



Government of **Western Australia**
Department of **Mines, Industry Regulation and Safety**
Energy Policy WA

Review of Supplementary Reserve Capacity Provisions

Stage 2 Consultation Paper

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Working together for a **brighter** energy future.

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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: EPWA-info@dmirs.wa.gov.au

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1. Introduction

The Coordinator of Energy is undertaking a review of the Supplementary Reserve Capacity (SRC) provisions in Section 4.24 of the Wholesale Electricity Market Rules (the WEM Rules). The need for the review was triggered by Australian Energy Market Operator's (AEMO's) commencement of an SRC procurement process in September 2022, and is conducted by the Coordinator of Energy under clause 4.24.19 of the WEM Rules.

Energy Policy WA (EPWA) has engaged ACIL Allen to assist with this review.

This Consultation Paper focusses on the operation of the procured SRC services during the 2022/23 Hot Season and follows the conclusion of the first stage of the review in April 2023 which was focussed on the procurement of SRC.¹

1.1 Background

1.1.1 What is Supplementary Reserve Capacity?

The SRC mechanism is a market mechanism that provides additional reserve capacity to the WEM in circumstances in which other market mechanisms are deemed insufficient to maintain system reliability.

SRC is provided by Eligible Services. The WEM Rules define an Eligible Service as load reduction or additional electricity generation, with some restrictions around the nature of the service, who can provide it, and whether a potential supplier already holds Capacity Credits. These restrictions are designed to minimise the potential for providers to withhold capacity from the Reserve Capacity Mechanism (RCM) and to ensure that the offered services contribute to maintaining reliability in practice.

If AEMO considers, at any time during the six months prior to the start of a Capacity Year, that there will be insufficient capacity available to maintain power system security and reliability, it may take steps to procure SRC. SRC 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. The provisions related to SRC are outlined in section 4.24 of the WEM Rules (section 4.24 as it will be in place on 1 July 2023, is provided in full for ease of reference in Appendix A to the Consultation Paper).

Normally, AEMO must seek SRC through a tender process and may directly negotiate with potential suppliers after a tender process. However, if the expected start date of the shortfall is less than 12 weeks from the date AEMO becomes aware of the shortfall, AEMO may enter directly into negotiations with potential suppliers.

Following Stage 1 of this Review, the WEM Rules now provide AEMO with discretion to call for a non-binding Expression of Interest for the provision of SRC at any time from six months prior to the start of a Capacity Year.

SRC is an important mechanism, which allows AEMO and stakeholders in the SWIS to work together to ensure power system security and reliability is maintained.

¹ Amending WEM Rules implementing the changes developed during Stage 1 were gazette on 28 April 2023. Most of the changes commenced on 29 April 2023.

1.1.2 Scope of the SRC Review

The SRC Review is undertaken in two stages:

- Stage 1 focussed on a review of the procurement process undertaken by AEMO between September and December 2022. It resulted in changes to the WEM Rules, which were gazetted on 28 April 2023 with most of these changes commencing on 29 April 2023.
- Stage 2 focuses on the operation of the SRC services between 1 December 2022 and 31 March 2023. This Consultation Paper is for Stage 2.

Figure 1: SRC Review Overview



1.1.3 Overview of 2022/2023 SRC process

On 23 September 2022, AEMO issued a call for tenders from potential providers of SRC for the upcoming Hot Season, commencing on 1 December 2022. The need for SRC was identified at 174 MW. At the time, AEMO made available a standard form of Supplementary Capacity Contract, and a series of pre-qualification questions.

The tender process included a briefing session facilitated by AEMO on 4 October 2022, and an opportunity for questions to be posed by potential respondents. The tender period closed on 21 October, at which time AEMO commenced its assessment of all responses.

Following discussions and negotiations, AEMO entered into contracts with providers who responded to the call for tenders. After the completion of the tender process, AEMO entered into negotiations with organisations who did not respond to the request for tender and entered into further contracts as a result of these negotiations.

AEMO entered into 11 Supplementary Capacity Contracts with a total of eight service providers for the period from 1 December 2022 to 31 March 2023. The individual contract periods ranged from 15 days to 110 days in length (noting that 84 days was the maximum for which any of the services was contracted to be available.). The highest total maximum available capacity² during the Hot Season was 67.3MW.

² Further capacity was contracted however due to non-performance of a service provider the effective available capacity of this service was reduced ex-post. Further details are provided in Section 2.

The services procured included:

- temporary uplifts to Declared Sent Out Capacity (DSOC) of Registered Facilities;
- distributed electric storage resources; and
- demand side management services.

AEMO activated SRC on 30 January and 20 February 2023. The January event was the first time in the history of the WEM SRC services were activated. Most services responded well but some had difficulties or failed to deliver the service as contracted. Further details regarding the performance of the SRC services is provided in Section 2.

1.1.4 Stage 2 assessment to date

EPWA held several meetings with AEMO and received information from AEMO under clause 10.4.1 of the WEM Rules about the contracted SRC services and their activation.

EPWA also issued a questionnaire to organisations involved in providing SRC and Western Power, and received a combination of verbal and written responses. The outcome of the meetings and responses is summarised in Section 2.

1.2 Purpose of this paper

The purpose of this Consultation Paper is to gather feedback on:

- the proposed rule changes aimed at addressing the issues identified through the analysis of the events, and the stakeholders' interviews and questionnaire responses; and
- any other issue encountered during the operation of SRC in 2022/23, which needs to be addressed.

Further information on the SRC Review, including the scope of work, is available on EPWA's website.³

1.3 Call for submissions

Stakeholder feedback is invited on all aspects of the procurement process for SRC and, in particular, on the proposed improvements outlined in Section 3 of this Consultation Paper and the proposed Amending Rules in Appendix C of this Consultation Paper.

Submissions can be emailed to energymarkets@dmirs.wa.gov.au. Any submissions received will be published on www.energy.wa.gov.au, unless requested otherwise.

The consultation period closes at **5:00pm (AWST) on 21 June 2023**. Responses after this date will not be able to be considered in the SRC Review. This is to allow time for any potential rule changes to be finalised by 30 June 2023, to provide certainty to market participants in the event AEMO calls either an EOI or tender for the provision of SRC for the 2023/24 Hot Season.

EPWA will discuss the proposed rule changes at a Transformation Design and Operation Working Group (TDOWG) meeting on 15 June 2023.

³ [Supplementary Reserve Capacity Review \(www.wa.gov.au\)](http://www.wa.gov.au)

2. Operation of the SRC in the 2022/23 Hot Season

The purpose of SRC is to provide extra capacity where there are risks to system security and reliability because of issues of reserve capacity availability (e.g. because of Forced Outages or fuel supply issues) and/or AEMO considers that demand is projected to be higher than the load forecast that was used to set the Reserve Capacity Target.

Procured SRC is then activated as a last resort after dispatch of resources that hold Capacity Credits. The assessment of SRC activation considers the reserves / planning margin required to maintain power system security during contingency events.

The remainder of this section includes:

- a summary of the two events when SRC was activated in the 2022/2023 Hot Season;
- a summary of the feedback provided by stakeholders; and
- an assessment of the performance and value for money of the services provided.

2.1 Summary of SRC activations in the 2022/2023 Hot Season

SRC was contracted in the second half of 2022 in anticipation of the potential for a shortfall in capacity during the 2022/2023 Hot Season. AEMO activated SRC on two occasions: **30 January 2023** and **20 February 2023**.

2.1.1 30 January 2023

On the morning of 30 January 2023, AEMO declared a Lack of Reserve 2 (LOR2) event. For the first time in the history of the WEM, SRC services were activated with activation notices sent around 13:15 for the evening peak (the trading intervals between 17:00 to 21:00). This was because of:

- a high peak demand forecast;
- low wind forecast; and
- unavailability of a large thermal generation unit.

On that day, the SWIS reached a peak demand of 3,575MW during the evening peak (the sixth highest daily peak operational demand for 2023). AEMO noted that the activation of SRC services was required to maintain power system security and reliability on that day.

During this event, AEMO activated about 222 MWh from four SRC services and about 121 MWh (55%) of the activated energy was delivered.

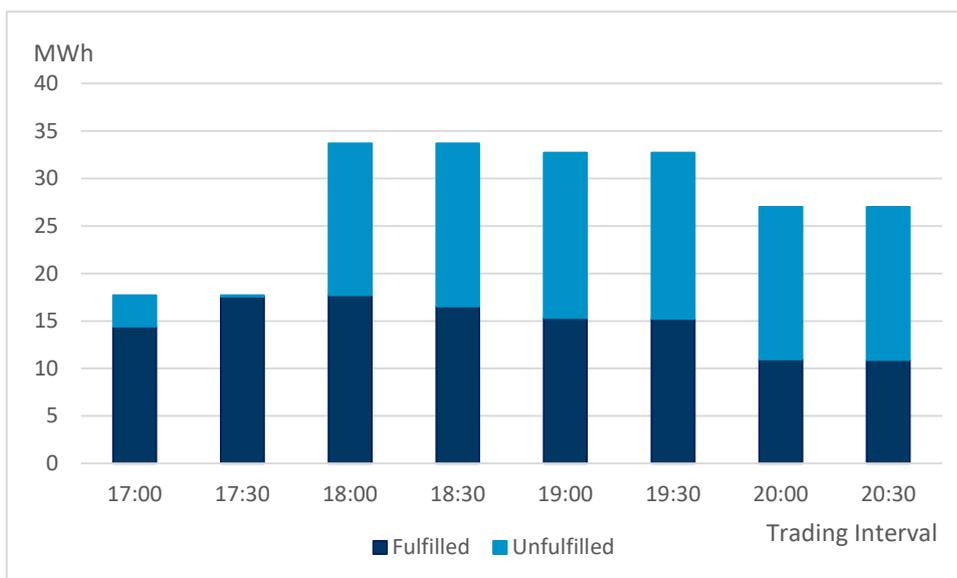
Three of the services activated had some minor issues and delivered slightly less than the full amount activated. However, one supply side service did not deliver the activated quantities. This was because:

- the activation request was not received by the operator due to communication issues on the service provider's side; and
- the facility did not reach its activation target due to technical issues at the facility.

The provider was subject to refunds determined as per the relevant Supplementary Capacity Contract.

Overall, SRC service provided by demand side response was activated to provide 92 MWh and provided about 94 MWh (though single demand response services did not meet the activation target in every Trading interval).

Figure 3: SRC provided vs activated (30 January 2023), MWh by Trading Interval



Source: based on data received from AEMO provided under clause 10.4.1 of the WEM Rules.

2.1.2 20 February 2023

On the morning of 20 February, AEMO declared a LOR2 event and activated SRC services, sending activation notices around 9:45 for the evening peak (the intervals between 17:00 and 20:00) because of:

- a high peak demand forecast; and
- uncertainty regarding the availability of a thermal generation unit.

AEMO issued activation notices to eight services but ultimately activated only six because, subsequently, less additional capacity was required than initially forecast.

On that day the SWIS reached a peak demand of 3,633MW during the evening peak (the second highest peak in operational demand for 2023). AEMO noted that while the services were ultimately not needed to maintain system security and reliability, their availability proved necessary to address a credible scenario of short supply, which was initially forecast for the evening peak but did not eventuate.

During this event, AEMO activated about 180 MWh from four SRC services and about 100 MWh (56%) of the activated energy was delivered.

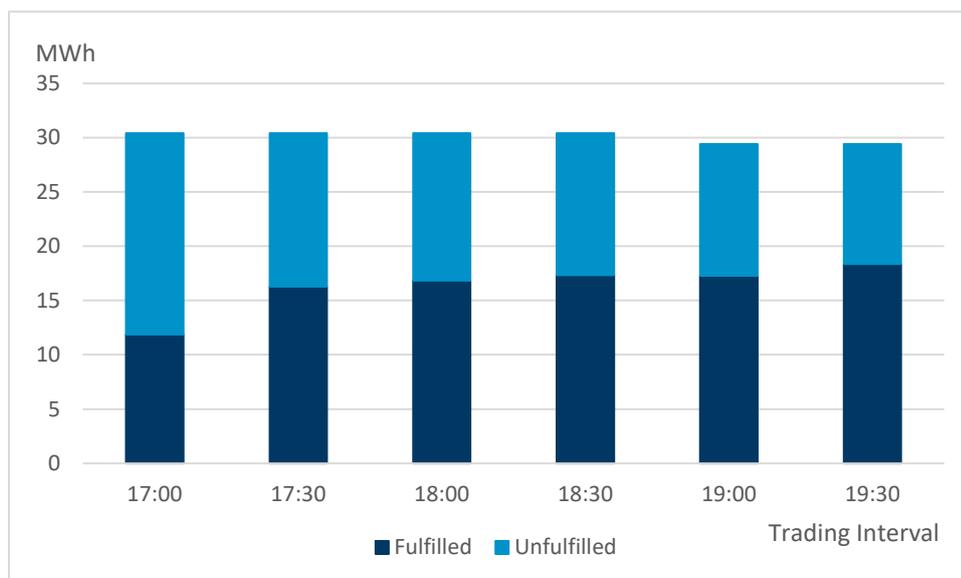
Two of the services activated delivered slightly less than the full amount specified in the relevant activation notice.

One demand response provider had issues with its behind the meter generation and delivered only up to 70% of the activated quantity per Trading Interval. The provider was subject to refunds determined as per the relevant Supplementary Capacity Contract.

One demand response provider was unable to call upon one of its largest contracted loads and delivered around 30% less than activated. The provider was subject to refunds determined as per the relevant Supplementary Capacity Contract.

The supply side service that had faced technical issues during the 30 January 2023 event delivered around 49% to 95% less than specified in the relevant activation notice over the activation period. The provider was subject to refunds and the relevant SRC service quantity was reduced for the entire contract period.

Figure 4: SRC provided vs activated (20 February 2023), MWh by Interval



Source: based on data received from AEMO under clause 10.4.1 of the WEM Rules.

2.2 Stakeholder feedback

EPWA met with AEMO and issued a questionnaire to Supplementary Capacity Contract holders and a questionnaire to Western Power. The engagement was centred on the operation of the SRC. The questionnaire for Supplementary Capacity Contract holders is provided in Appendix B for information.

EPWA received 7 responses to the questionnaires. A summary of the issues identified and feedback provided by stakeholders is presented below.

It is important to note that, while there were a range of issues identified, this was the first time SRC was activated in the history of the WEM and so it would have been reasonable to expect some issues. Importantly, the operation of SRC prevented possible load shedding during at least one of the events it was activated.

All service providers that responded to the questionnaire indicated that they would participate in future tenders or negotiations for SRC.

2.2.1 Non-performance of services

Overall, most of the activated SRC services performed to, or very close to, the level they were activated for.

A high level assessment of the instances in which SRC services didn't perform to the level contracted indicated that:

- some of the causes, such as issues with the communication, could have been rectified in time if the service was tested before it was actually needed; and
- some causes, such as technical issues with the facilities, could have been identified if the service was tested before it was actually needed.

The WEM Rules allow but don't require AEMO to test SRC Services. However, AEMO did not test any of the contracted services. This was partly because contracts were not finalised before the start of the 2022/23 Hot Season.

Some of the contracted demand side services provided evidence of self-testing as part of their contract negotiations with AEMO. No self-testing or verification of ability to deliver the contracted services was undertaken by supply side service providers.

SRC service providers are compensated in two ways: availability payments and activation payments. Following the identification of performance issues AEMO sought refunds of availability payments from service providers and reduced the contracted amount in accordance with the contract provisions. However, the WEM Rules don't explicitly provide for non-performance refunds or reduction of SRC. AEMO indicated that the retrospective reduction of SRC, that was applied to one of the services and which included the refund of the associated payments already received, relied upon the goodwill of the relevant service provider.

The introduction of testing requirements and formalisation of refunds in the SRC provisions are discussed in Section 3.

2.2.2 Actual activation of services

AEMO indicated that the activation of SRC was important to maintain system security and reliability on 30 January 2023 as it reduced the risk of load shedding. On 20 February 2023, while the services were ultimately not needed to maintain system security and reliability, their availability proved necessary to address a credible scenario of short supply that was initially forecast for the evening peak but did not eventuate.

The maximum length of the minimum notice period AEMO allowed for SRC contracts was nine hours. This was identified as problematic in Stage 1 of the SRC Review. Therefore, the WEM Amending Rules implemented as a result of Stage 1 of the SRC Review provided guidance to facilitate reduction of this period.

During the actual SRC events in the 2022/2023 Hot Season, the long notice periods presented challenges for AEMO. This was due to AEMO's daily system planning activities, which rely upon forecasts of the evening peak and projections of the available capacity. This reduces the certainty around the need for additional capacity nine hours ahead of time.

Some of the contracted Eligible Services could not be activated due to their long notice periods. This occurred in both activation events, because of the timing of the activation notices, making up to 27 MW unavailable for the full activation window on 30 January 2023, and 35 MW unavailable on 20 February 2023 for part of the activation window. While the relevant services were ultimately not required to maintain system security and reliability, excessive notice periods present a risk especially when the requirement to activate SRC is due to events that cannot be forecast well in advance.

On the other hand, AEMO did not ultimately require all services to be activated on 20 February 2023 but had to activate some of the services it did not need due to the long notice periods. This increases the cost of the SRC service to Market Customers. In addition, EPWA considers that if SRC services are activated and ultimately not needed this may distort the outcomes of the Balancing Market.

The change to the WEM Rules implemented in Stage 1 (to provide guidance on the need for shorter notice periods) is expected to support the shortening of notification periods for SRC services in future.

However, two stakeholders considered that the notice period should be longer with one of them also suggesting a longer notice period for after-hours activation.

Most of the feedback indicated no issues with the activation of the SRC services and that the communication processes in place allowed service providers to make informed decisions associated with enablement and activation.

Some stakeholders noted issues with the activation notification and activation of their SRC services by AEMO. The stakeholder feedback indicated that, in some cases, there was some misunderstanding about the format and process for receipt of instructions during the events. One

stakeholder considered that the inconsistent means of communicating the activation created the risk that the activation notice could have been disregarded. Most stakeholders, including AEMO, indicated that the lessons from these issues would likely prevent similar issues in the future.

One service provider reported that its supply side service received an activation notice on 20 February 2023. As a result, the service provider incurred costs to prepare its service for activation. However, the service was eventually not activated resulting in a loss to the service provider.

AEMO indicated that it learned from the issues and that this would be unlikely to happen again in the future.

EPWA considers that not activating a service that had previously received an activation notice would be best addressed in the Supplementary Capacity Contracts. Therefore, a rule change is not required.

2.2.3 Performance measurement

In general, the performance measurement of the SRC services was effective.

Some stakeholders noted that there had been some issues establishing the method for measuring performance of demand response services when negotiating the details of the contracts. However, the lessons from 2022/23 should make this easier for any subsequent SRC procurement.

EPWA is currently considering changes to the treatment, including performance measurement, of Demand Side Programmes under the RCM Review. Once these changes are implemented, AEMO could apply them to SRC services.

AEMO noted that the performance measurement for demand response services did not consider any load reduction by the provider to avoid Individual Reserve Capacity Requirement (IRCR) costs i.e. that was unrelated to the SRC provision. AEMO considered that load reduction to reduce IRCR cost cannot be relied on with the same certainty as load reduction due to SRC activation.

Adding a requirement to consider SRC providers' actions to reduce IRCR costs would be complex at this stage. However, the RCM Review is currently developing new methods for the performance measurement of Demand Side Programmes that will take into account their actions to reduce IRCR costs. EPWA considers that, once changes to the treatment of Demand Side Programmes in the RCM are implemented, these should also be applied to demand response services providing SRC.

The feedback identified that AEMO's ability to measure the performance of some of the distribution connected services, such as demand response aggregations, was reduced. This was due to the following issues with meter data availability:

- confidentiality prevented Western Power to provide AEMO with meter readings for some of the relevant NMIs; and
- some of the relevant meters were either not capable or were not set up to provide interval meter data.

One stakeholder noted that some distributed energy resources that could provide SRC don't have their own NMI but are connected behind a NMI and suggested that AEMO should consider alternative telemetry to measure performance of SRC services to allow these resources to participate.

Under the WEM Rules, AEMO is not prevented from making use of alternative telemetry for performance measurement of SRC services. AEMO noted that it considered using alternative telemetry on a case-by case basis. Overall AEMO expressed a preference for SRC services that are metered at the NMI.

EPWA considers that it is appropriate for AEMO to consider the use of alternative telemetry for the performance measurement of SRC services on a case-by case basis.

Therefore, EPWA considers no change is required to facilitate the use of alternative telemetry.

2.2.4 Publication of information about Supplementary Capacity Contracts

In the questionnaires, EPWA proposed that the following information should be published for each Supplementary Capacity Contract AEMO enters into:

- the name of the contracted service provider;
- quantity of supplementary capacity contracted;
- means of closing the contract (i.e. tender or direct negotiation); and
- the type of the service contracted.

Stakeholder feedback was generally supportive. However, one stakeholder considered that the identity of the service provider represents commercial information and should not be published. Instead, it was suggested to publish an aggregated outcome of the process without identifying individual services or service providers.

2.2.5 Other issues

Minimum threshold for providing SRC

Most stakeholders reported no issues with the 1MW minimum threshold for SRC services. However, some stakeholders noted that more services could have been provided if the threshold was lower.

The WEM Rules currently allow AEMO to set the minimum threshold for SRC services as it sees fit. During Stage 1 of the SRC Review, AEMO noted that the minimum threshold was set intentionally to capture as many potential service providers as possible while keeping the actual activation of the contracted service practical.

EPWA considers that it is appropriate for AEMO to set the minimum capacity threshold for providing SRC. Therefore, no changes are proposed to specify a particular threshold in the WEM Rules. EPWA expects that AEMO has a strong incentive to set that threshold at a level that would maximise the efficient quantum of the relevant services.

Settlement information

One stakeholder who provided SRC from an aggregated demand response resource noted that determining the activation payments for the individual loads took a while because of the delay in receiving the individual meter data.

One stakeholder who provided several services reported challenges associated with its ability to identify the payments for the different services. This was because, for Market Participants providing SRC, AEMO provides SRC payments as a single lump sum through the WEM settlement system without distinguishing between different services, and the corresponding availability payments and activation payments. AEMO noted that it would be able and is willing to provide disaggregated payment details outside the settlement system upon request and was already doing so for non-Market Participants that cannot be settled through the WEM system.

Minor issues

AEMO noted that the WEM Rules, as amended after stage 1 of the SRC Review, required additional changes to:

- allow the assessment of responses to a call for expression of interest to be less detailed than the assessment of responses to an actual call for tender;
- include requirements for respondents to a call for expression of interest, a call for tender or direct negotiation to provide evidence or information about their arrangements for network access;

- ensure that the head of power for the relevant WEM Procedure covers the interaction between stakeholders and Western Power before the stakeholder has decided to respond to a call for expression of interest, a call for tender, or enters into direct negotiation.

2.3 Value for Money Assessment

SRC is a costly service, which reflects its role in the market as a service of last resort.

Service providers are compensated in two ways: for having capacity available, and for activation of the service. Prices for these services are established through a competitive process subject to a maximum payment rate per MWh for the activation payment (availability payments have no maximum payment rate).

Across the Hot Season, the cost of SRC accumulated to \$3,849,201, comprising:

- Availability payments: \$3,875,737
- Refund of availability payments for non-performance including ex-post reduction of assigned SRC: (\$-485,737)
- Activation payments: \$459,201

When activated, the weighted average price paid for activation of SRC was \$2,099/MWh on 30 January, and \$2,045/MWh on 20 February.

Considering a provision of 221 MWh from SRC, this equates to a total cost of around \$17.40/kWh.⁴

The assessment of the cost effectiveness of SRC, and whether the 2022/23 SRC provided value for money must consider the counterfactual case if the service was not available. AEMO indicated that the activation of SRC was important to maintain system security and reliability on 30 January 2023 as it reduced the risk of load shedding. On 20 February 2023, while the services were ultimately not needed to maintain system security and reliability, their availability proved necessary to address a credible scenario of short supply which was initially forecast for the evening peak but did not eventuate.

Under the National Electricity Market (NEM) Rules, the economic value of avoided load-shedding is measured utilising the Values of Customer Reliability (VCR) estimated by the Australian Energy Regulator. The VCR is the value different types of customers place on having reliable electricity supply under different conditions, measured in dollars per kilowatt hour.⁵

The NEM VCR values for 2022 sit between \$18.87/kWh and \$36.97/kWh with a median value of \$26.085/kWh. All things being equal this translates to a customer benefit of \$26,085/MWh for avoided load shedding. The WEM Rules don't provide for a determination of VCR values for the WEM. However, Western Power has estimated the VCR for the WEM at \$48.10/kWh.⁶

The Balancing Price during the SRC activation was markedly lower than the average Balancing Price over the same intervals on the 10 days with the highest operational demand. This is likely to indicate that SRC activation may influence market outcomes. This may produce an inefficient market outcome in the event SRC that is ultimately not needed is activated because of its long notice period.

The above assessment indicates that, overall, there is adequate evidence to suggest the operations of SRC in the 2022/2023 Hot Season achieved value for money notwithstanding the high cost of the services relative to the ordinary operations of the WEM. The counterfactual case of

⁴ The calculation is based on the total cost for SRC in the 2022/2023 Hot Season and the quantity provided by all SRC services.

⁵ Australian Energy Regulator. 2022. *AER VCR Annual Adjustment 2022 Information Paper*. Accessed online at <http://www.aer.gov.au/>

⁶ Western Power's estimation of VCR can be found on the ERA's website in the document AAI – Attachment 6.3: [Access Arrangement 2022-2027 - Economic Regulation Authority Western Australia \(erawa.com.au\)](https://www.era.gov.au/Attachments/Attachment/AccessArrangement-2022-2027-Economic-Regulation-Authority-Western-Australia-erawa.com.au)

risks to system security and / or load shedding events are both costly, and have economic and social consequences in addition to its financial consequences.

EPWA considers that further downward pressure on SRC costs can be expected in the future. The learnings from the 2022/23 SRC procurement together with the improvements resulting from the SRC Review are expected to increase competition for the provision of SRC. Meanwhile, the anticipated reductions in the activation period for services would allow AEMO to utilise the least cost portfolio of services with fewer constraints on service availability.

3. Issues Which May Require Improvements

As a result of the feedback and analysis summarised in Section 2, EPWA has identified a number of opportunities to amend the SRC provisions in the WEM Rules to improve the operation of SRC. Proposed draft changes to the WEM Rules are provided in Appendix C.

Where a rule change is proposed, an initial assessment against the WEM Objectives is provided. The current objectives of the WEM are provided below for reference.

1.2.1. 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;
- (b) to encourage competition among generators and retailers in the South West interconnected system, 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 South West interconnected system; and
- (e) to encourage the taking of measures to manage the amount of electricity used and when it is used.

3.1 Availability of interval meter data for performance measurement

The feedback identified that AEMO's ability to measure the performance of some of the services provided by distributed energy resources, such as demand response aggregations, was reduced. This was due to the following issues with meter data availability:

- confidentiality prevented Western Power from providing AEMO with meter readings for some of the relevant NMIs; and
- some of the relevant meters were either not capable of providing, or were not set up to provide, interval meter data.

EPWA considers that the changes made as part of Stage 1 of the SRC Review will enable AEMO to obtain information from Western Power about which meters are set up as interval meters.

EPWA considers that AEMO should also be able to obtain the needed interval meter data to measure the performance of SRC services where this can be provided.

Proposal 1

EPWA proposes to amend the WEM Rules to require and enable Western Power to provide AEMO with the information necessary for the performance measurement of SRC services.

Assessment against the WEM Objectives

EPWA considers that providing AEMO with better data for the performance measurement of SRC services will better achieve WEM Objective 1.2.1(a), (d), and (e).

The availability of this data will enable AEMO to verify the performance of SRC services provided by demand side aggregations. This will increase reliability and efficiency, and potentially reduce overall costs to consumers. It will also promote the participation of these services in the SRC mechanism.

3.2 Formalisation of testing requirements for SRC services

As discussed in Section 2, the current WEM Rules provide the means for AEMO to require testing as part of an SRC contract (WEM Rule 4.24.13(h)(xii)). However, following the non-performance issues associated with some SRC contracts in the 2022/2023 Hot Season EPWA considers that this requirement should be strengthened to include mandatory testing of any Supplementary Capacity Contract.

Proposal 2

EPWA proposes to amend the WEM Rules to require AEMO to test every service subject to a Supplementary Capacity Contract as soon as practicable after entering into that contract.

Assessment against the WEM Objectives

EPWA considers that a mandatory testing of SRC services will better achieve WEM Objectives 1.2.1(a), and (d).

Mandatory testing will increase certainty that contracted SRC Services will be delivered when needed and allow AEMO to reduce the SRC capacity when an SRC service fails a test. This will increase efficiency of the SRC services and ensure costs are only incurred if the contracted service can be delivered.

3.3 Formalising refunds and capacity reductions for SRC services failing a test

The WEM Rules require AEMO to specify financial consequences for failing to supply contracted SRC services (clause 4.24.13 (e)) based on the refunds that apply under the RCM.

However, there are currently no provisions about the reduction of SRC or how refunds apply if an SRC service fails a test.

EPWA considers that refunds can be addressed through the Supplementary Capacity Contracts and does not propose to implement a refund regime in the WEM Rules at this stage. However, this issue will be revisited as part of the next review of the SRC provisions when the testing requirement has been operational.

3.4 Introduction of a security payment for SRC providers.

The WEM Rules require that capacity providers provide security payments to AEMO for any new facility and any Demand Side Programme that secures Capacity Credits in the RCM. The security payments are set at 25% of the relevant Benchmark Reserve Capacity Price for each Capacity Credit.

The WEM Rules currently don't include a similar provision for SRC services. No issues with the payment of refunds have been identified during the SRC Review.

Therefore, EPWA does not propose to implement an obligation for SRC providers to provide security payments at this stage. However, this issue will be revisited as part of the next review of the SRC provisions.

3.5 Changes to definition of Eligible Services

Clause 4.24.3 of the WEM Rules states that a service provider cannot provide SRC services:

- for load reduction, if the service provider is a Market Participant with a Demand Side Programme that does not satisfy, or has not satisfied, its Reserve Capacity Obligations during the current Capacity Year or a previous Capacity Year; and
- for a Registered Facility or load reduction for which the relevant Market Participant has held or holds Capacity Credits for the current or a previous Capacity Year.

These restrictions are to:

- ensure Market Participants that fail to perform in the RCM cannot participate in the SRC; and
- avoid incentives for Market Participants to withhold capacity from the RCM to maximise their returns in a possible SRC process.

EPWA considers that these provisions might be too restrictive and could exclude resources from providing SRC that are needed for system reliability and security. EPWA considers that limiting the restrictions to the three Capacity Years before the Capacity Year for which SRC is procured will be sufficient to exclude Market Participants with non-performing Demand Side Programmes and to disincentivise gaming.

Proposal 3

EPWA proposes to amend the WEM Rules to limit the restrictions related to Demand Side Programme performance and to previously holding Capacity Credits to three Capacity Years before the Capacity Year for which the SRC is procured.

Assessment against the WEM Objectives

EPWA considers that the changes to the definition of Eligible Services will better achieve WEM Objectives 1.2.12(a) and (d).

Amending the definition of Eligible Services will ensure possible providers of SRC services are not unnecessarily prevented from providing SRC while not creating incentives for withholding capacity from the RCM.

3.6 Minor amendments

AEMO noted that the WEM Rules, as amended after stage 1 of the SRC Review, required the following additional changes to fully facilitate the rule changes of Stage 1 of the SRC Review:

- allow the assessment of responses to a call for expression of interest to be less detailed than the assessment of responses to an actual call for tender;
- include requirements for respondents to a call for expression of interest, a call for tender or direct negotiation to provide evidence or information about their arrangements for network access;
- ensure that the head of power for the relevant WEM Procedure covers the interaction between stakeholders and Western Power before the stakeholder has decided to respond to a call for expression of interest, a call for tender, or enters into direct negotiation.

EPWA considers that the requested changes reflect the intent of the SRC provisions.

Proposal 4

EPWA proposes to amend the WEM Rules to facilitate the changes requested by AEMO.

Assessment against the WEM Objectives

EPWA considers that the introduction of the proposed clarifications are consistent with all WEM Objectives and will remove ambiguity from the WEM Rules.

3.7 Publishing the results of SRC procurement activities

The WEM Rules currently don't provide for any information related to the Supplementary Capacity Contracts to be published. EPWA considers that it is appropriate for the high level outcomes of SRC procurement activities to be published. Ultimately, consumers pay for these services and should be able to understand what they are paying for and how much.

One stakeholder considered that the identity of the service providers is commercial information and should not be published, and that instead the information should be aggregated.

EPWA considers that the publication of the identity of the service providers causes no commercial detriment and can therefore be published.

EPWA notes that in the RCM the identity of the service providers is published after Capacity Credits are assigned.

Proposal 5

EPWA proposes to amend the WEM Rules to require AEMO to publish the following information for each Supplementary Capacity Contract following the completion of a tender process and any direct negotiation with SRC providers:

- the name of the contracted service provider;
- quantity of supplementary capacity contracted;
- means of contracting (i.e. tender or direct negotiation); and
- the type of the service contracted.

Assessment against the WEM Objectives

EPWA considers that facilitating the publication of information about the Supplementary Capacity Contracts will better achieve WEM Objective 1.2.1(a).

The publication of the information will increase transparency and increase market efficiency regarding the provision of SRC.

Appendix A. WEM Rules about Addressing Shortages of Reserve Capacity

The Rules outlined in this Appendix are the Rules as they are expected to be in place from 1 July 2023.

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) 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;

- (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
- (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, consider the Eligible Services they propose to provide would 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 a previous 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, either:
 - i. does not hold Capacity Credits in the current Capacity Year; and

- ii. has not held Capacity Credits in the current Capacity Year or a previous Capacity Year; and
 - iii. holds Capacity Credits in a subsequent Capacity Year,
- or
- iv. 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;
- (h) the location on the WEM Website of the standard Supplementary Capacity Contract; and
- (i) the location on the WEM Website of the tender form to be used in applying to provide Eligible Services.

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.

4.24.7. AEMO must prescribe the tender form to be used by those applying to provide Eligible Services. This form must require the specification of:

- (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;
- (j) 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); and

- (k) the location of the Eligible Service and any associated Transmission Node Identifier.

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 the preceding paragraphs and clause 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 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.

- 4.24.11. Subject to clauses 4.24.3, 4.24.11A 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.
- 4.24.12. 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, then AEMO may enter into a Supplementary Capacity Contract containing such variations.

4.24.14A. The notification time for activation specified in a Supplementary Capacity Contract must be aligned, to the extent practicable and considering the characteristics of the facility providing the Eligible Service, with the notification time 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. [Blank]

4.24.17. [Blank]

4.24.18. AEMO must document in a WEM Procedure:

- (a) the processes it follows in:
 - i. acquiring Eligible Services;
 - ii. entering into Supplementary Capacity Contracts; and
 - iii. determining the maximum contract value per hour of availability for any Supplementary Capacity Contract;
- (b) requirements regarding the information and assistance AEMO may require from Western Power to support an expression of interest process or a procurement process for supplementary capacity under this section 4.24;
- (c) requirements, developed in consultation with Western Power, regarding the information that must be provided by those applying to provide Eligible Services, 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.

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- 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 applying to provide Eligible Services 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 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.

Appendix B. Stakeholder Questionnaire

The following questions were posed to SRC providers in the stakeholder questionnaire, the responses to which informed this Consultation Paper.

1. From your perspective, as a provider of SRC, what went well and what did not, during the activation and operation of your SRC services,?
 - Was there any difference in your experience and / or outcomes between the two events in which SRC was activated? If yes, please describe the difference.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?
2. How did the activation mechanism and notice period play out in practice?
3. Where the means of performance measurement adequate?
4. Thinking about the 2022/2023 Hot Season, your participation in the SRC process, and your provision of SRC services, if a future SRC process was commenced would you participate again? Why or why not?
5. What impact do the SRC provisions, your participation in the SRC process and the potential for future SRC processes have on your:
 - participation in the Reserve Capacity Mechanism;
 - participation in the Short Term Energy Market or the balancing market;
 - participation in markets for Ancillary Services/Essential System Services; and
 - investment decisions.
6. EPWA considers that AEMO should be required to publish the outcome of an SRC procurement process in line with similar provisions for the Reserve Capacity Mechanism. This would include details of contracts including:
 - the name of the contracting organisation;
 - quantity of supplementary capacity contracted;
 - means of contracting (ie tender or direct negotiation); and
 - the type of facility / service.Do you have any objections to this? If so, why?

Appendix C. 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). The mark up is based on the WEM Rules expected to be in place on 1 July 2023 based on current Amending Rules that are made but yet have to commence.

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) 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 the respondent has access to a network, or has taken actions to obtain network access, 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
- (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, consider the Eligible Services they propose to provide would likely 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 any of the two previous Capacity Years;
- (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, either:
 - i. does not hold Capacity Credits in the current Capacity Year; and
 - ii. has not held Capacity Credits in the current Capacity Year or the previous two-a-previous Capacity Years; and
 - iii. holds Capacity Credits in a subsequent Capacity Year,or
 - iv. 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;

- (h) the location on the WEM Website of the standard Supplementary Capacity Contract; and
- (i) the location on the WEM Website of the tender form to be used in applying to provide Eligible Services.

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.

4.24.7. AEMO must prescribe the tender form to be used by those applying to provide Eligible Services. This form must require the following information be provided~~specification of~~:

- (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;
- (j) 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); ~~and~~

- (k) the location of the Eligible Service and any associated Transmission Node Identifier; ~~and~~

(l) evidence that the Eligible Service has access to a network, 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 the preceding paragraphs and clause 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 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.

4.24.11. Subject to clauses 4.24.3, 4.24.11A 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 the tender process called under clause 4.24.2 and any negotiations in accordance with clause 4.24.11, 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.

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, then AEMO may enter into a Supplementary Capacity Contract containing such variations.

4.24.14A. The notification time for activation specified in a Supplementary Capacity Contract must be aligned, to the extent practicable and considering the characteristics of the facility providing the Eligible Service, with the notification time 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. [Blank] AEMO must verify the capability of each service procured under a Supplementary Capacity Contract as soon as practicable after entering into the relevant contract by activating 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 processes it follows in:
 - i. acquiring Eligible Services;
 - ii. entering into Supplementary Capacity Contracts; and
 - iii. determining the maximum contract value per hour of availability for any Supplementary Capacity Contract;
- (b) requirements regarding the information and assistance AEMO may require from Western Power to support: ~~an expression of interest process or a procurement process for supplementary capacity under this section 4.24;~~
 - i. an expression of interest process or a procurement process for supplementary capacity under this section 4.24;
 - ii. performance measurement of the 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 ~~applying to provide Eligible Services intending to respond to a call for expression of interest under clause 4.24.1B or intending to provide supplementary capacity in response to a call for tender 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 applying to provide Eligible Services 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 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.

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

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