



**Economic Regulation Authority**

# Final decision on proposed revisions to the access arrangement for the Western Power Network 2022/23 – 2026/27

Attachment 8: Services

31 March 2023

D259001

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## Note

This attachment forms part of the ERA's final decision on proposed revisions to the access arrangement for the Western Power Network for the fifth access arrangement period (AA5). It should be read with all other parts of the final decision.

The final decision comprises all of the following attachments:

Final decision on proposed revisions to the access arrangement for the Western Power network 2022/23 – 2026/27 – Decision Overview

Attachment 1 – Price control and target revenue

Attachment 2 – Regulated asset base

Attachment 3A – AA4 capital expenditure

Attachment 3B – AA5 capital expenditure

Attachment 4 – Depreciation

Attachment 5 – Return on regulated asset base

Attachment 6 – Operating expenditure

Attachment 7 – Other components of target revenue

Attachment 8 – Services (this document)

Attachment 9 – Service standard benchmarks and adjustment mechanism

Attachment 10 – Expenditure incentives and other adjustment mechanisms

Attachment 11 – Network tariffs

Attachment 12 – Policies and contracts

# 1. Summary

This attachment deals with covered services.<sup>1</sup> The Access Code uses the expression “covered service” to describe what is sometimes called a “regulated service”.

An access arrangement applies to covered services. A covered service is defined in section 1.3 of the Access Code as a service provided by means of a covered network including:<sup>2</sup>

- A connection service.
- An entry service.
- An exit service.
- A bidirectional service.
- A network use of system service.
- A common service.
- A service ancillary to any of the above services.

Western Power must use all reasonable endeavours to accommodate an applicant’s requirements to obtain covered services and requirements in connection with the negotiation of an access contract.

Covered services can be subdivided into reference services and non-reference services:

- Reference services are services specified in an access arrangement with a reference tariff, a standard access contract and service standard benchmarks. An access arrangement must specify at least one reference service and specify a reference service for each covered service that is likely to be sought by a significant number of network services customers or a substantial proportion of the network services market.<sup>3</sup>
- Non-reference services are negotiated services. The Access Code’s central emphasis is on negotiated outcomes. Western Power and existing customers or new applicants may negotiate an access contract for access to any service (including a service which differs from a reference service) on any terms (including terms which differ from a standard access contract).

The Access Code also provides for a covered service to be determined an “excluded service” by the ERA if it meets the following criteria:

- The supply of that service is subject to effective competition.
- The cost of the service can be excluded from consideration for price control purposes without departing from the Code objective.

<sup>1</sup> This attachment focusses on the services offered. The structure and pricing of services is considered under network tariffs (Attachment 11).

<sup>2</sup> In Western Power’s case, the covered network is the portions of the South West Interconnected System that are owned by Western Power. Under section 3.34A of the Access Code, a stand-alone power system provided by a service provider is treated as part of the covered network to which it is an adjunct if it replaces part of the covered network or is required to be provided by the service provider pursuant to a written law or statutory instrument.

<sup>3</sup> The Access Code defines “customer” as a “user” or “end-use customer” in the end-use customer’s capacity as an indirect customer for covered services. “User” is the person who is party to a contract for services with the service provider. “End-use customer” means a consumer (a person who consumes electricity) who obtains the benefit of covered services through a user.

Excluded services are not regulated.

An extract of the Access Code provisions relevant to reference services is included in Appendix 1.

The framework and approach document published on 9 August 2021 contained the ERA's decision on the list of reference services that Western Power was required to include in its proposed access arrangement for AA5.

On 15 October 2021, the ERA published a determination that covered services provided by batteries owned by Western Power are an excluded service.

In the draft decision:

- Residential and business exit and bi-directional super off-peak demand services were required to be added to be consistent with the framework and approach document.
- The following amendments were required to service descriptions or eligibility criteria:
  - Make clearer that storage and electric vehicle charging reference services may be used for purposes ancillary to those services.
  - Allow the low voltage storage and electric vehicle charging reference services to apply to inverter systems rated up to 3 MVA (rather than 1 MVA).
  - Allow users to choose either a five-minute or 30-minute interval data service.
  - Amend the remote load/inverter control service so that the activated device has its capability enabled for variable or binary control and allows the user to request variable or binary control.
  - Amend the business energy-based reference services so they are available to high voltage connected customers rather than only low voltage connected customers.
  - Amend the streetlighting reference service so that it is clear Western Power must ensure that if it replaces an existing luminaire with a different type of luminaire it must ensure that it complies with current public lighting standards.
  - Remove the requirement to comply with WEM Rules from the eligibility criteria for entry services.
  - Resolve the outstanding matters raised by users on the capacity allocation services and services facilitating distributed generation or other non-network solutions and amend the reference services accordingly.

In its revised proposal, Western Power has:

- Added residential and business exit and bi-directional super off-peak demand reference services.
- Clarified that storage and electric vehicle charging reference services may be used for purposes ancillary to those services.<sup>4</sup>
- Generally allowed the low voltage storage and electric vehicle charging reference services to apply to inverter systems rated up to 3 MVA (rather than 1 MVA), but limited in some cases to 2 MVA.<sup>5</sup>

<sup>4</sup> Some minor drafting changes are required to make clear the primary purpose relates to the use of the connection point, not the use of the storage device.

<sup>5</sup> Subject to incorporating some additional amendments proposed by Synergy.

- Allowed users to choose either a five-minute or 30-minute interval data service.
- Amended the remote load/inverter control service so that the activated device has its capability enabled for variable or binary control and allows the user to request variable or binary control.
- Removed the requirement to comply with WEM Rules from the eligibility criteria for entry services.

The final decision includes amendments to address:

- Amending the business energy-based reference services so they are available to high voltage connected customers rather than only low voltage connected customers.
- Resolution of the outstanding matters raised by users on the capacity allocation services and services facilitating distributed generation or other non-network solutions.

Following the draft decision, the ERA held a workshop with key stakeholders on matters raised by WALGA on streetlighting services. Subsequent engagement between Western Power and WALGA has resulted in significant progress on some longstanding issues.

These improvements have been reflected in the final decision and include:

- Before introducing any new streetlighting equipment that is likely to affect lighting performance (e.g. globes and luminaires) the equipment must be independently tested against relevant standards and the results published. This will inform whether and how a new asset can be deployed in consultation with customers. (This applies to the LED screw-in globe).
- Western Power must consult on and publish its Public Lighting Strategy and ensure it complies with the strategy.
- Clarification of Western Power's complaint handling responsibilities.

In addition:

- Western Power has not adequately demonstrated that its proposed screw-in globe replacement strategy has the lowest lifecycle cost. The testing against standards noted above may have implications for the deployment of the screw-in globe. Western Power will need to ensure that its final strategy is based on the lowest lifecycle cost.
- There are some issues around the treatment of streetlight outages caused by cable faults for service standard reporting purposes. It appears they are not being included in the current reporting framework. This will be followed up through the ERA's annual service standard reports.
- It needs to be made clearer to customers that the unmeasured disconnection and reconnection service is a standard service with a fixed fee. This should be published on the Western Power website.

### Summary of final decision on reference services

- Subject to some minor amendments, the ERA is satisfied Western Power's revised proposal adequately addresses the following required amendments in the draft decision:
  - Adding residential and business exit and bi-directional super off-peak demand reference services.
  - Making clearer that storage and electric vehicle charging reference services may be used for purposes ancillary to those services.
  - Allowing the low voltage storage and electric vehicle charging reference services to apply to inverter systems rated up to 3 MVA (rather than 1 MVA) but limited in some cases to 2 MVA.
  - Allowing users to choose either a five-minute or 30-minute interval data service.
  - Amending the remote load/inverter control service so that the activated device has its capability enabled for variable or binary control and allows the user to request variable or binary control.
  - Removing the requirement to comply with WEM Rules from the eligibility criteria for entry services.
- In this final decision, the ERA has required amendments to address:
  - Amending the business energy-based reference services so they are available to high voltage connected customers rather than only low voltage connected customers.
  - Resolution of the outstanding matters raised by users on the capacity allocation services and services facilitating distributed generation or other non-network solutions.
  - The streetlighting reference service.

The reasons for the ERA's final decision and details of required amendments in respect of reference services are set out in this attachment.



## 2. Reference services

In the framework and approach document published on 9 August 2021, the ERA decided that the AA4 list of reference services should be retained for AA5 with the following modifications:

- Amend entry reference services and capacity allocation swap services to reflect the introduction of constrained access.
- Amend the time-of-use periods to reflect forecast demand patterns for AA5 as follows:
  - Super off-peak – 9am to 3pm
  - Peak – 3pm to 9pm
  - Shoulder – 6am to 9am and 9pm to 11pm
  - Off-peak – 11pm to 6am
- Amend the business energy-based reference services to allow high voltage end-use customers to access them.
- Amend the meter reference service description to clarify that a user may agree a date for a scheduled meter reading.
- Combine the capacity swap reference services into a single service to simplify administrative arrangements and allow the application and use of the service to be addressed under a single electricity transfer application.
- Combine the remote direct load control and load limitation services and expand to include control of an inverter via the meter. Update the eligibility criteria to ensure it is clear the service is available to three phase connections and clarify the requirements to obtain the service.
- Clarify the eligibility criteria for the remote de-energise and re-energise services to explain what the controller/end-use customer is required to do to commence the flow of electricity and arrangements if a controller/end-use customer is not available to commence the flow of electricity.
- Include manual de-energisation and re-energisation as reference services under the access arrangement, consistent with remote de-energisation and re-energisation services.
- Remove eligibility criteria that is covered in the standard electricity contract and applications and queuing policy.
- Three new reference services were required for
  - transmission connected batteries
  - distribution connected batteries
  - electric vehicle charging stations.

### 2.1 Western Power's initial proposal

Western Power's initial proposed reference services for the AA5 period were set out in clause 2.2 of the proposed revised access arrangement.

Appendix E of the proposed revised access arrangement provided details of each reference service including a description of the service and user eligibility criteria. Western Power also

included a reference services change summary as Attachment 6.1 to the access arrangement information in the initial proposal.

Western Power proposed including the following new reference services for AA5:

- Low voltage distribution storage service (C18)
- High voltage distribution storage service (C19)
- Transmission storage service (C20)
- Low voltage electric vehicle charging service (C21)
- High voltage electric vehicle charging service (C22)
- Site visit to support the existing remote re-energise service (D11)
- Manual de-energise and re-energise services (D12 and D13)
- New metering services for weekly meter readings (M17, M18, M19 and M20)
- A new “super off-peak” time of use service for:
  - Residential exit and bi-directional services (A18 and C16)
  - Business exit and bi-directional services. (A19 and C17)

Western Power proposed the time-of-use services available under the current access arrangement (A3, A4, A12, A13, A14, A15, A16, A17, C3, C4, C9, C10, C11, C12, C13, C14) would continue to be available to connection points on those services immediately prior to the commencement of the revised access arrangement but would not be available for new nominations from the commencement of AA5.

Western Power proposed the following amendments to reference services available under the current access arrangement:

- The current four capacity allocation services (D2, D3, D4, D5) would be consolidated into a single capacity service (D2).
- The current two load control and limitation services (D6, D7) would be consolidated into a single service (D6).

## 2.2 Submissions on initial proposal

Submissions on reference services were received from Alinta Energy, Synergy and Change Energy. Details of the matters raised are included below in the considerations of the ERA.

## 2.3 Draft decision

The ERA’s considerations to make its draft decision are set out below in the following order:

- Requirements in the Access Code in respect of reference services, including the Access Code objective.
- Western Power’s proposed new reference services against the requirements in the framework and approach document and the Access Code, including the Access Code objective.

- Western Power’s proposed amended reference services against the requirements in the framework and approach document and the Access Code, including the Access Code objective.
- Issues raised in respect of reference services identified in stakeholder submissions.

### ***Identification of reference services required***

Under section 5.2(b) of the Access Code, Western Power must specify at least one reference service and specify a reference service for each covered service that is likely to be sought by a significant number of users, end-use customers (in the end-use customer’s capacity as an indirect customer for covered services) and applicants or a substantial proportion of the market for services in the covered network.

The “users” of Western Power’s network are predominantly retailers, generators and large users with direct connections to the transmission system.

As part of the ERA's publication of the framework and approach document, public consultation was undertaken. Given the level of public consultation that had occurred in respect of AA5, subject to the matters set out in this section 2.3, the ERA considered Western Power's proposed list of reference services included all services that were likely to be sought by a significant number of users.

### ***Proposed new reference services***

#### ***Storage services and electric vehicle charging services***

Consistent with the framework and approach document, Western Power included storage services and electric vehicle charging services in its proposed list of reference services:

- Low voltage distribution storage service (C18)
- High voltage distribution storage service (C19)
- Transmission storage service (C20)
- Low voltage electric vehicle charging service (C21)
- High voltage electric vehicle charging service (C22)

Synergy’s submission raised the following concerns on the proposed new reference services:

- Western Power proposed the eligibility criteria for the proposed new services would include a “sole use” limitation (for example, “the connection point will use storage works for the sole purpose of storage activity”). Synergy submitted that it requires the ability to use the services for purposes ancillary to storage and electric vehicle charging.
- Western Power proposed the eligibility criteria for the proposed new low voltage distribution storage service and low voltage electric vehicle charging service would restrict them to connections with inverter systems rated up to 1 MVA. Synergy submitted that it required the services to support inverters up to 3 MVA.

In its submission, Synergy noted it was continuing to engage with Western Power on the matters raised.

The ERA sought further information from Synergy and Western Power on the engagement between the parties. Western Power was proposing to amend its eligibility criteria in its access arrangement proposal to “the connection point will use storage works for the primary purpose

of a storage activity and may also be used for other purposes ancillary to a storage activity". The ERA understood this would address Synergy's concerns about "sole use".

**Draft decision required amendment 1**

Amend the eligibility criteria for storage works and electric vehicle charging reference services as follows:

"the connection point will use [storage works/electric vehicle charging] for the primary purpose of a [storage activity/electric vehicle charging activity] and may also be used for other purposes ancillary to a [storage activity/electric vehicle charging activity]".

Western Power had not provided any evidence to support its proposal to restrict eligibility for the proposed new reference services for low voltage connected storage and electric vehicle charging services to connections with inverter systems rated up to 1 MVA. In the absence of such evidence, the ERA agreed the eligibility criteria should be modified to reflect the service Synergy was seeking.

**Draft decision required amendment 2**

Amend the eligibility criteria for low voltage connected storage works and electric vehicle charging reference services as follows:

The premises have an inverter system rated up to a total of 4.3 MVA ...

Synergy submitted that it required both contract maximum demand and metered demand tariff structures for each service and that users should not be required to pay the transmission component of the reference tariff if it can be demonstrated they are not using the transmission network. Other stakeholders also raised concerns about the proposed tariffs and tariff structures for the new EV charging reference services. These matters are dealt with in Attachment 11 - Network Tariffs.

Subject to amending the eligibility criteria as set out in the required amendments above, the ERA considered the proposed new storage and electric vehicle charging reference services as proposed by Western Power were consistent with the requirements of the Access Code, the Access Code objective and the framework and approach document.

***Super off-peak time of use service***

Consistent with the framework and approach document, Western Power included new "super off-peak" time-of-use services. The proposed time periods were consistent with the time periods set out in the framework and approach document:

- Super off-peak – 9am to 3pm
- Peak – 3pm to 9pm
- Shoulder – 6am to 9am and 9pm to 11pm
- Off-peak – 11pm to 6am.

Western Power proposed the following reference services:

- Super Off-peak Energy (Residential) Exit Service (A18)
- Super Off-peak Energy (Residential) Bi-directional Service (C16)
- Super Off-peak Energy (Business) Exit Service (A19)
- Super Off-peak Energy (Business) Bi-directional Service (C17)

The current time-of-use reference services included energy-based and demand-based services.<sup>6</sup> The proposed new time-of-use reference services did not include any demand-based services. Western Power stated it had adopted time-of-use energy-based services rather than demand-based services because it considered that price signals based on energy usage are generally better understood by customers.<sup>7</sup>

In the framework and approach document, the ERA stated that the tariff structure statement would need to address how existing time-of-use periods will be transitioned to the revised time-of-use periods and that Western Power would need to ensure the tariffs for the discontinued time-of-use services were cost reflective. This is considered further in network tariffs (Attachment 11).

Western Power proposed the current time-of-use services (A3, A4, A12, A13, A14, A15, A16, A17, C3, C4, C9, C10, C11, C12, C13, C14) would continue to be available to connection points on those services immediately prior to the commencement of the revised access arrangement but would not be available for new nominations.

Synergy did not support the withdrawal of the current time-of-use reference services for new nominations without first being given visibility of the proposed new time-of-use tariffs.

Alinta Energy opposed the proposal to discontinue time-of-use demand-based services.<sup>8</sup> Alinta Energy submitted it had many customers that it expected will want to continue to use a time-of-use demand-based service. Alinta considered that its customers do not have difficulty understanding demand-based services.

The WA Expert Consumer Panel also considered that demand-based services should continue to be offered to residential and small business customers.<sup>9</sup>

As noted in Alinta Energy's submission, the framework and approach document required Western Power to retain all current reference services subject to the amendments set out in the framework and approach document. The amendments did not include removing the demand-based services.

To be consistent with the framework and approach document and as it is a service sought by users, the ERA considered the proposed revised reference services must include residential and business exit and bi-directional super off-peak demand services.

### **Draft decision required amendment 3**

Include residential and business exit and bi-directional super off-peak demand services in the list of reference services.

<sup>6</sup> A demand-based service is based on both power demand on the network in a specific time-period (expressed in kW) and the amount of electricity used (expressed as kWh). The current reference services include six demand-based services for residential and business: 3 Part Time of Use Demand (Residential) Exit Service A14, 3 Part Time of Use Demand (Business) Exit Service A15, 3 Part Time of Use Demand (Residential) Bi-directional Service C11, 3 Part Time of Use Demand (Business) Bi-directional Service C12, Multi Part Time of Use Demand (Residential) Bi-directional Service C13 and Multi Part Time of Use Demand (Business) Bi-directional Service C14.

<sup>7</sup> Western Power, *Proposed revisions to the access arrangement - Appendix F.1, Tariff Structure Statement Overview*, 1 February 2022, p. 14.

<sup>8</sup> Alinta Energy submission pp. 6 - 7.

<sup>9</sup> WA Expert Panel Submission Attachment 3 pp. 10 - 11.

### ***Site visit to support a remote re-energise service***

The framework and approach document required Western Power to clarify the eligibility criteria for the current remote de-energise and re-energise services to explain what the controller/end-use customer is required to do to commence the flow of electricity and arrangements if a controller/end-use customer is not available to commence the flow of electricity.

Western Power proposed to address this requirement by including additional details in the service description about what the customer must do to commence the flow of electricity and has proposed a new reference service – site visit to support a remote re-energise service D11 – for situations where the controller/end-use customer was not available to commence the flow of electricity.

The Australian Energy Council submitted that some of its members had not been able to use the remote de-energise and re-energise services because of issues with Western Power systems and processes. It encouraged the ERA to obtain confirmation from Western Power that it had resolved its system process issues and will be able to provide these services in AA5.

Western Power confirmed that the proposed changes would enable it to provide remote de-energise and re-energise services. The ERA was satisfied that the proposed changes were consistent with the Access Code requirements, Access Code objective and the framework and approach document.

### ***Manual de-energise and re-energise services***

Consistent with the framework and approach document, Western Power included manual de-energise and re-energise services in its proposed list of reference services. The ERA considered that this was consistent with the requirements of the Access Code and the Access Code objective.

### ***Metering services***

Consistent with the framework and approach document, Western Power added a clause to the metering reference services stating that a user may agree the date for a scheduled meter reading.

Western Power also proposed to add new metering reference services for weekly meter readings to facilitate the change to weekly settlement.

Synergy submitted that the proposed metering reference services did not allow users to elect between five-minute or 30-minute interval data service.

Subsequent to the submission of Western Power's access arrangement proposal, Synergy and Western Power met and reached agreement on revised drafting that addressed Synergy's concerns:

- Amend Appendix E, section E.1.3 Eligibility Criteria for Reference Service (metering) to include the following:

[Following weekly settlement commencement, if capability is enabled for the provision of five-minute interval energy data for a connection point, for a meter that is not a 5MS meter, the user may request the provision of either 30-minute interval energy data or five-minute interval energy data, for reference services \(metering\) that include the provision of interval energy data.](#)

- Add the following new definitions in Appendix E:



[“5MS meter” has the meaning given to it in the Metering Code.](#)

[“30-minute interval energy data” has the meaning given to it in the Metering Code.](#)

[“five-minute interval energy data” has the meaning given to it in the Metering Code.](#)

[“weekly settlement commencement” has the meaning given to it in the Metering Code.](#)

The ERA considered that, with these amendments, the proposed metering services were consistent with the requirements of the Access Code, the Access Code objective and the framework and approach document.

#### **Draft decision required amendment 4**

Amend Appendix E to allow users to elect between a five-minute or 30-minute interval data service.

### ***Proposed amended reference services***

#### ***Capacity allocation services***

Western Power's current access arrangement includes four capacity reference services:

- Capacity Allocation Swap (Nominator) (Business) Service – D2
- Capacity Allocation Swap (Nominee) (Business) Service – D3
- Capacity Allocation Same Connection Point (Nominator) (Business) Service - D4
- Capacity Allocation Same Connection Point (Nominee) (Business) Service – D5.

Consistent with the framework and approach document, Western Power proposed to combine the current four capacity swap services into a single service (Capacity Allocation Service - D2). As set out in the framework and approach document, this was intended to simplify administrative arrangements and allow the application and use of the service to be addressed under a single electricity transfer application.

Synergy submitted that Western Power's proposed amendments had not implemented the changes required by the framework and approach document. Synergy provided suggested amendments to the D2 service. Synergy noted it was continuing to engage with Western Power on this matter.

Alinta Energy considered the capacity allocation service could benefit customers and support network utilisation but required clearer eligibility and approval criteria to improve its usability and realise its potential. The submission provided various suggestions for improvements to the proposed capacity allocation reference service and processes for obtaining the service.

The draft decision noted Western Power had engaged with stakeholders to address the concerns raised but there were some outstanding issues to be resolved.

#### **Draft decision required amendment 5**

Western Power must resolve the outstanding matters raised by users on the capacity allocation service and amend the reference service accordingly.

#### ***Direct load control and load limitation services***

Consistent with the framework and approach document, Western Power combined the current remote direct load control and load limitation services into a single reference service and expanded the service to include control of an inverter via the meter (Remote Load/Inverter Control Service – D6).

The Australian Energy Council considered the remote load/inverter control service was important for assisting users and customers to develop innovative arrangements to use the network more efficiently and reduce the amount of investment needed to augment the network.<sup>10</sup> However, it considered the service proposed was not simple and that it was unclear what the user was paying for and what it would get. The Australian Energy Council also advised that some of its members had not been able to access this service because of issues with Western Power systems and processes.

Synergy submitted that the proposed amended reference service lacked adequate service definition in terms of what the reference service could be utilised for and how it would be implemented. Synergy noted it was continuing to engage with Western Power on this matter.

The ERA sought further information from Synergy and Western Power. Synergy and Western Power reached agreement on revised drafting that addressed Synergy's concerns. The agreed amendments were as follows:

Service description: [A service] ... to send a command to an activated device for the [variable or binary](#) control of a load or inverter at a connection point from a remote locality.

Eligibility criteria: [The activated device has capability enabled for the variable or binary control of electricity transferred through the connection point.](#)

The ERA agreed the proposed amendments provided greater clarity and the amendments were consistent with the requirements of the Access Code, the Access Code objective and the framework and approach document.

#### **Draft decision required amendment 6**

Amend the service description and eligibility criteria for Remote Load/Inverter Control Service D6 as follows:

Service description: [A service] ... to send a command to an activated device for the [variable or binary](#) control of a load or inverter at a connection point from a remote locality.

Eligibility criteria: [The activated device has capability enabled for the variable or binary control of electricity transferred through the connection point.](#)

#### ***Business energy-based services***

The current reference services for high voltage network connections are demand-based. While this is generally the type of service likely to be sought by large customers connected to the high voltage network, the ERA considered the ability to access an energy consumption-based service if a site becomes vacant or there is a temporary drop in demand would better assist users to manage energy costs and, therefore, a service likely to be sought by users.

The draft decision noted the current business energy-based reference services were restricted to customers on the low voltage network. For example, the Anytime Energy (Business) Exit Service A2 included the following:

Reference Service Description: An exit service combined with a connection service and a reference service (metering) at an exit point **on the low voltage (415 volts or less)** distribution system.

Eligibility Criteria: Users are eligible to use this service if:

1. The exit point is located at non-residential premises; and

<sup>10</sup> Australian Energy Council submission p. 7.



2. The maximum demand at the exit point is:
  - a. Less than 1,500 kVA based on historic metering data; or
  - b. Western Power determines, as a reasonable and prudent person, that the user's forecast maximum demand will be less than 1,500 kVA;

The framework and approach document required Western Power to amend the current business energy-based reference services to allow high voltage end-use customers to access them.

Western Power proposed to amend the service description and eligibility criteria for the Anytime Energy (Business) Exit Service A2 to the following:

Reference Service Description: An exit service combined with a connection service and a reference service (metering) at an exit point on the low voltage (415 volts or less) distribution system or on the high voltage (6.6 kV or higher) distribution system.

Eligibility Criteria: Users are eligible to use this service if:

1. The exit point is located at non-residential premises; and
2. One of the following applies:
  - a. It is a low voltage connection point and the maximum demand at the exit point is less than 1.500 kVA based on historic metering data; or
  - b. It is a low voltage connection point and Western Power determines as a reasonable and prudent person that the user's forecast maximum demand will be less than 1,500 kVA; or
  - c. It is a high voltage (6.6vV or higher) connection point with throughput equal to zero for a period of greater than 12 months.

Alinta Energy considered the proposed amendments were not consistent with the framework and approach document because:

- They only allow high voltage customers to access one business energy-based reference service and not the remaining energy-based services including the time of use services.
- The proposed eligibility criteria only allow high voltage customers to access these services where they have had "throughput equal to zero for a period of greater than 12 months."<sup>11</sup>

Synergy submitted that the proposed amendments to the eligibility criteria would limit (or prevent) customers from using the service in situations where their sites are temporarily vacant or are in care and maintenance.

The framework and approach document required Western Power to amend all of the business energy-based reference services to allow high voltage end-use customers to access them. The ERA considers this can be achieved by amending the service description for each relevant service as follows:

An [x] service combined with a connection service and a reference service (metering) at an exit point on the low voltage (415 volts or less) distribution system.

#### **Draft decision required amendment 7**

Amend the service description for all business energy-based reference services as follows:

<sup>11</sup> Alinta Energy submission p. 7.

An [x] service combined with a connection service and a reference service (metering) at an exit point on the ~~low voltage (415 volts or less)~~ distribution system.

### **Introduction of constrained access**

To implement the new Wholesale Electricity Market design, section 2.4C of the Access Code was amended to require entry services to allow interruption or curtailment in either of the following circumstances:<sup>12</sup>

- Where constraints are created by other users of the Western Power network (including users that connected to the Western Power network after the date of the relevant access contract).
- In connection with the operation of security constrained economic dispatch.

The framework and approach document required Western Power to amend its current entry reference services and capacity allocation swap reference services to reflect the introduction of constrained access.

Western Power proposed to meet this requirement by:

- Adding a sentence to the Distribution Entry Service (B1) and the Transmission Entry Service (B2) stating “As from 18 September 2020 an Electricity Transfer Access Contract may only be entered into on terms consistent with section 2.4C of the Access Code”.
- Removing entry services from the capacity allocation service.

The ERA considered the proposed amendments were consistent with requirements of the Access Code, the Access Code objective and the framework and approach document.

### **Streetlighting services**

Western Power proposed to amend the Streetlighting Exit Service (A9) to state that streetlights will be maintained to the design standard that existed at the time of their installation:

Western Power will maintain the streetlighting assets to ensure that the streetlighting exit service continues to be provided to [original](#) design levels. Western Power will:

....

- Replace or repair the lamps and luminaires where upon investigation the lumen output no longer meets [original minimum](#) design levels.

Western Power stated that this change confirmed that the baseline for determining whether repair or replacement of the lamps and luminaires was the original minimum design level, rather than any higher or lower standard.

WALGA submitted that this proposed change did not improve clarity. It noted that Western Power’s practice over a long period has been to replace luminaires with different luminaires:<sup>13</sup>

Each of these luminaires has a different design performance. The optics are different and will produce a different illumination footprint. Each replacement fitting does not perform photometrically in the same way as the original being replaced; therefore the design is being modified. It is very difficult to determine what the original design standard was, and it is not Western Power practice to measure and demonstrate that

<sup>12</sup> Provided they do not affect any agreement that came into effect prior to 18 September 2020.

<sup>13</sup> WALGA submission pp. 5 – 7.

following maintenance lighting meets the original or any other Standard in terms of illuminating the desired areas (AS/NZS 1158) and avoiding spill lighting (AS/NZS 4282 – Control of the obtrusive effects of outdoor lighting).

Western Power refers complaints from the public regarding over-lighting and under-lighting to the Local Government, despite the fact that the Local Government has no control over changes to the lighting as a result of installing different luminaires or globes, or assurance that the design performance meets the original design or current standards. The proposed change to the Reference Service definition makes it even more difficult to assess whether the service standard has been delivered.

WALGA noted that the 20-watt LED standard replacement for an 80-watt mercury vapour luminaire did not deliver the same lighting performance. WALGA considered it was unlikely to meet the current public lighting standards (AS/NZS 1158).

WALGA considered the reference service should be amended to provide clear accountability for the performance of the lighting with reference to AS/NZS 1158 and AS/NZS 4282.

The ERA considered Western Power's proposed amendment would be reasonable if replacements were like-for-like. However, as identified by WALGA, frequently luminaires are replaced with different luminaires. This is becoming increasingly common due to Western Power's strategy to proactively convert all mercury vapour luminaires to LEDs by 2030. In cases where Western Power initiates a change in the type of luminaire, the ERA agreed Western Power should be required to ensure that the new luminaire meets current public lighting standards.

#### **Draft decision required amendment 8**

The Streetlighting Exit Service (A9) must be amended as follows:

Western Power will maintain the streetlighting assets to ensure that the streetlighting exit service continues to be provided to original design levels. If Western Power initiates a change in the type of luminaire installed in an existing asset, it must ensure the streetlight asset meets current public lighting standards (AS/NZS 1158).

...

Replace or repair the lamps and luminaires where upon investigation the lumen output no longer meets the original minimum design levels. If Western Power replaces the luminaire with a different type of luminaire, it must ensure it meets current public lighting standards (AS/NZS 1158).

#### ***Other matters raised in submissions***

##### ***Requirement to comply with WEM Rules***

Western Power proposed to add a new eligibility criteria to the distribution entry service (B1), transmission entry service (B2) and capacity allocation swap service (D2):

The generator's facilities and equipment comply with the Technical Rules, [the WEM Rules](#), the WA Electrical Requirements and AS/NZS 3000;

...

The provision of the service does not result in the user/s, Western Power, system management or the market operator being unable to comply with their obligations under the [WEM Rules](#);

Synergy submitted that requiring users to demonstrate to Western Power compliance to all aspects of the WEM Rules requirement would create regulatory duplication and uncertainty. As noted in its submission, the WEM Rules include a compliance regime.

In response to Synergy's submission, Western Power agreed to remove the words “the WEM Rules” from the eligibility criteria for reference services B1, B2 and D2. The ERA considered that if this requirement was removed it would be consistent with the requirements of the Access Code, the Access Code objective and the framework and approach document.

**Draft decision required amendment 9**

Remove the words “the WEM Rules” from the eligibility criteria for reference services B1, B2 and D2.

***Services facilitating distributed generation or other non-network solutions***

The current list of reference services and Western Power's proposed list of reference services includes two services that are intended to facilitate distributed generation or other non-network solutions:

- Entry service facilitating a distributed generation or other non-network solution – B3
- Bi-directional service facilitating a distributed generation or other non-network solution - C15.

The Australian Energy Council considered these services had the potential to provide significant benefit to incentivise users and customers to develop innovative energy solutions, use the network more efficiently and reduce capital expenditure.<sup>14</sup> It noted some members had not been able to use these services and were concerned they would not be used in AA5. It encouraged the ERA to consider how these services could be designed so that they are simple and clear for users to apply for and receive the benefits of private investment on the network.

Synergy also submitted that amendments were required to these reference services.

The draft decision noted Western Power had engaged with stakeholders to address the concerns raised but there were some outstanding issues to be resolved.

**Draft decision required amendment 10**

Western Power must resolve the outstanding matters raised by users on the services facilitating distributed generation or other non-network solutions and amend the reference services accordingly.

## 2.4 Western Power’s revised proposal

The table below sets out the draft decision required amendments and Western Power’s response in its revised proposal.

**Table 1: Summary of Western Power’s responses to draft decision required amendments for reference services**

Draft decision required amendment	Western Power response
<p><b>Draft decision required amendment 1:</b> Amend the eligibility criteria for storage works and electric vehicle charging reference services as follows:</p>	<p>Western Power has amended the eligibility criteria for storage works and EV reference services consistent with the draft decision.</p>

<sup>14</sup> Australian Energy Council submission p. 7.

Draft decision required amendment	Western Power response
<p>“the connection point will use [storage works/electric vehicle charging] for the <u>primary purpose of a [storage activity/electric vehicle charging activity]</u> and may also be used for other <u>purposes ancillary to a [storage activity/electric vehicle charging activity]</u>”.</p>	
<p><b>Draft decision required amendment 2:</b> Amend the eligibility criteria for low voltage connected storage works and electric vehicle charging reference services as follows: The premises have an inverter system rated up to a total of <u>± 3 MVA</u> ...</p>	<p>The inverter system for the storage services has been amended consistent with the draft decision. Western Power has proposed a modification to the required amendment for the low voltage EV charging service. It proposes a limit of 2 MVA, representing a parallel connection to a 1 MVA transformer. Western Power notes this limit may be upgraded to 3 MVA where 1.5 MVA transformers are installed within the low voltage distribution network.</p>
<p><b>Draft decision required amendment 3:</b> Include residential and business exit and bi-directional super off-peak demand services in the list of reference services.</p>	<p>The following new reference services have been added:</p> <ul style="list-style-type: none"> <li>• A20 – Super Off-peak Time of Use Demand (Residential) Exit Service</li> <li>• A21 – Super Off-Peak Time of Use Demand (Business) Exit Service.</li> <li>• C11 –Super Off-Peak Time of Use Demand (Residential) Bidirectional Service</li> <li>• C12 – Super Off-Peak Time of Use Demand (Business) Bidirectional Service.</li> </ul>
<p><b>Draft decision required amendment 4:</b> Amend Appendix E to allow users to elect between a five-minute or 30-minute interval data service.</p>	<p>Western Power has deviated slightly from the required amendment to refer to “five-minute settlement commencement” rather than “weekly settlement commencement” because five minute interval energy data for non-contestable metering installations is currently not available and will only be able to be provided following the commencement of five minute settlement expected in 2025.</p>
<p><b>Draft decision required amendment 5:</b> Western Power must resolve the outstanding matters raised by users on the capacity allocation service and amend the reference service accordingly.</p>	<p>Western Power states it has proposed a modified position that it considers is consistent with the intent of the capacity allocation service and the Access Code.</p>

Draft decision required amendment	Western Power response
<p><b>Draft decision required amendment 6:</b> Amend the service description and eligibility criteria for Remote Load/Inverter Control Service D6 as follows: Service description: [A service] ... to send a command to an activated device for the <u>variable or binary control</u> of a load or inverter at a connection point from a remote locality. Eligibility criteria: <u>The activated device has capability enabled for the variable or binary control of electricity transferred through the connection point.</u></p>	<p>Western Power states it has amended the service description and eligibility criteria consistent with the Draft Decision required amendment. It notes, as a result of the changes to the applications and queuing policy, it is not proposing any changes to the Reference Service eligibility or requirements under Appendix E (Reference Services) of the access arrangement.</p>
<p><b>Draft decision required amendment 7:</b> Amend the service description for all business energy-based reference services as follows: An [x] service combined with a connection service and a reference service (metering) at an exit point on the <del>low voltage (415 volts or less)</del> distribution system.</p>	<p>Western Power states it has proposed a modification to the eligibility criteria to facilitate access to practical tariffs during care and maintenance.</p>
<p><b>Draft decision required amendment 8:</b> The Streetlighting Exit Service (A9) must be amended as follows: Western Power will maintain the streetlighting assets to ensure that the streetlighting exit service continues to be provided to original design levels. <u>If Western Power initiates a change in the type of luminaire installed in an existing asset, it must ensure the streetlight asset meets current public lighting standards (AS/NZS 1158).</u> ... Replace or repair the lamps and luminaires where upon investigation the lumen output no longer meets the original minimum design levels. <u>If Western Power replaces the luminaire with a different type of luminaire, it must ensure it meets current public lighting standards (AS/NZS 1158).</u></p>	<p>Western Power has not amended the streetlight exit service (A9) to include the Draft Decision proposed wording.</p>
<p><b>Draft decision required amendment 9:</b> Remove the words “the WEM Rules” from the eligibility criteria for reference services B1, B2 and D2.</p>	<p>Western Power has removed “the WEM Rules” from the eligibility criteria for reference services B1, B2 and D2.</p>
<p><b>Draft decision required amendment 10:</b> Western Power must resolve the outstanding matters raised by users on the services facilitating distributed generation or other non-network solutions and amend the reference services accordingly.</p>	<p>Western Power states it has implemented the required amendment in principle with modifications.</p>



## 2.5 Submissions on the revised proposal and draft decision

Submissions on reference services were received from Alinta Energy, Synergy and Change Energy. Details of the matters raised are included below in the considerations of the ERA.

The matters raised in submissions have been grouped by topic below.

### **General**

Change Energy submits that it:

- Remains concerned that Western Power continues to insist on designing products for end users rather than its actual customers – retailers. Reiterate that it would like to see a stronger push for demand-based products, which Western Power states are too complicated for end users.
- Understands Western Power's eagerness to engage with end users, but it is ultimately the retailer that owns the relationship with electricity consumers, and it is retailers that create the products and services electricity consumers use and pay for.

### ***Inverter size for dedicated Electric Vehicle chargers***

Synergy considers Western Power's proposed modification to the required amendment for the eligibility criteria for the low voltage EV charging service (a limit of 2 MVA rather than 3 MVA) is acceptable if the following changes are made:

- The limit should be 3 MVA for three phase connections on the low voltage network.
- There should be no limit for high voltage connected EV chargers.

### ***Capacity allocation service***

Synergy considers Western Power's revised proposed service is largely unchanged from the service proposed in February and does not resolve the concerns previously raised by Synergy because it:

- does not permit swaps between more than two connection points
- requires a technical assessment to be undertaken for all applications.

The Australian Energy Council supported the required amendment and considered the ERA should seek evidence that Western Power had resolved the issues raised by users.

Alinta Energy noted it planned to engage with Western Power to discuss further potential improvements to the capacity allocation service.

### ***Services facilitating distributed generation or other non-network solutions***

Similar to the capacity allocation service, Synergy considers Western Power's revised proposed service is unchanged from the service proposed in February and does not resolve the concerns raised by Synergy.

Synergy states it is seeking a discount off the relevant transport tariff where users invest in initiatives to promote the economically efficient investment and operation of the WP covered network. This discount can then be provided to end use customers who contribute to the efficient use of the network.

The Australian Energy Council supported the required amendment and considered the ERA should seek evidence that Western Power had resolved the issues raised by users.

### ***Business energy services and tariffs***

Synergy and the Australian Energy Council both considered Western Power's proposal that business tariffs should only be available to high voltage customers for a period of six months is not consistent with the draft decision required amendment.

### ***Demand based tariffs***

Synergy considered the draft decision required amendment also required demand-based, time of use (bi-directional) tariffs to be provided for commercial transmission customers.

### ***Streetlighting***

The ERA's draft decision included two required amendments relating to streetlighting:

#### **Attachment 6 required amendment 1**

Provide evidence that the proposed reactive replacement of streetlights with LED globes will meet current streetlighting standards and has the lowest lifecycle cost.

#### **Attachment 8 required amendment 8**

The Streetlighting Exit Service (A9) must be amended as follows:

Western Power will maintain the streetlighting assets to ensure that the streetlighting exit service continues to be provided to original design levels. If Western Power initiates a change in the type of luminaire installed in an existing asset, it must ensure the streetlight asset meets current public lighting standards (AS/NZS 1158).

...

Replace or repair the lamps and luminaires where upon investigation the lumen output no longer meets the original minimum design levels. If Western Power replaces the luminaire with a different type of luminaire, it must ensure it meets current public lighting standards (AS/NZS 1158).

The submissions on streetlighting services addressed both required amendments so have been considered together below.

Both Synergy and the Australian Energy Council support the draft decision required amendments and request the ERA to confirm that Western Power has provided evidence that the proposed reactive replacement of streetlights with light-emitting diode (LED) globes will meet current streetlighting standards and has the lowest lifecycle cost (as set out in Attachment 6 on operating expenditure).

Synergy notes that Western Power's alternative to providing the required evidence was to conduct further stakeholder engagement, but that Western Power had not clarified how and when stakeholders would be provided an opportunity to provide feedback to the ERA following the engagement, and that there would be sufficient time for the ERA to consider such feedback when making its final decision.

WALGA submitted the following:

- WALGA recognises that existing pole spacing of legacy installations may constrain the achievement of lighting that meets current minimum lighting of the roadway requirements set out in the Australian Standards. Although it may not be cost effective to relocate poles just to improve lighting levels on the roadway, the choice of luminaires and lamps determines performance against other important criteria set out in AS1158



and AS4282 including upward light ratio, luminous intensity and discomfort glare. The customer [local government] expectation is that changes made, including installing new lamps or new luminaires, must lead to an outcome closer to the Australian Standards than what previously existed.

- WALGA considers the streetlighting reference service should include a requirement that:
  - Any change impacting on streetlighting (such as replacing globes, replacing luminaires, relocating or replacing poles etc) must result in an outcome that is more closely aligned to the latest, relevant lighting standard for that particular type of road than previously existed.
  - Western Power is responsible for effectively dealing with public complaints about inadequate or excessive lighting, where the light output is different from the original design standard.
- WALGA recognises that screw-in LED globes may be the most cost-effective solution in some specific situations but considers the ERA should not accept the proposed strategy until a number of matters (set out in the submission) have been properly analysed and demonstrated.
- Considers customers should be engaged in the development of the Western Power Public Lighting Strategy, which should be regularly updated as pricing and technology changes and should be public.
- Identified some potential issues in the method and assumptions used to allocate costs to streetlighting and considers the building block costs for each luminaire-lamp combination should be provided.
- Considers the service standard does not adequately encourage Western Power to repair streetlight cable faults that typically result in the failure of multiple adjacent lights and recommends changes to address this.
- Requests a reference service for de-energising/re-energising unmetered supplies rather than requiring each application to go through a full design process which is not efficient for local governments or Western Power.

## 2.6 Considerations of the ERA

The ERA has reviewed Western Power’s revised proposal against the requirements of the draft decision. A summary of its review is set out in Table 2 below.

**Table 2: Summary of the ERA’s assessment of Western Power’s revised proposal against the draft decision required amendments for reference services**

Draft decision required amendment	ERA assessment
<p><b>Draft decision required amendment 1:</b> Amend the eligibility criteria for storage works and electric vehicle charging reference services as follows: “the connection point will use [storage works/electric vehicle charging] for the <u>primary purpose of a [storage activity/electric vehicle charging activity] and may also be used for other purposes ancillary to a [storage activity/electric vehicle charging activity]</u>”.</p>	<p>The ERA is satisfied the revised proposal complies with the required amendment subject to some minor drafting changes to clarify that the primary purpose relates to the use of the connection point, not the use of the storage device.</p>

Draft decision required amendment	ERA assessment
<p><b>Draft decision required amendment 2:</b> Amend the eligibility criteria for low voltage connected storage works and electric vehicle charging reference services as follows: The premises have an inverter system rated up to a total of <u>± 3</u> MVA ...</p>	<p>The ERA is satisfied the revised proposal complies with the required amendment subject to incorporating the additional amendments proposed by Synergy.</p>
<p><b>Draft decision required amendment 3:</b> Include residential and business exit and bi-directional super off-peak demand services in the list of reference services.</p>	<p>The ERA is satisfied the revised proposal complies with the required amendment subject to a small drafting change to reflect that type 4 meters do not need to be configured to tariff time bands as they can provide interval data. The draft decision did not require demand-based, time of use (bi-directional) tariffs to be provided for commercial transmission customers as suggested by Synergy. Network tariffs for transmission connected customers are already essentially demand based.</p>
<p><b>Draft decision required amendment 4:</b> Amend Appendix E to allow users to elect between a five-minute or 30-minute interval data service.</p>	<p>The ERA is satisfied the revised proposal complied with the required amendment.</p>
<p><b>Draft decision required amendment 5:</b> Western Power must resolve the outstanding matters raised by users on the capacity allocation service and amend the reference service accordingly.</p>	<p>See section below on capacity allocation services</p>
<p><b>Draft decision required amendment 6:</b> Amend the service description and eligibility criteria for Remote Load/Inverter Control Service D6 as follows: Service description: [A service] ... to send a command to an activated device for the <u>variable or binary</u> control of a load or inverter at a connection point from a remote locality. Eligibility criteria: <u>The activated device has capability enabled for the variable or binary control of electricity transferred through the connection point.</u></p>	<p>The ERA is satisfied the revised proposal complies with the required amendment.</p>
<p><b>Draft decision required amendment 7:</b> Amend the service description for all business energy-based reference services as follows: An [x] service combined with a connection service and a reference service (metering) at an exit point on the <del>low voltage (415 volts or less)</del> distribution system.</p>	<p>See section below on business energy services.</p>
<p><b>Draft decision required amendment 8:</b> The Streetlighting Exit Service (A9) must be amended as follows:</p>	<p>See section below on streetlighting services.</p>

Draft decision required amendment	ERA assessment
<p>Western Power will maintain the streetlighting assets to ensure that the streetlighting exit service continues to be provided to original design levels. <u>If Western Power initiates a change in the type of luminaire installed in an existing asset, it must ensure the streetlight asset meets current public lighting standards (AS/NZS 1158).</u></p> <p>Replace or repair the lamps and luminaires where upon investigation the lumen output no longer meets the original minimum design levels. <u>If Western Power replaces the luminaire with a different type of luminaire, it must ensure it meets current public lighting standards (AS/NZS 1158).</u></p>	
<p><b>Draft decision required amendment 9:</b> Remove the words “the WEM Rules” from the eligibility criteria for reference services B1, B2 and D2.</p>	<p>The ERA is satisfied the revised proposal complies with the required amendment.</p>
<p><b>Draft decision required amendment 10:</b> Western Power must resolve the outstanding matters raised by users on the services facilitating distributed generation or other non-network solutions and amend the reference services accordingly.</p>	<p>See section below on services facilitating distributed generation or other non-network solutions.</p>

### Required Amendment 1

Amend the storage service eligibility criteria to clarify that the primary purpose relates to the use of the connection point, not the use of the storage device.

### Required Amendment 2

Amend Western Power’s proposed changes to the electric vehicle charging services in relation to inverter size to incorporate the additional amendments proposed by Synergy.

### Required Amendment 3

Amend relevant reference services to reflect that type 4 meters do not need to be configured to tariff time bands as they can provide interval data.

### **Capacity services**

Synergy has raised the following issues with the revised proposed capacity services:

- It does not permit swaps between more than two connection points noting this is a change from the current service which permits swaps between more than two connection points.
- It requires a technical assessment to be undertaken by Western Power for all applications before approving the service and an operating document to be agreed. Synergy states it provided Western Power with an alternative proposal that specified the circumstances where a technical assessment and operating document should be required and where it should not.

The ERA has reviewed Western Power's revised proposed capacity allocation service (D2). Similar to the AA4 service description, the description refers to transfers between "one or more" connection points. The ERA does not consider the revised proposed service prevents swaps between more than two connection points.

However, for consistency with the current capacity reference services, eligibility criteria 4 should be amended as follows:

Where it is at the same connection point, the same *reference service* is provided at the connection point to each *user*

In relation to the requirement for a technical assessment, the ERA considers it is important to ensure the network can operate securely and reliably. Undertaking a technical assessment to ensure that is the case, providing Western Power is reasonable and timely when undertaking such an assessment, is appropriate. This final decision requires Western Power to publish information on how the technical assessment will be made with examples of allocations that would be permissible.

Similarly, providing Western Power is reasonable and timely, an operating document, will ensure all parties understand and have agreed the operational details for the service. This final decision requires Western Power to consult on and publish a proforma operating agreement.

#### **Required Amendment 4**

The revised capacity service must be amended to:

- Clarify that the requirement for the same reference service relates to capacity allocations at the same connection point.
- Require Western Power to publish information on how the technical assessment will be made with examples that would be permissible.
- Require Western Power to consult on and publish a pro forma operating agreement.

### **Business energy services**

The current business energy-based reference services are restricted to customers on the low voltage network. The framework and approach document required Western Power to amend the current business energy-based reference services to allow high voltage end-use customers to access them.

Western Power's revised proposal will allow high voltage end-use customers to access business energy-based reference services but places a time limitation so that they can only be accessed for a period no greater than six months.

Western Power states it has proposed a modification to the eligibility criteria to "facilitate access to practical tariffs during care and maintenance". It has modified the eligibility criteria to include a time limit of 6-months and a demand limit of 1,500 kVA that it says are necessary to ensure the energy consumption tariffs are only available to facilities that are currently in care and maintenance:

... it is a high voltage (6.6kV or higher) connection point and Western Power determines, as a reasonable and prudent person, that the user's forecast maximum demand will be less than 1,500 kVA for a period of no greater than six months.

The framework and approach decision was to enable high voltage customers to access energy based services just as low-voltage customers already can. It did not require a time limitation and the business energy-based services already includes a limitation of 1,500 kVA.

As submitted by Synergy and the Australian Energy Council, Western Power's revised proposal is not consistent with the draft decision required amendment.

The current reference service eligibility criteria is specified as follows:

Reference Service Description: An exit service combined with a connection service and a reference service (metering) at an exit point **on the low voltage (415 volts or less)** distribution system.

Eligibility Criteria: Users are eligible to use this service if:

3. The exit point is located at non-residential premises; and
4. The maximum demand at the exit point is:
  - a. Less than 1,500 kVA based on historic metering data; or
  - b. Western Power determines, as a reasonable and prudent person, that the user's forecast maximum demand will be less than 1,500 kVA;

Western Power's revised proposal amends the eligibility criteria as follows:

Reference Service Description: An exit service combined with a connection service and a reference service (metering) at an exit point **on the ~~low voltage (415 volts or less)~~** distribution system.

Eligibility Criteria: Users are eligible to use this service if:

The exit point is located at non-residential premises; and

One of the following applies:

it is a low voltage (415 volts or less) connection point and the maximum demand at the exit point is less than 1,500 kVA based on historic metering data; or

it is a low voltage (415 volts or less) connection point and Western Power determines as a reasonable and prudent person, that the user's forecast maximum demand will be less than 1,500 kVA; or

it is a high voltage (6.6kV or higher) connection point and Western Power determines, as a reasonable and prudent person, that the user's forecast maximum demand will be less than 1,500 kVA for a period of no greater than six months.

Although Western Power has expanded the eligibility criteria to include customers connected to the high voltage distribution network, it has imposed additional restrictions on such customers compared to customers connected to the low voltage distribution network. The framework and approach did not specify additional restrictions.

To meet the framework and approach requirement, the current service eligibility criteria can be amended by removing the words “low voltage (415 volts or less)” as set out below:

Reference Service Description: An exit service combined with a connection service and a reference service (metering) at an exit point **on the low voltage (415 volts or less)** distribution system.

Eligibility Criteria: Users are eligible to use this service if:

The exit point is located at non-residential premises; and

The maximum demand at the exit point is:

Less than 1,500 kVA based on historic metering data; or

Western Power determines, as a reasonable and prudent person, that the user's forecast maximum demand will be less than 1,500 kVA;

### Required Amendment 5

The eligibility criteria of the business energy-based reference services must be amended so that customers connected to the high voltage distribution network can access them just as customers connected to the low voltage network already can.

### *Streetlighting services*

In its revised proposal, Western Power did not amend the streetlight exit service as required by the draft decision.

Western Power stated it would conduct further stakeholder engagement with the ERA and local government authorities (LGAs) to better understand stakeholder concerns with Western Power's current approach and develop a pathway to address those concerns where practicable, without placing significant upward pressure on tariffs paid by LGAs, noting that streetlight services retail tariffs are fixed by the Western Australian Government. As part of the undergrounding program, Western Power stated it will design new streetlighting assets to the current standard as part of this process and will continue to work with LGAs to undertake proactive upgrades of streetlighting assets where these upgrades make economic sense.

Stakeholders submitted this approach did not adequately address the draft decision required amendment.

The draft decision required Western Power to:

- Provide evidence that its proposed reactive replacement of streetlights with LED globes will meet current streetlighting standards and has the lowest lifecycle cost.
- Continue to maintain streetlight assets at original design levels but, if Western Power initiates a change to the asset, ensure the asset meets current public lighting standards.

WALGA's submission on the draft decision recognises that existing pole spacing of legacy installations may constrain the achievement of lighting that meets current minimum lighting of the roadway requirements set out in the Australian Standards. However, WALGA considers the values for other criteria, such as upward light ratio, luminous intensity and discomfort glare can be assessed against the Australian Standards. WALGA submits that the customer

expectation is that changes made, including installing new lamps or new luminaires, must lead to an outcome closer to the Australian standards than what previously existed. The ERA considers this is a pragmatic approach.

Since the draft decision, there has been significant engagement between Western Power and WALGA to identify improvements that could be made to address longstanding issues in relation to the provision of streetlight services. The revised proposal did not capture these developments. Rather, Western Power considers the matters can be addressed through ongoing operational engagement.

However, the ERA considers now is the time for resolution of these longstanding issues and changes are needed to the access arrangement to accommodate a more accountable and workable framework for streetlight replacement.

The final decision requires the streetlighting reference service to be amended as follows:

- Before introducing any new streetlighting equipment that is likely to affect lighting performance (e.g. globes and luminaires) it must be independently tested against relevant standards and the results published. This will inform whether and how a new asset can be deployed in consultation with customers. (This applies to the LED screw-in globe).
- Western Power must consult on and publish its Public Lighting Strategy at least annually and ensure it complies with the strategy.
- Clarification of Western Power's complaint handling responsibilities.

In addition:

- Western Power has not adequately demonstrated that its proposed screw-in globe replacement strategy has the lowest lifecycle cost. The testing against standards noted in the paragraph above may have implications for the deployment of the screw-in globe. Western Power will need to ensure that its final strategy is based on the lowest lifecycle cost.
- There are some issues around the treatment of streetlight outages caused by cable faults for service standard reporting purposes. It appears they are not being included in the current reporting framework. This will be followed up through the ERA's annual service standard reports.
- It needs to be made clearer to customers that the unmeasured disconnection and reconnection service is a standard service with a fixed fee. This should be published on the Western Power website.



## Required Amendment 6

The revised streetlighting reference service must be amended to include:

- Before introducing any new streetlighting equipment that is likely to affect lighting performance (e.g. globes and luminaires) it must be independently tested against relevant standards and the results published. This will inform whether and how a new asset can be deployed in consultation with customers. (This applies to the LED screw-in globe).
- Western Power must consult on and publish its Public Lighting Strategy at least annually and ensure it complies with the strategy.
- Clarification of Western Power's complaint handling responsibilities.

### ***Services facilitating distributed generation and non-network services***

Synergy states it is seeking a discount off the relevant transport tariff where users invest in initiatives to promote the economically efficient investment and operation of the Western Power covered network. This discount can then be provided to end use customers who contribute to the efficient use of the network.

The service description of the relevant proposed reference services (B3 and C15) in Western Power's revised proposal states that it "provides for facilities and equipment comprising distributed generating plant or other non-network solutions connected at a connection point that results in Western Power's capital-related costs or non-capital costs reducing.

The relevant reference tariffs are RT23, RT24 which consist of:

- The reference tariff normally applicable.
- The discount that applies.

The tariff structure statement provides the formula that is used to calculate the discount as follows:

In situations where a user connects facilities and equipment (including distributed generating plant) to the Western Power Network and has applied and been assessed as resulting in Western Power's capital-related costs or non-capital costs reducing as a result of the entry point for the distributed generating plant or other non-network solution being located in that particular part of the covered network, the discount to be applied is an annualised discount amount (which can be no greater than the annual charge), calculated as the present value of FC<sub>p</sub> less FC<sub>n</sub> over a period of Y years using discount rate W.

Where:

- FC<sub>p</sub> is the present value of the Western Power committed forecast capital-related costs and noncapital costs that would be incurred over Y years if the facilities and equipment (including distributed generating plant) were not to connect to the Western Power Network.
- FC<sub>n</sub> is the present value of Western Power's forecast capital-related costs and non-capital costs over Y years that are anticipated to be incurred if the facilities and equipment (including distributed generating plant) were to connect to the Western Power Network.
- Y is the period over which the present value assessment is to occur which is 15 years unless otherwise agreed between Western Power and the user.



- W is the Weighted Average Cost of Capital as set out in section 5.4 of the Access Arrangement that applies in the pricing year.

The ERA considers the reference services have been specified sufficiently to enable a "discount off the relevant transport tariff where users invest in initiatives to promote the economically efficient investment and operation of the Western Power covered network."

Synergy's concerns appear to relate more to a view that Western Power is not accepting claims that a user has met this requirement or that the reduction in costs and consequent discount is not being calculated correctly.

The ERA does not consider these issues can be resolved by further amendments to the reference services or other aspects of the access arrangement. If Synergy considers Western Power is not providing the service it is seeking or is not calculating the discount correctly for specific applications there are other mechanisms under the Access Code to resolve disputes. The ERA is happy to take these matters up with Synergy and Western Power outside the access arrangement process if it would assist the parties to resolve any issues they have.

### 3. Non-reference services

As set out in Western Power's initial proposed access arrangement information, if a customer requests an access service that is not a reference service, Western Power will work with the customer to develop a customised product as a non-reference service. Western Power provided the following examples:

- Processing and administration fees associated with an application for network access as detailed in the applications and queuing policy.
- Network access services with conditions that vary from reference services, including:
  - transmission connected customers that have agreed to accept an interruptible service to avoid paying prohibitive deep connection costs that would otherwise be required to provide a standard service
  - customers with additional network redundancy or back-up supply available have paid for increased security and reliability for their connection
  - connections for which the customer's equipment does not meet the Technical Rules, but for which Western Power has sought an exemption from the ERA.

The specifics of the non-reference services and corresponding tariffs provided by Western Power are to be negotiated with the customer following a request for a non-reference service.

The ERA does not consider that this is contentious. The Access Code does not require a service provider to include in an access arrangement a designation or description of non-reference services or a standard access contract for non-reference services.

Disputes between Western Power and applicants (and users) in respect of access and the provision of services from Western Power are dealt with in Chapter 10 of the Access Code which provides for dispute resolution procedures if the parties cannot agree a service.

If a significant number of users seek a particular network access service not currently offered as a reference service then, under section 5.2(b) of the Access Code, consideration would need to be given for such services to be included as reference services.

## Appendix 1 Code Extract – Services

5.2 An *access arrangement* must:

- (a) specify at least one *reference service*; and
- (b) specify a *reference service* for each *covered service* that is likely to be sought by (or the benefit of which is likely to be sought by) either or both of:
  - (i) a significant number of *customers* and *applicants*; or
  - (ii) a substantial proportion of the market for *services* in the covered network;
 and
- (c) to the extent reasonably practicable, specify *reference services* in such a manner that a *user* or *applicant* is able to acquire by way of one or more *reference services* only those elements of a *covered service* that the *user* or *applicant* wishes to acquire; and
- (d) for the *Western Power Network* – specify one or more *reference services* such that there is both:
  - (i) a *reference service* which enables a *user* or *applicant* to acquire an *entry service* at a *connection point* without a need to acquire a corresponding *exit service* at another *connection point*; and
  - (ii) a *reference service* which enables a *user* or *applicant* to acquire an *exit service* at a *connection point* without a need to acquire a corresponding *entry service* at another *connection point*.

The following definitions included in the Access Code are relevant to understanding the reference services in the access arrangement:

“**covered service**” means a *service* provided by means of a *covered network*, including:

- (a) a connection service; or
- (b) an *entry service*, *exit service* or *bidirectional service*; or
- (c) a network use of system service; or
- (d) a *common service*; or
- (e) a *service* ancillary to a *service* listed in paragraphs (a) to (d) above,

but does not include an *excluded service*.

{Note: This Code uses the expression *covered service* to describe what is sometimes called a “regulated service”. It can be distinguished from an *excluded service*.

Covered services subdivide into reference services and non-reference services.}

“**services**” has the meaning given to that term in Part 8 of the Act, and “service” has a corresponding meaning.

The Act is the *Electricity Industry Act 2004* (WA), and at the time of this draft determination, the definition of “service” in Part 8 is as follows:

- (a) the transport of electricity and other services, provided by means of network infrastructure facilities; and
- (b) services ancillary to those services.

“**network**” has the meaning given to “network infrastructure facilities” in the Act.

At the time of this decision, the definition of "network infrastructure facilities" in the Act is as follows:

- (a) means electricity infrastructure used, or to be used, for the purpose of transporting electricity from generators of electricity to other electricity infrastructure or to end users of electricity; and
- (b) includes stand-alone power systems, or storage works, used, or to be used, as an adjunct to electricity infrastructure;

Other definitions in the Access Code relevant to reference services include:

**"connection service"** means the right to connect *facilities and equipment* at a *connection point*.<sup>15</sup>

{Note: A *connection service* is the right to physically connect to the network, and will regulate technical compliance etc. It is not the same thing as an *entry service* or *exit service*, which are the right to transfer electricity.}

**"entry service"** means a *covered service* provided by a *service provider* at an *entry point* under which the *user* may transfer electricity into the *network* at the *entry point*.

**"exit service"** means a *covered service* provided by a *service provider* at an *exit point* under which the *user* may transfer electricity out of the *network* at the *exit point*.

**"bidirectional service"** means a *covered service* provided by a *service provider* at a *bidirectional point* under which the *user* may transfer electricity into and out of the *network* at the *bidirectional point*.

**"common service"** means a *covered service* that is ancillary to the provision of one or more of *entry services*, *exit services* and network use of system services that ensures the reliability of a *network* or otherwise provides benefits to *users* of the *network*, the costs of which cannot reasonably be allocated to one or more particular *users* and so needs to be allocated across all *users*.

**"excluded service"** means a *service* provided by means of a *covered network*, including:

- (a) a *connection service*; or
- (b) an *entry service*, *exit service* or *bidirectional service*; or
- (c) a network use of system service; or
- (d) a *common service*; or
- (e) a service ancillary to the *services* listed in paragraphs (a) to (d) above,

which meets the following criteria:

- (f) the supply of the *service* is subject to effective competition, and
- (g) the cost of the *service* is able to be excluded from consideration for *price control* purposes without departing from the *Code objective*.

**"reference service"** means a *covered service* provided to a *user* and designated as a *reference service* in an *access arrangement* under section 5.1(a) for which there is a *reference tariff*, a *standard access contract* and *service standard benchmarks*.

**"non-reference service"** means a *covered service* that is not a *reference service*.

**"reference tariff"** means the *tariff* specified in a *price list* for a *reference service*.

**"applicant"** means –

<sup>15</sup> As defined in section 1.3 of the Access Code, "facilities and equipment" in relation to a *connection point*, means the apparatus, equipment, plant and buildings used for or in connection with *generating*, *consuming* and *transporting* electricity at the *connection point*.

(a) a person (who may be a *user*) who has lodged an *access application* under the *access arrangement* for a *covered network* to establish or modify a *contract for services*, and includes a prospective *applicant*; and

(b) a *prior applicant*.

“**user**” means a person, including a generator or a *consumer*, who is party to a *contract for services* with a *service provider*, and under section 13.4(e) includes an *other business* as a party to a *deemed access contract*.<sup>16</sup>

“**customer**” means a:

(a) *user*; or

(b) *end-use customer* in the *end-use customer’s* capacity as indirect customer for *covered services*.

“**end-use customer**” means a *consumer* who obtains the benefit of *covered services* through a *user*.

“**consumer**” means a person who consumes electricity.

{Note: A *consumer* may also be a *user*, if it acquires a *covered service* from a *service provider*.}

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<sup>16</sup> Section 13.4(e) relates to ringfencing requirements and only applies to integrated service providers. Western Power is not an integrated service provider.