Our ref: EDM 56267771
Contact: Jonathon Mizen

4 May 2021

Electricity Access Team
Economic Regulation Authority
Level 4, 469 Wellington Street,
Perth WA 6000

Submitted via electronic lodgement to info@erawa.com.au

Dear Sir / Madam

Re: Framework and approach for Western Power's fifth access arrangement review – Request for feedback on issue paper

Western Power welcomes the opportunity to respond to the Economic Regulation Authority of Western Australia's request for stakeholder feedback on an issues paper for the framework and approach that will apply for Western Power's fifth access arrangement review.

Western Power notes this is an opportunity to incorporate learnings from previous access arrangements in establishing an effective framework and approach process, while considering changes to energy landscape, and challenges and opportunities to meet our ever-changing customer and community requirements. It is important to note that the changes are largely driven by customer behaviour, decarbonisation of the electricity system, and technological advancement in the energy sector.

Western Power's feedback and considerations in this paper are cognisant of these drivers, Western Power's obligations, including safety, reliability and efficiency of solutions employed, and our commitment to the community in connecting Western Australians' homes, businesses and essential community infrastructure to our distribution and transmission network.

If the Economic Regulation Authority of Western Australia would like to discuss any aspect of our response, please contact Jonathon Mizen at jonathon.mizen@westernpower.com.au.

Yours sincerely

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Head of Regulation and Investment Assurance

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1. Executive Summary

Western Power welcomes the release of the Economic Regulation Authority of Western Australia's (**ERA**) framework and approach issues paper for Western Power's fifth access arrangement review (**AA5**).

Western Power notes this is an opportunity to incorporate learnings from previous access arrangements in establishing an effective framework and approach process, while considering changes to the energy landscape, and challenges and opportunities to meet our ever-changing customer and community requirements. It is important to note that the changes are largely driven by customer behaviour, decarbonisation of the electricity system, and technological advancement in the energy sector, as identified in the examples below:

- one in three homes have rooftop solar PVs:
  - over the past year (April 2020 to March 2021) there was an average of 4,825 residential solar PV installations per month.
  - over 1,357 MW of residential solar PV is currently installed.
- a further 460 MW of large-scale renewable energy projects (wind, solar and waste-to-energy) are currently under development in the South West Interconnected System (SWIS).
- there are now more than 2,900 batteries connected to the network.
- standalone power systems are being installed to replace traditional network infrastructure in areas where it addresses a network need and is financially prudent to do so.
- other recent technological advancements including electric vehicles and behind the meter solutions also offer our customers more choice to optimise their generation, storage and use of energy.

Western Power's considerations in this paper are cognisant of these drivers, Western Power's obligations, including safety, reliability and efficiency of solutions employed, and our commitment to the community in connecting Western Australians' homes, businesses and essential community infrastructure to our distribution and transmission network.

Western Power supports the ERA's view that establishing an effective framework and approach, and guidelines, is an important step to ensure Western Power's fifth access arrangement can accommodate industry, market and regulatory changes to provide the network services required for the long term interest of consumers.

This is the first access arrangement for which a framework and approach will be developed and approved therefore, ensuring clarity and certainty on the content of the framework and approach will be key to its success. Western Power notes the ERA has largely limited the framework and approach to the required content as specified in clause 4.A2 of the revised *Electricity Networks Access Code 2004* (**Access Code**). This will streamline the access arrangement process by ensuring the right matters are considered at the right time. The matters that must be included in this first framework and approach are:

- The investment adjustment mechanism
- The gain sharing mechanism
- The service standards adjustment mechanism
- The demand management innovation allowance

- The form of price control that will set the target revenue
- A list of, and classification of, services, including whether services are reference services or non-reference services. This may include the eligibility criteria for each reference service, the structure and charging parameters for each distribution reference tariff and a description of the approach to setting each distribution reference tariff
- The method for setting the service standard benchmarks for each reference service.

In addition, the ERA is seeking feedback on the ERA's proposed approach to determining consistency with the new Access Code objective, updated on 18 September 2020, as part of Energy Policy WA's Energy Transformation Strategy.

Western Power has identified reference to 37 matters in the framework and approach issues paper. For each of these matters, Western Power, similar to the ERA, has considered the impact on customers and the broader energy sector and whether the view proposed by the ERA supports the Access Code objective. Each of the 37 matters raised by the ERA, and Western Power's response to those matters, are discussed in this document.

2. Regulatory requirements

The ERA must determine whether Western Power's access arrangement is consistent with the Access Code objective and the detailed requirements set out in Chapter 5 of the Access Code. The framework and approach must also be consistent with the Access Code objective.

The Access Code objective was amended as part of the Energy Transformation Taskforce changes on 18 September 2020.

The new Access Code objective is set out in clause 2.1 of the Access Code:

> *"…to promote the efficient investment in and efficient operation and use of, services of networks in Western Australia for the long term interests of consumers in relation to:*
>
> *(a) price, quality, safety, reliability and security of supply of electricity;*
>
> *(b) the safety, reliability and security of covered networks; and*
>
> *(c) the environmental consequences of energy supply and consumption, including reducing greenhouse gas emissions, considering land use and biodiversity impacts and encouraging energy efficiency and demand management."*

Matters discussed in the ERA's issues paper:

The ERA considers that the Access Code objective must be read as a whole.

The ERA is seeking stakeholder feedback on the ERA's proposed approach to determining consistency with the Access Code objective, including but not limited to:

- what information or data might be available to assist the ERA in considering each of the limbs, particularly the environmental consideration, in determining consistency with the Access Code objective. For example, information on greenhouse gas emissions;

- where stakeholders foresee conflicts arising between elements of the new Code objective. For example, a line route chosen based on biodiversity considerations might result in higher prices for customers;

- where stakeholders foresee conflicts arising between the Code objective and particular criteria or criterion in the Access Code. For example, the new facilities investment test may produce a result that is inconsistent with the environmental limb of the Access Code objective;

- whether there are particular matters within the framework and approach and access arrangement which are not well suited to consideration of environmental consequences, or where environmental consequences may not be relevant. For example, biodiversity considerations may not be relevant when determining the list of reference services;

- do the questions above provide an analytical framework for assessing consistency with the new Code objective? Are there additional questions the ERA should ask?

2.1 Western Power's comments

Western Power recognises that the Access Code objective has changed and acknowledges the ERA's view that the amended Code objective must be read as a whole. Western Power is well equipped to accommodate the new Code objective as we have always had a strong focus on environmental impacts and are committed to listening to and considering our community's expectations.

Western Power is required to comply with environmental obligations including obligations under the *National Greenhouse and Energy Reporting Act 2007*, *National Greenhouse and Energy Reporting Regulations 2008* and the *National Greenhouse and Energy Reporting (Measurement) Determination 2008.*

The National Pollutant Inventory (**NPI**) focuses on 93 substances emitted to the local environment. Whilst being a national program, the NPI is implemented at the state level through the *Environmental Protection (NEPM-NPI) Regulations 1998 (WA)* and regulated by the Department of Water and Environmental Regulation.

Western Power reports greenhouse gas emissions (scope 1 and scope 2) for its network and its associated support activities along with energy production and consumption data to the Clean Energy Regulator.

Western Power acknowledges the environmental consequences of energy supply and consumption and the associated challenges of decarbonising the environment and economy. Western Power supports enablement of the State Governments Climate Policy that commits to achieving net zero emissions by 2050 and our governance framework therefore provides a foundation through which environmental impacts can be considered. Western Power's existing investment governance and risk management framework can accommodate the revised objective.

Each investment Western Power undertakes, regardless of the solution implemented, has its own requirements. Western Power's Enterprise Risk Management Framework, which interacts closely with our Investment Governance Framework, therefore includes assessment criteria for safety, environmental, compliance, customer (reliability) and financial impacts to ensure investment, operation and use of the network is balanced according to the long term interest of consumers.

Accordingly, Western Power considers that the three limbs of the Code objective are already substantially considered in key decision-making within Western Power. Further thought will need to be given to the express elements of the environmental limb but Western Power does not consider substantial changes are necessary.

Western Power notes the ERA has set out the following questions which may assist the ERA, Western Power and stakeholders in systematically considering each matter and whether it is consistent with the Code objective:

1. *What is the matter being considered? (for example, form of price control or list of reference services).*
2. *How does the matter "relate to" or connect to price, quality, safety, reliability, and security of supply?*
3. *How does the matter "relate to" the safety, reliability, and security of covered networks?*
4. *How does the matter "relate to" "environmental consequences of energy supply and consumption"?*
5. *In relation to the environmental consequences specifically identified:*

a. *What effect does the matter have on greenhouse gas emissions?*

b. *What effect does the matter have on land use and biodiversity?*

c. *What effect does the matter have on encouraging energy efficiency and demand management?*

6. *If some or all of the limbs are not relevant to the matter, is it still consistent with the overarching Access Code objective?*

7. *Is there a conflict between different requirements? What is the extent of the inconsistency? Which prevails?*

Western Power's fifth access arrangement submission will clearly articulate how we apply our existing Investment Governance Framework to demonstrate the consistency of forecast investments with the Code objective.

Western Power notes the third limb of the Code objective refers to the *"environmental consequences of energy supply and consumption."* Western Power would also like to draw attention to the current environmental impacts on energy supply and consumption.

In recent times, Western Power has seen environmental causes have significant impact on the network, including the Wooroloo, Wundowie and Red Gully bushfires in January, February and March 2021 and Tropical Cyclone Seroja in April 2021. Compared to any prior environmental event, these events caused the most significant widespread damage to Western Power's network and impacted the largest number of customers. Responding to emergency events such as these requires resources to be diverted to response and repair activities. This can result in delays to other planned works on the network and impact Western Power's costs and service performance.

In addition to these individual events, Western Power is seeing broader environmental factors impacting network access and operations, such as the impact of Total Fire Ban (**TFB**) days. The number of TFB days declared by the Department of Fire and Emergency Services (**DFES**) increased significantly during the 2019/20 summer compared to prior summers. In the period of November 2019 to February 2020 there were 148 district TFB days compared to 90 district TFB days in 2018/19 and just 43 district TFB days in 2017/18. On days declared as TFB Western Power is required to take additional precautions to eliminate or manage potential risks to the public and our people, which can lead to wider and longer power outages.

Whilst it is evident that weather and TFB days have played a part in recent network reliability performance response times, understanding how this may shift average performance in the future is a very real challenge.

Western Power therefore welcomes the ERA's proposed amendments to address these environmental impacts related to service standards and exclusion. These amendments, and Western Power's response, are discussed in further detail in Section 5 of this paper.

3. Classification of services

The ERA is seeking stakeholder feedback on the proposed approach to the classification of services including any views on the classification of batteries.

Matters discussed in the ERA's issues paper:

The ERA's views on how new technologies should be classified and other changes needed to the classification of services are set out below:

- the ERA considers a new category is required for non-covered services provided by multi-function assets;

- the ERA considers that a stand-alone power system is an input, rather than a service and it should therefore be captured under the existing reference services and included in the target revenue category;

- to ensure a level playing field for third parties that connect batteries to the network, the ERA will consider whether services provided by batteries owned by Western Power could be classified as excluded services. If this approach were to be adopted, the costs of the batteries would be excluded from the regulated asset base and any network support service provided to the regulated business could be charged to the regulated business on an arms-length basis.

3.1 Western Power's comments

Western Power recognises the changing energy needs of Western Australian's requires a framework which limits administrative complexity and promotes the continued evolution of the operation and use of services of the network.

The classification of services is important as it identifies which services are regulated and how Western Power can recover the cost of providing those services. Western Power recognises relatively new services and inputs will continue to mature throughout the fifth access arrangement period and that scalability of approach is an essential consideration to promote efficient access to services.

Western Power's comments on specific matters included in the issues paper relating to the classification of services is detailed below.

3.1.1 Multi-function assets

Matter discussed in the ERA's issues paper:

- the ERA considers a new category is required for non-covered services provided by multi-function assets.

Western Power considers there may be a need to establish a new category for non-covered services provided by multi-function assets, however there are multiple interpretations as to what this could mean in practice.

One such interpretation could mean that a new category of services is included in the 'overview of price control' section of the Access Arrangement (currently 5.1 of AA4) that sets out a definition of multi-function asset services, and a reference to the multi-function asset policy. Corresponding changes may also be required to Western Power's Cost and Revenue Allocation Method to

recognise the new category of service, noting that the revenue is not from providing covered services so the interactions with the Access Arrangement are limited.

Western Power welcomes the opportunity to work with the ERA on the establishment of the multi-function asset guidelines to be implemented as part of AA5.

3.1.2 Stand-alone power systems

Matter discussed in the ERA's issues paper:

- the ERA considers that a stand-alone power system is an input, rather than a service and it should therefore be captured under the existing reference services and included in the target revenue category.

Determining the most efficient way to service the energy needs of Western Australian's using either traditional network solutions ('poles and wires') or emerging technologies such as stand-alone power systems is essential to the long-term interests of consumers.

Stand-alone power systems present a fundamental change to the traditional electricity supply chain. The ability of this type of solution to consolidate generation and network operations at the point of consumption extends beyond traditional network services. As the grid continues to evolve, and value pools shift over time, it will likely be necessary to consider how inputs such as stand-alone power systems interact with the traditional electricity supply chain.

Western Power considers that stand-alone power systems could be captured under existing reference services and included in the target revenue category in AA5. However, Western Power notes that further consideration of this treatment may be required in future access arrangements as stand-alone power systems reach significant scale in the network.

3.1.3 Storage services

Matter discussed in the ERA's issues paper:

- to ensure a level playing field for third parties that connect batteries to the network, the ERA will consider whether services provided by batteries owned by Western Power could be classified as excluded services. If this approach were to be adopted, the costs of the batteries would be excluded from the regulated asset base and any network support service provided to the regulated business could be charged to the regulated business on an arms-length basis.

Western Power agrees with the ERA's observation that storage solutions, such as network-connected batteries, can be used as alternatives to traditional network investments. These solutions can either be Western Power owned batteries or third parties providing Western Power with support services. Such investments by Western Power in these storage solutions for network purposes will be subject to the usual network investment tests.

Additionally, and as also observed by the ERA, storage may be used to provide other non-network related services, such as storage services to customers. In such circumstances Western Power is supportive of further developing the ERA's suggestion that such services be considered as 'excluded services' under the Access Code thereby requiring the relevant portion of the investment in the storage solution to be excluded from the regulated asset base.

4. Reference services

The ERA is seeking stakeholder feedback on the current reference services, changes the ERA has raised and any further modifications or new reference services required.

Matters discussed in the ERA's issues paper:

*- **Eligibility criteria, structure and charging parameters –** the ERA considers determining the eligibility criteria and the structure and charging parameters for each reference service in the framework and approach.*

The ERA considers that the current list of reference services should be retained and developed further. Changes required are set out below.

*- **Constrained Access -** the ERA considers entry reference services and capacity allocation swap services will need to be amended to reflect Access Code amendments associated with the new Wholesale Electricity Market design (constrained access);*

*- **Exit and bi-directional services -** the ERA considers that reference services should be tailored to the service that is provided;*

*- **Time of use periods -** the ERA considers the current time of use periods require review to ensure they properly reflect forecast demand patterns for AA5;*

*- **New services arising from the Energy Transformation reforms -** the ERA considers a structured approach based on a carefully thought-out plan to introduce new services would be better than leaving them to ad hoc development;*

*- **Metering -** the ERA considers consequential amendments to standard metering services for each network service may be required following amendments to the Access Code and Metering Code. The method for calculating metering charges may also require review;*

*- **Distributed generation or other non-network solutions -** The ERA proposes that the current reference services to facilitate distributed generation or other non-network solutions should be retained;*

*- **Smart Technology** - the ERA considers that the direct load control and load limitation services should be retained and amended to clearly specify what the user needs to do to be eligible for the services. The ERA has also requested consideration be given to providing reference services for any other functionality that could easily be added to Western Power's existing infrastructure and that would enable users to actively manage demand;*

*- **Other new services requested by users -** The ERA has requested that stakeholders proposing new reference services provide as much information as they are able to assist the ERA to determine whether the service is likely to be sought by a significant number of network services customers or a substantial proportion of the network services market. Submissions should include a detailed description of the service sought, eligibility criteria and charging parameters.*

4.1 Western Power's comments

Western Power notes the ERA's comments on the role of reference services in the issues paper, noting that clause 5.2(b) of the Access Code should be viewed as a minimum requirement. While Western Power agrees that correctly specifying reference services is important, Western Power is aiming to achieve a balance between providing reference services where there is a clear demand

for them (as required by 5.2(b)) and letting the market for future services mature through negotiating non-reference services as an interim position.

Western Power's approach therefore to considering reference services for AA5 is to ensure the available service offerings meet the changing energy needs of Western Australians. On this basis, Western Power proposes the following approach to considering the existing and potential list of reference services:

- Rationalise existing reference services where it is prudent to do so, in particular:
    - Under-utilisation of services, whereby a very limited, or zero, users are currently using the reference service; and
    - Duplication of services, whereby another existing service can be utilised instead;
- Utilise existing reference services to enable new technologies through updates to the eligibility criteria where it is appropriate to do so;
- Consider proposals for new services where they are sufficiently justified by users in accordance with clause 4.A14 of the Access Code, which requires that a request for the introduction of new reference services be supported by information which justifies and supports the basis on which the party making the submission considers the relevant reference service is likely to be sought by either or both of a significant number of customers and applicants or a substantial proportion of the market for services in the covered network; and
- Ensure the appropriate mechanism exists for users to request customised non-reference services in period.

4.1.1 Eligibility criteria, structure and charging parameters

Matter discussed in the ERA's issues paper:

- the ERA considers determining the eligibility criteria and the structure and charging parameters for each reference service should be included in the framework and approach.

Western Power acknowledges the ERA's preference to include consideration of the eligibility criteria, structure and charging parameters for each reference service in the framework and approach.

Western Power currently offers 61 reference services:

- 17 exit services as reference services
- 3 entry services as reference services
- 15 bi-directional services as reference services
- 10 services at a connection point as a reference service (ancillary)
- 16 reference services (metering).

In order to meet this requirement in the limited time available, Western Power considers there may be an opportunity to reduce duplication between eligibility criteria and other elements of the access arrangement that may address similar matters. For example, the requirement in Appendix E: Reference Services eligibility criteria that consumer facilities and equipment must comply with the Technical Rules is likely already covered by Appendix A: Electricity Transfer Access Contract.

However, while a rationalisation of eligibility criteria through the framework and approach may be beneficial, there is a risk that at the conclusion of the access arrangement review, important considerations may not be addressed. For example, an eligibility criterion may be moved to become a contractual requirement of the ETAC which will not be considered after the F&A (and therefore eligibility criteria) are finalised. Also, any rationalisation will need to consider whether existing access contracts will be able to accommodate changes to the eligibility criteria structure.

Western Power proposes working closely with the ERA to ensure any drafting updates to eligibility criteria appropriately take into account impacts on other access arrangement artefacts, including relevant contracts and policies.

4.1.2 Constrained Access

Matter discussed in the ERA's issues paper:

- the ERA considers entry reference services and capacity allocation swap services will need to be amended to reflect Access Code amendments associated with the new Wholesale Electricity Market design (constrained access);

Western Power acknowledges the ERA's view that entry reference services[1] and capacity allocation swap services[2] will need to be amended to reflect Access Code amendments associated with the new security constrained economic dispatch under the Wholesale Electricity Market (**WEM**) design which is scheduled to be implemented from 2022.

The concept of 'contracted capacity' (and the ability to 'relocate' that capacity from one connection point to another) is less relevant for the export of power into the network under the proposed improvements to the network access framework, which will enable generators to connect to the grid irrespective of the available network capacity in their location. A generator's real time export to the network will be determined by the Australian Energy Market Operator's (**AEMO**) dispatch engine as updated to give effect to the principle of security constrained economic dispatch. Changes currently being made to the allocation of capacity credits (through the use of a Network Access Quantity) may also be impacted by a reallocation of capacity through this service.

For these reasons, Western Power considers reference services D2 and D3 (capacity allocation swap services) and reference services D4 and D5 (capacity allocation same connection point services) should be amended to exclude eligibility for generators, due to the introduction of constrained access. Additionally, given the limited take up to date and very narrow set of circumstances where these services could be used, consideration should also be given to removing these services as reference services entirely and allowing the services to develop as non-reference services.

Western Power acknowledges the ERA's view that amendments are required to entry reference services B1 and B2 to reflect the introduction of Constrained Access.

4.1.3 Exit and bi-directional services

Matter discussed in the ERA's issues paper:

- the ERA considers that reference services should be tailored to the service that is provided;

[1] Western Power currently offers 3 entry services as reference services (reference services B1, B2 and B3)

[2] Western Power currently offers 4 capacity allocation swap services as reference services (reference services D2, D3, D4 and D5)

Western Power acknowledges the ERA's view that reference services should be tailored to the service that is provided and considers exit and bi-directional services should continue to be offered as separate reference services.

Western Power agrees care needs to be taken before expanding the existing bi-directional services to include connections with new technologies, in particular storage and electric vehicles. Western Power considers new technologies can be accommodated via a structured approach which either expands the eligibility criteria of a relevant existing reference service or introduces new tailored reference services.

Appropriately structured tariffs combined with new opportunities for customers, to provide services to Western Power, can achieve some of the same outcomes that might otherwise be addressed through the specification of new reference services. For instance:

- More efficient charging parameters will better accommodate customer diversity than proliferating reference services and associated tariff classes, as has occurred with multiple time of use reference services in the AA4 period. While the operating patterns of various new technologies may have different impacts on the network, if consumers face efficient network prices, much of the need to specify separate reference services, according to the types of technology the customer has installed, will fall away. Instead, customers on the same reference service may pay differing amounts reflective of the differences in the long run cost of supplying them depending on the way each customer utilises the network (both in taking energy and/or supplying energy).
- Complementing efficient tariff design, which will operate across the entire system, will be alternative options which will provide a more targeted locational signal. Such non-tariff options will allow Western Power to more directly reward customers for energy consumption and/or supply decisions that are beneficial to the network and other customers. The use of alternative options will incentivise customers to make their technologies controllable and will target incentives in the locations where greatest cost reductions can be achieved. The incentives created under contracts between Western Power and, for instance, aggregators will take some of the burden currently borne by tariffs for signalling the costs (and conversely the benefits) of different behaviours.

Western Power welcomes submissions from stakeholders on changes to existing, or new, reference services that are likely to be required by a substantial number of network service customers.

4.1.4 Time of use periods

Matter discussed in the ERA's issues paper:

- the ERA considers the current time of use periods require review to ensure they properly reflect forecast demand patterns for AA5;

Western Power supports the review of the current time of use periods to ensure they properly reflect forecast demand patterns for AA5. The scope of this review should include consideration of the most appropriate time bands and potential grandfathering of existing time bands that are inconsistent with the demand patterns forecast for AA5.

The objective of setting appropriate time of use periods should be to deliver more consistent usage of the network throughout the day in order to avoid significant peaks and lows and ultimately reduce the requirement for network augmentation to address those peaks or lows. Western Power is currently observing system peaks in the late afternoon and early evening period, with lows

occurring in the middle of the day, aligned with the increased prevalence of solar photovoltaic systems.

Western Power considers charging parameters for time of use services should be set at a level that provides strong price signals for periods of peak and low demand. Western Power would therefore support a strong pricing differential between peak and low demand time bands. An example of the time bands that would work well based on the current loads observed in the network would be;

- significantly lower prices for electricity consumption during periods of low demand from 9am to 3pm;
- higher prices for consumption during on peak periods of high demand from 3pm to 9pm; and
- moderate prices for off-peak periods at all other times.

4.1.5 New services arising from the Energy Transformation reforms

Matter discussed in the ERA's issues paper:

- the ERA considers a structured approach based on a carefully thought-out plan to introduce new services would be better than leaving them to ad hoc development;

Western Power considers that the major changes foreshadowed by the Energy Transformation Strategy with relevance to the specification of reference services are those relating to the establishment of:

- Market reforms intended to increase the opportunities for distributed energy resources (**DER**) to become orchestrated – for instance through the intermediation of aggregators participating in the wholesale market. Orchestrated DER should be more responsive to the price signals in retail tariffs, but may also be available to operate in ways that improve network service levels or reduce network costs.
- The new role of Distribution System Operator (**DSO**) expected in 2023. The DSO may be vested with responsibilities for identifying alternative options to network investments and procuring suitable services from, among other venders, users and DER aggregators by means of bilateral contracts.
- Rules and requirements designed to ensure Western Power enables and engages with non-network solutions as alternatives to traditional network investment ("alternative options"). Relevant initiatives include developing a template alternative options contract and an alternative options vendor register.

Western Power agrees a structured approach is required to introduce new services. However, Western Power is of the view that introducing new services as reference services while concepts are still being developed may result in inflexibility in the defined services and contribute to their underutilisation. As an example; direct load control, load limitation services, streetlight LED replacement service, and capacity swap services were introduced as reference services in AA4 and utilisation has been very limited to date. The nature of these services requires collaboration between Western Power and users, often with user-specific customisations. Services with these characteristics may reach maturity more quickly via negotiated non-reference services during AA5, with outcomes informing reference services in future access arrangements. However, Western Power welcomes submissions from stakeholders on changes to existing, or new, reference services that may promote the objectives of the energy transformation reforms or that are likely to be required by a substantial number of network service customers.

4.1.6 Metering

Matter discussed in the ERA's issues paper:

- the ERA considers consequential amendments to standard metering services for each network service may be required following amendments to the Access Code and Metering Code. The method for calculating metering charges may also require review;

Western Power agrees with the ERA's view that consequential amendments to standard metering services for each network service may be required following amendments to the Access Code and Metering Code. The method for calculating metering charges may also require review.

Western Power considers the scope of this review should consider:

- the progress of deployment of advanced metering infrastructure and its capability to provide remote reference services (metering)
- wholesale electricity market reforms, which introduce market requirements for five-minute interval energy data and weekly settlement for contestable metering points
- compatibility of permissible reference services (metering) with any new reference services.

4.1.7 Distributed generation or other non-network solutions

Matter discussed in the ERA's issues paper:

- The ERA proposes that the current reference services to facilitate distributed generation or other non-network solutions should be retained;

Western Power does not believe the existing reference services (B3 and C15) to facilitate distributed generation or other non-network solutions should be retained.

Distributed generation and other non-network solutions have the potential to reduce Western Power's capital and/or non-capital costs. Western Power acknowledges the ERA's view that the amendments to the Access Code requiring Western Power to produce an annual network opportunity map, an alternative options strategy and a vendor register will provide information to enable prospective users to take up opportunities to install distributed generation or other non-network solutions in places that provide network benefits.

However, Western Power believes that once these new annual arrangements are in place from October 2021, then having separate reference services available is no longer necessary. The changes introduced in to the Access Code (specifically Chapter 6A), including the Network Opportunity Map, are designed to ensure that all network users have visibility of future costs on the network which creates opportunities for providers of non-network solutions to provide these solutions to Western Power at lower cost than a network option. As part of this process, Western Power will be required to enter into a contract with the provider of the alternative option. This contract will in effect be based on the reduction in network costs. It is unclear at that point, what additional benefit there is from retaining these reference services as the benefit has already been quantified and delivered to the provider of the alternative option.

The advantage of utilising the approach set out in Chapter 6A of the Access Code is that all opportunities are publicly available and available to all network users, while still meeting the intent of the Access Code to provide discounts to distributed generating plant (Section 7.10). The current reference services do not require the opportunities to be public and transparent.

4.1.8 Smart Technology

Matter discussed in the ERA's issues paper:

- the ERA considers that the direct load control and load limitation services should be retained and amended to clearly specify what the user needs to do to be eligible for the services. The ERA has also requested consideration be given to providing reference services for any other functionality that could easily be added to Western Power's existing infrastructure and that would enable users to actively manage demand;

Western Power acknowledges the ERA's view that the existing direct load control and load limitation services should be retained and reviewed to ensure they clearly specify what is available and what the user needs to do to be eligible for the services, including the marginal costs of access.

As with all reference service requests, Western Power welcomes proposals from stakeholders for new reference services which use some form of smart technology to enable users to actively manage demand. An understanding of user preferences will assist Western Power in the evaluation of any incremental capital and/or non-capital costs associated with establishing new reference services. It will also allow Western Power and ERA to better understand whether the proposed new service is likely to be sought by a significant number of network services customers or a substantial proportion of the network services market as required by the Access Code. Alternatively, Western Power is open to negotiating non-reference services as requirements emerge.

4.1.9 Other new services requested by users

Matter discussed in the ERA's issues paper:

- The ERA has requested that stakeholders proposing new reference services provide as much information as they are able to assist the ERA to determine whether the service is likely to be sought by a significant number of network services customers or a substantial proportion of the network services market. Submissions should include a detailed description of the service sought, eligibility criteria and charging parameters.

Western Power supports the ERA's view that stakeholders proposing new reference services should provide as much information as they are able to assist the ERA to determine whether the service is likely to be sought by a significant number of network services customers or a substantial proportion of the network services market.

Western Power is committed to working with users to develop new services that are likely to be required by a substantial number of network service customers and inclusion of a detailed description of the service sought, eligibility criteria and charging parameters will support efficient consultation and service development.

5. Method for setting service standard benchmarks

The ERA is seeking stakeholder feedback on the proposed changes to the method for setting service standard benchmarks.

Matters discussed in the ERA's issues paper:

- *The ERA considers the method for calculating the benchmarks should continue to be based on the 97.5th (or 2.5th) percentile of actual performance over the previous period;*
- *The ERA considers some amendments are necessary to the service standards and exclusions;*
- *the ERA considers if Western Power proposes any planned disruptions, new investment or changes to maintenance activities in its access arrangement proposal that would affect service standard performance, it should include details in its access arrangement proposal so that the service standards can be adjusted if appropriate;*
- *the ERA considers that circuit availability can be removed from the transmission service standard benchmarks;*
- *the ERA considers a new transmission service standard benchmark should be introduced to measure the frequency (and/or quantity of energy) that a generator would have been dispatched by AEMO and could not be due to a planned or unplanned network outage;*
- *the ERA considers that the current exclusions should be amended so that any interruptions to distribution customers caused by Western Power planned or unplanned outages on the transmission network are included in SAIDI and SAIFI;*
- *the ERA considers distribution service standard exclusions should not exclude faults on the transmission network;*
- *the ERA considers distribution service standard exclusions should no longer require force majeure;*
- *the ERA considers a new exclusion should be added to distribution service standard exclusions to exclude load interruptions caused or extended by a direction from state or federal emergency services, provided that a fault in, or the operation of the network did not cause, in whole or part, the event giving rise to the direction;*
- *the ERA considers planned outages should continue to be excluded. The ERA proposes introducing increased reporting requirements to provide better information on the level and reason for planned outages.*

5.1 Western Power's comments

5.1.1 Method for calculating benchmarks

Matter discussed in the ERA's issues paper:

- the ERA considers the method for calculating the benchmarks should continue to be based on the 97.5th (or 2.5th) percentile of actual performance over the previous period;

Western Power considers the method for calculating service standard benchmarks (SSBs) should be reviewed to ensure that the levels at which SSBs are set continue to provide:

- the right incentives for Western Power to continue to seek cost efficiencies to provide an affordable and valued service to our customers; and,
- the required SSB levels to deliver on customer expectations with respect to reliability and the customer felt experience.

The SSB compliance levels should be set at levels that can consistently be met during each financial year of AA5. If SSB compliance levels are set at levels that cannot be consistently achieved, the implication of Access Code clause 11.1 is that greater investment is required to meet the SSB compliance levels:

- *11.1 A service provider must provide reference services at a service standard at least equivalent to the service standard benchmarks set out in the access arrangement*

Western Power considers the implications of the challenging external environment experienced in recent times, as noted in Section 2.1 of this paper, are not reflected in the current methodology for setting SSBs. In particular, Western Power's most recent 2019/20 service standard performance report noted that weather and broader environmental factors (such as bushfires) have played a part in recent network reliability performance. In addition, responding to these emergency environmental events requires resources to be diverted from other planned works on the network which can have a related impact on reliability and SSB performance in other areas. This has seen a variance in Western Power's performance over time (after exclusions) which impacts our performance against the SSB levels.

Western Power considers the current methodology for setting SSB levels based on the 97.5th (or 2.5th) percentile of actual performance over the previous period does not capture the full impact of shifts in performance (i.e. volatility) in recent years. Continuing with this approach may inappropriately incentivise a focus on addressing the factors that are creating the increased volatility in performance over time, rather than the factors that are causing a shift in the underlying trend in performance to meet a service standard benchmark measure.

Western Power considers that setting SSB levels at the 99th (or 1st) percentile of actual performance over the most recent actual 5-year or 10-year period would more successfully achieve the outcomes customers are seeking with respect to maintaining current levels of reliability performance throughout AA5 and meeting the Access Code obligations to meet at least the SSB levels each financial year. An alternate approach could be to clarify that SSB levels are set at levels that "must be reasonably achieved" to recognise instances where emerging external factors cause performance worse than the SSBs, whilst still incentivising Western Power to address the factors impacting SSB performance within its control.

Western Power notes that changes to the SSB compliance levels, will not change the incentive to maintain current levels of average performance to our customers. This is incentivised through the service standard adjustment mechanism (SSAM) which sets a financial service standard target based on the average of the most recent 5 financial years performance. It is against this service standard target that Western Power is subject to financial rewards and penalties based on our ability to maintain average performance. The incentive rates which determine the magnitude of the financial rewards and penalties are set based on the value to customers, such as the value of customer reliability mentioned in section 9.1.3. The SSAM incentive scheme will also strengthen with the removal of the individual penalty caps at the SSB, as outlined in section 9.1.5. It is the SSAM incentive scheme that provides a strong incentive to ensure that Western Power is incentivised to invest to maintain and improve reliability performance where it is valued by our customers.

5.1.2 Factors that may affect service standard performance

Matter discussed in the ERA's issues paper:

- the ERA considers if Western Power proposes any planned disruptions, new investment or changes to maintenance activities in its access arrangement proposal that would affect service standard performance, it should include details in its access arrangement proposal so that the service standards can be adjusted if appropriate

Western Power acknowledges the ERA's proposed amendment to adjust service standards for specific impacts where appropriate.

Western Power's fifth access arrangement submission will clearly articulate the required capital and operating expenditure to deliver network outcomes in line with customer and community expectations. The submission will include the expected outcome on reliability and service standards. Where planned disruptions, new investment, changes to maintenance activities or any other factors which may affect service standard performance, Western Power may propose step changes, either upwards or downwards, in its submission to reflect the expected impact.

As noted in Western Power's 2019/20 service standard performance report, a broader contributing factor impacting Western Power's operations has been the impact of Total Fire Ban (**TFB**) days. The number of TFB days declared by the Department of Fire and Emergency Services (**DFES**) increased significantly during the 2019/20 summer compared to prior summers. In the period of November 2019 to February 2020 there were 148 district TFB days compared to 90 district TFB days in 2018/19 and just 43 district TFB days in 2017/18. TFB days are declared by the DFES on days of extreme weather. When a TFB day is declared this prohibits activity that may start a fire. This means Western Power should, and does, take additional precautions to eliminate or manage potential risks to the public and our people, which leads to wider and longer power outages.

In addition, Western Power has experienced an increase in large environmental impacts on the network. Most recent events are the Wooroloo, Wundowie and Red Gully bushfires in January, February and March 2021 and Tropical Cyclone Seroja in April 2021. These events caused the most significant widespread damage and impacted the largest number of customers compared to any previous environmental event impacting Western Power's network. Western Power also notes that, similar to the TFB restrictions noted above, following Tropical Cyclone Seroja, Western Power crews were prevented from accessing certain parts of our network to restore power to customers until relevant state emergency services bodies granted access.

Whilst it is evident that weather and TFB days play a part in network reliability performance, understanding how this may shift average performance in the future is a very real challenge. Western Power is continually assessing the impact of these environmental events on service standards and operational activities and, where robust data exists, Western Power will propose specific step changes to SSBs as part of the AA5 submission.

5.1.3 Service standard benchmarks – transmission network

Matters discussed in the ERA's issues paper:

- the ERA considers that circuit availability can be removed from the transmission service standard benchmarks

- the ERA considers a new transmission service standard benchmark should be introduced to measure the frequency (and/or quantity of energy) that a generator would have been dispatched by AEMO and could not be due to a planned or unplanned network outage;

Western Power considers the removal of circuit availability from the list of transmission service standard benchmarks to be reasonable, for the reasons noted by the ERA.

However, Western Power considers the new transmission service standard benchmark for planned and unplanned network outages proposed by the ERA is unsuitable. Western Power is of the view that it is not in line with responsibilities between Western Power and AEMO.

With respect to planned network outages, under the new Wholesale Electricity Market (WEM) rules, Western Power is required to notify and coordinate with market participants who are affected by a network outage six months prior to the commencement of the proposed outage and AEMO is required to approve the planned network outage. Where possible, Western Power will seek to align its planned network outages with market participant planned outages. Western Power therefore considers it is unreasonable to include the impact of network planned outages as Western Power considers that AEMO, under normal circumstances, would not dispatch an impacted generator during an approved planned network outage. Western Power notes however, that under abnormal circumstances, AEMO has the power to cancel an approved planned outage and if required, direct market participants and Western Power to operate their generators and network equipment in specific ways.

As the network operator, Western Power does not have access to the data required to determine what quantity of energy a generator would be generating had a network outage not occurred. The quantity of energy that the generator would have been generating would be subject to many factors including:

- the generators' own availability to generate;
- fuel source availability to generate;
- whether or not the generator would have been dispatched based on the economics of its bid or other bilateral arrangements;
- whether the generator was required given the current system demand and the nature of generation required at the time; and
- how AEMO meets its obligations with respect to system security and reliability.

With respect to the impact of unplanned network outages, at the time of the outage the actual generation at the time may (depending on configuration) be known, however in subsequent intervals the quantity of generation impacted may be unknown due to the factors applying to planned outages as noted above.

The impact of planned or unplanned network outages and constraints on the market will be subject to greater focus in the new WEM. Western Power therefore proposes that any new transmission service standard benchmark be considered once the new regime is in place and there is sufficient experience and data to determine appropriate service standard benchmarks. Western Power

understands there will be extensive reporting under the new regime with greater measurement of related market impacts which will provide sufficient information to stakeholders and market participants. Examples of new WEM Rules provisions increasing review and reporting include:

- ERA review – once every five years the ERA must conduct an economic study on the impact of Network Operator outages on the market against the Wholesale Market Objectives. Any recommendations made by the ERA to change the WEM Rules or WEM Procedures must be submitted as a Rule Change Proposal;
- Coordinator of Energy review - once every five years the Coordinator must conduct a review of the Outage planning process against the Wholesale Market Objectives. Any recommendations made by the Coordinator to change the WEM Rules must be submitted as a Rule Change Proposal.

There will also be a Congestion Information Resource (**CIR**) which will be published by AEMO and is expected to provide a consolidated source of information relevant to the understanding and management of transmission network congestion (constraint) risk, including:

- major transmission outages including trends and insights (such as outage duration, types of outages and outage submit time versus start time);
- assessment of market impact of network congestion;
- provide network congestion information in cost-effective and timely manner;
- allow Rule Participants and stakeholders to understand patterns and market impact of network congestion.

Western Power therefore does not support the new transmission service standard benchmark as proposed by the ERA. Western Power considers that appropriate mechanisms exist in the new WEM Rules framework to ensure that network outages are effective via the Network Operator's obligation to co-ordinate network outages and the one in five year reviews by the ERA and Energy Co-ordinator. Western Power considers these mechanisms should be maintained in the WEM Rules framework and not through the service standard benchmarks framework.

In general, Western Power considers the introduction of new service standard benchmarks should be carefully planned and tested to ensure they deliver outcomes in the long-term interests of consumers. This generally requires consideration of how measures should evolve over multiple access periods.

Western Power considers additional consultation with the ERA, AEMO and other stakeholders may be required during AA5 to develop an appropriate alternative measure and to collect data to inform amendments to transmission service standard benchmarks for following access arrangements.

5.1.4 Service standard benchmarks – distribution network

Matter discussed in the ERA's issues paper:

- the ERA considers that the current exclusions should be amended so that any interruptions to distribution customers caused by Western Power planned or unplanned outages on the transmission network are included in SAIDI and SAIFI;

- the ERA considers distribution service standard exclusions should not exclude faults on the transmission network;

Western Power is of the view that the exclusion for transmission outages from distribution SAIDI and SAIFI measures should be retained.

Whilst Western Power recognises that distribution customers can be impacted by both distribution and transmission unplanned outages, Western Power considers that maintaining SSBs for AA5 separately for the distribution network and transmission network enables the risks and issues related to each of the distribution and transmission networks to be separately and appropriately managed. The transmission network with its fewer, larger assets is planned and managed substantially differently to the distribution network. Expectations of transmission network reliability are significantly higher due to the large number of customers that could be impacted by a single event and this is typically mitigated by strong planning criteria that requires redundancy and security of supply. However, the distribution network with many, smaller assets is not able to justify the high levels of redundancy and is focussed more on management of risks of an outage occurring or reducing response times to outages.

For transmission networks a focus is on how to account for and manage high impact, low probability events. If transmission unplanned outages were included in SAIDI and SAIFI, this could have the impact of skewing the SAIDI and SAIFI performance by a few one-off low probability, high impact events. This could inadvertently drive a focus on investing to address these high impact, low probability events at the expense of addressing other more commonly occurring distribution reliability risks.

Western Power considers that the inclusion of transmission outages in the distribution SAIDI and SAIFI measures will result in a double counting of transmission outages, whilst the existing transmission reliability measures continue to be service standard benchmark measures; loss of supply event frequency >0.1SMI[3] and <1SMI, loss of supply event frequency <=1.0SMI and average outage duration. This will mean that Western Power and our customers will be either double rewarded or penalised for performance which will skew the value that customers place on reliability. Adjustments of the service standard benchmark measures needs to be considered holistically to ensure that measures remain independent.

Western Power notes that it already reports on SAIDI and SAIFI under its licence conditions in several ways through its annual Electricity Distribution Licence Performance Reporting. This includes SAIDI and SAIFI performance including unplanned distribution and transmission outages.

The integration of transmission outages into SAIDI and SAIFI compliance benchmarks could lead to unintended outcomes and drivers for Western Power to manage its network and drive investment decisions. Any changes to the distribution and transmission reliability service standard benchmarks needs to be carefully considered to ensure they continue to incentivise the right expenditure and performance outcomes for customers.

Matter discussed in the ERA's issues paper:

- the ERA considers distribution service standard exclusions should no longer require force majeure;

Western Power considers force majeure should be retained in distribution service standard exclusions.

[3] System Minutes Interrupted

The ERA proposes that force majeure events are adequately dealt with under the calculation of major event days. However, Western Power notes there are examples of force majeure events which have not been excluded under the major event day definition.

Western Power's 2019/20 service standard performance report had three examples affecting distribution service standards, where the major event day exclusion alone was insufficient and the force majeure exclusion was used to remove events outside of Western Power's control. These events included two bushfires (the Yanchep and Two Rocks bushfire in December 2019 and the Katanning bushfire in February 2020) and abnormal storm activity in the North Country in February 2020.

The definition of force majeure events is wide ranging and provides Western Power the opportunity to seek exclusion for a force majeure event which is outside of Western Power's control, noting that these such events could extend for many days, weeks or even months.

Matter discussed in the ERA's issues paper:

- the ERA considers a new exclusion should be added to distribution service standard exclusions to exclude load interruptions caused or extended by a direction from state or federal emergency services, provided that a fault in, or the operation of the network did not cause, in whole or part, the event giving rise to the direction;

Western Power supports in principle the ERA's proposal to include a new distribution service standard exclusion to exclude load interruptions caused or extended by a direction from an external body which prevents Western Power from accessing an area to restore supply.

As noted in sections 2 and 5.2.2 above, in addition to major environmental events, Western Power is seeing broader environmental factors impacting network access and operations, for example the impact of Total Fire Ban (**TFB**) days and access restrictions to cyclone affected areas, which can lead to wider and longer power outages.

To address these impacts outside Western Power's control, Western Power supports the ERA's proposed exclusion. Western Power considers the exclusion should not be limited to state or federal emergency services as Western Power notes that local government can also restrict Western Power entering an area to restore the supply. Western Power therefore proposes the exclusion be expanded to refer to state or federal emergency services and local or state government bodies.

Western Power considers that this exclusion should focus on excluding the impacts of third party directions, such as the impacts to fault response time, rather than the cause of the fault. The ERA's proposal specifically excludes situations where the event giving rise to the direction was caused in whole or part by a fault in, or the operation of, the network. Western Power considers this exclusion might not be practical in real circumstances, and exposes Western Power to additional reliability impacts where Western Power is not in a position to control third party directives following an events occurring - for example, inadequate emergency responses (other government services accountability)and unmanaged fuel loads (customer accountability). Additionally, in some cases an investigation into the cause of load interruption is required - for example a fire event. Accountability for the load interruption may therefore not be attributed until the completion of the investigation which may take an extended period of time and therefore cross financial or calendar years. Furthermore, Western Power notes it already has strong reputational and regulatory incentives to minimise network safety performance incidents. Western Power publishes Annual Network Safety Performance Objectives and quarterly Network Safety Performance Outcomes.

Western Power therefore proposes the following amendments to the ERA's proposed exclusion:

- expand the exclusion to include direction from any local or state government body in addition to state or federal emergency services;
- expand the inclusion to specifically refer to Total Fire Ban days; and
- remove the wording of "provided that a fault in, or the operation of the network did not cause, in whole or part, the event giving rise to the direction."

Matter discussed in the ERA's issues paper:

- the ERA considers planned outages should continue to be excluded. The ERA proposes introducing increased reporting requirements to provide better information on the level and reason for planned outages.

Western Power acknowledges the ERA's view to continue to exclude planned outages from distribution service standards. However, Western Power considers increased reporting requirements unnecessary, due to the extensive reporting obligations that already exist under our licence conditions. These obligations are satisfied through our annual electricity distribution licence performance reporting, that includes the following indicators for the Distribution Network:

- The number of premises of small use customers to which the supply of electricity has been interrupted for more than 12 hours continuously
- The number of premises of small use customers to which the supply of electricity has been interrupted more than the permitted number of times, as is defined in section 12(1) {of the NQ&R Code}
- For each discrete area, the average length of interruption of supply to customer premises expressed in minutes
- For each discrete area, the average number of interruptions of supply to customer premises
- For each discrete area, the average percentage of time that electricity has been supplied to customer premises
- For each discrete area, the average total length of all interruptions of supply to customer premises expressed in minutes
- Overall SAIDI by Total Network, CBD, Urban, Short Rural and Long Rural
- Distribution Network (Planned) SAIDI by Total Network, CBD, Urban, Short Rural and Long Rural
- Distribution Network (Unplanned) SAIDI by Total Network, CBD, Urban, Short Rural and Long Rural
- Normalised distribution network SAIDI by Total Network, CBD, Urban, Short Rural and Long Rural
- overall SAIFI by Total Network, CBD, Urban, Short Rural and Long Rural
- Distribution Network (Planned) SAIFI by Total Network, CBD, Urban, Short Rural and Long Rural
- Distribution Network (Unplanned) SAIFI by Total Network, CBD, Urban, Short Rural and Long Rural
- Normalised distribution network SAIFI by Total Network, CBD, Urban, Short Rural and Long Rural

- Overall CAIDI by Total Network, CBD, Urban, Short Rural and Long Rural
- Distribution Network (Planned) CAIDI by Total Network, CBD, Urban, Short Rural and Long Rural
- Distribution Network (Unplanned) CAIDI by Total Network, CBD, Urban, Short Rural and Long Rural
- Normalised distribution network CAIDI by Total Network, CBD, Urban, Short Rural and Long Rural.

In addition, as noted in section 5.1.3, Western Power understands there will be extensive reporting under the new WEM regime with greater measurement of related market impacts.

6. Price control

The ERA is seeking stakeholder feedback on the proposed amendments to the form of the price control.

Matters discussed in the ERA's issues paper:

The form of the current price control is a modified revenue cap. When Western Power updates its tariffs each year, it must ensure that the forecast revenue from those tariffs is equal to the target revenue determined by the price control formula.

The current access arrangement includes separate price controls for the transmission and distribution network. In addition, there is a side constraint that restricts the change for each tariff to be no more than 2 per cent above the overall change in tariffs.

The ERA proposes the current form of price control should apply for the AA5 period with some modifications:

- the ERA considers separate price controls for the transmission and distribution network may no longer be required;

- the ERA considers the side constraint may no longer be required.

6.1 Western Power's comments

Western Power acknowledges the ERA's proposed form of price control and the modifications to the form of price control.

In addition, Western Power proposes two additional modifications as follows:

- remove the requirement to ensure that when Western Power updates tariffs each year, forecast revenue from those tariffs must equal the target revenue determined by the price control formula; and
- include a revenue uncertainty adjustment mechanism for a portion of under or over recovery of revenue if it is sufficiently material.

The reasons for Western Power's expanded view are provided below.

6.1.1 Single price control – transmission and distribution networks

Matter discussed in the ERA's issues paper:

- the ERA considers separate price controls for the transmission and distribution network may no longer be required.

Western Power considers that the ERA's view that separate price controls for the transmission and distribution network may no longer be required is reasonable. Western Power understands this amendment will move the price control to a single target revenue in the fifth access arrangement in place of separate target revenues for the transmission and distribution networks.

However, Western Power recognises there may still need to be separate revenue components for the transmission and distribution network included in Western Power's fifth access arrangement submission information, for example to calculate the reward and penalty caps to apply to transmission and distribution under the service standards adjustment mechanism.

6.1.2 Side constraints

Matter discussed in the ERA's issues paper:

- the ERA considers the side constraint may no longer be required.

Western Power considers the ERA's view that the side constraint is no longer required is reasonable.

The Energy Transformation amendments to the Access Code include new requirements for the information Western Power must include in its access arrangement on tariffs and the principles it must follow to set reference tariffs.

Western Power's access arrangement is now required to include a tariff change forecast setting out the forecast change in each tariff for each year of the access arrangement. This will enable consultation during the access arrangement review on the price path for each reference tariff.

Accordingly, Western Power considers that the introduction of new pricing principles in Chapter 7 of the Access Code and the requirement for Western Power to include a tariff structure statement as part of the Access Arrangement, provides greater flexibility and clarity for setting tariffs for all customers.

6.1.3 Additional matters for consideration

Western Power proposed modification

- remove the requirement to ensure that when Western Power updates tariffs each year, forecast revenue from those tariffs must equal the target revenue determined by the price control formula

Western Power proposes an additional modification to remove the requirement to ensure that when Western Power updates tariffs each year, forecast revenue from those tariffs must equal the target revenue determined by the price control formula.

The requirement is included in section 6.5.3 of the Access Arrangement Four which states:

> *Western Power, as a reasonable and prudent person, will set the reference tariffs in the price list so that the forecast transmission system revenue for revenue target services for year t recovers MTR or TTR as applicable and the forecast distribution system revenue for revenue target services for year t recovers MDR or TDR as applicable.*

As noted by the ERA, the current form of price control ensures Western Power is exposed to demand risk rather than guaranteeing Western Power a fixed level of revenue and passing on the costs (or returning revenue) to users. However, Western Power notes that in practice, the current form of price control has unlimited in period downside volume risk and revenue risk for Western Power. However, the upside volume and revenue opportunity is impacted by the annual target revenue approved for AA4 at the time of setting the annual price list as per section 6.5.3 above. This results in an asymmetrical pricing constraint.

Western Power therefore proposes to remove section 6.5.3 in order to remove the asymmetrical pricing constraint.

Western Power also considers this modification is required in order for the ERA's proposed amendment to the investment adjustment mechanism to be implemented. The ERA states that "as Western Power receives more revenue if demand is greater than forecast and less revenue if

demand is less than forecast, there is less need for the investment adjustment mechanism to include expenditure for growth and customer demand."

Western Power considers this statement to only be valid if the asymmetrical pricing constraint caused by the link to target revenue is removed.

Western Power proposed modification:

- include a revenue uncertainty adjustment mechanism for a portion of under or over recovery of revenue if it is sufficiently material.

Western Power proposes an additional modification to include an adjustment for a portion of under or over recovery of revenue if it is sufficiently material.

Western Power recognises that the current form of price control ensures Western Power is exposed to demand risk rather than guaranteeing Western Power a fixed level of revenue and passing on the costs, or returning revenue, to users. Western Power notes the ERA's comments on demand forecasting challenges in their scoping paper "Framework and approach for Western Power's fifth access arrangement review" published in November 2020:

> *The electricity sector in Western Australia is experiencing a major transformation due to the rapid uptake of rooftop solar panels and increasing levels of large-scale renewable generators. Advances in battery storage, distributed energy technologies and evolving consumer preferences are significantly changing the dynamics of the power system and the demands on the electricity network. Forecasting future demand is becoming increasingly challenging with many uncertainties, including the future uptake of electric vehicles.*[4]

Western Power has a robust forecasting process combining forecast customer connection inputs based on regional economic factors and tariff churn; and forecast PV uptake based on connection growth and retail tariffs. However, Western Power acknowledges the ERA's comments that a number of uncertainties exist which may have a significant impact on future demand. Many of these are the result of new technologies as noted by the ERA however, additional uncertainty may arise from unexpected economic factors, a recent example being the COVID-19 pandemic and related restrictions on business operations during Government imposed lockdowns.

Western Power considers that exposure to significant and unexpected demand volatility within an access arrangement period, that is outside the control of Western Power, should not be borne in full by Western Power, this includes both upside and downside demand volatility. Western Power therefore proposes that if the increase or decrease in demand, and therefore revenue, is sufficiently material, Western Power and customers should share this demand risk. One method to achieve this is through a revenue uncertainty adjustment mechanism.

Western Power therefore proposes to include a revenue uncertainty adjustment mechanism for AA5. Western Power considers the adjustment mechanism should have the following characteristics:

- an adjustment mechanism where target revenue is adjusted either in period, or at the commencement of the next access arrangement, to allow for recovery (or return) of a portion of revenue if demand was materially different to that forecast in the AA decision;

[4] Framework and approach for Western Power's fifth access arrangement review, Scoping paper, 5 November 2020, pg. 3

- under the mechanism, demand risk would remain first with Western Power, however the magnitude of the risk would be capped so that is shared with customers if sufficiently material;
- determining the level of the cap should have regard to actual demand volatility experienced in previous access arrangement periods and the related variance to target revenue; and
- the cap should be symmetrical (similar to the application of the Gain Sharing Mechanism and the Service Standard Adjustment Mechanism).

7. Investment adjustment mechanism

The ERA is seeking stakeholder feedback on the proposed amendments to the investment adjustment mechanism.

Matter discussed in ERA's issues paper:

- the ERA considers that including expenditure for growth and customer demand in the investment adjustment mechanism is inconsistent with the price control that has applied since 2019/20, which places demand risk on Western Power; and that the current price control effectively already includes an adjustment mechanism.

7.1 Western Power's comments

The current price control allows Western Power to receive more revenue if demand is greater than forecast and less revenue if demand is less than forecast.

Western Power considers the ERA's view that there is less need, under the current form of price control, for the investment adjustment mechanism to include expenditure for growth and customer demand expenditure is reasonable.

Western Power considers this statement to only be valid if the asymmetrical pricing constraint is removed as noted in Western Power's proposed modification to remove the requirement to ensure that when Western Power updates tariffs each year, forecast revenue from those tariffs must equal the target revenue determined by the price control formula. This is discussed in more detail in Section 6.2.3.

8. Gain sharing mechanism

The ERA is seeking stakeholder feedback on the proposed changes to the gain share mechanism.

Matters discussed in ERA's issues paper:

The ERA proposes amendments to the gain sharing mechanism are required due to Access Code amendments:

- the requirement that the above-benchmark surplus does not exist to the extent that a service provider achieves efficiency gains by failing to comply with the service standard benchmarks should be removed. This change also results in a consequential amendment to the service standard adjustment mechanism which will no longer require the benchmark as a floor when calculating penalties;

- the gain sharing mechanism must be amended to reflect the requirement for it to be symmetrical;

- the effects of the gain sharing mechanism on incentives for the implementation of alternative options must be minimised. The ERA considers the existing requirement for D-factor expenditure to be excluded from the gain sharing mechanism addresses this requirement;

- In addition, the ERA proposes to remove the exclusion of uncontrollable costs (superannuation costs for defined benefit schemes, licence fees, energy safety levy and ERA fees) from the gain share mechanism.

8.1 Western Power's comments

8.1.1 Alignment with amendments to the Access Code

Western Power acknowledges amendments proposed by the ERA for the gain sharing mechanism to be updated to reflect changes to the Access Code.

8.1.2 Exclusion of D-factor expenditure

Western Power acknowledges the ERA's view that the existing requirement for D-factor expenditure to be excluded from the gain sharing mechanism addresses the requirement for the effects of the gain sharing mechanism on incentives for the implementation of non-capital expenditure alternative options to be minimised. Western Power notes that alternative options may involve both capital as well as non-capital expenditure and could be implemented either instead of or in combination with part of a network augmentation.

8.1.3 Uncontrollable costs

Western Power does not support the removal of the exclusion for costs that are provided by external bodies. Western Power and customers would be subject to rewards and penalties under the gain sharing mechanism if external bodies provide forecasts of their fees that subsequently change within the access arrangement period. Western Power believes the gain sharing mechanism should incentivise Western Power to manage the operating costs within its control and notes that clause 5.26 (c) of the Access Code states that efficiency and innovation benchmarks must be reasonable.

9. Service standards adjustment mechanism

The ERA is seeking stakeholder views on the proposed changes to the service standards adjustment mechanism.

Matters discussed in ERA's issues paper:

The ERA proposes to retain the current service standards adjustment mechanism with the following modifications:

- the ERA has proposed changes to service standard benchmarks, which, if introduced would require consequential amendments to the service standard adjustment mechanism as follows:

- AA5 service standard targets for SAIDI and SAIFI would need to be calculated using adjusted historical data with transmission outages included;

- An incentive rate for the new proposed transmission measure to capture the frequency and/or quantity of energy that a generator would have been dispatched by AEMO but could not be due to a planned or unplanned network outage would need to be established;

- The ERA proposes to amend the calculation of the incentive rates to use the revenue attributable to the customers the transmission service standards apply to;

- The ERA proposes the most recent Australian Energy Regulator (AER) results available should be used to estimate suitable values of customer reliability for Western Power and whether the information from the AER could be used to derive a value of customer reliability for transmission connected customers;

- The ERA has identified the Access Code has been amended to remove the requirement that an above-benchmark surplus did not exist to the extent that a service provider achieved efficiency gains by failing to comply with the service standard benchmarks. Consequently, the service standard adjustment mechanism will no longer require the individual penalties to be capped at the service standard benchmark;

- The ERA proposes to retain the cap for rewards and penalties for the transmission network at 1 per cent of total transmission revenue. The ERA proposes the caps for the distribution network should be symmetrical and set at 1 per cent of total distribution revenue.

9.1 Western Power's comments

9.1.1 Service standard benchmarks – transmission network

Matters discussed in the ERA's issues paper:

The ERA has proposed changes to service standard benchmarks, which, if introduced would require consequential amendments to the service standard adjustment mechanism as follows:

- AA5 service standard targets for SAIDI and SAIFI would need to be calculated using adjusted historical data with transmission outages included;

- An incentive rate for the new proposed transmission measure to capture the frequency and/or quantity of energy that a generator would have been dispatched by AEMO but could not be due to a planned or unplanned network outage would need to be established.

As noted in Section 5.1.3 and 5.1.4 Service Standard Benchmarks, Western Power does not support the ERA's proposed amendments to amend the service standard benchmarks as follows:

- introduction of a new transmission service standard benchmark to measure the frequency (and/or quantity of energy) that a generator would have been dispatched by AEMO and could not be due to a planned or unplanned network outage;
- the current exclusions should be amended so that any interruptions to distribution customers caused by Western Power planned or unplanned outages on the transmission network are included in SAIDI and SAIFI.

Accordingly, Western Power does not support the consequential amendments to the service standard adjustment mechanism.

9.1.2 Calculation of incentive rates

Matter discussed in the ERA's issues paper:

- The ERA proposes to amend the calculation of the incentive rates to use the revenue attributable to the customers the transmission service standards apply to.

Western Power notes the ERA's proposed amendment of the calculation of the incentive rates to use the revenue attributable to the customers the transmission service standards apply to. However, Western Power seeks for the incentive rates to continue to apply to total transmission network revenue. The transmission service standards currently in place reflect reliability of the transmission network as a whole, not just the reliability experienced by transmission connected customers.

9.1.3 Values of customer reliability

Matter discussed in the ERA's issues paper:

- The ERA proposes the most recent Australian Energy Regulator (AER) results available should be used to estimate suitable values of customer reliability for Western Power and whether the information from the AER could be used to derive a value of customer reliability for transmission connected customers.

Western Power acknowledges the ERA's proposal to use the most recent AER results available to estimate suitable values of customer reliability for Western Power for the AA5 period.

9.1.4 Amendments to the Access Code

Matter discussed in the ERA's issues paper:

- The ERA has identified the Access Code has been amended to remove the requirement that an above-benchmark surplus did not exist to the extent that a service provider achieved efficiency gains by failing to comply with the service standard benchmarks. Consequently, the service standard adjustment mechanism will no longer require the individual penalties to be capped at the service standard benchmark.

Western Power acknowledges the service standards adjustment mechanism will no longer require the individual penalties to be capped at the service standard benchmark.

9.1.5 Incentive rate caps

Matter discussed in the ERA's issues paper:

- The ERA proposes to retain the cap for rewards and penalties for the transmission network at 1 per cent of total transmission revenue. The ERA proposes the caps for the distribution network should be symmetrical and set at 1 per cent of total distribution revenue.

Western Power supports setting the AA5 cap for rewards and penalties for the transmission network at 1 per cent (symmetrical) of total transmission revenue, consistent with the AA4 decision.

Western Power supports the ERA's movement towards a symmetrical cap for rewards and penalties for the distribution network. The service standards adjustment mechanism ensures that Western Power is incentivised to invest to maintain and improve reliability performance where it is valued by our customers. Western Power therefore considers the incentive to improve reliability should be symmetrical with the penalty applied where reliability performance declines.

Western Power considers that the movement towards a symmetrical gain sharing mechanism and the removal of the cap of individual penalties (discussed in the previous section) supports a move towards symmetrical rewards and penalties for the service standards adjustment mechanism.

10. Demand management innovation allowance

The ERA is seeking stakeholder views on the proposed level of the demand management innovation allowance.

Matter discussed in the ERA's issues paper:

- The ERA is required to determine the demand management innovation allowance mechanism as part of the framework and approach.

- The ERA will consider whether the allowance for Western Power should be set at a similar level to schemes operating in the National Electricity Market (NEM). Based on the AA4 target revenue, this would equate to approximately $7 million over the five-year regulatory period, or $1.4 million each year.

10.1 Western Power's comments

Western Power considers setting the level of the demand management innovation allowance at a similar level to schemes operating in the National Electricity Market (**NEM**) to be reasonable.

Western Power considers that a flexible approach that allows initiatives to be delivered within the overall allowance within the period would be more efficient than limiting initiatives to the annual cap within a given year.

Western Power considers the demand management innovation allowance should be sufficiently flexible to consider both network and non-network demand management solutions that improve network reliability, safety, stability, supply quality, visibility, forecasting and capacity in delivering outcomes that have the potential to reduce long term network cost.

Western Power notes that the schemes operating in the NEM are highly prescriptive and administratively complex and considers that a less complex approach with lower administrative overheads is in the long-term interests of consumers.