in present value terms) to the building block revenue requirement.

3.2.3 Synergy's comments

Synergy does not oppose a move to a post-tax modelling approach.

Also, Synergy considers the building block methodology, as its implementation is described by WP, is theoretically an appropriate basis for determining revenue caps for transmission services and distribution services.

Synergy notes WP's building block model has been publicly released. However, Synergy has not undertaken a detailed review of this building block model. As a result, Synergy is not in a position to comment on the appropriateness of the detailed implementation of the revenue modelling approach adopted by WP. Synergy submits the Authority should (having regard to the relevant Chapter 6 Requirements, the Code objective and other matters referred to in this submission, including the matters listed in section 26(1) of the ERA Act) undertake a detailed review of the building block model (and of WP's implementation of it).

3.3 Regulated asset base (RAB)

3.3.1 Code requirements

Section 1.3 of the Code defines capital base as follows:

“capital base” for a covered network means the value of the network assets that are used to provide covered services on the covered network determined under sections 6.44 to 6.63.

Importantly, therefore, it is only the value of network assets used to provide covered services that are to be included in the capital base.

Section 6.48 of the Code requires the capital base to be determined in a manner that is consistent with the Code objective and notes that options for determining the capital base include:

- Rolling forward the capital base from the previous access arrangement period.
- Valuation or revaluation of the capital base using an appropriate methodology such as the Depreciated Optimised Replacement Cost or Optimised Deprival Value methodology.

3.3.2 WP’s proposal

WP proposes to roll forward its RAB from the start of AA3 to the start of AA4 (30 June 2017) by applying a methodology that is the same as that used for previous access arrangement periods (AA1, AA2 and AA3). The method WP proposes is the following:

- start with the opening RAB at the commencement of AA3;
- adjust this RAB to account for:
 - the difference between any estimated capex included in that value and actual capex undertaken in the preceding access arrangement period; and
 - the difference between any forecast inflation included in that value and actual inflation observed in the preceding access arrangement period; and
- add the value of capex (net of contributions) incurred from 1 July 2012 to 30 June 2017; and
- deduct the value of disposals that occurred and forecast depreciation from 1 July 2012 to 30 June 2017.

WP notes it has:

- rolled forward the RAB over AA4 based on its forecast of new facilities investment and capital contributions; and
- made minor changes to the economic life for meters and services (reducing from 25 years to 15 years) to better reflect the life of these assets for new facilities investment undertaken in the AA4 period. However, Synergy notes WP has not substantiated whether this is consistent with efficient operation and use of the metering infrastructure as required by sections 2.1(b) and 6.48 of the Code.

3.3.3 Synergy's comments

Synergy considers the approach to rolling forward the RAB to determine an opening RAB for AA4 and the approach for rolling forward the RAB during AA4, as it is described by WP, is theoretically appropriate.

Synergy notes WP's building block model has been publicly released. However, Synergy has not undertaken a detailed review of this building block model. As a result, Synergy is not in a position to comment on the appropriateness of the detailed calculations of the opening RAB and the calculations to roll forward the RAB by WP. Synergy submits the Authority should undertake a detailed review of the building block model (and of WP's implementation of it).

In particular, Synergy considers the Authority should investigate in detail to ensure WP's capital base only includes the value of assets that are used to provide covered services (as is required by the definition of capital base in section 1.3 of the Code) and does not include the value of any asset (or part of an asset) that is not used to provide a covered service.

For example, Synergy is concerned with the apparent inclusion of "non-network assets" and depreciation for "non-network assets" in the RAB (see "Transmission other, non-network assets" in WP's proposal at Table 21, "Distribution other, non-network assets" in WP's proposal at Table 22 and AAI [904]). Given Tables 21 and 22 of WP's proposal are intended to set out the economic lives for each group of **network assets** for which new facilities investment is forecast for AA4 (see AA4's 5.3.2(c)), it is unclear why they should contain any reference to "non-network assets" at all. It is the value of network assets used to provide covered services that is to be included in the capital base (section 1.3 of the Code),³⁶ and an access arrangement must provide for the depreciation of the network assets comprising the capital base (section 6.70 of the Code). Synergy could not find any explanation of what these "non-network assets" are or why WP considers it is justified in including them and/or depreciation for them in the RAB. In the absence of adequate justification showing consistency with the Code, Synergy considers their inclusion in the RAB is likely to be inconsistent with the Code.

Synergy does note the method of rolling forward the RAB means WP's customers face significant risk of stranded assets, that in Synergy's view would be contrary to section 2.1(b) of the Code. 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 supporting information to its customers and stakeholders with reasonable opportunity to review and comment on its methodology, assumptions and forecasts. Synergy's view is this also places a strong onus on WP to thoroughly substantiate its capex proposal. As discussed further in Section 4 and Section 5 of this submission below, Synergy considers there are areas WP has not adequately substantiated its demand forecasts or its capex proposal. Therefore, it would be difficult for users and the Authority to determine if WP has met the Code objectives, in particular the objective in section 2.1(b) of the Code.

As noted above, WP is proposing to roll-forward its RAB on the basis of forecast (rather than actual) depreciation. The AER has previously noted using actual depreciation provides stronger incentives for a network business to achieve capex efficiencies, as compared to using forecast depreciation. Specifically, the AER noted:³⁷

³⁶ The Code defines "capital base" for a covered network to mean "the value of the network assets that are used to provide covered services on the covered network determined under sections 6.44 to 6.63" (section 1.3 of the Code).

³⁷ AER, *Explanatory Statement – Capital Expenditure Incentive Guideline for Electricity Network Service Providers*, November 2013, p 43.

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- If there is a capex overspend, actual depreciation will be higher than forecast depreciation. This means the RAB will increase by a lesser amount if actual depreciation is used than if forecast depreciation were used. Hence, WP will earn less revenue into the future (i.e. it will bear more of the cost of the overspend into the future) if actual depreciation is used than if forecast depreciation had been used to roll forward the RAB.
 - If there is a capex underspend, actual depreciation will be lower than forecast depreciation. This means the RAB will increase by a greater amount if actual depreciation is used than if forecast depreciation were used. Hence, the network operator will earn greater revenue into the future (i.e. it will retain more of the benefit of an underspend into the future) if actual depreciation is used than if forecast depreciation had been used to roll forward the RAB.

In the NEM, the AER will roll-forward the RAB using forecast depreciation except where the network operator is not subject to the CESS, or has persistently overspent on capex or persistently incurred inefficient capex.³⁸ It notes in most cases, using forecast depreciation in combination with the CESS will provide sufficient incentive for a network business to pursue capex efficiencies. In Synergy's view this approach better achieves the Code objectives.

Synergy notes WP is not subject to a CESS. In addition, the IAM limits WP's incentive to achieve capex efficiencies (this is further discussed in Section 7 below). As such, Synergy submits WP should be subject to stronger capex incentives and that using actual depreciation (rather than forecast depreciation) to roll forward the RAB will assist in this endeavour. In our view, requiring WP to use actual depreciation to roll forward the RAB is better aligned with achieving outcomes that are in the long-term interests of consumers (section 26(1)(b) of the ERA Act) and better achieves the Code objectives. Synergy notes it is also consistent with the AER's capex guidelines in the NEM and that having such consistency with a relevant market may encourage relevant market investment (section 26(1)(c) of the ERA Act).

3.4 Tax asset base (TAB)

3.4.1 Code requirements

While the Code does not contain any specific requirements relating to tax asset base calculation, whatever approach is adopted, it must be consistent with the Chapter 6 Requirements (including, but not limited to, the price control objectives in section 6.4) and the overarching Code objective.

3.4.2 WP's proposal

WP proposes to calculate the TAB using the roll-forward method, similar to the method applied to roll forward the RAB. The key differences in the methods are:

- the TAB is rolled forward in nominal terms;
- depreciation for the TAB is calculated using the diminishing value method, as opposed to the straight line method used for the RAB; and
- depreciation is based on actual expenditure rather than forecast depreciation.³⁹

³⁸ AER, *Explanatory Statement – Capital Expenditure Incentive Guideline for Electricity Network Service Providers*, November 2013, p 44.

³⁹ AAI, Attachment 102, p 8.

3.4.3 Synergy's comments

As with the RAB, Synergy considers the approach to rolling forward the TAB to determine an opening TAB for AA4 and the approach for rolling forward the TAB during AA4, as it is described by WP, is theoretically appropriate.

Synergy notes WP's building block model has been publicly released. However, Synergy has not undertaken a detailed review of this building block model. As a result, Synergy is not in a position to comment on the appropriateness of the detailed calculations of the opening TAB and the calculations to roll forward the RAB by WP. Synergy submits the Authority should undertake a detailed review of the building block model (and of WP's implementation of it).

3.5 Return of capital (depreciation)

3.5.1 Code requirements

The Code requires an access arrangement must provide for the depreciation of the network assets comprising the capital base, including the economic lives of each network asset or group of network assets, the depreciation method to be applied to each network asset or group of network assets and the circumstances in which the depreciation of a network asset may be accelerated (refer section 6.70 of the Code).

Synergy submits the depreciation method choice to be applied (and how it is applied) must also be guided by the need for consistency with the price control objectives in section 6.4 of the Code and with the Code objective (with the Authority also having regard to the matters listed in section 26(1) of the ERA Act).

3.5.2 WP's proposal

WP proposes the following approach to determining depreciation:

- Asset categories – assets are assigned to asset categories with matching asset lives. WP has not proposed changes to asset categories for transmission and distribution.
- Economic lives – WP proposes to maintain the economic lives that were applied in AA3 for the majority of the asset categories, except for distribution meters and services which is proposed to be 15 years.
- RAB depreciation approach – WP proposes to maintain the RAB depreciation approach approved by the Authority in previous access arrangements, which involves depreciating assets using the real straight line approach.
- TAB depreciation approach – WP is proposing a slight modification to the TAB depreciation methodology to fully depreciate the asset within its stipulated economic tax life.

(a) Economic life

WP proposes to maintain the economic lives that were applied in AA3 for the majority of the asset groups, except for distribution meters and services, which are proposed to be 15 years.

Under WP's proposal these changes to economic lives will only affect the calculation of the depreciation for new capex. Investment undertaken in previous access arrangements will continue to be depreciated based on the previous economic lives.

(b) RAB depreciation

WP proposes to maintain the existing depreciation methodology for all investments in AA4.

In particular, RAB depreciation is modelled in two parts: initial capital base (which depreciates the opening capital base from when WP was first disaggregated in 2006) and new capital expenditure in the access periods following disaggregation (which depreciates the capital expenditure for each year following disaggregation).

WP proposes to maintain the current approach for allocating WP's actual distribution capital expenditure to approved distribution regulatory asset categories. Both initial capital base and annual capital expenditure in each asset category is depreciated over their approved standard life on a real straight line basis.

(c) TAB depreciation

Tax depreciation is also conducted in two parts.

WP proposes to maintain the current tax depreciation methodology for Initial tax capital base (as per the AA3 submission) (i.e. a straight line method). However, WP proposes to depreciate the TAB on a diminishing value basis over the approved standard tax life, with a minor modification to the diminishing value methodology to ensure assets are fully depreciated within its stipulated tax life.

3.5.3 Synergy's comments

Subject to the comments made above about the use of forecast depreciation to roll forward the RAB and (at Section 3.3.3 of this submission, above) concerning WP's apparent inclusion of depreciation for "non-network assets" in the RAB,⁴⁰ Synergy considers the approach for calculating depreciation on the RAB and the TAB, as it is described by WP, is theoretically appropriate.

Synergy also considers the minor adjustments to the application of the diminishing value methodology, as described by WP, are theoretically appropriate.

With regard to WP's proposed reduction in the economic life⁴¹ of "Distribution meters and services" from 25 years to 15 years (compare AA3 Table 23 with WP's proposal at Table 22), WP claims the reduction from 25 years to 15 years is "to better reflect the life of these assets for new facilities investment undertaken in the AA4 period" (AAI [894] and AAI Attachment 10.2, p 12) and this change "will only affect the calculation of the depreciation for new facilities investment undertaken during the AA4 period. New facilities investment undertaken in previous access arrangements will continue to be depreciated based on the economic lives that applied at the time the depreciation forecast was developed for the investment" (AAI [908] and AAI Attachment 10.2, p 13). On its face, if WP is correct the proposed reduction in economic life for these assets does "better reflect the life of these assets", then this proposed change may be consistent with the Code objective. However, Synergy considers WP needs to better explain why it proposes to reduce the metering asset life from 25 years to 15 years and how this decision is consistent with section 2.1(b) of the Code. The Authority should also confirm with the AER whether the proposed economic life of "Distribution meters and services" is consistent with NEM practice.

⁴⁰ See "Transmission other, **non-network** assets" in WP's proposal at Table 21, "Distribution other, non-network assets" in WP's proposal at Table 22 and AAI, [904].

⁴¹ The Code requires an access arrangement must provide for the depreciation of the network assets comprising the capital base, including the economic lives of each network asset or group of network assets, the depreciation method to be applied to each network asset or group of network assets and the circumstances in which the depreciation of a network asset may be accelerated (section 6.70 of the Code).

Synergy notes WP's building block model has been publicly released. However, Synergy has not undertaken a detailed review of this building block model. As a result, Synergy is not in a position to comment on the appropriateness of the detailed calculations of depreciation of the RAB and the TAB by WP. Synergy submits the Authority should undertake a detailed review of the building block model (and of WP's implementation of it).

3.6 Tariff equalisation contribution

3.6.1 Code requirements

The Code allows for an increase in target revenue due to a TEC (sections 6.4(a)(vii) and 6.37A of the Code), subject to:

- the increase in target revenue must not exceed the TEC,
- the amount of TEC must be separately identified.

Further, section 7.12 of the Code requires that if an amount is added to the target revenue under section 6.37A (i.e. a TEC adjustment) 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 the users referred to in section 7.12(a); and
- (c) otherwise being consistent with the Code objective.

Further, section 7.6 of the Code provides that 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.

3.6.2 WP's proposal

WP proposes to include a TEC of \$822 million (\$ nominal) to the AA4 target revenue, in line with sections 6.4(a)(vii) and 6.37A of the Code (which enable the TEC to be recovered from users of the distribution network) (AAI [863], [947]).

As per the AA3 period, WP proposes to recover the TEC from distribution customers with demand less than 7,000 kVa. Customers with demand greater than 7,000 kVA do not pay the TEC as these customers can usually choose between being connected to the transmission or distribution network (and charging the TEC to these customers may create incentives for customers to move to the transmission network to avoid paying the TEC).

The State Government periodically gazettes the TEC amounts. Given the potential changes that may occur to the TEC over the AA4 period, the price control formula for the distribution system includes an explicit pass-through element for the TEC.

3.6.3 Synergy's comments

Synergy notes WP's proposal to recover the TEC through reference service fixed charges rather than (as is currently the case) through reference service variable charges. Subject to verification by the Authority of WP's methodologies and calculations for achieving this outcome, Synergy considers this aspect of WP's proposal is consistent with section 7.6 of the Code and unlikely to be inconsistent with relevant matters in section 26(1) of the ERA Act.

However, Synergy has identified an issue with WP's proposed TEC adjustment. WP's proposal does not comply with the requirements of section 7.12 of the Code in that it does not share the TEC amount "equitably" between all users of reference services in respect of exit points on the distribution system (section 7.12(b) of the Code). This non-compliance occurs because WP does not apply the TEC amount to distribution system customers with demand greater than 7,000 kVA (i.e. only lesser demand distribution system customers share in paying the TEC amount).

WP claims it allows customers with demand greater than 7,000 kVA not to share in paying the TEC amount as "these customers can usually choose between being connected to the transmission or the distribution network. Charging the TEC to distribution-connected users with demand greater than 7,000 kVA may create an incentive for those users to change to being connected to the transmission network in order to avoid being charged for the TEC. A high number of customers switching from the distribution to the transmission network could result in additional costs that would ultimately be paid for by the wider customer base." (AAI [949]).

However, WP's stated justification for sparing customers with demand greater than 7,000 kVA does not clearly show how doing so is consistent with the objective of equity between users outlined in section 7.12(b) of the Code or with the Code objective (as expressly required by section 7.12(c) of the Code). There is also a material inconsistency in WP's AA4 documentation on the matter. WP's AAI at page 232 states:

"As per the AA3 period we propose to recover the TEC from distribution customers with demand less than 7,000 kVA."

However, in contrast WP's AAI Attachment 11.1 at page 15 states:

"Recovering the TEC from fixed tariff components would also mean the regional subsidy is shared equally by all Western Power customers."

Given section 7.12 of the Code, Synergy considers there should be no threshold for payment of the TEC adjustment by distribution customers irrespective of whether the TEC is recovered from fixed or variable charges.

Synergy considers WP's proposal to charge the TEC adjustment only to customers below a certain threshold is not consistent with the Code (section 7.12) or with relevant matters in section 26(1) of the ERA Act to which the Authority must have regard (specifically those matters listed in sections 26(1)(a), (b), (e) and (f)). Synergy therefore submits the Authority should reject WP's proposed TEC adjustment.

3.7 Deferred revenue

3.7.1 Code requirements

The Code allows for defined deferred revenue amounts to be added to target revenue, adjusting for inflation and the time value of money so the deferral is financially neutral (sections 6.5B and 6.5C of

the Code). When considering deferred revenue in the past the Authority has been motivated by the Code requirement to avoid price shocks for customers (section 6.4(c) of the Code).⁴²

3.7.2 WP's proposal

As part of the Authority's access arrangement decision for the AA2 period, revenue amounts were deferred to future access arrangement periods for both distribution and transmission, to be recovered as a real annuity over the average life of assets on each system (42 years for distribution and 50 years for transmission).⁴³ The Authority subsequently revised the recovery period to 10 years in its access arrangement decision for the AA3 period, in response to concerns raised by WP the recovery period was too slow.⁴⁴

Deferred transmission revenue

Transmission revenue over the AA3 period was materially lower (on a per annum basis) than during the AA2 period, largely as a result of the significant reduction in the WACC between periods.⁴⁵ To minimise price volatility between years, it is normal practice to smooth the recovery of revenue over an access arrangement period to minimise variances in revenue to be collected each year and as such, the Authority applied a smooth price path to WP's revenue during the AA3 period. Because AA3 transmission revenue was so much lower than AA2 transmission revenue, the smoothed transmission price path declined over the AA3 period, with the result the transmission revenue path is substantially lower than the building block revenue at the end of the AA3 period.⁴⁶ However, there is insufficient information to determine whether an inefficient decision in relation to the operation of the transmission network may have contributed to this.

The prices at the end of AA3 are so far below the revenue building blocks WP claims there must be a sharp price increase over the AA4 period to recover the transmission target revenue.⁴⁷ Since the AA4 network tariffs are unlikely to come into effect until 1 July 2018 the AA4 transmission target revenue will be recovered over four years, rather than five, further exacerbating the required price increase.⁴⁸ Depending on the timing of the Authority's final AA4 decision, this could be longer.

Recovering all forecast transmission target revenue over the AA4 period would require an 18 per cent per annum increase in transmission network prices; a significant price shock for transmission customers.⁴⁹ As such, WP proposes to defer the recovery of \$234.1 million of AA4 transmission target revenue to future access arrangement periods.⁵⁰ The deferral amount is such that it caps the transmission price increase for the AA4 period to 10 per cent per annum.

Deferred distribution revenue

WP proposes to offset the proposed deferral of transmission revenue by bringing forward the recovery of the same amount of previously deferred distribution revenue to the AA4 period, aiming to make WP revenue neutral. In particular, WP proposes substituting the collection of \$234.1 million

⁴² The Authority (2009). *Final Decision on Proposed Revisions to the Access Arrangement for the South West Interconnected Network*. Perth: The Authority, p 316. The Authority (2012). *Final Decision on Proposed Revisions to the Access Arrangement for the South West Interconnected Network*. Perth: The Authority, p 297.

⁴³ AAI, p 233.

⁴⁴ The Authority (2012). *Final Decision on Proposed Revisions to the Access Arrangement for the South West Interconnected Network*. Perth: The Authority, pp 301-302.

⁴⁵ AAI, p 234.

⁴⁶ AAI, p 235.

⁴⁷ AAI, p 235.

⁴⁸ AAI, p 235.

⁴⁹ AAI, p 235.

⁵⁰ AAI, p 236.

transmission revenue during AA4 for \$234.1 million of distribution revenue instead.⁵¹ WP argues the increase in distribution revenue does not materially impact network tariffs for distribution customers, as the distribution customer base is significantly larger than the transmission customer base and therefore, the costs are spread over a much larger number of connection points.

3.7.3 Synergy's comments

Deferred transmission revenue

WP's proposal to defer \$234.1 million of AA4 transmission target revenue to future access arrangement periods is not clearly permitted by the Code and amendment of the Code may be required to allow this to happen (as apparently was required previously when section 6.4(a)(iiA) of the Code was inserted to allow for the deferral of the AA2 deferred revenue).

Section 6.4(a) of the Code sets out the only amounts that may be included in target revenue for an access arrangement period.⁵²

While the Code expressly permits the original amounts of AA2 deferred revenue (as defined in section 6.5A of the Code) to be added to target revenue in accordance with a schedule of amounts per access arrangement period that is determined by the Authority (see sections 6.4(a)(iiA) and 6.5A to 6.5E of the Code), there is no corresponding provision in the Code which expressly permits target revenue other than the AA2 "deferred revenue" defined in section 6.5A of the Code to be deferred from one access arrangement period to another. The Code does not expressly permit WP to defer any revenue from AA4 to subsequent access arrangement periods (as it is seeking to do in WP's proposal with its proposed amendments to section 5.5).

However, WP appears to claim the price control objective in section 6.4(c) of the Code (avoidance of price shocks between succeeding years) overrides the limits in section 6.4(a) of the Code on what may be included in target revenue for an access arrangement period.

Section 6.4(c) of the Code requires the price control in an access arrangement must have as an objective "avoiding price shocks (that is, sudden material tariff adjustments between succeeding years)."

While section 6.4(c) of the Code would clearly allow for smoothing "between succeeding years" **within the same** access arrangement period so as to avoid price shocks, it is less clear that smoothing "between succeeding years" would extend to smoothing between succeeding access arrangement periods. It is one matter to re-distribute target revenue **within** the access arrangement period for which that target revenue was determined (as that does not affect the overall amount of target revenue for the access arrangement period) and quite another to re-distribute target revenue from one access arrangement period to another (as that **does** affect the overall amount of target revenue both for the access arrangement period from which it is taken and the access arrangement period to which it is brought forward). While avoidance of price shock between succeeding years may have some attraction, it does not necessarily outweigh other factors that may arise as a consequence of re-distributing target revenue from one access arrangement period to another.

For example, a deferral of target revenue between access arrangement periods would risk the tariffs for both those access arrangement periods being less economically efficient, as the target revenue (and hence tariffs) for each affected access arrangement period would be rendered even more remote

⁵¹ AAI, p 235.

⁵² Consistent with the Code objective, the price control objective in section 6.4 of the Code requires target revenue for an access arrangement period to be based on forward-looking and efficient costs (section 6.4(a)(i) of the Code) and allows only certain specific limited exceptions to this which are the additional adjustment amounts listed in sections 6.4(a)(ii)-(vii) of the Code.

from the efficient costs of the particular access arrangement period than section 6.4(a) of the Code already allows to happen.⁵³ The tariffs for the access arrangement period from which the revenue was deferred would arguably be less efficient because they excluded relevant efficient costs for that period and the tariffs for the access arrangement period to which the revenue was transferred would arguably be less efficient because they included revenue from another period that was not relevant to efficient costs in the current period.

So any further deviation from what is expressly permitted by section 6.4(a) of the Code is clearly a matter for concern, especially if it is inconsistent with the Code objective.

The more that target revenue for an access arrangement period is allowed to deviate from the relevant costs of providing covered services in that access arrangement period, the less economically efficient the target revenue will be and consequently, the greater the risk the Code objective will not be complied with.

Section 6.4(c) of the Code does not give WP total discretion to defer revenue from AA4 to subsequent access arrangement periods simply based on the avoidance of price shocks.

Synergy submits that any such deferral from one access arrangement period to another would only be permissible if it could be shown the Code objective would require a deferral between access arrangement periods in this case. For example, if the effect on economic efficiency of the particular price shock would be so great that it would far outweigh any adverse effect on economic efficiency of making the deferral.

However, WP does not appear to have provided any such justification to conclusively show the Code objective requires section 6.4(c) to override section 6.4(a) in this particular case. Further, as the state government (rule maker) clearly considered it necessary to amend the Code to include express provision in section 6.4(a)(iiA) to allow for deferral of the AA2 deferred revenue, Synergy submits that a similar amendment to the Code may be required to enable any other deferral of revenue from one access arrangement period to another.

Further, WP's proposal is also inconsistent with the Authority's earlier regulatory decision on this issue. The Authority clearly stated its preference to avoid price shocks by recovering deferred revenue based on a pre-determined schedule in its determination for the AA2 regulatory period.⁵⁴ At that time it determined deferred revenue should be recovered as a constant amount over the life of the assets, but noted its willingness to revisit this decision in future access periods based on the updated information available at the time.⁵⁵ The Authority's decision for AA3 contained a detailed assessment of the implications of alternative treatments of recovering deferred revenue for prices, cash flows and intergenerational equity, ultimately deciding to allow deferred revenue to be recovered over a 10 year period, rather than the five years proposed by WP.⁵⁶ The Authority's decision was based on its assessment of the likely price shock to customers and consistent with its AA2 position that deferred revenue should be recovered according to a pre-determined schedule.

⁵³ Clearly, the adjustments permitted under sections 6.4(ii)-(iiA) of the Code already allow target revenue for an access arrangement period to deviate from the efficient costs objective in section 6.4(a)(i) of the Code, in they allow for the 'import' into target revenue for one access arrangement period of some costs from other access arrangement periods. However, that is expressly permitted by and limited to, what is set out in sections 6.4(ii)-(iiA) of the Code. In this regard, we note the rule maker clearly considered it necessary to include express provision in section 6.4(a)(iiA) of the Code and sections 6.5A-6.5E of the Code to allow for a specific case of revenue deferral from one access arrangement period (AA2) to subsequent periods. That would seem to indicate it was considered not possible to do this under the Code without inclusion of express provision in the Code

⁵⁴ The Authority (2009). *Final Decision on Proposed Revisions to the Access Arrangement for the South West Interconnected Network*. Perth: The Authority, p 318.

⁵⁵ The Authority (2009). *Final Decision on Proposed Revisions to the Access Arrangement for the South West Interconnected Network*. Perth: The Authority, p 318.

⁵⁶ The Authority (2012). *Final Decision on Proposed Revisions to the Access Arrangement for the South West Interconnected Network*. Perth: The Authority, pp 296-302.

WP's proposal would involve another change to the pre-determined schedule for the recovery of deferred revenue. In its AA3 determination the Authority did not indicate it was open to revisit the pre-determined schedule for deferred revenue and WP's proposal to defer the recovery of transmission revenue in AA4 contravenes many of the arguments advanced by WP in its proposal for the AA3 access period.

WP argues it is necessary to defer the transmission revenue to manage the potential impact on transmission customers. However, Synergy considers that deferring the transmission revenue will not necessarily manage the potential impact on transmission customers in the long term.

The Code objectives require efficient operation and use of the network. It is therefore important to ensure the practices associated with deferring revenue do not promote inefficient operation, use or investment in the network. For example, it is not clear if efficient transmission investment decisions will be consistently made if a service provider is allowed to defer transmission revenue and substitute it with distribution revenue.

As noted above, deferring transmission revenue between access arrangement periods also weakens the relationship between the costs incurred and tariffs in each access arrangement period. This weakened relationship limits the capacity of WP's proposal to promote efficient network use and investment, thereby contravening the Code objective.

Finally, continuing to defer transmission revenue consistent with WP's proposal could actually **increase** the risk of price shocks in future access arrangement periods to ensure the shortfall is recovered over the life of the assets, as required by the Authority's earlier decisions.

Synergy therefore submits WP's proposal to defer transmission revenue should be rejected.

Deferred distribution revenue

Synergy opposes WP's proposal to offset the deferral in transmission revenue by bringing forward an equivalent amount of deferred revenue for the distribution business.

Synergy submits there is no fundamental reason why an additional deferral of revenue for transmission should be matched by bringing forward deferred revenue on distribution. Synergy notes this proposal would not arise in a situation where separate transmission and distribution service providers exist in the SWIS (i.e. the situation that occurs in the NEM). In addition, Synergy notes the recovery path for distribution deferred revenue was determined by the Authority in its AA3 decision on the basis the approved path was best aligned with the long-term interests of consumers. By bringing forward deferred revenue, WP is acting inconsistent to this decision and requiring the Authority to reconsider the appropriate recovery path for this revenue. Synergy submits there is nothing to suggest that an accelerated recovery profile for deferred distribution revenue will result in better outcomes for customers. If anything, this decision will result in a larger price increase for customers in AA4 vis-à-vis the situation where the original recovery path was maintained.

Synergy submits WP's proposal to advance distribution revenue to offset the deferral of transmission revenue should be rejected.

3.8 Other revenue adjustments

WP intended to invest approximately \$109 million during AA3 to deliver SMI as part of its 'Smart Grid' program. In its Final Decision for AA3, the Authority approved a total of \$87.3 million⁵⁷ of SMI capex

⁵⁷ Real dollars at 30 June 2012.

and \$24.3 million⁵⁸ of SMI opex for the AA3 period. Synergy notes this SMI investment did not occur. Synergy submits this SMI investment capex is subject to the IAM and, as such, WP's revenue requirement in AA4 should be adjusted to remove the return on capital and depreciation allowance WP earned in AA3 with respect to this proposed investment.

The IAM requires WP to adjust its target revenue in AA4 in a manner that exactly corrects for the economic loss or gain to WP as a result of any investment difference in AA3 in relation to specific categories of new facilities investment identified in the access arrangement. These categories include, but are not limited to:

new facilities investment 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 2012⁵⁹

Where:

'Augmentation' is defined in section 1.3 of the Code as follows:

in relation to a covered network, means an increase in the capability of the covered network to provide covered services.

'Covered service' is defined in section 1.3 of the Code as:

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.

'Service' is defined in section 1.3 of the Code as follows:

"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, 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; and
- (b) services ancillary to such services'.

'New facilities investment' is defined in section 1.3 of the Code as follows:

"new facilities investment", for a new facility, means the capital costs incurred in developing, constructing and acquiring the new facility

⁵⁸ Real dollars at 30 June 2012.

⁵⁹ See AA3, section 7.3.7(c).

'New facility' is defined in section 1.3 of the Code as follows:

“new facility” means any capital asset developed, constructed or acquired to enable the service provider to provide covered services including assets required for the purpose of facilitating competition in retail markets for electricity.

Synergy submits the SMI capex investment is within the category of 'new facilities investment' in section 7.3.7(c) of AA3 because:

- the SMI is within the definition of a "new facility" because the SMI is "a capital asset developed, constructed or acquired to enable the service provider to provide covered services" as the SMI provides access to: (a) improved information about the timing and quantity of electricity consumption to support decisions about network investment; (b) new business practices that reduce cost, such as remote reading and remote reconnection and disconnection; and (c) improved management of network reliability, through better outage information and detection.
- the capex incurred in developing, constructing and acquiring the new facility (SMI) is therefore "new facilities investment";
- that "new facilities investment" (SMI capex) is in relation to an "augmentation" (because it increases the capability of the covered network to provide covered services); and
- that "augmentation" is to provide additional capacity to the transmission system or distribution system for the provision of covered services from 1 July 2012.

Synergy submits WP has not complied with the IAM since it has not adjusted its revenue requirement in AA4 to account for the over-recovery of revenue in AA3 from the allowed forecast SMI investment which in reality did not occur. Synergy submits any gain to WP from its AA3 SMI program should be subtracted from the revenue requirement in WP's proposal.

In addition, or as an alternative, Synergy notes permitting WP to retain this gain is inconsistent with the Code objective since it does not promote economically efficient investment in and operation of and use of networks and services of networks in the SWIS.

Synergy submits when calculating target revenue for AA4 an adjustment must be made to account for unutilised AA3 SMI investment (capex and opex), if WP's proposal is to be consistent with and meet the Code objective, having regard also to the matters listed in section 26(1) of the ERA Act.

While Synergy notes that, as a usual practice, the Authority will not 'claw back' any efficiency gains achieved within an access arrangement period (i.e. there is usually no ex-post adjustment for any differences between forecast and actual expenditure at the end of the period), in this case the gain WP is making from the AA3 SMI investment has not been shown to be an **efficiency** gain (i.e. WP has not shown it is based on any demonstrated efficiency). If it is not an efficiency gain, then it is an **inefficient** gain and WP should not be permitted to retain it.

Synergy therefore submits WP's proposal would not meet the Code objective if WP were allowed to retain any of its AA3 SMI investment (capex and opex) that was not utilised for its stated purpose in AA3 as:

- to the extent it was used in AA3 for a purpose other than the purpose for which it was approved by the Authority for AA3, WP has not provided any evidence to show that its use of

-
- the SMI investment promoted economically efficient investment in or operation of and use of the covered network; and
 - to the extent it was not used for any purpose at all in AA3 and the purpose for which it was approved by the Authority for AA3 was not achieved, WP has not provided any evidence to show its failure to use the SMI investment promoted economically efficient investment in or operation of and use of the covered network.

Further, Synergy submits that if WP were allowed to retain any of the AA3 SMI investment (capex and opex) (capex or opex) that was not utilised for its stated purpose in AA3 and which has not been shown to have been used to promote economically efficient investment in or operation of and use of the covered network in accordance with the Code objective, then this would also not be consistent with section 26(1) of the ERA Act, including because it would not:

- promote regulatory outcomes that are in the public interest (ERA Act section 26(1)(a));
- be in the long-term interests of consumers in relation to the price, quality and reliability of goods and services provided in relevant markets (ERA Act section 26(1)(b)); and/or
- promote competitive and fair market conduct (ERA Act section 26(1)(e)).

Synergy therefore submits that target revenue for AA4 should be adjusted to exclude any of the AA3 SMI investment (capex and opex) that was not utilised for its stated purpose in AA3 and which has not been shown to have been used to promote economically efficient investment in or operation of and use of the covered network in accordance with the Code objective.

Synergy submits if no such adjustment is made to WP's target revenue for AA4 to exclude AA3 SMI investment (whether as is required under the IAM (for capex) or as is required (for both capex and opex) by the Code objective), then WP's proposal is legally flawed as regards its calculation of target revenue and (having regard to the relevant Chapter 6 Requirements, the Code objective and other matters referred to in this submission, including the matters listed in section 26(1) of the ERA Act) should be rejected by the Authority.

Synergy notes allowing WP to retain a windfall for the SMI investment would also be inconsistent with other jurisdictions. In the NEM, for instance, a capex efficiency gain achieved by a network is shared between the network and end consumers on the basis of a 30:70 split, respectively. Further, the AER will adjust any efficiency gain purportedly achieved by a business to take into account any deferral of capex from one period to the next.

4 FORECASTS OF CUSTOMER CONNECTIONS, ENERGY AND PEAK DEMAND

In this section Synergy outlines its response to the forecasts of customer connections, energy and peak demand WP has used as an input in developing its AA4 proposal.

Table 2 summarises Synergy's response to these aspects of WP's proposal, using the 'traffic light' system discussed in Section 2.3 of this submission. The rest of this section provides greater detail around the material issues identified by Synergy.

Table 2: Synergy's response on WP's forecasts of customer connections, energy and peak demand

Area	Our assessment	Decision/Rationale	Relevant section
Forecasts of customer connections, energy and peak demand		<p>Synergy's view is WP has not provided sufficient information about the specific forecasting methodology or assumptions used by WP for Synergy to properly assess or comment on the appropriateness of the forecasts.</p> <p>Synergy recommends WP provide far more detail about the models and assumptions it has used to develop its forecasts, including releasing its forecasting models.</p> <p>Synergy submits:</p> <ul style="list-style-type: none"> WP's failure to provide sufficient information is inconsistent with sections 4.1, 4.2, 4.3 and 4.4 of the Code and the Authority should require WP to provide far more detail about the models and assumptions it has used to develop its forecasts, including releasing its forecasting models; and the Authority should (having regard to the relevant Chapter 6 Requirements, the Code objective and other matters referred to in this submission, including the matters listed in section 26(1) of the ERA Act) undertake a detailed review of WP's forecasts of customer connections, energy and peak demand, including to determine whether it meets the price control objectives in section 6.4 and otherwise complies with Chapter 6 of the Code (as required by section 6.1) and is consistent with the Code objective so WP's proposal can meet the Code objective (as required by section 4.28). 	4.3
Forecasts of energy and peak demand		Synergy questions whether the forecast increases in network tariffs during AA4 have been taking into account WP's forecasts of energy and peak demand.	4.3
Forecasts of peak demand		Synergy has questions about the reasonableness of WP's POE50 peak demand forecasts, in light of how these forecasts compare with historical actual peak demand.	4.3
Forecasts of energy		Synergy has questions about the reasonableness of WP's energy forecasts, given how little these forecasts have been adjusted over time, despite changing market circumstances.	4.3

4.1 Code requirements

While the Code does not provide any explicit provisions regarding forecasts of customer connections, energy or peak demand, whatever approach is adopted, it must be consistent with the Chapter 6 Requirements (including, but not limited to, the price control objectives in section 6.4) and the overarching Code objective.

Sections 4.1, 4.2, 4.3, 4.4, 4.5 and 4.6 of the Code state:

4.1 The service provider of a covered network must submit a proposed access arrangement and access arrangement information to the Authority by the submission deadline.

4.2 Access arrangement information must enable the Authority, 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.

4.3 Access arrangement information must include:

- (a) information detailing and supporting the price control in the access arrangement; and
- (b) information detailing and supporting the pricing methods in the access arrangement; and
- (c) if applicable, information detailing and supporting the measurement of the components of approved total costs in the access arrangement; and
- (d) information detailing and supporting the service provider's system capacity and volume assumptions.

4.4 If a service provider submits a revised proposed access arrangement under section 4.16 or an amended proposed access arrangement under section 4.19, the service provider must at the same time submit appropriately amended access arrangement information.

4.5 The Authority may from time to time publish guidelines setting out in further detail what information must be included in access arrangement information in order for the access arrangement information to comply with sections 4.2 and 4.3, either generally or in relation to a particular matter or circumstance.

4.6 Subject to sections 4.2 and 4.3, access arrangement information submitted more than three months after guidelines are published under section 4.5⁹³ must comply with the guidelines.

The Authority published its AAI Guidelines in December 2010. Synergy notes sections 4.5 and 4.6 of the Code require WP to comply with the AAI Guidelines.

Synergy also notes the AAI Guidelines require forecasts of capital expenditure must be accompanied by, among other things, "the forecasts of load growth relied upon to derive the forecasts and details of the methods and assumptions used to develop the forecasts of capital expenditure from the forecasts of load growth".

Synergy submits sections 4.1, 4.2, 4.3 and 4.4 of the Code and the AAI Guidelines require WP to provide sufficient information substantiating its forecasts of customer connections, energy and peak demand so the Authority, users and applicants can understand how WP derived its forecasts of capex, opex and prices and can form an opinion as to whether the proposed access arrangement complies with the Code. The forecasts are critical in that regard.

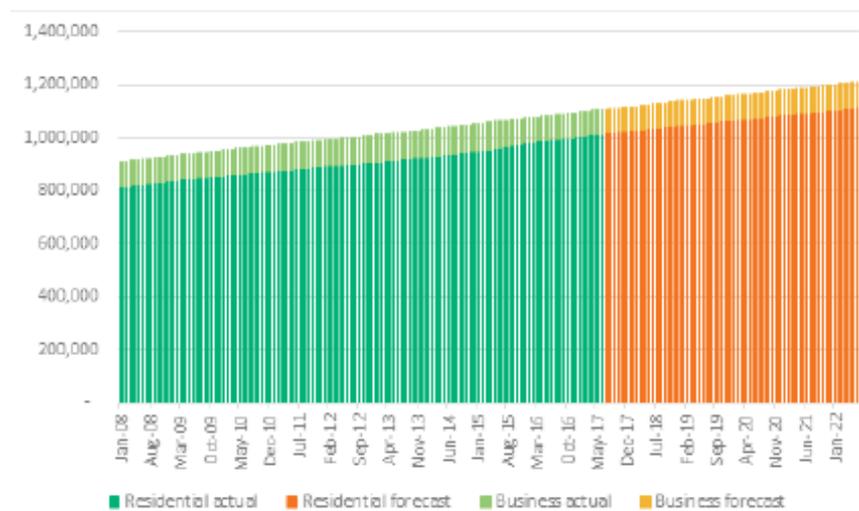
As discussed in Section 3 of this submission, Synergy considers the revenue cap form of price control and rolling capex into the RAB mean WP's customers face significant demand risk. Synergy considers this places a strong onus on WP to apply best practice in forecasting demand for the purposes of WP's 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. Synergy submits the Authority should obtain and publish this information to demonstrate proposed forecasts are credible and consistent with the Code requirements, including but not limited to those in sections 2.1, 4.1, 4.2, 4.3 and 4.4 and Chapter 6 of the Code.

4.2 WP's proposal

4.2.1 WP's forecasts

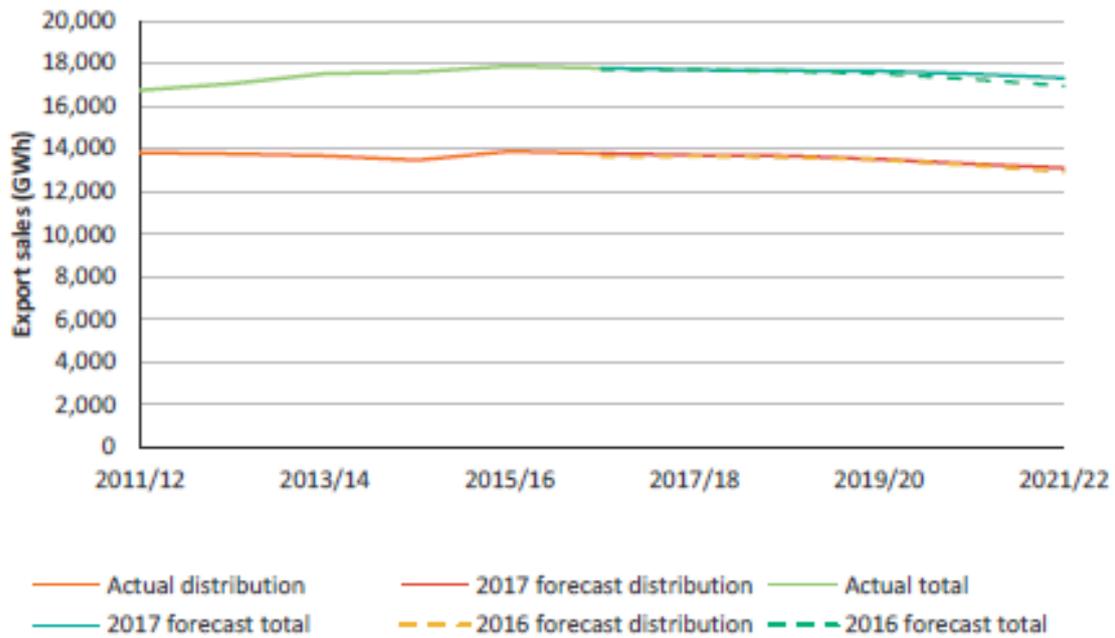
WP's forecasts of customer connections, energy and peak demand are set out in Figure 1, Figure 2 and Figure 3, respectively. Over the period of AA4, WP is forecasting annual average growth in customer numbers of 1.7%, annual average growth in energy of 0.5% and annual average growth in peak demand of -1.1%.

Figure 1: WP's customer number forecasts



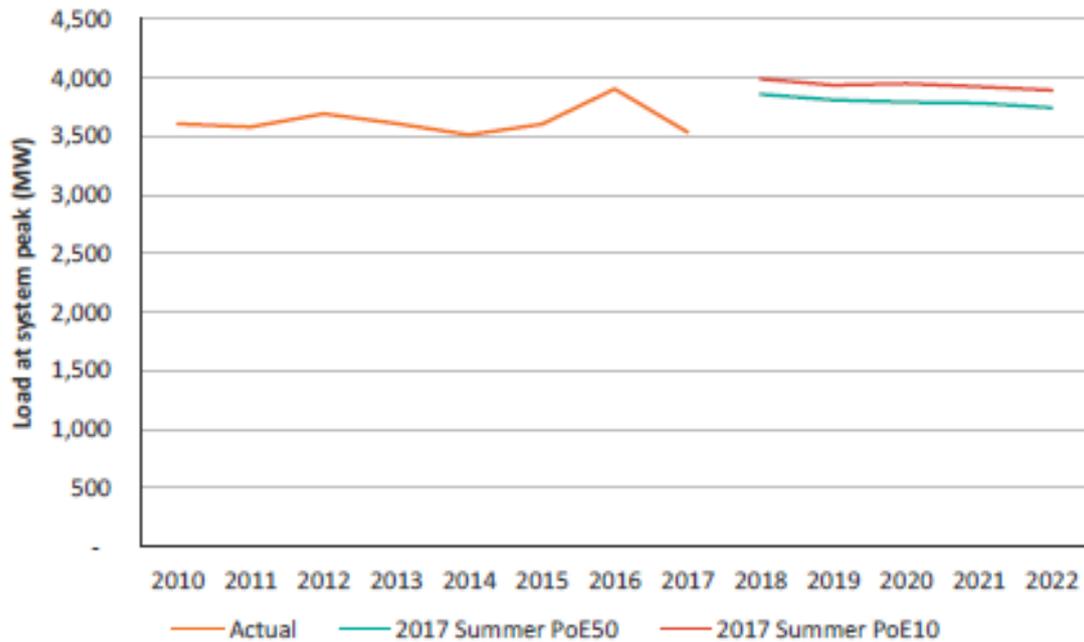
Source: WP, Access Arrangement Information Attachment 7.3 – Peak demand, energy and customer number forecasts, 2 October 2017, Figure 3.1.

Figure 2: WP's energy consumption forecasts



Source: WP, Access Arrangement Information Attachment 7.3 – Peak demand, energy and customer number forecasts, 2 October 2017, Figure 4.1.

Figure 3: WP's peak demand forecasts



Source: WP, Access Arrangement Information Attachment 7.3 – Peak demand, energy and customer number forecasts, 2 October 2017, Figure 2.2.

4.2.2 Overview of WP's approach

For customer connections, energy and peak demand, WP's proposal uses both forecasts from 2016 and forecasts from 2017. The reason is the forecasts from 2017 only became available in May 2017,

part way through the development of WP's proposal. Synergy understands WP uses the forecasts in the following way:

- Opex forecasts and network pricing outcomes are based on the forecasts of customer connections, energy and peak demand from 2017. This is because updating opex forecasts and network pricing outcomes for the new forecasts available in May 2017 was relatively mechanical.
- Capex forecasts are based on the forecasts of customer connections, energy and peak demand from 2016. The 2017 forecasts were not available at the time of developing the capex program included in WP's AA4 proposal. However, WP proposes, following the Authority's draft decision, it will update its capex program using 2017 forecasts of customer numbers and demand. WP states it does not expect that updating for the 2017 forecast will have a material impact on the proposed capex program.

WP provides little information about its methodology for forecasting customer connections, energy and peak demand. WP states it has a single forecasting process for forecasting customer numbers, technology, energy exports, energy imports and peak demand. WP also states forecasts are completed both bottom up (zone substation level) and top down (network level) using a variety of predominantly time-series forecasting techniques and the bottom up and top down forecasts are then reconciled and compared to ensure local and global trends are incorporated correctly.

WP states the external variables considered in its forecasts include:

- economic activity: variables that measure the level of activity in the economy;
- price: volumetric component of the electricity price;
- seasonal: temperature and other weather variables; and
- substitution: capture any influence of alternatives to network delivered energy.

Very little additional information about the specific forecasting methodology or forecasting assumptions used for forecasting each of customer connections, energy and peak demand for each customer category is provided by WP. For instance, while WP states it considers the effect that economic activity has on its forecasts and also states it assumes economic growth of 1.8% per annum over 5 years, no information is provided about which forecasts are related to economic activity or about the sensitivity of forecasts to economic growth. Similarly, while WP states it considers the effect prices have on its forecasts, no information is provided about which forecasts are related to prices or about the sensitivity of forecasts to future prices.

4.3 Synergy's comments

Synergy considers the lack of transparency about the forecasting methodology and forecasting assumptions used by WP make it difficult to assess whether the resulting forecasts of customer connections, energy and peak demand are reasonable or otherwise consistent with the Code requirements. In Synergy's view the information provided is insufficient to meet the requirements of sections 4.1, 4.2, 4.3 and 4.4 of the Code.

Synergy would expect far more relevant information would be made available to support WP's forecasts and proposed revisions, including:

- Historical data for dependent and independent variables that is used in the modelling.

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- Details of any weather normalisation that is undertaken for energy or demand forecasts.
 - The specification of the preferred forecasting models used by WP, for each of customer connections, energy and peak demand and for each customer category. This should include coefficients for each independent variable and relevant measures of goodness of fit and statistical significance.
 - Forecasts of independent variables used in developing forecasts of connections, energy or demand.
 - Details of any post-modelling adjustments undertaken, including post-modelling adjustments to account for solar PV, batteries and electric vehicles.

Synergy notes this is the kind of information provided by AEMO in support of its WEM Electricity Statement of Opportunities⁶⁰ and this is also the kind of information that is typically provided as part of access arrangement proposals by network service providers in the NEM. Further, this is also the level of information that is required so efficient decisions can be made in relation to the investment and operation of the network, as required by section 2.1 of the Code.

Synergy considers this information is particularly relevant to determine the veracity of the proposed revisions. Some of the information WP has provided about its forecasts raise some important matters. For instance:

- Synergy notes 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 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.
- Synergy notes 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.

Synergy submits the Authority should obtain and publish WP's forecasts of customer connections, energy and peak demand, consistent with sections 2.1, 4.1, 4.2, 4.3 and 4.4 of the Code.

⁶⁰ See AEMO's 2017 Electricity Statement of Opportunities for the WEM, including the accompanying methodology report. Available here: <http://www.aemo.com.au/Electricity/Wholesale-Electricity-Market-WEM/Planning-and-forecasting/WEM-Electricity-Statement-of-Opportunities>

4.3.1 Price effect of WP's AA4 proposal

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.

4.3.2 Forecasting customer connections, energy and peak demand for new tariffs

WP is proposing to introduce new time of use energy tariffs (RT17 and RT18) and new demand-based tariffs (RT19 and RT20) in AA4. No information is provided about how customer connections, energy and peak demand for these customers have been forecast.

Given WP proposes all new customers will be placed on the time of use energy tariffs it is likely that, at least during AA4, a large percentage of customers on the time of use energy tariffs will be new customers. New customers tend to have different patterns of energy use than existing customers (as a result of trends over time in building construction and appliance use and efficiency). This suggests the forecast energy and peak demand of residential customers on the new time of use energy tariffs will be different from the forecast energy and peak demand of existing residential customers who will remain on existing tariffs.

Also, given the purpose of the new time of use energy tariffs and the new demand-based tariffs is to drive changes in patterns of energy consumption by customers, it would be expected that customers on these tariffs would have different patterns of consumption than similar customers on existing tariffs provided the customer moves to a time of use retail tariff.

It is unclear to Synergy whether WP has taken account of the type of customers that will be on the new time of use energy tariffs and the new demand-based tariffs and whether WP has taken account of the effect these tariffs will have on patterns of energy use. WP has not discussed the practical workings and effects of these tariffs on customers with Synergy. Failing to account for these effects will likely result in poor forecasts of energy and peak demand for these customers and potentially affect the price path that customers face over the period of AA4.

⁶¹ AAI Attachment 7.3.3 – Energy and Customer Numbers Forecast YE2016, 2 October 2017. It is unclear whether WP continue to use these price forecasts from the state budget for its 2017 forecasts.

5 CAPEX

In this section Synergy outlines its response to the capex forecasts in WP's proposal.

Table 3 summarises Synergy's response to the relevant aspects of WP's proposal, using the 'traffic light' system discussed in Section 2.3 of this submission. The rest of this section provides greater detail around the material issues Synergy has identified.

Table 3: Synergy's response to WP's capex proposal

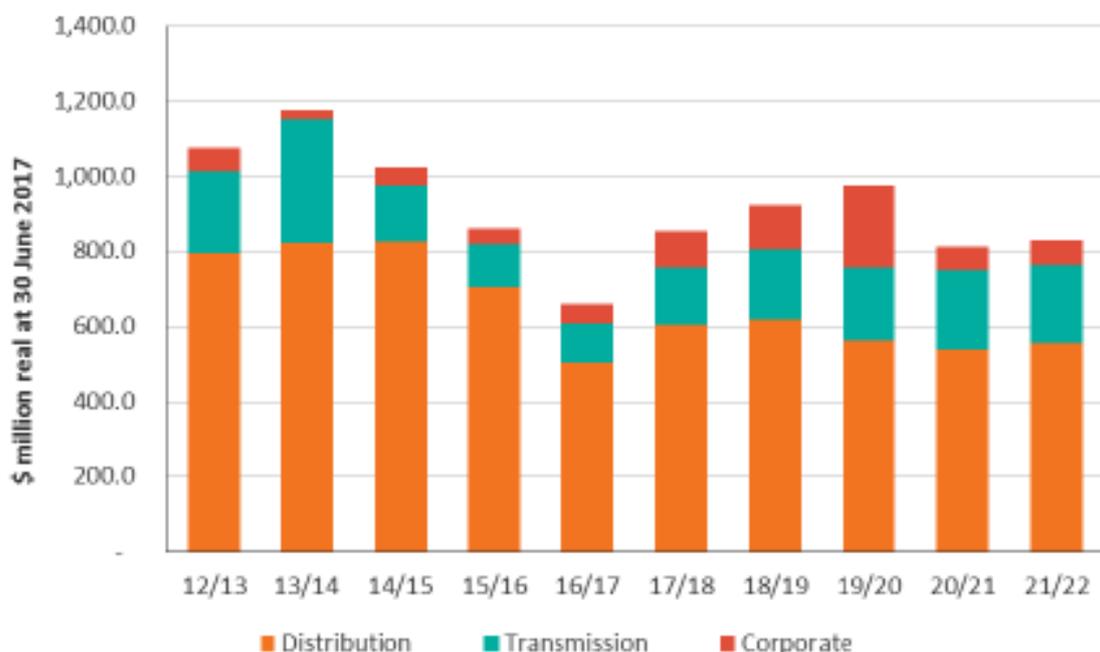
Area	Our assessment	Decision/Rationale	Relevant section
Maintaining service levels		<p>WP proposes to increase capex during AA4 relative to AA3 for maintaining service levels.</p> <p>Synergy considers it is unclear (and it has not been adequately explained) why there needs to be a significant increase in capex to maintain service levels at the level in AA3.</p> <p>Synergy submits:</p> <ul style="list-style-type: none"> • WP's has not provided sufficient information is a breach of sections 4.1, 4.2, 4.3 and 4.4 of the Code and the Authority should require WP to provide adequate information; and • the Authority should (having regard to the relevant Chapter 6 Requirements, the Code objective and other matters referred to in this submission, including the matters listed in section 26(1) of the ERA Act) undertake a detailed review of WP's proposed capex increase for maintaining service levels, including to determine if there are any inefficiencies (e.g. over investment, cross-subsidies) that would be inconsistent with the Code objective. 	5.3.1
Meeting forecast growth		<p>WP proposes to increase capex during AA4 relative to AA3 for meeting forecast growth.</p> <p>Synergy considers it is unclear (and WP has not adequately explained) why capex to meet forecast growth needs to increase despite forecasted peak demand decreasing relative to AA3.</p> <p>Synergy submits:</p> <ul style="list-style-type: none"> • WP has not provided sufficient information as required by sections 4.1, 4.2, 4.3 and 4.4 of the Code and the Authority should require WP to provide adequate information; and • the Authority should (having regard to the relevant Chapter 6 Requirements, the Code objective and other matters referred to in this submission, including the matters listed in section 26(1) of the ERA Act) undertake a detailed review of WP's proposed capex increase for meeting forecast growth, including to determine if there are any inefficiencies that would be inconsistent with the Code objective. 	5.3.2

<p>Improving efficiency</p>		<p>WP proposes to increase capex during AA4 relative to AA3 for improving efficiency.</p> <p>Synergy considers it is unclear (and WP has not adequately explained) how customers will obtain the benefit of this capex investment to improve efficiency and it is unclear WP has subjected these investments to the NFIT.</p> <p>Synergy submits:</p> <ul style="list-style-type: none"> • WP's has not provided provide sufficient information as required by sections 4.1, 4.2, 4.3 and 4.4 of the Code and the Authority should require WP to provide adequate information; and • the Authority should (having regard to the relevant Chapter 6 Requirements, the Code objective and other matters referred to in this submission, including the matters listed in section 26(1) of the ERA Act) undertake a detailed review of WP's proposed capex increase for improving efficiency, including to determine if the NFIT has been properly applied and if there are any inefficiencies that would be inconsistent with the Code objective. 	<p>5.3.3</p>
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5.1 WP's proposal

WP sets out a forecast of AA4 capex in its AAI. WP's proposed capex for AA4, as well as WP's actual capex for AA3, is set out in Figure 4.

Figure 4: WP's capex forecast for AA4, compared with actual capex for AA3



Source: WP, Access Arrangement Information, 2 October 2017, Figure 8.1.

5.2 Synergy's comments

Synergy has not undertaken a detailed bottom-up review of WP's capex forecasts; nor has Synergy sought to benchmark WP's capex forecasts against capex forecasts by other network service providers.

Nevertheless, Synergy does have a number of comments about WP's capex forecasts, in the sections that follow. Synergy also comments on WP's proposal regarding advanced metering in Section 9 of this submission.

In addition to these specific comments, Synergy considers WP has not provided sufficient detail regarding its capex forecasts. Synergy notes the AAI Guidelines require that information supporting forecasts of costs must include:

- the assumptions on which forecasts are based;
- a full and detailed explanation of the basis of preparation of the forecasts; and
- evidence to show the forecasts only include costs which would be incurred by a service provider efficiently minimizing costs.

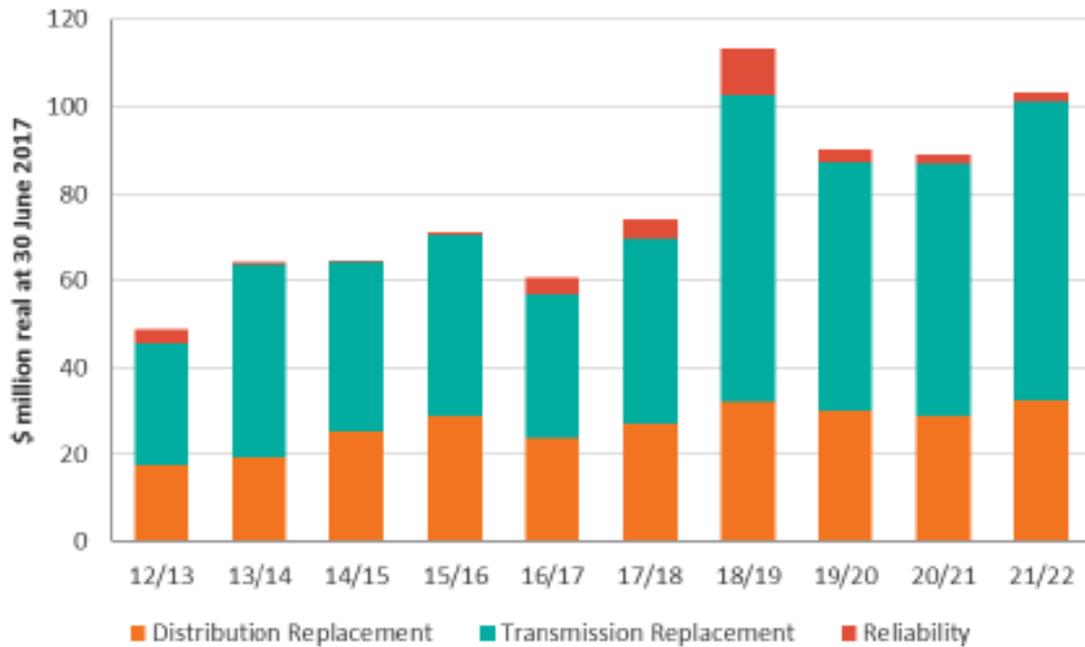
Synergy considers WP has not met this standard in its capex proposal, including in regards to the specific issues highlighted below.

5.2.1 Maintaining service levels

WP proposes to increase capex focused on maintaining service levels during AA4 relative to AA3, as seen in Figure 5. WP notes customers are generally satisfied with overall current levels of performance and so WP's forecast service performance capex for AA4 is focused on maintaining services levels that were achieved in AA3. 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. This appears to suggest the underlying operations and investments may not be consistent with section 2.1 of the Code and may be a result of cross subsidisation between the transmission, distribution and metering businesses. In Synergy's view, the Code contemplates all three businesses should be efficient and one business unit should not compensate for inefficient decisions or operations in the other business units.

Further, in light of WP's proposed transmission price path, Synergy submits the Authority should determine what level of "cross subsidised operational or investment arrangements" exists, if any, in relation to investment and operation of the transmission, distribution and metering business is consistent with the Code objectives. Synergy also submits the Authority should determine what information must be provided by WP under section 4.2 of the Code so users and the Authority can understand how these arrangements are consistent with the Code and require WP to provide that information. For example, if proposed investment in the metering business is subsequently decided to be reallocated, for commercial reasons, to the transmission business or vice versa.

Figure 5: WP's service performance capex forecast for AA4, compared with actual capex for AA3



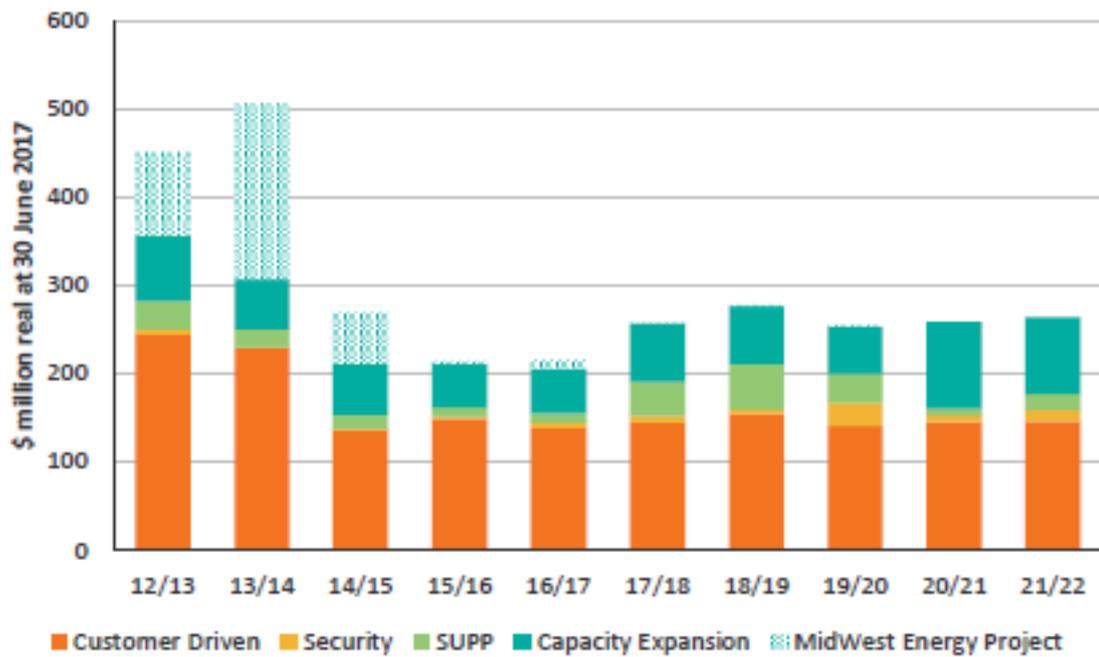
Source: WP, Access Arrangement Information, 2 October 2017, Figure 8.10.

5.2.2 Meeting forecast growth

WP notes during the course of AA3 the total capital investment was 22% less than included in the AA3 target revenue. WP states this lower capex was driven by a slowdown in the growth rate of peak demand, a reduction in customer-driven work, a risk-based approach to asset management and process improvements as a result of WP's Business Transformation Program.

However, for AA4, WP is forecasting a pick-up in growth-related capex relative to that in 2015/16 and 2016/17, as seen in Figure 6. This is despite the fact WP is forecasting peak demand will fall over the period of AA4 and that peak demand is forecast to be well below the levels forecast during AA3. It is unclear to Synergy (and WP has not adequately explained) why the rate of growth-related capex would need to increase (relative to growth-related capex in 2015/16 and 2016/17) if peak demand is forecast to be lower than during AA3 and falling over the period of AA4.

Figure 6: WP's growth-rated capex forecast for AA4, compared with actual capex for AA3



Source: WP, Access Arrangement Information, 2 October 2017, Figure 8.12.

5.2.3 Improving efficiency

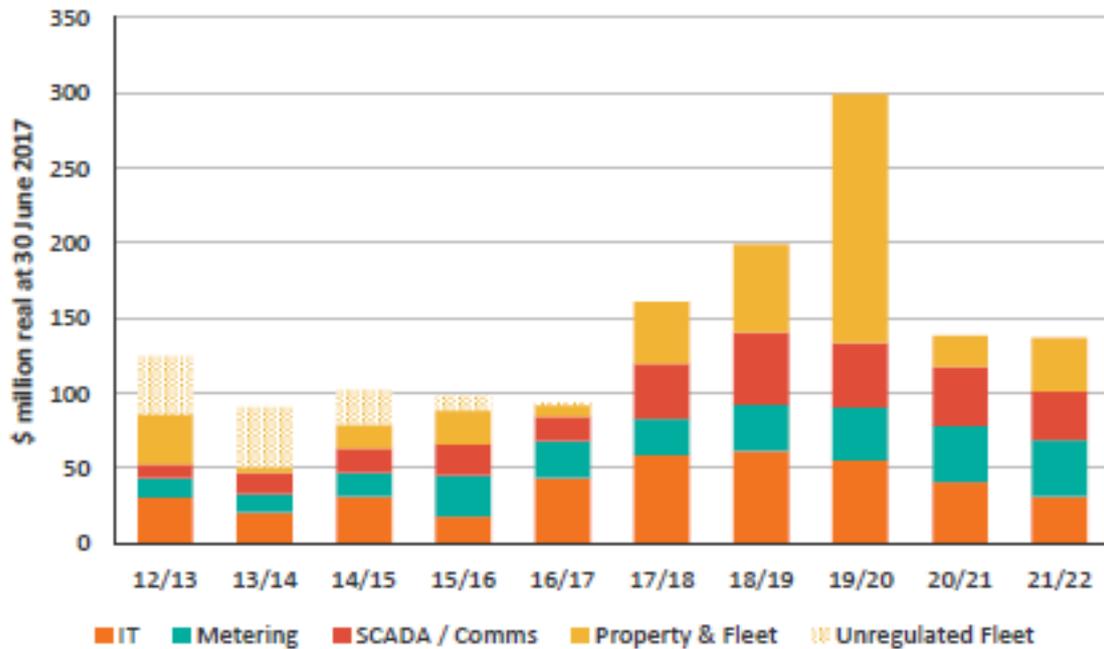
WP proposes a material increase in capex that is designed to improve operational efficiency as part of AA4, as seen in Figure 7.

As a general point, Synergy considers it is often unclear how the benefits of this expenditure in improving efficiency will flow through to customers. Synergy makes some specific points in this regard:

- The largest increase in capex designed to improve operational efficiency is related to property and fleet. WP states this is related to the modernisation of WP's metropolitan and regional operational depots, phase one of which will occur in AA4. WP states it considers this will deliver "recurring expenditure savings of \$10 million per annum and one-off benefits of \$60 million". In Synergy's view, it is unclear (and WP has not adequately explained) how WP's customers receive the benefit of these savings. It is possible the recurring expenditure savings of \$10 million per annum are part of the \$56 million of costs associated with the Business Transformation Program that have been removed from the 2016/17 actual opex to determine efficient base year opex, although this is not clear. Synergy has also been unable to see how the one-off saving of \$60 million will flow through to WP's customers.
- WP also proposes to invest significantly more in SCADA and communications systems in AA4 than in AA3. WP provides a number of reasons for this investment:
 - it is required to replace obsolete SCADA and communications equipment,
 - it will improve WP's ability to control and monitor the network remotely and this will increase asset utilisation and extend asset life and
 - it will improve the efficiency of staff deployment.

In Synergy’s view, it is unclear how the benefit of these latter two justifications will flow through to customers. It is unclear WP’s proposed amount for replacement capex reflects any extension to asset life and it is unclear WP’s proposed opex amount reflects operating efficiencies as a result of the investment in SCADA and communications equipment. Synergy submits WP has not provided adequate information to explain or justify the above matters and the Authority should require WP to do so.

Figure 7: WP’s capex forecast for AA4 for improving operation efficiency, compared with actual capex for AA3



Source: WP, Access Arrangement Information, 2 October 2017, Figure 8.14.

5.2.4 Application of the NFIT and regulatory test

WP has not provided sufficient information to demonstrate its proposed capex program for AA4 will satisfy the NFIT. This is particularly problematic given the material increase in capex for property and fleet and SCADA and communications systems. To the extent that some of this cost does not meet the NFIT, its addition to WP’s RAB would be in contravention of the Code and (having regard to section 26(1)(b) of the ERA Act) also contrary to the long-term interests of consumers.

Synergy also submits WP has failed to apply the regulatory test in Chapter 9 of the Code to its property and fleet and SCADA and communications systems, investment. Synergy considers these asset classes should be subject to the regulatory test since: (a) the assets increase the capability of WP in providing covered services, by improving WP’s operational efficiency; and (b) the cost of the assets will exceed the materiality thresholds in the Code. Synergy submits the Authority should ensure the regulatory test has been adequately applied with respect to each of these asset classes.

6 OPEX

In this section Synergy outlines its response to the opex forecasts in WP's proposal.

Table 4 summarises Synergy's response to the relevant aspects of WP's proposal, using the 'traffic light' system discussed in Section 2.3 of this submission. The rest of this section provides greater detail around the material issues Synergy has identified.

Table 4: Synergy's response to WP's opex proposal

Area	Our assessment	Decision/Rationale	Relevant section
Base-step-trend approach		<p>WP proposes to adopt a base-step-trend approach to forecasting opex.</p> <p>Synergy considers this appears consistent with the Code and with relevant matters in section 26(1) of the ERA Act to which the Authority must have regard. However, Synergy has not undertaken a detailed review of WP's implementation of its base-step-trend approach to forecasting opex and thus cannot comment on the appropriateness of its implementation by WP. Synergy submits the Authority should (having regard to the relevant Chapter 6 Requirements, the Code objective and other matters referred to in this submission, including the matters listed in section 26(1) of the ERA Act) undertake a detailed review of WP's implementation of its base-step-trend approach to forecasting opex.</p>	6.2
Establishing efficient base year		<p>WP proposes to use 2016-17 actual audited recurrent operating expenditure as the efficient base year.</p> <p>Synergy considers that benchmarking, if properly implemented, can be an appropriate tool for establishing whether WP's proposed base year opex is efficient. However, Synergy has not undertaken a detailed review of WP's use or implementation of its benchmarking and also has questions about the application and use of benchmarking by WP. Synergy submits the Authority should (having regard to the relevant Chapter 6 Requirements, the Code objective and other matters referred to in this submission, including the matters listed in section 26(1) of the ERA Act) undertake a detailed review of the application and use of benchmarking by WP.</p>	6.3 and 6.8
Step changes in recurrent expenditure		<p>WP proposes to apply a \$5 million reduction in recurrent expenditure due to efficiencies resulting from its Business Transformation Program.</p> <p>Synergy considers this appears consistent with the Code and with relevant matters in section 26(1) of the ERA Act to which the Authority must have regard. However, Synergy has not undertaken a detailed review of this aspect of WP's proposal and thus cannot comment on the appropriateness of its use or implementation by WP. Synergy submits the Authority should (having regard to the relevant Chapter 6 Requirements, the Code objective and other matters referred to in this submission, including the matters listed in section 26(1) of the ERA Act) undertake a detailed review of this aspect of WP's proposal.</p>	6.4

Trending the base year		<p>Synergy has concerns with the analysis used to establish the weightings for growth factors.</p> <p>Synergy recommends this analysis should be updated and submits that unless that is properly done, WP's proposal should be rejected in this respect.</p>	6.5
Adjusting non-recurrent expenditure		<p>WP proposes \$34 million of non-recurrent operating expenditure during the AA4 period.</p> <p>Synergy considers this appears consistent with the Code and with relevant matters in section 26(1) of the ERA Act to which the Authority must have regard. However, Synergy has not undertaken a detailed review of this aspect of WP's proposal and thus cannot comment on the appropriateness of its use or implementation by WP. Synergy submits the Authority should (having regard to the relevant Chapter 6 Requirements, the Code objective and other matters referred to in this submission, including the matters listed in section 26(1) of the ERA Act) undertake a detailed review of this aspect of WP's proposal.</p>	6.6
Escalation for labour costs		<p>Labour costs are forecast to increase by 1% in real terms in line with the Real WPI – EGWWS forecasts provided by SE Consulting.</p> <p>Synergy notes this appears consistent with the method that was previously applied in AA3 and approved by the Authority. However, Synergy has not undertaken a detailed review of this aspect of WP's proposal and thus cannot comment on the appropriateness of its use or implementation by WP. Synergy submits the Authority should (having regard to the relevant Chapter 6 Requirements, the Code objective and other matters referred to in this submission, including the matters listed in section 26(1) of the ERA Act) undertake a detailed review of this aspect of WP's proposal.</p>	6.7

6.1 Code requirements

The Code requires the non-capital cost component of approved total costs must include only those non-capital costs which would be incurred by a service provider efficiently minimising costs (section 6.40 of the Code).

Section 1.3 of the Code defines "efficiently minimising costs" as follows:

"efficiently minimising costs", in relation to a service provider, means the service provider incurring 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 costs of delivering covered services and without reducing service standards below the service standard benchmarks set for each covered service in the access arrangement or contract for services."

Section 1.3 of the Code defines "good electricity industry practice" as follows:

"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 costs, standards and guidelines.”

6.2 Base-step-trend approach

6.2.1 WP’s proposal

WP has adopted a ‘base-step-trend’ approach to forecasting recurrent opex.

6.2.2 Synergy’s comments

Synergy supports the use of a ‘base-step-trend’ approach to forecasting recurrent opex.

6.3 Establishing the efficient base year

6.3.1 WP’s proposal

WP proposes to use 2016/17 as the base year for forecasting recurrent opex. In 2016/17, WP states its recurrent opex was \$457 million. WP adjusts this \$457M recurrent opex by the following amounts and in the following ways to determine efficient base year opex:

- \$17 million of non-revenue cap opex is removed;
- \$56 million of opex is removed to reflect the efficiencies achieved through the Business Transformation Program;
- \$15 million of opex incurred for the EMR is removed;
- \$6 million of opex is added to account for adjustments due to the Mid-West Energy Project; and
- \$57 million of opex for indirect costs is removed because indirect costs are separately forecast.

The result is an estimate of efficient base year opex of \$318 million.

WP states that opex of \$318 million is efficient because it represents the benefits of the Business Transformation Program and reflects the lowest sustainable recurrent costs of providing covered services.

6.3.2 Synergy’s comments

Synergy considers that, if properly used and implemented, benchmarking WP’s proposed opex against the opex of other transmission and distribution businesses, can be a (but not the only) reliable way to assess whether WP’s proposed base year opex of \$318 million is efficient.

WP’s proposal does report some benchmarking results. However, as discussed in Section 6.8 of this submission, Synergy is not convinced these benchmarking results support the contention WP’s proposed base year opex of \$318 million is efficient.

Synergy also questions, as set out in Section 5 of this submission, the extent to which elements of WP’s capex proposal that involve additional capex to achieve efficiency gains are appropriately reflected in WP’s opex proposal.

6.4 Adjusting for recurrent step changes

6.4.1 WP's proposal

WP proposes to remove \$5 million from recurrent operating expenditure from 2017/18 to reflect initiatives associated with the Business Transformation Program that were not completed prior to 2017/18.

6.4.2 Synergy's comment

Synergy does not oppose these recurrent step changes.

6.5 Trending the base year

6.5.1 WP's proposal

WP has updated its approach to trending the base year for AA4, making use of different network growth factors, making use of separate network growth factors for distribution and transmission and applying a weighting system to these growth factors.

6.5.2 Synergy's comments

To the extent the growth factors relate to forecasts of customer connections, energy and peak demand, Synergy refers to the comments that it makes in Section 4 of this submission.

In relation to the weightings for growth factors, Synergy notes the weightings for both the transmission network and the distribution network used by WP are derived from regressions underlying the AER's benchmarking of the DNSPs and TNSPs in the NEM.

Distribution network growth factors

Synergy notes the relative weights for customer numbers (67.6), circuit length (10.7) and ratcheted maximum demand (21.7) in WP's distribution network growth factors are derived from an econometric regression which could potentially be problematic for a number of reasons:

- This regression was estimated in 2014, with data from 2006 – 2013. The relative coefficients on customer numbers, circuit length and ratcheted maximum demand are likely to change if the latest data from 2014 – 2016 is included. In other words, these network growth factors are now out of date.
- This regression was estimated including a sample of the 13 DNSPs in the NEM. In principle, WP could re-estimate the regression including itself as a 14th Australian DNSP in the sample, to see the impact on the resulting network growth factors.

Transmission network growth factors

Synergy notes the relative weights for circuit length (28.7), ratcheted maximum demand (22.1), energy delivered (21.4) and weighted entry and exit connection points (27.8) in WP's transmission network growth factors are derived from an econometric regression which could potentially be problematic for a number of reasons:

- This regression was estimated in 2014, with data from 2006 – 2013. The relative coefficients on circuit length, ratcheted maximum demand, energy delivered and weighted entry and exit

connection points are likely to change if you include the latest data from 2014 – 2016. In other words, these network growth factors are now out of date.

- This regression was estimated including a sample of the 5 TNSPs in the NEM. In principle, WP could re-estimate the regression including itself as a 6th Australian TNSP in the sample, to see the impact on the resulting network growth factors.

6.6 Adjusting for non-recurrent opex

6.6.1 WP's proposal

WP has proposed \$34 million of non-recurrent operating expenditure for the AA4 period largely related to the Business Transformation Program in 2017/18.

6.6.2 Synergy's comment

Synergy does not oppose these recurrent step changes.

6.7 Escalating for labour costs

6.7.1 WP's proposal

WP proposes to escalate labour costs based on forecasts of real wage price growth developed for WP by SE Consulting.

6.7.2 Synergy's comment

Synergy notes the forecasts of real wage growth from SE Consulting is somewhat higher than the equivalent forecasts from the budget papers. Nevertheless, since SE Consulting has also forecast real wage growth for the Electricity, Gas, Water and Waste Services sector, Synergy does not oppose the forecasts proposed by WP.

6.8 Benchmarking

Information on WPs benchmarking performance is available in section 7.11 and section 3.1.4 of the AAI. The Authority has also published a benchmarking report prepared for WP by SE Consulting on WP's productivity performance and raw data used for this analysis.

6.8.1 Summary of Synergy's comment

Synergy's key conclusions on the benchmarking analysis undertaken by SE Consulting are as follows:

- Synergy's review of SE Consulting's report suggests there is insufficient information to conclude WP's costs are efficient. Information published on customer density, customer numbers by distribution network location and network size suggests WP's closest DNSP peers in the NEM are likely to be SA Power Networks, Powercor and AusNet, which are three of the top 5 DNSPs in the NEM according to the AER's preferred benchmarking model. There is evidence of a large efficiency gap between WP and these three DNSP peers.
- Synergy notes WP ranks more favourably according to SE Consulting's MTFP and MPFP analysis, when compared to its econometric analysis and DEA analysis. However, Synergy does not agree with SE Consulting's assessment that its MTFP/MPFP analysis is a superior method which produces more robust results when compared to econometrics and DEA.

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- Synergy's review of SE Consulting's published underlying data for WP suggests there are a number of comparability issues with the way in which WP has reported information and the way it has been used in the AER's models used for benchmarking. For example, there is evidence to suggest WP has excluded \$200 million per annum of opex from its benchmarking models to account for taxes and levies. As the DNSPs in the NEM do not exclude such taxes and levies from their benchmarked opex, it is possible this cost adjustment may create a bias in favour of WP. We also note that data on certain variables, which are necessary for the replication of AER's work, are not included within the data file published by SE Consulting.
 - Overall, Synergy notes while SE Consulting states it has replicated the AER's benchmarking models, including the AER's MTFP analysis and econometric analysis, there is insufficient information published for Synergy to conclude the AER's analysis has been replicated correctly. and

For Synergy and other stakeholders to assess these issues, Synergy submits the Authority should require WP to release SE Consulting's underlying modelling files. This would enable Synergy and other stakeholders to undertake a more comprehensive assessment of the modelling.

Synergy elaborates on these matters in the remainder of this Section 6.

6.8.2 SE Consulting's preference for MTFP/MPFP analysis over SFA analysis

SE Consulting notes that while the AER has relied heavily on a **SFA** model developed by Economic Insights (the **EI Model**) for its assessment of DNSPs' base year opex, this approach has gathered a significant amount of criticism in recent appeals to the Australian Competition Tribunal (**the Tribunal**) and Federal Court.⁶²

Synergy agrees the AER is now less likely to apply results from its SFA analysis mechanistically. However, we do not necessarily agree with SE Consulting's assessment the AER's MTFP/MPFP analysis is a superior technique. Rather, we note as the AER did not use its MTFP/MPFP analysis to determine opex allowances in any way, the DNSPs in the NEM are yet to review or critique the AER's MTFP/MPFP analysis in any amount of detail. Further, Synergy notes:

- the AER's MTFP analysis results hinge on a set of econometric output weights that are derived by a regression excluding the international data. However, Synergy understands there are issues with this regression.
- the AER's set of output weights have not been updated since 2014, or with the inclusion of WP in the sample, which Synergy does not consider to be appropriate.
- the AER does not consider MTFP/MPFP to be suitable for assessments of relative efficiency. This is the reason for the AER's preference for using econometrics for the assessment of relative efficiencies.

For these reasons, Synergy does not share SE Consulting's assessment that MPFP analysis provides robust results on the relative productivity of Australian DNSPs.

⁶² For example, see *Applications by Public Interest Advocacy Service Ltd and Ausgrid Distribution* [2016] ACompT 1, *Applications by Public Interest Advocacy Service Ltd and Endeavour Energy* [2016] ACompT 2, *Applications by Public Interest Advocacy Service Ltd and Essential Energy* [2016] ACompT 3, *Application by ActewAGL Distribution* [2016] ACompT 4 and *Australian Energy Regulator v Australian Competition Tribunal (No 2)* [2017] FCAFC 79 at [188]-[386].

6.8.3 SE Consulting's assessment of comparator DNSPs

SE Consulting has identified WP has to be:

- one of the more rural DNSPs, when compared to the 13 DNSPs in the NEM;
- mid- to large sized, when compared to the 13 DNSPs in the NEM; and
- one of only a small number of DNSPs having CBD, urban, short rural and long rural sub-components (the only DNSPs in the NEM with these characteristics being SA Power Networks and Ausgrid).

Owing to the “strong rural” components of WP’s network, SE Consulting identifies the following DNSPs in the NEM to be the most suitable comparators for WP:

- SA Power Networks (South Australia)¹
- Powercor (Victoria)
- Ausnet Services (Victoria)
- Essential Energy (New South Wales)
- Ergon Energy (Queensland).

However, in Synergy’s view, based on the evidence that has been presented, two of the five peers above (Ergon Energy and Essential Energy) are unlikely to be suitable comparators for WP. Ergon Energy and Essential Energy are the two most rural DNSPs in the sample, with less than half WP’s number of customers per route line length kilometre, with a significantly larger service area than WP and a significantly more challenging operating environment than the remaining three peers identified above (Powercor, AusNet and SA Power Networks).

Synergy considers that evidence presented on customer density, customer numbers by distribution network location does indicate that Powercor, AusNet and SA Power Networks might, , be more suitable comparators for WP. Synergy also notes that TasNetworks is fairly comparable with WP in relation to customer density and it has a mix of urban, rural and long-rural customers like WP. Even though it is a relatively small network we would consider it to be a likely comparator to WP on the basis of information that has been published by SE Consulting (in Figure 1 through to Figure 5 in the SE Consulting report).

Synergy also notes that Powercor, AusNet and SA Power Networks are three of the top 6 most efficient DNSPs according to the AER’s preferred econometric benchmarking model. Should these three DNSPs, , be the most suitable comparators for WP on the basis of evidence from the raw data, it would be reasonable to expect WP to demonstrate its relative efficiency when compared to these three peers, rather than Ergon Energy and Essential Energy.

6.8.4 SE Consulting's assessment of comparator TNSPs

SE Consulting notes there are only six TNSPs in the NEM (compared to 13 DNSPs), with relatively large differences in their size. It states WP’s network size, throughput and maximum demand place it among the smaller TNSPs. In terms of climatic and terrain factors, SE Consulting notes WP has a reasonably large bushfire risk exposure (although probably somewhat less than TNSPs in NSW, Victoria and SA).

On the basis of the assessments above, SE Consulting argues that it makes little sense to identify a peer group to which WP belongs. Rather, SE Consulting argues that limited reliance should be placed on any productivity benchmarking applied to the TNSPs.

Synergy notes that SE Consulting's assessment above of WPs relatively small size and high bushfire exposure is not supported by evidence from the data. It would be helpful to conduct an assessment of WP's network characteristics (e.g., customer density, size, bushfire exposure, etc) using the data available, to understand whether SE Consulting's assessment of peers above is reasonable.

Synergy also notes that heterogeneity amongst the TNSPs is insufficient reason to argue that limited reliance should be placed on any productivity benchmarking applied to the TNSPs.

6.8.5 Results from SE Consulting's DNSP MTFP/MPFP analysis

Based on SE Consulting's analysis:

- WP ranks 4th out of 14 DNSPs on MTFP in the most recent year, 2016.
- WP ranks 8th out of 14 DNSPs on opex MPFP in the most recent year, 2016.
- WP ranks 3rd out of 14 DNSPs on capital MPFP in the most recent year, 2016.

This is set out in Figure 21 to Figure 23 of SE Consulting's report.

Synergy notes the AER's preferred benchmarking model, which is used to determine the relative efficiencies of the DNSPs, is an econometric Cobb-Douglas SFA model. The AER does not use MTFP/MPFP to determine relative efficiencies, as it acknowledges there are analysis issues, including the sensitivity of DNSP opex MPFP rankings to output weights. Synergy notes WP ranks lower in the econometric analysis and DEA analysis (presented below) when compared to the MTFP/MPFP analysis.

6.8.6 Results from SE Consulting's TNSP MTFP/MPFP analysis

Based on SE Consulting's analysis, WP ranks 3rd out of 5 TNSPs on MTFP, opex MPFP and capital MPFP in the most recent year, 2016. This is set out in Figure 24 to Figure 26 of SE Consulting's report.

Synergy notes WP has provided comparisons against only 4 of the 5 TNSPs in the NEM. It has not stated its rationale for excluding AusNet from the comparator sample. Synergy notes that AusNet had the second highest opex MPFP score amongst the 5 TNSPs in the NEM in the AER's 2016 annual benchmarking report, which would mean WP's ranking would likely drop from 3rd out of 5 TNSPs to 4th out of 6 TNSPs if AusNet were to be included in the sample.

Synergy also notes the AER has signalled a change in its MTFP and MPFP approach in its 2017 annual benchmarking report, which may not be reflected in SE Consulting's work.

6.8.7 Results from SE Consulting's SFA analysis

Synergy notes WP ranks 9th out of 14 DNSPs according to the SFA results presented by SE Consulting.

Synergy notes these results do not account for differences in operating environment between the DNSPs and might be limited by data comparability issues (as we agree that collating WP's data on a like-for-like basis with the AER is likely to have been a challenge). Therefore, Synergy submits the Authority and others should exercise a degree of caution with regards to how these results should be interpreted. However, notwithstanding these caveats, Synergy considers the evidence may suggest

WP to be less efficient in comparison to all its peers (especially Powercor, AusNet and SA Power Networks, which have significantly higher SFA scores).

Synergy also notes the SFA efficiency scores presented by SE Consulting (in Figure 27 of the SE Consulting report) are average efficiency scores over time. Synergy understands a number of DNSPs that are shown to be less efficient than WP on average are likely to have improved their efficiency significantly in more recent years. For example, DNSPs like ActewAGL, Ausgrid and Essential Energy were required by the AER to make more than 25% reductions in opex between 2015 and 2016 alone and there have been even further reductions since. In Synergy's view, WP may not be as efficient if its performance were to be assessed in the more recent years.

6.8.8 Results from SE Consulting's DEA analysis

Based on SE Consulting's DEA analysis, WP ranks 7th to 8th out of a total of 14 DNSPs, depending on model specification. This is set out in Figure 30 of SE Consulting's report.

Synergy considers these results support there is scope for further efficiency savings to be made by WP relative to NEM DNSPs.

6.8.9 Synergy's comments on SE Consulting's underlying data

Synergy's review of SE Consulting's published data for WP suggests there are comparability issues in relation to the AA4 information and the way that it has been used in the AER's models used for benchmarking. For example:

- It appears WP has excluded \$200 million per annum of opex from its benchmarking models to account for taxes and levies. As the DNSPs in the NEM do not exclude such taxes and levies from their benchmarked opex, it is possible this cost adjustment is creating a bias in favour of WP.
- It appears SE Consulting has measured WP's reliability in its MTFP analysis for the TNSP using data on customer minutes off supply, while the AER measures reliability of the NEM TNSPs using data on energy unsupplied. If SE Consulting has mapped WP's customer minutes off supply against energy unsupplied by the NEM TNSPs, this would not be a consistent basis for comparison.
- It appears that SE Consulting has mapped WP's voltage-unweighted entry and exit connections against voltage-weighted entry and exit connections of the NEM TNSPs. If this is the case, this would not be a consistent basis for comparison.

Synergy also notes that data on certain variables which are necessary for the replication of AER's work have not been included within the data file published by SE Consulting.

7 INCENTIVE SCHEMES

In this section Synergy outlines its response to WP's proposals regarding the incentive schemes to apply during AA4. Section 6 of WP's proposal deals with incentive schemes and adjustment mechanisms.

Table 5 summarises Synergy's response to these aspects of WP's proposal, using the 'traffic light' system discussed in Section 2.3 of this submission. The rest of this section provides greater detail around the material issues Synergy has identified.

Table 5: Synergy's response on WP's proposed incentive schemes

Area	Our assessment	Decision/Rationale	Relevant section
Gain Sharing Mechanism		<p>Synergy considers:</p> <ul style="list-style-type: none"> WP has not provided sufficient information to determine whether the EIBs are appropriate and robust and will lead to outcomes that are consistent with the objectives of the Code. In particular, WP has not explained in detail how it has developed its EIBs or demonstrated how its proposed EIBs are consistent with the objectives in the Code. Incentives under WP's proposed GSM may be limited due to its interaction with the IAM or other incentive mechanisms. WP's proposed GSM is not symmetrical in its operation and the incentive for WP to pursue opex efficiencies would be greatly improved by making the GSM symmetrical both as regards treatment of gains and losses and WP's proposal to split its GSM between transmission and distribution networks (which currently may lead to unintended outcomes that overall do not promote economic efficiency). <p>Synergy therefore submits WP has not provided adequate justification that its proposed GSM is consistent with the Code requirements and the Authority should (having regard to the relevant requirements of the Code, the matters listed in section 26(1) of the ERA Act and the other matters referred to in this submission) reject WP's proposed GSM.</p>	7.1
Investment Adjustment Mechanism		<p>Synergy considers WP's proposed IAM limits the incentive to achieve capex efficiencies, increasing the risk of over-investment in the network and commensurately higher network prices in the future. Interaction between the IAM and GSM may distort decisions about whether to undertake capex or opex, potentially leading to inefficient outcomes.</p> <p>In Synergy's view, a capex incentive scheme should be included in AA4 in place of the current IAM.</p> <p>Synergy recommends the Authority should remove SMI from the IAM or, in the alternative, ensure SMI expenditure is subject to strict regulatory assessment through other mechanisms.</p> <p>Synergy therefore submits WP's proposed IAM is not consistent with the Code requirements and so the Authority should (having regard to the relevant requirements of the Code, the matters listed in section</p>	7.2

		26(1) of the ERA Act and the other matters referred to in this submission) reject WP's proposed IAM.	
Service Standards Adjustment Mechanism		<p>Synergy submits the Authority must consider the interaction between the SSAM and the IAM, which may provide incentives for WP to over invest the network to achieve higher service performance and receive both cost recovery through the IAM and an incentive payment under the SSAM.</p> <p>Synergy further submits WP's proposal not to apply the SSAM in 2017/18 fails to promote economic efficiency consistent with the Code objective and WP's proposed SSAM is therefore contrary to section 6.31 of the Code. Synergy considers WP must have an SSAM for 2017/18 which contains appropriate sanctions/rewards for failing to achieve/achieving SSB. If that is not possible, then at the very least, WP should be required to formally report its service performance against AA3 benchmarks in 2017/18.</p> <p>Synergy therefore submits WP's proposed SSAM is not consistent with the Code requirements and so the Authority should (having regard to the relevant requirements of the Code, the matters listed in section 26(1) of the ERA Act and the other matters referred to in this submission) reject WP's proposed SSAM unless it is re-worked:</p> <ul style="list-style-type: none"> ▪ so that (having regard to the interaction between the SSAM and the IAM) incentives for WP to over invest the network are avoided. In this regard, Synergy notes that, overly stringent SSB or STT may lead to inefficient over investment and Synergy therefore recommends maintaining for AA4 the same SSTs that applied in AA3. ▪ the SSAM is also applied for 2017/18 with appropriate sanctions/rewards for failing to achieve/achieving SSB. If that is not possible, then at the very least, WP should be required to formally report its service performance against AA3 benchmarks in 2017/18. However, given WP has volunteered to continue to apply AA3 SSB in 2017/18 so that customers are "no worse off", Synergy submits it would be reasonable for WP to also apply AA3 SST in 2017/18. 	7.3
D-factor		<p>Synergy submits:</p> <ul style="list-style-type: none"> • WP's proposed D-factor does not entirely address the bias towards network options over non-network options related to demand management. WP's proposed changes do not ensure it will choose the overall least cost option between capital and non-capital solutions. • WP's proposed "minor administrative amendment" requiring the Authority to determine certain D factor applications within 25 business days may lead to determinations that have to be hastily made without time for public consultation or gathering full information and which are therefore potentially not consistent with the Code objective. <p>Synergy therefore submits WP's proposed D-factor is not consistent with the Code requirements and so the Authority should (having regard to the relevant requirements of the Code, the matters listed in section 26(1) of the ERA Act and the other matters referred to in this submission) reject WP's proposed D-factor unless it is re-worked:</p>	7.4

		<ul style="list-style-type: none"> ▪ to provide stronger incentives for WP to pursue demand management activities, drawing in particular on the proposed DMIA and DMIS in the NEM; and ▪ for intra-period applications, to allow the Authority sufficient time and provide it with sufficient information in a suitable form to enable it to efficiently and effectively apply the test under sections 6.40 and 6.41 of the Code within the required timeframe (with sufficient time to conduct any public consultation and obtain any information/advice it requires to enable its determination to be consistent with the Code objective). 	
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7.1 Gain Sharing Mechanism (GSM)

7.1.1 Code requirements

Section 6.20 of the Code requires an access arrangement to include a GSM unless the Authority determines that a GSM is not necessary to achieve the price control objective set out in section 6.4(a)(ii) of the Code.

Section 6.21 of the Code requires a GSM must have the objective of:

- achieving an equitable allocation over time between network users and WP of innovation and efficiency gains in excess of EIBs);
- being objective, transparent, easy to administer and replicable from one access arrangement to the next; and
- giving WP an incentive to reduce costs or otherwise improve productivity in a way that is neutral in its effect on the timing of such initiatives.

Under the Code, a surplus arises if WP's actual returns from the sale of covered services in a previous access arrangement period are greater than forecast returns (section 6.23 of the Code). The Authority must determine how much (if any) of the surplus results from efficiency gains or innovation by WP in excess of the EIBs in the previous access arrangement (section 6.25 of the Code). An above benchmark surplus does not exist to the extent that it arises from WP not meeting its service standards (section 6.26 of the Code).

The Authority must apply the GSM to determine how much (if anything) is to be added to the target revenue for the next or subsequent access arrangement periods to enable WP to continue to share in the benefits of the efficiency gains or innovations which gave rise to the surplus (section 6.27 of the Code).

7.1.2 WP's Proposal

WP is proposing to apply the same GSM in AA4 it applied in AA3, with some changes to the way in which the EIBs are escalated and an adjustment to ensure the scheme is applied separately to each of WP's distribution and transmission businesses.

The key features of WP's GSM are as follows:⁶³

- the scheme applies to opex only, not to capex;
- the scheme calculates the above-benchmark surplus in each year of the access period as the incremental efficiency gain or loss in opex, relative to the (escalated) EIB for that year;
- the above-benchmark surpluses are adjusted to remove any surplus achieved by WP failing to meet its requisite service standards;
- target revenue in the subsequent access period is adjusted by carrying forward the above-benchmark surplus for a period of 5 years after the year in which the surplus was incurred; and
- in any year where the amount of an adjustment to target revenue is a negative value, the adjustment is deemed to be zero in that year.

7.1.3 Synergy's comments

Synergy supports the use of a GSM to incentivise WP to pursue opex efficiencies.

Synergy notes the usual practice of the Authority to not 'claw back' any efficiency gains achieved within an access period, i.e. there is no ex-post adjustment for any differences between forecast and actual opex at the end of the period. However, Synergy also notes the no claw back principle alone does not provide incentives that are consistent with the objectives of the Code, since WP's incentive to reduce its opex would decrease as it approached the end of the access arrangement period. For this reason, the GSM plays an important role in ensuring WP has a constant and continuous incentive to achieve efficiency gains in opex, which is invariant to the timing in which those gains are incurred.

Having said this, Synergy considers there are limitations with WP's proposed GSM approach. For example:

EIB issues

The effectiveness of the GSM depends heavily on developing appropriate and robust EIBs, since these will determine the magnitude of the incentive WP will face. However, the AA4 provides little information on how the EIBs have been developed. This is inconsistent with the Code, which explicitly provides the EIBs should 'be sufficiently detailed and complete to permit the Authority to make a determination' (section 5.26 of the Code). Further, the absence of information on how the EIBs were developed limits the integrity of the mechanism, since it means Synergy and other interested parties are unable to assess whether WP is subject to sufficiently robust incentives to achieve efficiencies in opex. Synergy submits the Authority should require WP to explain in detail how it has developed its EIBs under AA4 and demonstrate how its proposed EIBs are consistent with the Code objective.

Asymmetry issues

(a) GSM treatment of efficiency gains and losses

Synergy notes the GSM is not symmetrical in its operation. That is, all incremental efficiency **gains** are carried over, however incremental efficiency **losses** are only carried over to the extent they do not result in an absolute reduction in WP's opex in any given year. This is inconsistent with the approach adopted by the AER in the NEM, where the EBSS carries forward all incremental efficiency gains and

⁶³ WP's proposal, pp 47-52.

losses.⁶⁴ Synergy submits the incentive for WP to pursue opex efficiencies will be greatly improved by removing this constraint and making the GSM symmetrical.

(b) Proposed separate GSM operation for distribution and transmission

WP is also proposing to amend the operation of the GSM so it applies separately to each of WP'S transmission and distribution networks. While Synergy is not opposed to this change in principle, the Authority must ensure the incentives **between** the two networks are consistent. Absent this, WP may inefficiently characterise its opex as distribution or transmission, to maximise its GSM benefit for one business and minimise its GSM loss for the other business.

For example, in the situation where WP incurs a large GSM gain on its distribution business and a loss on its transmission business. Under a joint distribution-transmission scheme (as currently applies for AA3), the net effect of these outcomes would be carried forward. As such, 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 localise all expected efficiency losses in one business.

That is, whereas the current (AA3) joint distribution-transmission scheme would provide an incentive for WP to improve efficiency for **both** distribution and transmission otherwise it has no prospect of a GSM reward (i.e. "all or nothing"), WP's proposed separate schemes for distribution and transmission for AA4 would potentially allow WP, without any additional input or overall improvement as compared to what would apply in a joint distribution-transmission scheme, to earn a GSM reward it would not otherwise get under the current joint regime. Synergy therefore submits WP's proposed joint scheme provides limited incentive for WP to make any overall improvement in efficiency as compared to its current performance and WP has therefore not demonstrated how its proposed scheme will necessarily

- achieve an "equitable allocation over time between users and the service provider" as required by section 6.21(a) of the Code;
- promote the objective of "giving 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" as required by section 6.21(c) of the Code; or
- promote economically efficient investment in and operation and use of the network and network services as required for consistency with the Code objective.

Synergy submits the above asymmetry issues can be addressed by making the GSM symmetrical in operation as between efficiency gains and losses and between WP's transmission and distribution business. Synergy considers this approach better achieves the Code objectives.

Interrelationship between GSM and other incentive mechanisms

Finally, Synergy notes the incentives provided by the GSM should be assessed together with the other incentive mechanisms included in AA4, particularly the IAM. The schemes should not be considered in isolation. If the incentive to achieve opex efficiencies provided by the GSM is not matched by an equivalent incentive to achieve capex efficiencies, or is not considered with respect to the trade-off

⁶⁴ AER, *Better Regulation – Efficiency Benefit Sharing Scheme for Electricity Network Service Providers*, November 2013.

between achieving cost efficiencies and maintaining service standards, then it could result in unintended outcomes. This issue is explored further in the following sections.

7.2 Investment Adjustment Mechanism

7.2.1 Code requirements

Under section 6.15 of the Code, WP's access arrangement must contain an IAM. An IAM must detail how any investment difference is to be treated by the Authority at the next access arrangement review (section 6.13 of the Code). An "investment difference" is defined as the difference between actual new facilities investment which occurred during the access arrangement period and forecast new facilities investment which at the start of the access arrangement period was forecast to occur during that period (section 6.14 of the Code).

Section 6.17 of the Code provides an IAM must be sufficiently detailed and complete to enable its application by the Authority, consistent with the GSM (if any) in the access arrangement and consistent with the Code objective. The Code does not prescribe the type of IAM (section 6.16 of the Code).

7.2.2 WP's Proposal

WP is proposing to apply the same IAM in AA4 that it applied in AA3, with some adjustments to the expenditure categories that are subject to the scheme. The scheme applies separately to WP's distribution and transmission businesses.

The IAM proposed by WP is principally a scheme to correct for forecasting error in capex. It provides for an adjustment to target revenue in the next regulatory period to ensure WP and its customers are financially neutral due to differences between actual and forecast capex in the current regulatory period.

The IAM is limited to certain expenditure categories, which for AA4 are:⁶⁵

- the connection of new generation capacity and new load;
- all augmentations to provide additional capacity;
- the SUPP; and
- the provision of metering installations on the distribution system.

The IAM is applied by calculating the difference in net present value terms between the target revenue that would have been calculated for the current access arrangement period if the investment difference had been zero (i.e. there was no forecasting error in relation to the new facilities investment categories that are subject to the AIM) and the target revenue that actually applied in the period.⁶⁶ This amount will be added to target revenue in the next period (if WP has overspent its capex allowance), or subtracted from target revenue in the next period (if WP has underspent its capex allowance).⁶⁷

⁶⁵ WP's proposal, p 47.

⁶⁶ WP's proposal, p 47.

⁶⁷ WP's proposal, p 46.

7.2.3 Synergy's comments

WP is proposing changes to the investment categories subject to the IAM, vis-à-vis AA3. In particular, WP is proposing to:

- 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 AA2 and 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. 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.

The current IAM means the treatment of capex in the SWIS is fundamentally different to the NEM. Network businesses in the NEM are subject to continuous and symmetric incentives to reduce capex due to:

- The 'no claw-back' principle, which states there is no ex-post adjustment at the end of the regulatory period to account for differences between forecast and actual capex in the period. This provides incentives for a network business to make efficiency improvements as it will retain any difference between actual and forecast costs (or means the network business wears the financial penalty when forecast costs exceed actual costs).
- 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.

In view of these issues, Synergy recommends the inclusion of a capex incentive scheme in AA4 . Synergy submits this capex incentive scheme should replace the current IAM and include the following features:

- no ex-post adjustment to target revenue in the next access period to account for differences between forecast and actual capex in the current period provided the differences are shown to be economically efficient (e.g. WP'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
- provide WP with continuous and sustained incentives to pursue capex efficiencies and ensure these incentives are equivalent to the incentives WP faces under the GSM.

Synergy submits these changes will better satisfy the Code objective of promoting economically efficient investment in and operation of and use of, networks and services of networks in Western Australia. Further, Synergy submits its recommended changes:

- are also consistent with good regulatory practice (which also promotes economic efficiency consistent with the Code objective),
- will align the regulatory approach in the SWIS with the NEM framework, which Synergy considers would promote a regulatory outcome that is in the public interest (which is a matter the Authority must have regard to under section 26(1)(a) of the ERA Act) and also promote economic efficiency consistent with the Code objective; and,
- more generally, will be in the long-term interests of consumers (since Synergy considers its recommended changes would be expected to result in lower network prices for electricity customers going forward, vis-à-vis the current approach), which is a matter the Authority must have regard to under section 26(1)(b) of the ERA Act and also promotes economic efficiency consistent with the Code objective.

7.3 Service Standards Adjustment Mechanism

7.3.1 Code requirements

Section 6.30 of the Code requires an access arrangement must contain a SSAM. The Code does not prescribe the form of SSAM, but does require that a SSAM must be (a) sufficiently detailed and complete to enable the Authority to apply the SSAM at the next access arrangement review; and (b) consistent with the Code objective (section 6.31 of the Code).

7.3.2 WP's Proposal

WP is proposing to apply the same SSAM in AA4 that it applied in AA3, with some changes to the specific parameters that are measured. The SSAM rewards (penalises) WP depending on its performance against pre-determined SST. The scheme also establishes distinct SSB that reflect minimum service standards and impose a hard cap on the financial penalty WP faces if its performance falls below the SST.

A summary of the parameters included in the SSAM is provided in Table 6.⁶⁸

Table 6: WP's proposal re the parameters to be included in the SSAM

Metric	Description
Transmission	
Circuit availability	The actual hours transmission circuits are available, divided by the total possible hours available for transmission circuits
Loss of supply event frequency	The frequency of unplanned customer outage events where loss of supply: (1) exceeds 0.1 system minutes interrupted and less than or equal to 1.0 system minutes interrupted; and (2) exceeds 1.0 system minutes interrupted
Average outage duration	The accumulative actual duration of unplanned outages, divided by the total number of events on regulated transmission circuits
Distribution	
SAIDI	The sum of the duration of each sustained distribution customer interruption (greater than 1 minute) attributable to the distribution system, divided by the number of distribution customers served
SAIFI	The number of sustained distribution customer interruptions (greater than 1 minute) attributable to the distribution system, divided by the number of distribution customers served
Call centre performance	In relation to interruptions and life-threatening emergencies, percentage of calls responded to in 30 seconds or less

WP notes the SSAM is designed so that performance would exceed the SST 50% of the time and fall below the SST 50% of the time, the net outcome being overall service levels are maintained.⁶⁹

⁶⁸ WP's proposal, Chapter 4.

⁶⁹ AAI, p 58.

WP has set its SST and SSB equal to the 50th and 99th percentile of the average of the distributions of best fit for each metric, respectively.⁷⁰ It will calculate the SSD in any given year as the SST for that year, less actual service performance (except when actual service performance is greater than the SSB, in which case the SSD is hard capped as the difference between the SST and the SSB).⁷¹ Synergy notes these calculations exclude events that occur on major event days.

For distribution, the revenue increments/decrements are calculated by multiplying the SSD with the applicable ‘incentive rate,’ being the percentage change in WP’s revenue allowance for each unit of over/under achievement of a given SST. WP states its incentive rates are based on its value of customer reliability and have been determined in accordance with the AER’s 2009 STPIS for DNSPS.⁷² For transmission, the revenue increments/ decrements are calculated by allocating the transmission revenue-at-risk in accordance with predefined weightings for each parameter.⁷³

The sum of all rewards/penalties under the SSAM is capped at 5% of the revenue requirement for distribution and 1% of the revenue requirement for transmission.⁷⁴

7.3.3 Synergy’s comments

Synergy notes there are differences between the SSAM proposed by WP and the STPIS applied by the AER in the NEM.⁷⁵ Key differences are:

- The STPIS includes additional parameters, such as:
 - the MAIFI for DNSPs, which measures the total number of customer interruptions of 1 minute or less, divided by the number of distribution customers;
 - unplanned outage circuit event rate for TNSPs, which is the actual number of times defined transmission circuits are unavailable due to unplanned outages, divided by the total number of defined circuits; and
 - proper operation of equipment parameter for TNSPs, which counts the number of times protection or control systems fail as well as occurrences of incorrect operational isolation of equipment during maintenance.
- 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.

WP notes its proposed SST for AA4 are ‘the same or more stringent for the majority of measures’ with exceptions for rural long SAIDI and SAIFI and average outage duration.⁷⁶

Synergy submits the proposed SST does not reflect the feedback from WP’s Customer Insights Report (AAI Attachment 4.1). In particular, this report states that ‘customers are not prepared to pay for an improved service generally, but are willing to support those specifically in regional areas where the

⁷⁰ AAI, pp 89 and 98. Note the SSB for circuit availability and call centre performance is expressed in inverse (i.e. the 1st percentile).

⁷¹ WP’s proposal, p 53.

⁷² AAI, pp 101-103.

⁷³ AAI, pp 103-104.

⁷⁴ AAI, p 104.

⁷⁵ AER, *Final – Electricity Transmission Network Service Provider – Service Target Performance Incentive Scheme Version 5 (Corrected)*, October 2016; AER, *Electricity Distribution Network Service Providers – Service Target Performance Incentive Scheme*, November 2009.

⁷⁶ AAI, p 98.

performance would be below what would be deemed acceptable.⁷⁷ Further, in its AAI, WP notes 'customers have told us they don't necessarily want us to improve overall levels of reliability, but they are happy for us to target expenditure on pockets of the network where reliability is lower than average.'⁷⁸

These insights suggest customers are generally unwilling to pay for improvements to overall levels of reliability that would follow from the imposition of more stringent SST (vis-à-vis the targets set in AA3). Considering this, Synergy recommends the Authority amend the SST to ensure WP will maintain current levels of overall reliability, rather than improve upon current levels. This can be achieved by maintaining the same SST applied in AA3 in the forthcoming access period. Synergy considers this will ensure WP does not overinvest in areas of its network where customers are satisfied with network reliability and instead focuses on those areas of the network where reliability may fall below average levels, consistent with the outcomes of the Customer Insights Report.

In addition, it is unclear (and WP has not adequately explained) how WP has converted the revenue at risk for its transmission business into applicable incentive rates. For TNSP in the NEM, this occurs through specification of four required variables: parameter weightings, performance targets, caps and collars. All four of these metrics are required to determine the size of the revenue increment (decrement) that a TNSP will earn (incur). WP's access arrangement only specifies two of these metrics (i.e. parameter weightings and performance targets), which are necessary but not sufficient to determine incentive rates for each metric. Synergy submits WP should clarify how it has calculated incentive rates for transmission.

Synergy notes WP is proposing to not apply the SSAM in 2017/18. Specifically, WP proposes the SSAM be changed for AA4 so that, because AA4 is not expected to be approved until 1 July 2018 (a year after the AA4 period commences on 1 July 2017), no SST should be determined and the SSAM should not apply for the first year of the AA4 period (2017/18), but AA3 SSB would continue to apply in 2017/18 (AAI [358]). WP claims its proposal to continue applying AA3 SSB in 2017/18 will ensure the minimum standards are maintained and customers will not be worse-off (AAI [358]). However, it is not entirely clear how SSB will "ensure" any such thing, as unlike the SSAM, the SSB alone do not have financial penalties/rewards attached to them (although failure to achieve SSB can prevent GSM rewards arising).

Synergy understands it is not consistent with good regulatory practice to impose financial rewards or penalties on a regulated business subject to a scheme that is introduced ex-post. However, Synergy submits that consistency with the Code objective requires there should at least be some form of consequence for failure to meet SSB.

WP claims the AA3 SSAM and associated SST should not be applied in AA4 because that would be "in a context different to the one in which it was intended" (AAI [357], last dot point). However, Synergy questions if the context is really so materially different. It is unclear what performance measures and targets has WP in practice been applying since 1 July 2017.

Synergy notes WP does state it "will continue to apply AA3 SSBs in 2017/18. This will ensure the minimum standards are maintained and our customers will not be worse-off."⁷⁹

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?

⁷⁷ AAI Attachment 4.1, p 34.

⁷⁸ AAI, p 4.

⁷⁹ AAI, [358].

The relevant requirements for a SSAM (see sections 6.29 to 6.32 of the Code) give significant latitude as to how WP's performance against the chosen SSB is to be treated. However, above all, the SSAM must be consistent with the Code objective (section 6.31(b) of the Code). 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 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.

In any case, WP has stated it will continue to apply the AA3 SSBs in 2017/18, so that customers "will not be worse-off". Logically, a way to ensure customers will not be worse off would be to continue to apply the AA3 SST in 2017/18. By effectively continuing the AA3 incentive mechanism for 2017/18, WP is not faced ex-post with un-similar SSB or SST and there is a better chance of WP fulfilling its undertaking that customers "will not be worse off" and of satisfying the Code objective of promoting economic efficiency, than if WP did not have **any** meaningful rewards/sanctions for achieving/failing to achieve SSB in 2017/18.

Synergy therefore submits that if WP is to be permitted to dis-apply the SSAM in 2017/18 then the Authority should (having regard to the requirements of the Code (including the definition of SSB in section 1.3 of the Code, sections 5.1(c), 5.6 and 6.29 to 6.32 of the Code and the Code objective) and the matters listed in section 26(1) of the ERA Act) include some form of incentive mechanism (if possible, one with appropriate regulatory oversight) to encourage WP to ensure performance standards are met during 2017/18.

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 if there are no financial rewards or penalties applied for any under or over performance in that year).

Further, Synergy submits the Authority should consider the interaction between the SSAM and the IAM as this is critical to the overall promotion of economic efficiency consistent with the Code objective. For example, taken together, the IAM and SSAM may provide incentives for WP to over invest in the network to achieve higher service performance, as it would receive both cost recovery for the additional investment through the IAM and also an incentive payment under the SSAM.

7.4 D-factor

7.4.1 Code requirements

The Code does not provide any explicit provisions for inclusion of a D-factor.

7.4.2 WP's Proposal

The D-factor allows WP to recover an amount through target revenue in AA5 in respect of any additional opex incurred as a result of deferring a capex project during AA4, or in relation to demand

management initiatives or network control services,⁸⁰ where that opex meets the requirements of section 6.40 and 6.41 of the Code.⁸¹

WP is proposing some "minor administrative amendments" to the D-factor scheme to:

- allow WP to lodge an application outside of an access arrangement review process for a determination by the Authority whether expenditure satisfies the D-factor non-capital costs tests; and
- requiring the Authority to make that determination within 25 business days of receipt of WP's application (AAI [421] and WP's proposal at sections 7.6.6 to 7.6.10).

If the Authority approves these costs, they are to be added to the revenue requirement in the next access arrangement period.

7.4.3 Synergy's comments

WP notes the D-factor is designed to offset the bias towards capex projects provided by the IAM. It states if the D-factor did not exist, or did not provide an effective incentive, WP would be incentivised to spend capex rather than opex, since capex overspends can be recovered under the IAM, while opex overspends are penalised under the GSM.⁸² Synergy submits the same objective can be achieved by amending the IAM as per the suggestions above, to bring it in line with the CESS which is currently applied in the NEM.

In addition, Synergy also submits the D-factor does not entirely address the bias towards network options over non-network options related to demand management.

It is important to understand this bias can manifest itself in several ways, only one of which is addressed by the operation of the IAM. Apart from this, when a distributor invests in network assets, capex is included in its RAB where it accrues the allowed rate of return over the life of the assets, which is typically decades long. This treatment of capex can create an incentive for a distributor to prefer network solutions to non-network solutions if the distributor and/or its investors prefer relatively stable long-term cash flows and receive an allowed rate of return on capex that is above its actual cost of capital, which would produce an opportunity for it to profit from its capex. Synergy submits the D-factor does not address these incentives that are inherent in the current regulatory framework.

The first set of circumstances identified by WP in which the D-factor would apply is where additional opex is incurred because of deferring or avoiding capex. It does not appear this circumstance is limited to demand side measures, but rather would apply in all cases where opex is substituted for capex. Synergy submits this outcome is inconsistent with the intention of the scheme, which is to incentivise demand management activities.

⁸⁰ "network control services" is defined in WP's proposal at section 7.6.1 as demand-side management or generation solutions (such as distributed generating plant) that can be a substitute for network augmentation).

⁸¹ WP's proposal, pp 56-57; AAI, [419].

⁸² AAI, pp 110-111.

The second set of circumstances in which WP proposes to apply the D-factor is where additional opex is incurred due to demand management initiatives. WP's proposed D-factor would appear to result in a revenue adjustment in relation to any demand side initiative and not just where the initiative defers the need for a network solution. In both cases, WP does not propose any limit on the extent of expenditure that may be recovered under the D-factor and therefore the extent of the costs that customers may be expected to meet.

In comparison to the NEM, the incentives under AA4 to invest in non-network solutions are far less. Previously, the AER's DMEGCIS provided for an ex-ante allowance to DNSPs to fund demand management projects.⁸³ However, the AER is currently consulting on two new schemes – the DMIA, which is essentially an extension of the DMEGCIS and the DMIS.⁸⁴

The DMIS is designed to provide DNSPs with an opportunity to earn a return for undertaking efficient demand management projects. As such, DNSPs are encouraged to actively seek these opportunities in managing and planning their distribution networks. The scheme goes beyond allowing a DNSP to recover the efficient costs associated with demand management (which is the purpose of the D-factor) and provides an explicit financial incentive to undertake demand management projects in the form of an uplift on the costs of those projects.

Intra-period applications

Synergy submits WP's proposal to amend the D-factor to allow an application to be made intra-period may better encourage WP to consider demand management options (vis-à-vis the status quo). However, Synergy submits it does not ensure WP will choose the overall least cost option when choosing between capital and non-capital solutions and does not address the broader issues identified above.

Further, Synergy is concerned WP's proposed 25 business day timeframe for the Authority to make a determination may be too short to enable the Authority to conduct public consultation (if required) and obtain any necessary information/advice and so could lead to determinations that are potentially inconsistent with the Code objective. To address these concerns, if a time limit is to be imposed on the Authority for such ad hoc intra-period applications, then Synergy submits:

- it should be of a reasonable length including the possibility of extension if public consultation is required by the Authority (cf section 9.18 of the Code for major augmentation proposals); and
- WP's application should be required to be in a form and content that ensures the Authority receives sufficient information in a suitable form to enable it to efficiently and effectively apply the test under sections 6.40 and 6.41 of the Code within the required timeframe (cf sections 9.15 to 9.17 of the Code for major augmentation proposals).

Synergy therefore submits the D-factor be re-worked:

- to provide stronger incentives for WP to pursue demand management activities, drawing in particular on the proposed DMIA and DMIS in the NEM; and
- for intra-period applications, to allow the Authority sufficient time and provide it with sufficient information in a suitable form to enable it to efficiently and effectively apply the test

⁸³ See, for example: AER, *Final Decision Endeavour Energy Distribution Determination 2015/16 to 2018/19 – Attachment 12 (Demand Management Incentive Scheme)*, April 2015.

⁸⁴ See: <https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/demand-management-incentive-scheme-and-innovation-allowance-mechanism>.

under sections 6.40 and 6.41 of the Code within the required timeframe (with sufficient time to conduct any public consultation and obtain any information/advice it requires to enable its determination to be consistent with the Code objective).

8 REFERENCE SERVICES AND TARIFF STRUCTURES

In this section Synergy outlines its response to WP’s proposal regarding reference services and tariff structures.

Table 7 summarises Synergy's response to these aspects of WP’s proposal, using the ‘traffic light’ system discussed in Section 2.3 of this submission. The rest of this section provides greater detail around the material issues Synergy has identified.

This submission should also be read in conjunction with Synergy's “AA4 submission no: 4: Synergy’s Reference Services Request Submission” and the matters raised and comments and submissions made in that document are to be taken to be **incorporated in this submission**.

Table 7: Synergy’s response on reference services and tariff structures

Area	Our assessment	Decision/Rationale	Relevant section
Price path		<p>WP proposes to smooth transmission and distribution tariffs to achieve constant increases in average tariffs across each year of the regulatory period.</p> <p>Synergy supports this approach, subject to the caveat Synergy does not support the deferral of transmission revenues or the bringing forward of deferred distribution revenues. Refer also to Section 3.7 above.</p>	8.1
New services and tariffs		<p>WP proposes new mandatory time of use tariffs for all new residential and small use customers and new optional demand-based tariffs for residential and small use customers.</p> <p>Synergy considers the Code requires all residential and small use customers should be given the option to choose whether to face time of use tariffs and more information be provided relating to customer demand and customer impacts.</p> <p>Synergy submits WP's proposed new mandatory time of use tariffs and new optional demand-based tariffs for residential and small use customers are not consistent with the Code requirements. Refer also to Synergy's Reference Services Request Submission.</p> <p>Synergy therefore submits that the Authority should (having regard to the relevant requirements of the Code, the matters listed in section 26(1) of the ERA Act and the other matters referred to in this submission) reject WP's proposed new mandatory time of use tariffs and WP's proposed design of its new optional demand-based tariffs for residential and small use customers.</p>	8.2

8.1 Price path

8.1.1 Code requirements

The objectives of pricing methods set out in sections 7.3 and 7.4 of the Code contain several provisions relevant to revenue smoothing for reference tariffs. In particular, the secondary objectives set out in section 7.4 of the Code require the proposed tariffs to be predictable (section 7.4(c)) and avoid price shocks (section 7.4(d)).

8.1.2 WP’s proposal

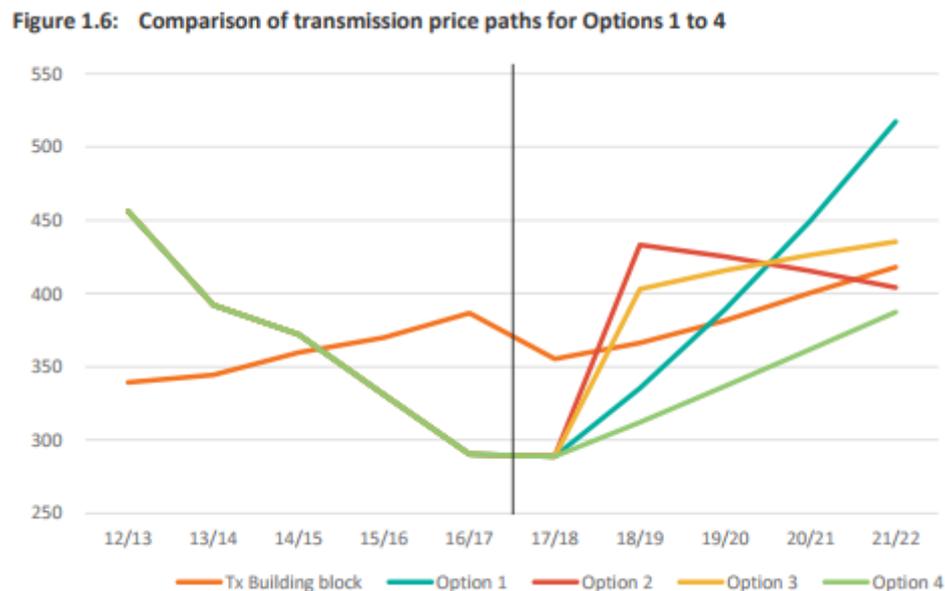
Transmission and distribution tariffs under WP’s AA4 proposal are calculated based on smoothed annual revenue requirements. In particular, prices are smoothed so there are constant increases in average tariffs each year across the regulatory period, while maintaining the total target revenue over the period in net present value terms.⁸⁵ This results in average real price increases of 2.5% per annum taking into account both transmission and distribution charges.⁸⁶

8.1.3 Synergy’s comments

Adopting revenue smoothing is an important mechanism to manage the impact of price movements on customers between and during access arrangement periods and is consistent with best practice. Revenue smoothing is consistent with the Code and in particular sections 7.4(c) and (d) of the Code which require tariffs to be predictable and price shocks to be minimised.

There is a range of methodologies that could be used to implement smoothing and the Code is not prescriptive about the preferred approach. WP’s proposal involves revenue smoothing to ensure constant average price increases. This ensures predictability and limited price variation within the AA4 period. For these reasons, Synergy supports this approach, subject to the proviso that Synergy does not support deferral of transmission revenues to AA5 (refer to Section 3.7 above). Synergy therefore supports Option 1 in Figure 8 (below).

Figure 8: Comparison of transmission price paths



Source: WP (2017). Attachment 10.8: Transmission Price Path Access arrangement information. Perth: WP, p. 10

⁸⁵ AAI, p 243.

⁸⁶ AAI, p 243.

8.2 New services and tariffs

8.2.1 Code requirements

Chapter 7 of the Code sets out the requirements relating to the structure of network tariffs. The reference tariff structures proposed by WP are required to meet:

- the primary objective 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 of service provision (section 7.3 of the Code); and
- the secondary objectives set out in section 7.4 of the Code that:
 - 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;
 - the structure of reference tariffs so far as is consistent with the Code objective accommodates the reasonable requirements of users collectively;
 - the structure of reference tariffs enables a user to predict the likely annual changes in reference tariffs during the access arrangement period; and
 - the structure of reference tariffs avoids price shocks (that is, sudden material tariff adjustments between succeeding years).

Section 7.5 of the Code provides that to the extent the objectives in section 7.3 conflict with the objectives in section 7.4 in respect of pricing methods in a proposed access arrangement, the Authority, when determining whether the pricing methods are consistent with Chapter 7, must reconcile the conflict, or determine which objective is to prevail, having regard to the Code objective but where necessary permitting the objectives in section 7.3 of the Code to prevail over the objectives in section 7.4.

Further, Synergy submits that if there is any conflict between the objectives in sections 7.3 or 7.4 of the Code and the Code objective in section 2.1, the Code objective is to prevail.⁸⁷

In relation to tariff structure section 7.6 of the Code requires the incremental cost of service provision should be recovered via tariff components that vary with usage or demand; any recovery in excess of the incremental cost of service provision should be recovered via tariff components that do not vary with usage or demand. The Code requires WP to levy geographically uniform tariffs in certain circumstances (section 7.7 of the Code).

⁸⁷ As noted in Section 2.2 above, section 4.28 of the Code, as modified for access arrangement reviews by section 4.52 of the Code, in effect requires the Authority, when making a draft decision, final decision or further final decision concerning WP's proposal, to determine whether WP's proposal meets the Code objective and the requirements set out in Chapter 5 (and Chapter 9, if applicable) of the Code. These section 4.28 criteria are specific criteria as defined in section 1.3 of the Code. Where the Code objective is a specific criterion and it is in conflict with any other specific criterion, sections 2.3 and 2.4 of the Code provide the Code objective is to prevail. So if the specific criterion in section 4.28 of the Code WP's proposal must meet the Code objective is in conflict with any requirement in Chapter 5 (including any requirement of pricing methods under Chapter 7, that is required by section 5.1(e) to be included in AA4), then the Code objective is to prevail.

8.2.2 WP's proposal

WP's proposal contains several key developments in relation to tariff structures:

- the introduction of compulsory time of use tariffs (RT17 and RT18) for all new residential and small use customers who connect to the network from the AA4 period onwards (and who will also be required to have a type 4 "advanced meter" installed);⁸⁸ and
- the introduction of optional demand-based tariffs for residential and small use customers (RT19 and RT20).⁸⁹

Each of these tariff proposals is discussed in more detail in turn below.

Currently residential customers pay a flat rate, regardless of the time of day if they use electricity (RT1) or time of use transport charge (RT3). Under the current WA regulatory model network users nominate the reference services to WP that are to apply to their customers based on the retail tariff the end use customer selects with their retailer. Business customers have the opportunity to participate in time of use pricing (under tariff RT4), but as with RT1 the peak charging window is too broad to send clear price signals to customers.⁹⁰

Under WP's proposal all new customers and those who require a new meter installed for change of product reasons will be compelled to pay a time of use tariff which for 2018/19 provides for no price differential between each of the three time bands. Synergy understands from 2019/20 onwards charges will be higher in the late afternoon and early evening on weekdays and lower at other times although AA4 contains no forward price path in that regard.

Time of use tariffs are intended to provide customers with a more accurate understanding of the cost of their electricity usage, providing customers with the information required to encourage them to optimise their consumption, potentially delaying expensive network investment.⁹¹ Most residential and small use customers currently do not have the advanced meters required to support time of use tariffs. Time of use tariffs will be imposed on all new residential and small business customers depending on their meter requirements. Existing customers who have their meter replaced at the end of its life will have the option to choose whether to move to time of use tariffs.⁹²

Historically demand-based tariffs were only made available to large and medium customers. WP's proposal provides for demand-based tariffs to be extended to residential and small use customers. Under these arrangements the demand charge would be based on a customer's maximum usage in any 30 minute period between 3pm and 9pm on weekdays, rather than total usage over a time period, sending stronger price signals about the cost of consumption.⁹³ Once again this pricing methodology is only available to those customers with advanced meters and is proposed to be introduced on an opt-in basis with a relatively small demand component as customers become familiar with the tariff and its impact.⁹⁴

8.2.3 Synergy's comments

Synergy supports introducing opt in tariffs that better reflect the cost to customers of using electricity at different times as this is likely to promote more efficient consumption and is consistent with

⁸⁸ AAI, [1017] and [1028]-[1031].

⁸⁹ AAI, [1032]-[1036].

⁹⁰ AAI, pp 251-252.

⁹¹ AAI, pp 250-252.

⁹² AAI, p 252.

⁹³ AAI, p 253.

⁹⁴ AAI, p 252.

network tariff structure reform currently taking place in other Australian jurisdictions. Table 8 and Table 9 summarise the time of use and demand components of the electricity distribution businesses in South Australia, NSW, Victoria and Queensland. In most cases the potential to participate in time of use and demand based pricing is not compulsory for residential and small use customers, in contrast to WP's proposal to introduce time of use tariffs on a compulsory basis for all new residential and small use customers who receive a type 4 "advanced meter". WP's proposal to base demand charges on peak demand in the window 3-9pm is broadly consistent with the approach adopted by distribution businesses in other Australian jurisdictions.

Under sections 2.7 and 2.8 of the Code, WP is required to use all reasonable endeavours to accommodate an applicant's requirement to obtain covered services, including an obligation to provide, to the extent reasonably practicable, only those parts of a covered service the applicant wishes to acquire. Similarly, under section 5.2 of the Code, an access arrangement must specify 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 to the extent reasonably practicable, must specify 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. Mandating a particular reference service as mandatory for certain customers (as is proposed by WP) is inconsistent with the above Code requirements as it deprives the element of choice enshrined in them. Synergy therefore does not support WP's proposal to mandate particular reference services for certain customers and submits that the Authority should reject this aspect of WP's proposal.

Refer also to Synergy's Reference Services Request Submission.

Table 8: Comparison of time of use network tariff structure between selected Australian jurisdictions

Corporation	Customers affected	Variation over time	Opt-in / opt-out / compulsory
WP (Western Australia) ⁹⁵	Residential and small business customers	Peak, shoulder, off-peak, without seasonality	Opt-in for existing customers; mandated for new customers, new meters due to meter failure and change of product that requires a metre exchange
AusNet, CitiPower, Jemena, Powercor, United Energy (Victoria) ⁹⁶	Residential and small business customers	Peak, shoulder, off-peak, with seasonality	Opt-in
Ausgrid (NSW) ⁹⁷	Residential and small business customers	Peak, shoulder, off-peak, without seasonality	Opt-in for existing customers; opt-out for new customers
Endeavour Energy (NSW)	Residential and small business customers	Peak, shoulder, off-peak, without seasonality	Opt-in for existing customers; opt-out for new customers
Essential Energy (NSW)	Residential and small business customers	Peak, shoulder, off-peak, without seasonality	Opt-in for existing customers; opt-out for new customers
Energex (Queensland) ⁹⁸	Residential, small business and medium business customers	Peak, shoulder, off-peak, without seasonality	Opt-in
Ergon (Queensland)	Residential, small business and medium business customers	Peak, off peak, with seasonality for business customers	Opt-in
South Australia Power Networks (South Australia) ⁹⁹	Small business customers	Peak, shoulder, off-peak, with seasonality	Opt-in for existing customers; default for new customers

⁹⁵ AAI, pp 250-253.

⁹⁶ AER (2016). Final Decision - Tariff Structure Statement Proposals – Victorian electricity distribution network service providers. Melbourne: AER, pp 41-44.

⁹⁷ AER (2017). Final Decision - Tariff Structure Statement Proposals – Ausgrid, Endeavour and Essential Energy. Melbourne: AER, pp 12 & 45-50.

⁹⁸ AER (2017). Final Decision - Tariff Structure Statements – Energex and Ergon Energy. Melbourne: Australian Energy Regulator, pp 10-15.

⁹⁹ AER (2017). Final Decision - Tariff Structure Statement – South Australia Power Networks. Melbourne: AER, pp 39-40.

Table 9: Comparison of demand based network tariff structure between selected Australian jurisdictions

Corporation	Customers affected	Variation over time	Opt-in / opt-out / compulsory
WP (Western Australia) ¹⁰⁰	Residential and small business customers	Max half hour demand during six-hour peak period, without seasonality	Opt-in
AusNet, CitiPower, Jemena, Powercor, United Energy (Victoria) ¹⁰¹	Residential and small business customers	Max half hour demand during six-hour peak period, with seasonality	Opt-in
Ausgrid (NSW) ¹⁰²	NA	NA	NA
Endeavour Energy (NSW)	NA	NA	NA
Essential Energy (NSW)	Residential and small business customers	Max half hour demand during the month, without seasonality	Opt-in
Energex (Queensland) ¹⁰³	Residential, small business and medium business customers	Max half hour demand during four-hour peak period, without seasonality	Opt-in
Ergon (Queensland)	Residential, small business and medium business customers	Average of highest four days with max half hour demand during 6.5-hour peak period, with minimum charge during non-summer months	Opt-in
South Australia Power Networks (South Australia) ¹⁰⁴	Residential and small business customers	Max half hour demand during five-hour peak period, with seasonality	Opt-in for existing customers; default for new customers

The AER has argued demand tariffs are more cost reflective and therefore preferable to time of use tariffs, because they better reflect the cost of customer’s consumption decisions on the network.¹⁰⁵ WP’s proposal to identify customer peak demand within defined windows is consistent with the approach adopted by most network businesses in other Australian jurisdictions. However, the AER has expressed concern that using the single highest peak demand in a billing period to determine customer demand may create perverse incentives, by encouraging customers to consume up to their historical previous peak demand.¹⁰⁶ The alternative is to adopt an approach where the demand charge is based on an average of several high demand events, such as Ergon Energy’s STOU approach. This

¹⁰⁰ AAI, p 253.

¹⁰¹ AER (2016). *Final Decision - Tariff Structure Statement Proposals – Victorian electricity distribution network service providers*. Melbourne: AER, pp 41-44.

¹⁰² AER (2017). *Final Decision - Tariff Structure Statement Proposals – Ausgrid, Endeavour and Essential Energy*. Melbourne: AER, pp 45 & 52.

¹⁰³ AER (2017). *Final Decision - Tariff Structure Statements – Energex and Ergon Energy*. Melbourne: Australian Energy Regulator, pp 10-15.

¹⁰⁴ AER (2017). *Final Decision - Tariff Structure Statement – South Australia Power Networks*. Melbourne: AER, pp 39-40.

¹⁰⁵ AER (2016). *Final Decision - Tariff Structure Statement Proposals – Victorian electricity distribution network service providers*. Melbourne: AER, pp 13-14.

¹⁰⁶ AER (2016). *Draft Decision - Tariff Structure Statement Proposal – Energex & Ergon Energy*. Melbourne: AER, p 41.

approach is more likely to incentivise customers to minimise their peak demand over the billing period and is therefore preferable to the simple approach proposed by WP.¹⁰⁷

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.¹⁰⁸ 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 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.

¹⁰⁷ AER (2016). Draft Decision - Tariff Structure Statement Proposal – Energex & Ergon Energy. Melbourne: AER, p 41

¹⁰⁸ AAI, p 252.

9 ADVANCED METERING

In this section Synergy outlines its response to WP's proposal in regard to the roll-out of advanced metering.

Table 10 summarises Synergy's response to these aspects of WP's proposal, using the 'traffic light' system discussed in Section 2.3 of this submission. The rest of this section provides greater detail around the material issues Synergy has identified.

Table 10: Synergy's response to WP's proposals on advanced metering

Area	Our assessment	Decision/Rationale	Relevant section
SMI costs		<p>Insufficient information to allow for an adequate assessment of whether WP's metering capex and opex forecasts is consistent with the Code. WP's SMI Business Case (Attachment 8.2 to its AAI) has not been provided for public review.</p> <p>Important information relating to the proposed meter specification and communications infrastructure has not been published.</p> <p>Synergy submits:</p> <ul style="list-style-type: none"> WP's failure to provide sufficient information is a breach of sections 4.1, 4.2, 4.3 and 4.4 of the Code and the Authority should require WP to provide far more detail about WP's metering capex and opex forecasts; and the Authority should (having regard to the relevant Chapter 6 Requirements, the Code objective and other matters referred to in this submission, including the matters listed in section 26(1) of the ERA Act) undertake a detailed review of WP's metering capex and opex forecasts, including to determine whether it complies with Chapter 6 of the Code (as required by section 6.1) and is consistent with the Code objective so WP's proposal can meet the Code objective (as required by section 4.28). 	9.3.1
Approach to SMI roll-out		<p>Absence of competitive and regulatory oversight on SMI means increases the risk that the roll-out will not be efficient and prudent. Consequently WP may have an incentive to over invest its meters to increase its return on capital and recover any overspend through the IAM.</p>	9.3.2
Regulatory test		<p>Synergy submits that by not undertaking a regulatory test in relation to SMI, WP is in contravention of the Code and the Authority must therefore reject WP's proposal in this regard. The regulatory test may assist in allaying some of the concerns identified above with respect to whether WP's SMI roll-out program is prudent and efficient.</p>	9.3.3

9.1 Code requirements

The Code does not provide any explicit provisions on advanced metering.

9.2 WP's proposal

Under the Metering Code, WP is the only business permitted to provide metering services to customers in the SWIS. Currently, WP installs basic meters at small use customers' premises (residential and small business).¹⁰⁹ These meters are typically manually read every two months with only basic consumption and generation data being retrieved.

WP is proposing to change the default replacement meter from basic meters to advanced meters.¹¹⁰ As such, rather than undertaking a wide-spread rollout of advanced meters, WP is proposing to introduce advanced meters in the SWIS through its standard meter replacement program.

In this case, advanced meters will be:¹¹¹

- the default replacement for meters that are forecast for replacement over AA4;
- installed for all new connections to the network;
- installed where an existing meter is non-compliant;
- installed for retailer requested replacements, such as where a customer installs a solar PV system and requires a bi-directional service.
- Configured and installed as a basic meter to provide basic consumption and generation data until WP has implemented a communication infrastructure.

Under this arrangement, WP forecasts it will install around 355,000 advanced meters over AA4.¹¹² Customers whose meters are not scheduled for replacement during AA4 will have the option to request an advanced meter if they wish, with payment of an applicable fee.¹¹³

WP has forecast the capital cost of SMI rollout to be \$209 million.¹¹⁴ This includes the cost of the meters and the communications infrastructure and IT system costs to allow WP to access interval data and meter alarms remotely.¹¹⁵

WP is also proposing to include distribution metering investment in the IAM.¹¹⁶ This was undertaken to insulate WP against any large scale additional uptake of SMI that may occur during AA4 due to, for instance, future market reforms that require a retailer-led implementation of advanced metering services.

¹⁰⁹ AAI, p 171.

¹¹⁰ AAI, p 171.

¹¹¹ AAI, p xxix.

¹¹² AAI, p xxix.

¹¹³ AAI, p xxix.

¹¹⁴ AAI, p 171.

¹¹⁵ AAI, p 171.

¹¹⁶ AAI, p 106.

Metering costs are recovered in a two-tier structure:¹¹⁷

- ‘standard metering services’ (as defined in the Model SLA) are characterised as revenue cap services and are to be recovered through WP’s reference tariffs as a fixed annual charge of \$32.16 for all customers; and
- ‘extended metering services’ (as defined in the Model SLA) have been characterised as price cap services and are to be recovered through separate fees that customers are required to pay upon receipt of the relevant service, as set out in the Model SLA.

Synergy notes WP proposes that upon installation of an advanced meter, customers are required to switch to a time of use tariff, with no option to opt-out.¹¹⁸

9.3 Synergy’s comments

9.3.1 SMI expenditure is not transparent or substantiated

Synergy supports WP’s proposed roll-out of SMI in the SWIS provided it meets Code requirements. However, Synergy submits there is insufficient information in WP’s proposal to allow for an adequate assessment of whether its metering capex and opex forecasts are consistent with the provisions of the Code. Further, Synergy notes essential SMI information has not been published to the market specifically the full meter (functionality) specification and the proposed communications infrastructure. Synergy submits the Authority should obtain and publish this information including the cost stack that relates to the annual charge of \$32.16.

WP is proposing to spend approximately \$209 million in capex on its SMI roll-out program over AA4. However, it has not identified how this forecast was derived, including for instance the expected cost of the meters that will be installed. Further, in one section of its proposal, WP notes that around \$21 million (\$2017/18) will be spent on SCADA and communications to support implementation of advanced metering,¹¹⁹ and in a subsequent section, notes that approximately \$15 million (\$2017/18) will be spent on ICT capex for SMI.¹²⁰ It is not clear how these two forecasts should be reconciled, since both appear to relate to the same SMI communications infrastructure.

Synergy also notes WP has not provided any information on how its SMI roll-out will impact its opex. In general, Synergy expects SMI should result in a downward step-change in opex since WP will save labour costs associated with field services such as manual meter reading and outage investigation. It is not clear WP has incorporated any adjustments for SMI roll-out in preparing its opex forecasts.

Synergy understands WP has prepared an SMI Business Case as Attachment 8.2 to its AAI. However, this document has not been published for review. In the absence of further information, Synergy submits WP’s SMI rollout expenditure is not transparent and has not been adequately substantiated, consistent with sections 4.2 and 4.3 of the Code. Consequently, Synergy submits WP this is inconsistent with sections 4.1, 4.2, 4.3 and 4.4 of the Code.

Synergy also notes WP has not deducted the incremental revenue (\$109.62 million) for its previous SMI project that was not implemented in AA3 and accordingly seeks the Authority to consider the matter as submitted above in Section 3.8 of this submission.

¹¹⁷ WP, *Metering Code Model Service Level Agreement*, 16 October 2017.

¹¹⁸ AAI, p 252.

¹¹⁹ AAI Attachment 8.1, p 80.

¹²⁰ AAI Attachment 8.1, p 111.

9.3.2 SMI expenditure may not be prudent or efficient

The deployment of SMI by WP is materially different to the deployment of SMI in the NEM (excluding Victoria, where roll-out of advanced meters occurred under government mandate). Specifically, in the NEM, the roll-out of SMI will occur in the context of full retail and metering contestability, under which any person can become a 'metering coordinator' and provide advanced metering services (subject to meeting registration requirements).¹²¹ This means advanced metering services in the NEM are subject to competitive pressure, which in turn helps ensure the roll-out occurs at the lowest possible cost.

In the absence of competitive or regulatory pressure on WP to ensure that its investment in advanced meters is prudent and efficient, it may be subject to adverse incentives. For instance, WP may have an incentive to over invest its meters to roll a larger amount of capex into its RAB and, consequently, benefit in the form of a higher return on capital. This is compounded by the fact WP has included metering in the IAM, so any overspend on SMI may be recovered in a subsequent period. Synergy submits this outcome is inconsistent with the objective of the Code.

Advanced metering in the NEM is subject to a detailed framework developed by the AEMC, specifying information such as the minimum services that advanced meters should provide, the right of parties to access energy data and metering data from these meters and the circumstances in which customers can opt out of having and an advanced meter.¹²² The purpose of these requirements is to ensure the roll-out of SMI is undertaken in such a way as to maximise the benefit to consumers. As noted by the AEMC, 'investment in metering services driven by consumers choosing products and services they value at a price they are willing to pay can be expected to result in efficient investment.'¹²³

In contrast, the SWIS is not subject to metering contestability. In addition, there is no central framework or policy to ensure that any roll-out of SMI occurs efficiently. Accordingly, the Authority needs to ensure there is adequate regulatory oversight over WP's proposed SMI roll-out program. This is addressed in the next section.

9.3.3 WP has not provided due account to the NFIT or the regulatory test

In the absence of competitive constraints, investment in SMI must be subject to adequate regulatory controls to ensure that it is prudent and efficient. Under the Code, the efficiency of capex is generally assessed through the application of two mechanisms – the NFIT and the regulatory test.

As noted above, WP's SMI costs are not transparent nor fully substantiated, with the implication there is insufficient information to allow for an adequate assessment on whether these costs will satisfy the NFIT. To the extent that some of this cost does not meet the NFIT, its addition to WP's RAB would be in contravention of the Code and contrary to the long-term interests of consumers (which is a matter the Authority must have regard to under section 26(1) of the ERA Act).

Synergy notes WP has not submitted a major augmentation proposal to the Authority in respect of its proposed SMI investment in order the Authority may determine or be deemed to determine the test in section 9.14 or 9.20, as applicable, is satisfied .

¹²¹ AEMC, *Rule Determination – National Electricity Amendment (Expanding Competition in Metering and Related Services) Rule 2015*, 28 November 2015, p iii-iv.

¹²² AEMC, *Rule Determination – National Electricity Amendment (Expanding Competition in Metering and Related Services) Rule 2015*, 28 November 2015, Chapter 4.

¹²³ AEMC, *Rule Determination – National Electricity Amendment (Expanding Competition in Metering and Related Services) Rule 2015*, 26 November 2015, p 23.

Further, under Chapter 9 of the Code, WP must not commit to a major augmentation before the Authority makes such a determination or is deemed to have done so.

A ‘major augmentation,’ is effectively defined as an increase in the capability of the covered network to provide covered services for which the capital costs incurred in developing, constructing and acquiring any capital asset required to enable that increase exceed \$10 million (CPI adjusted)¹²⁴ for distribution assets (section 1.3).

Synergy submits WP’s proposed SMI investment of \$209 million is a ‘major augmentation’.

WP’s proposed SMI investment **increases the capability** of the covered network to provide covered services because, it involves the widespread adoption of technology that provides new services that are properly understood as relating to the **conveyance** of electricity rather than metrology, as such constituting covered services within the meaning of the Code. These services include:

- remote connection/disconnection;
- direct load control;
- ripple control;
- quality of supply (designed to monitor voltage swell and sag);
- load limitation;
- under frequency load control; and
- loss of supply and outage detection.

Consistent with the Code, the Authority must consider whether it can approve the proposed SMI investment unless and until WP submits a major augmentation proposal in accordance with the Code. Synergy also considers that it would not be in the long term interests of consumers for the Authority to waive the requirement for the SMI investment to be subjected to the regulatory test because given the scale of the investment and the experience of SMI roll-outs in other jurisdictions, it is important to ensure that the SMI roll out is undertaken in the most economically efficient manner and that any alternatives are properly assessed and considered in accordance with Chapter 9 of the Code.

9.3.4 WP has included the full SMI capital costs in the RAB

WP is proposing to include the capital costs of its advanced meters in its RAB and so recover these costs through its regulated network tariffs over the economic life of the asset. However, Synergy notes there are unregulated (non-covered) services WP may provide using these advanced meters, such as the provision of half-hourly metered data upon request by a customer or retailer or direct load control services.

Under the Authority’s AAI Guidelines, WP must, in preparing its cost forecasts, allocate costs between the various regulated (covered) and unregulated (non-covered) components of its business. If an asset may be used to provide different types of services (covered and non-covered services), then good regulatory practice dictates the asset cost should be apportioned between the different services it may provide. This is also in effect a requirement of Chapter 6 of the Code in that price control has as

¹²⁴ As from July 2017 the CPI adjusted amount is \$12.2 million – see Economic Regulation Authority, *Notice, 2017 Consumer Price Index Adjustments*, 26 July 2017.

an objective that target revenue is revenue "from the provision of covered services" (section 6.4(a) of the Code).

It would therefore not be consistent with that price control objective if a service provider were permitted to include revenue from non-covered services in its target revenue. Further, it would not promote economic efficiency and would therefore not be consistent with the Code objective or the price control objective in section 6.4(a)(i) of the Code if costs for providing non-covered services were allowed to be included in target revenue for providing covered services. Appropriate and effective cost allocation ensures that only efficient costs relevant to the provision of a service are passed through to the customers receiving that service and prevents inefficient cross-subsidisation. Therefore, Synergy considers it is also important to have visibility on the cost stack that relates to the \$32.16 annual charge.

This principle has also been emphasised by the AEMC when it said as follows:¹²⁵

... customers who pay for one type of regulated service that is provided by a shared asset should not be paying for the full cost of the asset. Instead, those customers should be receiving some benefit from the asset being used for a service other than a regulated service.

To be consistent with the Code and the Authority's AAI Guidelines, WP must apportion the cost of SMI between the different types of metering services it provides (i.e. standard, extended and unregulated metering services). In practice, this means that only a portion of SMI capital costs, reflecting an appropriate allocation of this cost to the provision of standard metering services, will be incorporated into the RAB (rather than the full cost of the meters). In the absence of this, the cost of advanced meters would be recovered entirely from customers of standard metering services and additional revenue derived from providing other metering services may constitute a significant gain for WP. In these circumstances, customers of standard metering services derive no benefit from the shared use of the asset.

To complement WP's CRAM, Synergy submits the Authority should introduce a 'shared asset mechanism' similar to that under the NER. This would act as a fall-back in the event that an appropriate allocation for SMI costs between regulated and unregulated services is not currently known and would also help to account for future changes in the use of SMI (and other) assets.

In the NEM, a shared asset is an asset that is used to provide both standard control services (which are regulated by the AER and subject to a revenue cap) and another service that is not a standard control service. The NER allows the AER to reduce a DNSP's revenue allowance for standard control services by such an amount as it considers reasonable to reflect the proportion of the costs of the asset the DNSP is recovering from services that are not standard control services.¹²⁶

The shared asset mechanism is designed to complement a DNSP's cost allocation methodology. The AER notes DNSPs are required to allocate the cost of an asset at the start of its life in accordance with its expected use at that time. If the use of an asset changes, the initial cost allocation may no longer be appropriate. The shared asset mechanism will apply to assets used to provide regulated services and so for which the costs were initially allocated to regulated services, but at some point, come to be used to provide non-regulated services as well. This results in a DNSP deriving regulated and non-regulated revenues in connection with the asset, making it a shared asset.¹²⁷

¹²⁵ AEMC, *Rule Determination – National Electricity Amendment (Economic Regulation of Network Service Providers)*, November 2012, p 191.

¹²⁶ NER, clause 6.4.4(a).

¹²⁷ AER, *Shared Asset Guideline*, November 2013.

There is no equivalent to the NEM's 'shared asset mechanism' in the SWIS to account for changes in the use of assets. Synergy submits the development and application of such a mechanism to WP will better achieve the Code objective and price control objectives by ensuring that asset costs are efficiently allocated between the different services they provide.

10 WEIGHTED AVERAGE COST OF CAPITAL

In this section Synergy outlines its response to WP's proposal in regard to the WACC.

Table 10 summarises Synergy's response to these aspects of WP's proposal, using the 'traffic light' system discussed in Section 2.3 of this submission. The rest of this section provides greater detail around the material issues Synergy has identified.

Table 11: Synergy's response to WP's proposals on advanced metering

Area	Our assessment	Decision/Rationale	Relevant section
Approach to determining WACC		<p>Synergy agrees WP has broadly followed the approach to determining the allowed rate of return adopted by the Authority in recent regulatory decisions.</p> <p>However, Synergy submits it is still necessary for WP to justify why its proposed use of the DBNGP WACC methodology represents (consistently with section 6.66) an effective means of achieving the Code objective in section 2.1 of the Code and the price control objectives in section 6.4 of the Code.</p>	10.3
MRP		<p>WP has departed from the Authority's approach when deriving its estimate of the MRP using historical excess returns in two respects:</p> <ul style="list-style-type: none"> ▪ exclusive use of NERA estimates; and ▪ exclusive use of arithmetic averages. <p>Of these departures, the second results in the greatest divergence from the Authority's approach.</p> <p>Based on Synergy's calculations, replacing WP's proposed MRP estimate with the MRP estimate derived correcting for the second departure would result in WP's proposed allowed rate of return falling from 6.09% to 5.92% (holding all else equal).</p>	10.3.2

10.1 Code requirements

The Code permits the Authority to make a determination of the preferred methodology for calculating WACC (section 6.65). A determination of the preferred methodology for calculating WACC must:

- represent an effective means of achieving the Code objective and the price control objectives in section 6.4 of the Code; and
- be based on an accepted financial model such as the Capital Asset Pricing Model (section 6.66 of the Code).

With regard to the section 6.66 requirements, section 6.4(a)(i) of the Code relevantly includes the price control objective that target revenue must include " 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". The WACC methodology must therefore represent an effective means of achieving this. Similarly, it must represent an effective means of promoting economic efficiency consistent with the Code objective.

10.2 WP's proposal

WP has proposed an allowed rate of return of 6.09% (nominal, vanilla WACC). This proposed allowed rate of return comprises:

- a proposed return on equity of 7.24%;
- a proposed return on debt of 5.32%; and
- a gearing assumption of 60%.

WP's proposal notes that, in developing this allowed rate of return proposal, it has:

"...broadly, adopted the same method for determining the cost of equity and debt the Authority applied to the DBNGP..."

WP notes that its proposal:

- proposes a benchmark debt gearing ratio of 60%, unchanged from the AA3 period and consistent with recent decisions by the Authority and the AER for regulated gas and electricity networks;
- adopts the Authority's approach to inflation forecasting, using the Fisher Equation to estimate the implied inflation rate from five-year Australian CGS and five-year indexed CGS yields;
- adopts annualised yields on a five-year CGS as the proxy for the risk free rate;
- adopts the Authority's approach to estimating the equity beta;
- calculates the MRP using updated DGM and long-run average MRP estimates;
- adopts the Authority's approach to estimating the cost of debt, incorporating a hybrid trailing average with an annual update of the DRP; and
- proposes a preliminary gamma of 0.40, with a view to reassessing this value in the light of forthcoming Tribunal and Full Federal Court appeal decisions.

10.3 Synergy's comments

Synergy agrees WP has broadly followed the approach to determining the allowed rate of return adopted by the Authority in recent regulatory decisions. However, Synergy notes WP has deviated from the Authority's approach to determining the MRP allowance.

WP, like the Authority, estimates a range for the MRP using two methods: long-run averages of historical excess returns on the market; and DGM estimates of the MRP. WP's estimated MRP range is 6.8% to 8.2%. WP then adopts the midpoint of this range, 7.5%, as its point estimate of the MRP.

However, WP has departed from the Authority's approach when deriving its estimate of the MRP using historical excess returns in two respects:

- exclusive use of NERA estimates; and
- exclusive use of arithmetic averages.

We discuss each of these departures in the remaining Sections of this submission, below.

Also, Synergy notes WP proposes adopting the Authority's DBNGP WACC methodology, but has not clearly shown how doing so represents an effective means of achieving a "return on investment commensurate with the commercial risks involved" (as is required by sections 6.4(a)(i) and 6.66 of the Code) and results that are consistent with the Code objective (as is required by section 6.66 of the Code). This cannot necessarily be assumed just because a particular WACC methodology the Authority has used for DBNGP is adopted. DBNGP is regulated under a different access regime (the NGL and National Gas Rules NGR), with different criteria to be complied with. While a WACC methodology which is suitable for compliance with the NGL and NGR may be relevant for Code purposes, the requirements relating to rate of return and other provisions of an access arrangement under the NGL and NGR are not exactly the same as the requirements for return on investment in determining target revenue under the Code. There may be subtle, but significant, differences between the requirements of the two different regimes that mean the WACC methodology used for DBNGP is not necessarily suitable in every respect for compliance with the Code requirements.

Synergy therefore submits it is still necessary for WP to justify why its proposed use of the DBNGP WACC methodology represents (consistently with section 6.66 of the Code) an effective means of achieving the Code objective in section 2.1 and the price control objectives in section 6.4 of the Code.

10.3.1 Exclusive use of NERA estimates

Whilst the Authority gives equal weight to the NERA and BHM estimates of historical average excess returns, WP places 100% weight on the NERA estimates.

The NERA and BHM estimates differ because NERA considers the historical returns series used by BHM are downwardly biased due to inadequate adjustments to the dividend yields reflected in the data. NERA's estimates make adjustments to dividend yields prior to 1957, which has the effect of increasing the total estimated return on the market and, therefore, the average excess returns on the market that uses any data prior to 1957.

The Authority has previously expressed concern about the reliability of the adjustments to the historical data made by NERA and has concluded that uncertainty surrounding the appropriate adjustments to the market returns series warrants equal weight being given to the NERA and BHM estimates to reduce the estimation error that could arise from using one of these estimates to the exclusion of the other.¹²⁸

WP uses as the lower bound of its estimated MRP range the NERA arithmetic average historical excess returns measured over the period 1883-2016, which is approximately 6.8%. Table 9.3 in WP's proposal demonstrates that adopting the Authority's approach of giving equal weight to the NERA and BHM estimates would reduce the lower bound (derived using just arithmetic averages) to approximately 6.6%.

Given the concerns the Authority has expressed about relying exclusively on the NERA estimates, Synergy recommends the Authority should consider closely whether WP's approach of giving 100% weight on the NERA estimates and 0% weight to the BHM estimates, is appropriate. If the Authority considers WP's approach is not appropriate, that would imply the lower bound of the MRP range should be reduced and, consequently, the midpoint of the MRP range would also be lower.

¹²⁸ DBNGP decision, Appendix 4, [526]-[527].

10.3.2 Exclusive reliance on arithmetic averages

In the DBNGP decision, the Authority's approach to selecting the lower bound of its MRP range involved the following steps:

- First, the Authority derived arithmetic averages of historical excess returns over five different historical periods (giving equal weight to the NERA and BHM estimates, as discussed above). WP has also considered estimates over five historical periods, extending the returns data to include the latest data available.
- Next, the Authority identified the lowest estimate across each of the historical periods, 5.6%. The lowest estimate based on WP's dataset would be 5.8%.¹²⁹
- Finally, the Authority adopted a lower bound estimate for the MRP that was 20 basis points lower than the lowest arithmetic average, having some regard to the geometric averages over the same five historical periods. The geometric averages are consistently lower than the arithmetic averages. This resulted in the Authority adopting a lower bound for the MRP of 5.4%.¹³⁰

Adopting the Authority's process set out above would reduce WP's lower bound estimate from 6.8% to 5.6%. This represents a material reduction. Synergy recommends the Authority should consider whether WP's exclusive reliance on arithmetic historical averages, with no consideration given to geometric historical averages, is appropriate. If the Authority considers WP's approach is not appropriate, that would imply the lower bound of the MRP range should be reduced and, consequently, the midpoint of the MRP range would also be lower.

¹²⁹ This estimate corresponds to the arithmetic average over the period 1988 to 2016 and is therefore unaffected by the pre-1957 returns data made by NERA.

¹³⁰ DBNGP decision, [563]-[564].