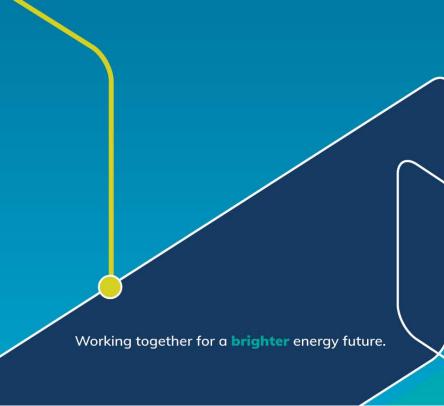


2024 Review of Supplementary Capacity Provisions

Consultation Paper



An appropriate citation for this paper is: 2024 Review of Supplementary Reserve Capacity Provisions Consultation Paper

Energy Policy WA

Level 1, 66 St Georges Terrace Perth WA 6000

Locked Bag 100, East Perth WA 6892

Telephone: 08 6551 4600

www.energy.wa.gov.au ABN 84 730 831 715

Enquiries about this report should be directed to:

Email: <u>EPWA-info@dmirs.wa.gov.au</u>

Contents

1
2
2
2
3
3
4
6
6
8
9
9
10
0
11
12
3
13
4
15
3
4
4

1. Introduction

The Coordinator of Energy (Coordinator) is undertaking a review of the supplementary capacity provisions in section 4.24 of the Wholesale Electricity Market Rules (the WEM Rules). The need for the review was triggered, under clause 4.24.19 of the WEM Rules, as a result of the Australian Energy Market Operator's (AEMO's) call for the provision of supplementary capacity on 11 August 2023.

1.1 Background

What is supplementary capacity?

Supplementary capacity is a market mechanism that can be triggered by AEMO in the event AEMO identifies a capacity shortfall.

If AEMO considers that there will be insufficient available capacity, it may take steps to procure supplementary capacity from April prior to the start of a Capacity Year. Supplementary Capacity Contracts may have alternative pricing arrangements to the Reserve Capacity Price and are limited to the immediately following Hot Season – 1 December to 31 March.

Supplementary capacity is provided by Eligible Services. The WEM Rules define an Eligible Service as load reduction or additional electricity supply, with some restrictions around the nature of the service, who can provide it, and whether a potential supplier already holds, or has held, Capacity Credits. These restrictions are designed to minimise the potential for providers to withhold capacity from the Reserve Capacity Mechanism (RCM).

Supplementary capacity processes have now been run three times in the WEM to cover forecast capacity shortfalls for the 2008-09, 2022-23 and 2023-24 Hot Season. Supplementary capacity of 120 MW was contracted for 2008-2009, 96.1 MW for 2022-23 and 160MW for 2023-24.

Capacity year 2023-24: call for supplementary capacity

Following the release of the 2023 WEM Electricity Statement of Opportunities (WEM ESOO), which presented AEMO's revised forecast maximum demand and capacity for the 2023-24 Capacity Year Hot Season, AEMO identified a need for 326 MW of supplementary capacity. This was mainly due to the increase in forecast maximum demand compared to the 2021 WEM ESOO on the basis of which reserve capacity was procured for the 2023-24 Capacity Year.

The 2023 tender process resulted in 160MW being procured through 11 Supplementary Capacity Contracts with 8 providers (see section 2.1).

Further information on the 2023-24 supplementary capacity tender process can be found at AEMO's website: <u>AEMO | Supplementary Reserve Capacity</u>

Recent improvements to the supplementary capacity provisions

Following the 2022-23 call for supplementary capacity, the Coordinator undertook a review of the supplementary capacity provisions. The 2023 Review was completed on 18 July 2023, and resulted in amendments¹ to the WEM Rules to improve the supplementary capacity provisions.

Further information on the 2023 review of the supplementary capacity provisions can be found at the Coordinators' website: 2023 Supplementary Reserve Capacity Review (www.wa.gov.au)

¹ Wholesale Electricity Market Amendment (Supplementary Capacity) Rules 2023 (www.wa.gov.au)

¹ Wholesale Electricity Market Amendment (Supplementary Capacity No. 2) Rules 2023 (www.wa.gov.au)

1.2 Stakeholder Engagement

Direct engagement with AEMO

EPWA held several meetings and received information from AEMO about the 2023 procurement process, engagement with service providers as part of the negotiation process, the contracted supplementary capacity services, verification tests and activation of procured service quantities.

Questionnaire and interviews

EPWA issued a questionnaire to organisations identified to have an interest in the supplementary capacity process including, but not limited to, organisations that have been contracted to provide supplementary capacity.

Stakeholders were invited to provide feedback on:

- the effectiveness of the 2023 tender process, and tender preparation, submission and evaluation;
- the effectiveness of the provision of the contracted services;
- the potential for a second alternative supplementary capacity product; and
- the operation of the improvements introduced by the 2023 supplementary capacity review.

Stakeholders provided their responses between 29 April 2024 and 13 May 2024. The questionnaire is provided in Appendix A of this consultation paper.

EPWA received seven responses to the questionnaire. The issues raised by stakeholders are discussed in section 3 of this paper.

1.3 Purpose of this paper

The purpose of this Consultation Paper is to gather feedback on potential rule changes, which aim to address any issues identified through the analysis of the AEMO data and issues raised by stakeholders through interviews and the survey.

Further information on the 2024 review of the supplementary capacity provisions can be found at the Coordinators' website: <u>2024 Supplementary Capacity Review</u>

1.4 Call for submissions

Stakeholder feedback is invited on the proposals outlined in this consultation paper.

Submissions can be emailed to energymarkets@dmirs.wa.gov.au.

The consultation period closes at **5:00pm (AWST) on 8 July 2024.** Late submissions may not be considered.

Any submissions received will be published on <u>www.energy.wa.gov.au</u>, unless requested otherwise.

2. 2023-2024 Supplementary capacity overview

2.1 Supplementary capacity procurement process

On 4 August 2023, AEMO held a forum to introduce participants to the revised supplementary capacity process and advise participants on the upcoming 2023 supplementary capacity tender. 91 participants attended. AEMO issued the call for tenders on 11 August 2023, accompanied by two standard form Supplementary Capacity Contracts and a series of pre-qualification questions. The request for tender closed on 8 September 2023.

The call for tender sought responses from providers capable of production of electricity or load reduction, which meet the Eligible Services requirements in line with clause 4.24.3 of the WEM Rules. In addition to the requirements in this clause, AEMO specified that the Eligible Services must:

- be available from 3:30 pm to 8:30 pm over a period of no longer than 16 weeks between 1 December 2023 and 1 April 2024;
- be greater than 1 MW; and
- have an activation duration of no less than 2 hours.

In addition, any Unregistered Equipment needed to be capable of being activated within 2 to 5 hours of the request for the service provision. Eligible services already registered as a Scheduled Facility or Semi-scheduled Facility had to be able to respond to Dispatch Instructions.

On 7 March 2024, the tender process and direct negotiation for the provision of supplementary capacity was completed. A total of 160MW was contracted through 11 Supplementary Capacity Contracts with eight service providers, as shown in Table 1.

Table 1: Contracted service providers for the 2023-2024 supplementary capacity period

Service Provider	Eligible Service	Contracted	
		Quantity	via
Starling Energy	Energy Producing	1.5 MW	Tender
AER Retail	Load Reduction	3 MW	Tender
Water Corporation	Load Reduction	50 MW	Tender
Synergy	Load Reduction & Energy Producing	17.1 MW	Tender
Enel X	Load Reduction	60 MW	Tender
Shell Energy	Load Reduction	10 MW	Negotiation
Cockburn Cement Limited	Load Reduction	7 MW	Negotiation
NewGen Neerabup Partnership	Energy Producing	11.4 MW	Negotiation

2.2 Operation of supplementary capacity

Multiple heatwave events during the Hot Season of the 2023-2024 Capacity Year resulted in higher operational demand than in previous Hot Seasons. The previous record for peak demand, set in February 2016, was exceeded seven times between 23 November 2023 and 19 February 2024, as shown as in Figure 1 below.

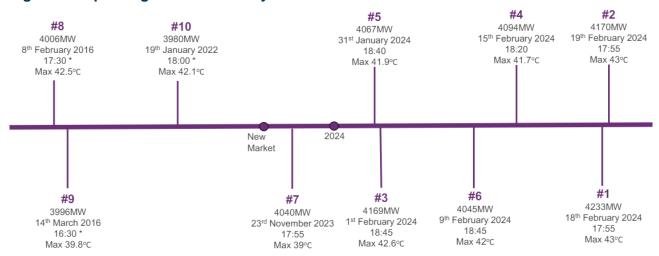


Figure 1: Top 10 highest demand days since the commencement of the WEM

Source: AEMO Real Time Market Insights Forum 20 February 2024.

Production of electricity and load reduction provided by supplementary capacity and Demand Side Programmes (DSPs) were critical to maintain power system security and reliability. Fourteen Low Reserve Condition events declared by AEMO during the Hot Season resulted in supplementary capacity services being activated. All 8 service providers were called upon during each event. In total, AEMO issued 145 activation notices and 92% of these were responded to as instructed.

Table 2 - Supplementary capacity activation dates and temperature

Date	Max temperature (°C)	Declared LOR	
14 January 2024	36.6	LOR 2	
15 January 2024	34.4	LOR 2	
16 January 2024	38.3	LOR 2	
31 January 2024	41.9	LOR 2	
01 February 2024	42.6	LOR 2	
02 February 2024	40.4	LOR 2	
08 February 2024	39.9	LOR 2	
09 February 2024	42	LOR 2	
15 February 2024	41.7	LOR 2	
18 February 2024	42.9	LOR 2	
19 February 2024	42.3	LOR 3	
20 February 2024	38.1	LOR 2	
23 February 2024	37.7	LOR 2	
07 March 2024	36	LOR 2	

^{*} Pre-New Market Start the Energy market was operated on a 30minute basis

Given the number of these events, they are not discussed individually in this paper. The issues experienced with the operation of supplementary capacity during these events are summarised below.

On seven occasions, service providers (all load reduction services) did not respond as requested. These included:

- 14 January: One provider did not respond to an activation notice and was treated as unavailable by AEMO. A reason for the lack of response was not provided or recorded.
- 8 February: One provider advised of internal communication problems at its site, which resulted in a partial load reduction response;
- 20 February: One provider advised of insufficient available load and a pending planned outage;
- 23 February: One provider advised of a planned outage;
- 23 February: One provider advised of partial unavailability due to fuel delivery delay; and
- 20 and 23 February: A provider delivered significantly lower service quantities than what was requested. A reason for this was not provided or recorded.

All issues (excluding the first and last instances) were communicated to AEMO via email following the request for activation, and within two hours of the requested activation time.

In general, it appears that the issues with the activation of supplementary capacity were not related to the process set out in the WEM Rules, but rather due to communication issues or external factors outside of AEMO or the provider's control.

The following matters were also noted by AEMO in relation to the operation of supplementary capacity in 2023-24:

- On two occasions (20 and 23 February), a provider requested a delayed and shorter activation period due to concerns about value-for-money/customer costs. The requests were approved by AEMO; and
- On 16 January, a provider enquired, 30 minutes before the requested activation time, whether dispatch was still necessary. AEMO advised that it was necessary 10 minutes before the activation time and the provider delivered as required.

3. Review of the supplementary capacity provisions and proposed improvements

3.1 Overview of stakeholder feedback

Stakeholders' overall perception of the procurement process and the operation of the supplementary capacity services was positive. Both stakeholders and AEMO noted that improvements introduced by the 2023 supplementary capacity review allowed for a better outcome.

Pre-tender process

Generally, stakeholders considered that the information made available about the supplementary capacity process, including the service specification and contract, was clear.

One provider noted that without existing familiarity with the WEM Rules, or the resources of a major market participant, it was challenging to get across the detail and AEMO's processes. Some stakeholders noted that there were gaps in the information provided, or that clarifications were required. These were noted as easily resolvable following discussion with AEMO, but that this caused delays in submitting tender documentation.

One stakeholder noted that if AEMO is looking for additional suppliers of supplementary capacity, it is likely that those suppliers are not fully engaged with the WEM Rules or monitoring the tender portal for energy related tenders.

Coordinator response

See Proposal 1. Under this proposal, during the pre-tender process AEMO will be required to identify, using data provided by Western Power, potential suppliers of supplementary capacity and proactively provide these parties with information about supplementary capacity and the tender process.

Tender preparation, contracting, submission and evaluation

Several stakeholders considered that additional time was required for tender preparation, which would have allowed for:

- further opportunity to arrange all required documentation and approvals, particularly approvals by Western Power for network access; and
- adequate coordination with customers (for demand side management services) and therefore more capacity could have been offered.

One stakeholder noted that the contract negotiation process was fairly onerous in terms of coordinating with counterparties and customers to ensure contracts and parties were aligned.

Some stakeholders noted the difficulty in negotiating away from the standard form contract, with one stakeholder commenting that AEMO's interpretation of clause 4.24.14 of the WEM Rules has impacted the ability to vary the standard form of contract for different technology types or specific circumstances. Stakeholders noted:

- gaps in the contract around options for activation of supplementary capacity quantities;
- that a hybrid approach (allowing for activation price above the Energy Offer Price Ceiling) was rejected by AEMO;
- difficulty in managing third party risks through the standard form contract;
- lack of accommodation to consider or accept proposed contract departures to fit bespoke asset bids; and
- lack of remuneration for required testing and lack of sufficient time to coordinate with customers. Some stakeholders noted issues around the conditions precedent in the contract, specifically that:

- The wording of the conditions precedent in AEMO's favour introduced risks that providers could not manage, as they were not all within the providers control (for example, testing could not be done without network access approval).
- There was some uncertainty around condition precedent satisfaction date and contract commencement for availability payments, and more clarity around this may ease the process next time.

Coordinator response

No proposals for changes to the WEM Rules are made in response to this. Given that supplementary capacity must be negotiated within a reasonably short timeframe, it is important for there to be a standard form contract to guide negotiations between parties. Clause 4.24.14 of the WEM Rules already allows for variations to the standard form contract where these are reasonably required.

Operation of supplementary capacity

Service providers identified challenges with providing supplementary capacity services, including:

- reliability of notification process via email and telephone, noting that some notifications were not
 received in time and some responses were not confirmed. It was stated that this improved for
 activations later in the Hot Season;
- confusion about the requirements to bid the supplementary capacity as part of the Real-Time Market;
- requests to be activated were not followed through due to factors such as security constrained economic dispatch or load adjustments;
- the activation of supplementary capacity required unit commitment, forcing generators to be price takers;
- the simultaneous activation of load reduction services softened market conditions, resulting in a distorted wholesale market and short-term loss-making outcomes; and
- volatility due to the adjustment factor mechanism in the baselining methodology for demand side services.
 - One provider noted that the cost of activation in lost production, consumables and plant efficiency is unrelated to what the load may have been for the relevant intervals in the previous 10 days and that, if costs are not covered, supplementary capacity activation will not be a priority. It added that the changes to the baseline methodology made it difficult to justify participation in supplementary capacity in the internal approval processes.
 - Another noted that the baseline methodology also meant that compensation for the service provided was less linked to the volume of energy discharge from the battery and more to the non-controllable load behind the meter.

Coordinator response

Several of the issues raised about the operation of supplementary capacity were resolved by the end of the Hot Season and were related to the learning process in a Hot Season with a significantly higher number of activation events than previous cycles. No changes to the supplementary capacity provisions are proposed in response to this.

Other issues relate to the interaction between the activation of supplementary capacity and the real-time market. These issues cannot be resolved through the supplementary capacity provisions that are being reviewed in this process and are a natural result of operating supplementary capacity and security constrained economic dispatch in parallel. As such, no changes are proposed in response to this.

With regard to the dynamic baseline, Proposal 2 sets out amendments to clause 4.24.14A to ensure that provisions in the standard form contract mirror similar provisions in the WEM Rules to the extent

possible, including the methodology for measuring demand side response. This will not be implemented until the later of:

- the end of the next Hot Season (1 April 2025); or
- the time the WEM Amending Rules implementing the dynamic baseline are made by the Minister.²

Alternative supplementary capacity product

Early discussions between Energy Policy WA and AEMO on the 2023-24 supplementary capacity process involved consideration of the potential for a second supplementary capacity product, that would be procured through the tender process but based on activation payments only and without any availability requirements or payments. EPWA sought stakeholders' view on the proposed product as part of the survey process. Stakeholders had split views on the introduction of an alternative supplementary capacity product.

One stakeholder was supportive of the proposal. This stakeholder suggested that, for an activation only product to be attractive, the following aspects should be considered:

- a retainer or other income to justify the cost of creating the service (e.g. establishing of communications, staff training and production planning);
- the activation rate would need to be high enough to support the fixed costs of participation;
- · the baselining methodology would need to be more predictable; and
- earlier notice of activations may be required.

However, most of the stakeholders stated they were unlikely to make an offer on this type of product, and that their preference is to maintain the current contract with availability and activation payments. Stakeholders considered that the availability payments have been the largest source of revenue. It was noted that there are numerous upfront and fixed costs associated with participating in the supplementary capacity process that are unlikely to be recovered under an activation payment only contract (for example network studies, fuel commitments, legal and other costs) and that require a guaranteed rate of return.

One stakeholder indicated that activation only contracts would require more revenue certainty associated with supplementary capacity events. Examples would be minimum dispatch duration, minimum MW quantity, and the ability for supplementary capacity provided by generation to opt out of delivery if wholesale pricing is not sufficient to allow cost recovery. It also noted that the wholesale market price during supplementary capacity events is unpredictable.

Coordinator response

EPWA is seeking further feedback on this matter in section 3.4.

3.2 Other suggestions provided by stakeholders

On 13 June 2024, the Market Advisory Committee (MAC) was briefed on the current supplementary capacity review. A MAC member noted that the calls for supplementary capacity have become more frequent and questioned whether the requirement for the Coordinator to review section 4.24 of the WEM Rules after each call for tender was efficient.

² The dynamic baseline rules are currently undergoing stakeholder consultation as part of the Exposure Draft of the Wholesale Electricity Market Amendment (Miscellaneous Amendments No. 3) Rules 2024. Available at: https://www.wa.gov.au/system/files/2024-06/wholesale-electricity-market-rules-exposure-draft-misc-3.pdf

Coordinator response

See Proposal 4 to allow the Coordination the discretion to review the supplementary capacity provisions only if substantial changes are required following a call for tender of supplementary capacity.

3.3 Proposed improvements to the supplementary capacity provision

As a result of the feedback in section 3.1 and summary of events in sections 2, EPWA has identified opportunities to amend the supplementary capacity provisions in the WEM Rules to improve them.

This section outlines high-level proposals for improvement and an assessment against the WEM Objectives. Proposed draft changes to the WEM Rules are provided in Appendix B.

The current objectives of the WEM are provided below for reference.

The objectives of the market are:

- (a) to promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the South West interconnected system (SWIS);
- (b) to encourage competition among generators and retailers in the SWIS, including by facilitating efficient entry of new competitors;
- (c) to avoid discrimination in that market against particular energy options and technologies, including sustainable energy options and technologies such as those that make use of renewable resources or that reduce overall greenhouse gas emissions;
- (d) to minimise the long-term cost of electricity supplied to customers from the SWIS; and
- (e) to encourage the taking of measures to manage the amount of electricity used and when it is used.

3.3.1 Reaching potential providers

In the survey responses, one stakeholder noted that potential providers of supplementary capacity may not be involved in WEM Rules related processes and therefore may not be aware of the opportunity to participate.

EPWA proposes to require AEMO to identify potential suppliers of supplementary capacity and proactively reach out to them in advance or during the tender process.

Proposal 1

Clause 4.24.6AA of the WEM Rules will be introduced to require AEMO to use reasonable endeavours to identify potential suppliers of supplementary capacity (using data provided by Western Power) and provide those potential providers with information on the call for supplementary capacity tender.

To assist with helping potential providers to understand how supplementary capacity operates, clause 4.24.6 of the WEM Rules will be amended to require AEMO to advise, as part of the call for tender, the location on the WEM Website for general information about supplementary capacity, including the location of the WEM Procedure made under clause 4.24.18 of the WEM Rules. Clause 4.24.1B of the WEM Rules will also be amended to require AEMO to include the location on the WEM Website of general supplementary capacity information in a call for expressions of interest.

Assessment against the WEM Objectives

Proposal 1 will better achieve WEM Objectives 1.2.1(a), (b) and (d).

Ensuring that, to the extent practicable, potential supplementary capacity providers are captured and encouraged to participate in the supplementary capacity tender process will promote the

economically efficient supply of electricity, encourage competition between participants in the SWIS and therefore minimise the long-term cost of electricity.

3.3.2 Consistency between matters specified in the supplementary capacity standard form contract and the WEM Rules.

One of the most consistent themes in the feedback from stakeholders was about the baseline methodology, and its predictability and suitability for different types of load reduction services.

As part of the Demand Side Response Review that Energy Policy WA has recently conducted, rules have been proposed to apply a dynamic baseline to DSPs participating in the RCM. Energy Policy WA is currently consulting on further amendments to that baseline methodology to ensure it is appropriate for measuring the performance of DSPs comprised of an aggregation of residential/small-use customers.

Energy Policy WA considers that it is important to have consistency, to the extent practicable, between the framework for participation in supplementary capacity and the relevant frameworks set out in the rest of the WEM Rules.

Proposal 2

Clause 4.24.14A of the WEM Rules will be amended to clarify that matters specified in the standard form contract should be aligned, to the extent practical, with the requirements in the WEM Rules that apply to participants in the RCM. It is proposed that this should include, but not be limited to, measurement methods (including baseline methodology for demand side services) and notice periods.

An amended dynamic baseline for DSPs participating in the RCM is currently undergoing consultation, and the WEM Amending Rules to introduce it will not be made for some time. Therefore, the proposed amendments to clause 4.24.14A will not come into effect until the later of:

- The end of the next Hot Season, 1 April 2025; and
- The date on which the WEM Amending Rules introducing the new DSP dynamic baseline are made.

Assessment against the WEM Objectives

Proposal 2 will better achieve all the WEM Objectives.

Provisions in the WEM Rules regarding matters such as measurement of demand side response and notice periods have undergone comprehensive consultation processes and have been carefully considered to ensure they are fit for purpose and meet the objectives of the WEM Rules. Ensuring consistency between the standard form contract and the WEM Rules will mean the objectives each relevant provision in the WEM Rules sets out to achieve will be reflected in the standard form contract.

3.3.3 Maximum supplementary capacity price

Supplementary capacity providers currently receive two payments:

- Availability payments, which are an amount per hour of availability over the period of the Supplementary Capacity Contract, expressed in \$ per MW
- Activation payments, which are an amount paid per hour of activation, expressed in dollars per MWh. The activation price submitted by a participant as part of the tender must reflect direct or opportunity costs incurred in providing the service (clause 4.24.7(j)(ii) of the WEM Rules)

Under clause 4.24.7 of the WEM Rules, these two payments are combined to develop a maximum contract value per hour which is equal to:

• The activation price (expressed in dollars per MW), plus

- The availability price (expressed in \$ per MWh), divided by the lesser of:
 - The number of hours specified in the advertisement for the call for tenders; and
 - the maximum number of hours over the term of the Supplementary Capacity Contract that the Eligible Service will be available.

AEMO is required to publish the maximum contract value per hour of availability for any Supplementary Capacity Contract that it will accept (clause 4.24.6(g) of the WEM Rules). If publishing an expression of interest under 4.24.1A of the WEM Rules, AEMO must also publish a preliminary estimate of the maximum contract value per hour that it will accept (clause 4.24.1B(g) of the WEM Rules).

Evidence indicates that providers have shadowed the maximum price as a default, and concerns have been raised that this is detrimental to competition. At the same time, there is no transparency to the market as contract prices are currently not published. This is inconsistent with the provisions regarding Non-Co-optimised Essential System Services, which require contract prices to be published following the award of contracts.

Proposal 3

The requirements under clauses 4.24.6(g) and 4.24.1B(g) of the WEM Rules to publish the maximum contract value per hour will be removed.

To ensure transparency to the market regarding the costs of supplementary capacity, clause 4.24.11B of the WEM Rules will be amended to include an obligation for AEMO to publish the availability and activation price associated with each contract.

Assessment against the WEM Objectives

Proposal 3 will better achieve WEM Objectives 1.2.1(b) and (d).

Removing the published maximum price, and requiring prices to be published after all contracts are signed, should encourage more competition between providers and therefore minimise the long-term cost of electricity in the SWIS.

3.3.4 Coordinator's requirement to review the supplementary capacity provisions

Clause 4.24.19 of the WEM Rules requires that after each call for tenders for supplementary capacity or otherwise acquiring Eligible Services, the Coordinator must:

- review the supplementary capacity provisions in section 4.24 of the WEM Rules; and
- undertake a public consultation process in respect of the outcome of the review.

As noted in the previous section, in the MAC meeting of 13 June 2024 one stakeholder noted that there are diminishing returns to reviewing the supplementary provisions after every call for supplementary capacity tender.

Proposal 4

The requirements under clause 4.24.19 of the WEM Rules for the Coordinator to review the supplementary capacity provision following each call for tender will be amended such that the review is optional. A clause will be added to require AEMO to notify the Coordinator of any deficiencies with the supplementary capacity provisions as they are identified by AEMO in undertaking its functions under section 4.24 of the WEM Rules.

Assessment against the WEM Objectives

Proposal 4 will better achieve WEM Objectives 1.2.1(d).

Removing the obligation to review the supplementary capacity provisions after every call for tender will allow the Coordinator to assess whether a formal review is required. If the Coordinator decides

that a review is not required, human and financial resources can be directed to other priority areas, which will increase the overall efficiency in the WEM and minimise the cost to consumers.

3.4 Introduction of an alternative supplementary capacity product

Initial consultation with AEMO regarding the 2023-24 supplementary capacity process indicated that there was a need for flexibility that enables AEMO to seek additional supplementary capacity from Eligible Services at short notice, for example in the lead up to a heat wave.

AEMO has the ability under clause 4.24.2(b)(ii) of the WEM Rules of the WEM Rules to negotiate directly with suppliers within 12 weeks of identified capacity shortfall. However, AEMO expressed concern regarding the ability of potential service providers and AEMO to agree terms and conditions at short notice, and proposed having a second alternative supplementary capacity product that is sought as part of the tender process, alongside the existing product.

This alternative product would involve activation payments only. A provider of this product would have no availability obligations, but the contract would allow for a higher price for activation.

As noted in section 3.1 of this paper, most stakeholders indicated they would be unlikely to opt for a contract with an activation payment only, given the costs associated with preparing the service and agreeing a contract with AEMO.

Before making a recommendation on this matter, Energy Policy WA but is seeking further feedback about whether potential service providers would be:

- 1. Interested in the introduction of an activation payment only contract?
 - a) If so, what factors would be considered important for an activation only contract to be attractive to an organisation? For example, certain activation notice periods, payment terms or price?
 - b) If not, what factors would deter participation in a tender for this type of product?
- 2. Willing to enter into short term negotiations to provide short term supplementary capacity response during the Hot Season without a pre-existing contract?
 - a) This may involve, by way of example, direct negotiations in the lead up to a heatwave to provide capacity/reduce demand for a limited, specified time (possibly 2-3 hours a day over 1-2 days) at a specified price.
 - b) It is anticipated this would only be used if it is expected that without procuring this additional capacity manual load shedding would be required.

Appendix A. Survey Questions

The following questions were posed to participants in the stakeholder questionnaire for industry (Appendix A.1) and for service provides (Appendix A.2). Stakeholders were invited to provide responses between 29 April 2024 to 13 May 2024, which informed this Consultation Paper.

A.1 Questionnaire for industry

Tender process

- Were the supplementary capacity requirements adequately explained and sufficiently clear in the material provided by AEMO? In providing your response, please consider the tender documentation, standard form contract, information conveyed in the industry forum and prequalification questions.
- 2. Was there sufficient time to effectively participate in the process, thinking of the time between the call for tender submissions and the end date for submissions? Would a different timeframe have led to a different response from your organisation?

Tender preparation, submission and evaluation

- 4. From your organisation's perspective, when thinking about the procurement process generally, what went well and what did not? Were there any barriers or limits to participating?
- 5. If you made a submission, how onerous was preparing a submission to the tender process? Has this impacted on the services you could offer in your submission? Please provide details of the time, cost and other resources required to prepare a submission, if possible.
- 6. If you did not make a submission, what was the primary reason for this?
- 7. If you were unsuccessful in the tender process, what feedback did you receive regarding your submission? Was this sufficient to enable you to participate in a future process?

Alternative supplementary capacity product

- 8. Would an alternative supplementary capacity product that is procured through the tender process but based on activation payments only without any availability requirements or payments be of interest to your organization? If this would be of interest:
 - a. What would guide your preference between an activation/availability contract and an activation only contract?
 - b. Are there any factors you would consider important for an activation only contract to be attractive to your organisation? For example, certain activation notice periods, payment terms or price?

General

9. Do you have any other feedback you wish to provide?

A.2 Questionnaire for Service Providers.

Tender process

- Were the supplementary capacity requirements adequately explained and sufficiently clear in the material provided by AEMO? In providing your response, please consider the tender documentation, standard form contract, information conveyed in the industry forum and prequalification questions.
- 2. Was there sufficient time to effectively participate in the process, thinking of the time between the call for tender submissions and the end date for submissions? Would a different timeframe have led to a different response from your organisation?

Tender preparation, submission and evaluation

- 3. From your organisation's perspective, when thinking about the procurement process generally, what went well and what did not? Were there any barriers or limitations to participating?
- 4. How onerous was preparing a submission to the tender process? Please provide details of the time, cost and other resources required to prepare a submission, if possible. Has this impacted on the services you could offer in your submission?

Provision of contracted services

- 5. From your perspective, as a provider of supplementary capacity, what went well and what did not, during the activation and operation of your supplementary capacity services?
- 6. Was there any difference in your experience and / or outcomes across the 14 events in which supplementary capacity was activated? If yes, please describe the difference.
- 7. Were there any challenges in providing the services you were contracted to provide? What was the nature of these challenges? What happened as a result of these challenges?
- 8. What impact do the supplementary capacity provisions, your participation in the supplementary capacity process and the potential for future supplementary capacity processes have on your:
 - a. participation in the Reserve Capacity Mechanism; and/or
 - b. investment or commercial decisions.

Alternative supplementary capacity product

- 10. Would an alternative supplementary capacity product that is procured through the tender process but based on activation payments only without any availability requirements or payments be of interest to your organization? If this would be of interest:
 - a. What would guide your preference between an activation/availability contract and an activation only contract?
 - b. Are there any factors you would consider important for an activation only contract to be attractive to your organisation? For example, certain activation notice periods, payment terms or price?

General

11. Do you have any other feedback you wish to provide?

Appendix B. Proposed WEM Rule changes

EPWA proposes the following Amending Rules to implement the changes proposed in Section 3 of this Consultation Paper (deleted text, added text):

4.24. Supplementary Capacity

- 4.24.1. If, at any time after the day which is six months before the start of a Capacity Year, AEMO considers that inadequate Reserve Capacity will be available in the SWIS to maintain Power System Security and Power System Reliability, using the most recent published forecasts and the methodology outlined in clauses 4.5.9(a) and 4.5.9(b) and any other information AEMO considers relevant, then it must:
 - (a) determine the expected start and end dates for the period of the shortfall;
 - (b) determine the expected amount of the shortfall; and
 - (c) seek to acquire supplementary capacity in accordance with clause 4.24.2.
- 4.24.1A. Without limiting clause 4.24.1, if, at any time after the day which is six months before the start of a Capacity Year, AEMO considers that there is a risk that adequate Reserve Capacity may not be available in the SWIS to maintain Power System Security and Power System Reliability, then it may advertise a call for expressions of interest for supplementary capacity by publishing a notice on the WEM Website and issuing a Market Advisory.
- 4.24.1B. A notice calling for expressions of interest for supplementary capacity in accordance with clause 4.24.1A must include:
 - (a) the date and time by when any person wishing to respond to the call for expressions of interest must have completed and lodged with AEMO the form specified in clause 4.24.1B(i);
 - (b) contact details for AEMO and Western Power;
 - (c) AEMO's preliminary estimate of the amount of capacity which AEMO considers may be required if AEMO decides to seek to acquire supplementary capacity pursuant to clause 4.24.1;
 - (d) AEMO's preliminary estimate of the number of hours over which the capacity is expected to be used;
 - (e) AEMO's preliminary estimate of the time of the day where the capacity is expected to be required;
 - (f) AEMO's preliminary estimate of the term of any Supplementary Capacity Contract if AEMO decides to seek to acquire supplementary capacity pursuant to clause 4.24.1;
 - (g) [blank]AEMO's preliminary estimate of the maximum contract value per hour of availability for any Supplementary Capacity Contract that AEMO will accept if AEMO decides to seek to acquire supplementary capacity pursuant to clause 4.24.1;
 - (gA) a statement that a respondent must provide evidence that it has access to a network, or has taken steps to obtain access to a network, where applicable;

- (h) the location on the WEM Website of the standard Supplementary Capacity Contract;
- (i) the location on the WEM Website of the form to be used in responding to the call for expressions of interest; and
- (iA) the location on the website for general information about supplementary capacity; and
- (j) the location on the WEM Website of the WEM Procedure referred to in clause 4.24.18
- 4.24.1C. Following the close of a call for expressions of interest for supplementary capacity in accordance with clause 4.24.1A, AEMO:
 - (a) must assess all responses received by the closing date, and may assess any late responses;
 - (b) must consult with Western Power on any network access matters related to the proposed Eligible Services specified in the responses in accordance with the WEM Procedure referred to in clause 4.24.18; and
 - (c) must, for each response assessed by it, provide feedback to each respondent on whether AEMO or Western Power, as applicable, considers the Eligible Services the respondent proposes to provide would be likely to be capable of meeting the requirements outlined in the call for expressions of interest and contained in the standard Supplementary Capacity Contract.
- 4.24.2. If AEMO decides to seek to acquire supplementary capacity and:
 - (a) the expected start date of the shortfall is at least 12 weeks from the date AEMO becomes aware of the shortfall, then it must call for tenders from potential suppliers of supplementary capacity in an invitation to tender;
 - (b) clause 4.24.2(a) does not apply, then it must either:
 - i. call for tenders from potential suppliers of supplementary capacity in an invitation to tender; or
 - ii. negotiate directly with potential suppliers of supplementary capacity.
- 4.24.3. The only eligible sources of supplementary capacity are the following services ("**Eligible Services**"):
 - (a) load reduction, that is measures to reduce a consumer's consumption of electricity supplied through the SWIS from that which the consumer would have otherwise consumed, but excluding reductions provided by a Market Participant with a Demand Side Programme that does not satisfy its Reserve Capacity Obligations during the current Capacity Year or did not satisfy its Reserve Capacity Obligations during the immediately preceding Capacity Year;
 - (b) the production of electricity by Energy Producing Systems that are not Registered Facilities; and
 - (c) the production of electricity by Energy Producing Systems that are Registered Facilities, or load reductions provided by loads, but only to the extent that the

electricity is generated, or the load reduction is provided, by capacity for which the relevant Market Participant:

- i. does not hold Capacity Credits in the current Capacity Year or has not held Capacity Credits in the current Capacity Year or the immediately preceding Capacity Year; or
- ii. provides evidence satisfactory to AEMO, prior to a Supplementary Capacity Contract taking effect, that:
 - 1. costs have been incurred to enable the provision of the capacity through the installation of physical equipment; and
 - 2. the capacity is in addition to the sent out capacity of the Energy Producing Systems, or the maximum amount of load that can be curtailed, that existed prior to the installation of the physical equipment.
- 4.24.4. A person is not required to be a Rule Participant in order to submit a tender in response to a call for tenders under clause 4.24.2 or enter into a Supplementary Capacity Contract with AEMO. However, if a Rule Participant does enter into a Supplementary Capacity Contract with AEMO, then it must comply with that contract.
- 4.24.5. AEMO must not call for tenders for supplementary capacity earlier than six calendar months prior to the calendar month in which the shortfall period is expected to start.
- 4.24.6. If AEMO decides to call for tenders for supplementary capacity, then, no earlier than 30 Business Days and no later than 10 Business Days prior to the proposed closing date for submission of tenders, AEMO must advertise the call for tenders in accordance with clause 4.24.6A. The advertisement must include:
 - (a) the date and time by when any person wishing to tender to supply Eligible Services must have completed and lodged with AEMO the form specified in clause 4.24.7;
 - (b) contact details for AEMO and Western Power;
 - (c) the amount of capacity required;
 - (d) the number of hours over which the capacity is expected to be used;
 - (e) the time of the day where the capacity is expected to be required;
 - (f) the expected term of any Supplementary Capacity Contracts entered into as a result of the call for tenders;
 - (g) the maximum contract value per hour of availability for any Supplementary

 Capacity Contract that AEMO will accept; the location on the website for general information about supplementary capacity;
 - (h) the location on the WEM Website of the standard Supplementary Capacity Contract; and
 - the location on the WEM Website of the tender form to be used in applying to provide Eligible Services-;and

- (i) the location on the WEM Website of the WEM Procedure referred to in clause 4.24.18.
- 4.24.6A. In advertising the call for tenders in accordance with clause 4.24.6, AEMO must:
 - (a) publish a notice on the WEM Website;
 - (b) publish a notice on at least one major tender portal; and
 - (c) issue a Market Advisory.
- 4.24.6AA AEMO must use reasonable endeavours to identify potential Eligible Services providers and contact them regarding any call for tender under clause 4.24.6.
- 4.24.6AB Western Power must provide data to AEMO to assist it with identifying potential Eligible Service providers under clause 4.24.6AA.
- 4.24.7. AEMO must prescribe the tender form to be used by those applying to provide Eligible Services. This form must require the provision of the following information:
 - (a) the name and contact details of the applicant;
 - (b) the nature of the Eligible Service to be provided;
 - (c) the amount of the Eligible Service available;
 - (d) the maximum number of hours over the term of the Supplementary Capacity Contract that the Eligible Service will be available;
 - (e) the maximum number of hours on each day during the term of the Supplementary Capacity Contract that the Eligible Service will be available;
 - (f) the time of each day during the term of the Supplementary Capacity Contract that the Eligible Service will be available;
 - (g) any information required to complete the relevant standard form Supplementary Capacity Contract for the Eligible Service and the applicant, together with full details of any amendments to the standard form Supplementary Capacity Contract required by the applicant;
 - (h) the mechanism for activating the Eligible Service;
 - (i) the mechanisms available for measuring the Eligible Service provided;
 - (i) the values of
 - i. the availability price for the Eligible Service expressed in dollars; and
 - ii. the activation price for the Eligible Service, expressed in dollars per hour of activation, where this price must reflect direct or opportunity costs incurred.

where the activation price plus:

iii. the availability price; divided by

iv. the lesser of:

1. the number of hours specified in the advertisement for the call for tenders under clause 4.24.6(d); and

2. the number of hours specified for the Eligible Service in accordance with clause 4.24.7(d),

must not exceed the maximum contract value per hour of availability specified in the advertisement for the call for tenders under clause 4.24.6(g);

- (k) the location of the Eligible Service and any associated Transmission Node Identifier and any associated NMI, where applicable;
- (I) evidence that the Eligible Service will have access to a network for the contract period, where applicable; and
- (m) the applicant's consent for Western Power to provide AEMO with relevant information, including information related to meters, meter readings and status of access arrangements, where applicable.
- 4.24.8. In determining the result of a call for tenders and entering into Supplementary Capacity Contracts:
 - (a) AEMO must only accept an offer for the provision of Eligible Services;
 - (b) AEMO must not accept an offer for the provision of an Eligible Service if AEMO is not satisfied that the Eligible Service will be available during times of system peak demand coinciding with the shortfall period;
 - (c) subject to clauses 4.24.8(a), 4.24.8(b) and 4.24.9, AEMO is to seek to enter into the lowest cost mix of Supplementary Capacity Contracts that:
 - i. will meet the requirement for supplementary capacity; or
 - ii. will, if it is not possible to meet the requirement for supplementary capacity, minimise the remaining Reserve Capacity shortfall,

where the cost of each Supplementary Capacity Contract is to be defined to be the sum of:

- iii. the availability price; plus
- iv. the product of the activation price and the lesser of:
 - 1. the number of hours specified in the advertisement for the call for tenders under clause 4.24.6(d); and
 - 2. the number of hours specified for the Eligible Service in the relevant tender form in accordance with clause 4.24.7(d); and
- (d) AEMO must be reasonably satisfied that the provider of the Eligible Service has access to a network, where applicable.
- 4.24.9. AEMO is not under any obligation to accept any tender, or enter into a Supplementary Capacity Contract in respect of any tender, made in response to a call for tenders under clause 4.24.2.
- 4.24.10. If AEMO negotiates directly with a potential supplier of Eligible Services in accordance with clause 4.24.2(b)(ii), then it must provide the following information to the potential supplier:
 - (a) the amount of capacity required;

- (b) the relevant standard form Supplementary Capacity Contract; and
- (c) details of the information to be provided by the potential supplier, including:
 - i. the amount of the Eligible Service available;
 - ii. the mechanism for activating the Eligible Service;
 - iii. the mechanisms available for measuring the Eligible Service provided;
 - iv. the availability price for the Eligible Service expressed in dollars;
 - v. the activation price for the Eligible Service, expressed in dollars per hour of activation, where this price must reflect direct or opportunity costs incurred; and
 - vi. the location of the Eligible Service and any associated Transmission Node Identifier and any associated NMI, where applicable.
- 4.24.11. Subject to clauses 4.24.3, 4.24.11B and 4.24.14, AEMO may at its discretion enter into any negotiated Supplementary Capacity Contract, but must use reasonable endeavours to minimise the cost of Eligible Services acquired in this manner.
- 4.24.11A. Where AEMO has issued a call for tenders under clauses 4.24.2(a) or 4.24.2(b)(i), AEMO must not enter into negotiations for a negotiated Supplementary Capacity Contract under clause 4.24.11 before the completion of the tender, including, to avoid doubt, assessment of all in-time responses received by AEMO in response to the tender.
- 4.24.11B. Following the completion of a tender process called under clauses 4.24.2(a) or 4.24.2(b)(i) and any negotiations in accordance with clause 4.24.2(b)(ii), as applicable, AEMO must publish on the WEM Website the following information for each Supplementary Capacity Contract:
 - (a) the name of the service provider that has been contracted to provide supplementary capacity;
 - (b) the quantity contracted under the Supplementary Capacity Contract;
 - (c) whether the contract was entered in through a tender process or direct negotiation; and
 - (d) the type of the Eligible Service contracted.
 - (e) the availability price for the Eligible Service expressed in dollars, as defined in clause 4.24.7(j)(i); and
 - (f) the activation price for the Eligible Service, expressed in dollars per hour of activation, as defined in clause 4.24.7(j)(ii).
- 4.24.12. AEMO must, in consultation with stakeholders, develop and maintain a standard form Supplementary Capacity Contract, which accords with the requirements in clause 4.24.13.
- 4.24.13. A standard form Supplementary Capacity Contract will require the supplier of an Eligible Service to reduce net consumption, or to increase energy production, on instruction from AEMO and must specify:

- (a) that there are no force majeure conditions;
- (b) the settlement process to be followed, including timing of payments;
- (c) contract variation conditions;
- (d) any conditions required to ensure that if a different person takes over the facility used to provide the Eligible Service, that the person taking over will be bound by the contract obligations (for example, by requiring the execution of a deed of assumption or novation);
- (e) the financial consequences of failing to supply the Eligible Service in accordance with the contract, based on the arrangements which apply under section 4.26 where a Market Participant holding Capacity Credits for a Facility fails to comply with its Reserve Capacity Obligations;
- (f) [Blank]
- (g) the technical standards and verification arrangements which facilities used to provide Eligible Services must comply with; and
- (h) blank schedules specifying:
 - i. the term of the Supplementary Capacity Contract, where this term is not to exceed, but may be shorter than, the Hot Season;
 - ii. the sources of the net consumption reduction or energy production increase;
 - iii. the amount of net consumption reduction or energy production increase required;
 - iv. the notification time to be given for activation;
 - v. the method of notification of activation;
 - vi. the minimum duration of any activation;
 - vii. the maximum duration of any single activation;
 - viii. any limits on the number of times AEMO can request activation;
 - ix. the basis to be used for measuring the response;
 - x. the availability price;
 - xi. the activation price;
 - xii. technical matters relating to the facility (including testing); and
 - xiii. the fact that activation instructions will be given by AEMO.
- 4.24.14. AEMO must enter into a Supplementary Capacity Contract in the form of the standard form Supplementary Capacity Contract, except where AEMO considers that one or more variations are reasonably required, having regard to the specific characteristics of the facility providing the supplementary capacity and to any other matter that AEMO considers appropriate, AEMO may enter into a Supplementary Capacity Contract containing such variations.

- 4.24.14A. The notification time for activation_Matters specified in a Supplementary Capacity Contract, including but not limited to:
 - (a) the notification time for an activation; and
 - (b) the method(s) for measuring the response of Eligible Services contracted to reduce their net consumption;

must be aligned, to the extent practicable and considering the characteristics of the facility providing the Eligible Service, with the notification time equivalent provisions applicable to a similar type of facility providing a similar service under the WEM Rules.

- 4.24.15. AEMO must recover the full cost it incurs in respect of Supplementary Capacity Contracts in accordance with section 4.28 and Chapter 9.
- 4.24.16. AEMO must verify the ability of each contracted Eligible Service to provide the maximum quantity contracted under the Supplementary Capacity Contract.
- 4.24.17. [Blank]
- 4.24.18. AEMO must document in a WEM Procedure:
 - (a) the process it follows in:
 - i. acquiring Eligible Services;
 - ii. entering into Supplementary Capacity Contracts;
 - iii. [blank]determining the maximum contract value per hour of availability for any Supplementary Capacity Contract;
 - iv. determining how a payment in relation to a Supplementary Capacity Contract is to be made to the party identified in clause 4.29.3(e)(ii) if that party is not a Market Participant; and
 - v. determining under clause 4.24.8(d) that a provider of an Eligible Service has access to the network;
 - (b) requirements regarding the information and assistance AEMO may require from Western Power to support:
 - i. an expression of interest process or a procurement process for supplementary capacity under this section 4.24; and
 - ii. measuring the performance of activated Eligible Services subject to a Supplementary Capacity Contract;
 - (c) requirements, developed in consultation with Western Power, regarding the information that must be provided by those intending to respond to a call for expressions of interest under clause 4.24.1A, or intending to provide supplementary capacity in response to a call for tenders or direct negotiation under clause 4.24.2, who request assistance or an assessment from Western Power in accordance with clause 4.24.18B;

- (d) timelines, developed in consultation with Western Power where applicable, for the provision of requested information and for assistance or an assessment of requests submitted; and
- (e) contact details for Western Power which must be used by AEMO or those applying to provide Eligible Services when assistance or assessment by Western Power is requested in accordance with clause 4.24.18B.
- 4.24.18A. Western Power must provide information and respond to requests for assistance or assessment related to the provision of supplementary capacity under this section 4.24 in accordance with the WEM Procedure referred to in clause 4.24.18.
- 4.24.18B. A request to Western Power for assistance or an assessment by those intending to respond to a call for expressions of interest under clause 4.24.1A, or intending to provide supplementary capacity in response to a call for tenders or direct negotiation under clause 4.24.2 or a request to Western Power by AEMO must:
 - (a) be in writing and addressed to the contact nominated by Western Power in the WEM Procedure referred to in clause 4.24.18;
 - (b) allow sufficient time to enable Western Power to provide the assistance or make the assessment requested in accordance with the timelines specified under clause 4.24.18(d); and
 - (c) contain the information and analysis as may be required under the WEM Procedure referred to in clause 4.24.18.
- 4.24.19. Following each call for tenders for supplementary capacity or otherwise acquiring Eligible Services, the Coordinator must may review the supplementary capacity provisions of this section 4.24. with regard to the Wholesale Market Objectives and must undertake a public consultation process in respect of the outcome of the review.
- 4.24.20. If, following a call for tenders for supplementary capacity or otherwise acquiring Eligible

 Services, the Coordinator decides to review the supplementary capacity provisions of this section 4.24, the Coordinator must undertake a public consultation process in respect of the outcome of the review.
- 4.24.21. If in the performance of its functions under this section 4.24 AEMO identifies a deficiency with the supplementary capacity provisions, it must notify the Coordinator of the deficiency as soon as practicable.

Energy Policy WA

Level 1, 66 St Georges Terrace, Perth WA 6000 Locked Bag 100, East Perth WA 6892

Telephone: 08 6551 4600 www.energy.wa.gov.au