



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

Review of Supplementary Reserve Capacity Provisions

Stage 1 Consultation Paper

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

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Glossary

Term	Definition
AEMO	Australian Energy Market Operator
DSOC	Declared Sent Out Capacity
ESOO	Electricity Statement of Opportunities
IRCR	Individual Reserve Capacity Requirement
kW	kilowatt
kWh	kilowatt hour
MW	megawatt
MWh	megawatt hour
NMI	national meter identifier
RCM	Reserve Capacity Mechanism
SRC	Supplementary Reserve Capacity
SWIS	South West Interconnected System
WEM	Wholesale Electricity Market

Unless otherwise defined, capitalised terms have the meaning prescribed in the WEM Rules.

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 is triggered by the Australian Energy Market Operator's (AEMO's) call for the provision of SRC 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.

1.1 Background

What is Supplementary Reserve Capacity?

The SRC mechanism is a market mechanism, which provides additional reserve capacity to the WEM in circumstances where other existing 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 restrictions based on: the nature of the service, who provides it and whether a potential supplier already holds Capacity Credits. These restrictions are designed to minimise the potential for providers of reserve capacity to withhold capacity from the Reserve Capacity Mechanism.

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 acquire SRC. SRC contracts may have alternative pricing arrangements to the Reserve Capacity Price and are currently limited to 12 weeks in length. The rules related to SRC are outlined in section 4.24 of the WEM Rules (the current section 4.24 is provided in full for ease of reference in Appendix A to the Consultation Paper).

AEMO must seek SRC through 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 instead of commencing a tender process.

SRC is an important tool by which AEMO and stakeholders in the SWIS can work together to ensure power system security and reliability is maintained.

Summary of the 2022 procurement process

On 23 September 2022, AEMO called 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 tender process. After the completion of the tender process, AEMO also entered into negotiations with organisations who did not provide a response to the request for tender and entered into further contracts as a result of these negotiations.

Scope of the SRC Review

The SRC Review is undertaken in two stages, with Stage One focussing on a review of the procurement process undertaken by AEMO between September and December 2022, and Stage Two on the operation of the SRC services between 1 December 2022 and 31 March 2023.

Figure 1: SRC Review Overview



Stage 1 assessment to date

EPWA has engaged with AEMO and Western Power, and sent a questionnaire to organisations identified to have an interest in the process (even if they did not make a submission in the SRC procurement process). The key issues identified through this engagement are outlined in Section 2 of this report and EPWA’s proposed solutions are outlined in Section 3 and Appendix C of this report.

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 interviews and questionnaire; and
- any other issues encountered during the procurement process for SRC, which need to be addressed.

The required rule changes must be implemented in time for a possible 2023 SRC process.¹

Stage two of the Review, centred on the operation of the SRC provisions during the period the SRC contracts apply, will commence following the conclusion of that period (i.e. in April 2023).

Further information on the SRC Review, including the scope of work, is available on EPWA’s website.²

¹ - AEMO can commence a 2023 SRC process from 1 April 2023 if a shortfall is identified.

² The information on the SRC Review is published on: <https://www.wa.gov.au/government/document-collections/supplementary-reserve-capacity-review>.

1.3 Call for submissions

Stakeholder feedback is invited on all aspects of the procurement process for SRC and, in particular, on the proposed rule changes 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 Tuesday, 21 March 2023**. Responses after this date will not be able to be considered in Stage One of the SRC Review. This is to allow time for any potential rule changes to be finalised by 1 April 2023 (the date from which AEMO is able to identify any potential capacity shortfall under the WEM Rules).

Please email all responses to: energymarkets@dmirs.wa.gov.au

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

2. Stakeholder feedback

EPWA met with AEMO and Western Power, and issued a questionnaire to organisations identified to have an interest in the SRC process (including but not limited to organisations that participated in the SRC procurement process). The engagement was centred on nine questions, which are provided in Appendix B for information.

EPWA received six responses to the questionnaire from stakeholders other than AEMO and Western Power, some of them through recorded interviews.

2.1 AEMO's SRC procurement process

EPWA notes that the SRC procurement process is not a regular process in the WEM and has only been undertaken once before (in 2008).

Stakeholders provided generally positive feedback on AEMO's procurement process from September 2022 to the process end in December 2022. Most stakeholders that attended the relevant briefing session indicated that AEMO provided adequate information to allow them to consider the costs and benefits of participation in the SRC process, and to make an informed submission.

There was consistent feedback regarding the limited time available to prepare an SRC submission. Some potential providers did not provide SRC submissions for that reason. It was noted that this can compromise the depth of the market of offers for services.

Some stakeholders, who did not participate in the procurement process due to its tight timeframes, indicated that this was because they became aware of the process too late.

One stakeholder noted that there were several clarifications required regarding the tender documentation, for example, in relation to the determination of unavailability payments, testing, monitoring, maintenance, liability and termination provisions. Not all questions could be resolved in time, which led to inefficient use of internal resources in providing response to the tender.

Substantial interaction between AEMO and potential SRC providers was required to agree on contractual terms for the provision of the SRC services. There were mixed views regarding the cause of this.

Stakeholders had mixed views regarding the form and function of the Standard Form of Contract made available by AEMO as part of the tender process. Some stakeholders suggested that the nature of SRC means there will likely be a need for bespoke contracts (which take time to negotiate). Others suggested a preference for a standardisation of contracts, with the particulars of different SRC accepted offers dealt with through annexures and attachments. AEMO noted that it has the right to not accept proposed variations to the contract.

While all successful respondents to the Request for Tender, as well as the successful participants in direct negotiation, ultimately agreed on a contract, stakeholders reported that the process was held up by the limitations of the Standard Form of Contract – in some cases until weeks after the commencement of the SRC period on 1 December 2022.

One stakeholder noted that the Standard Form of Contract was difficult to navigate as it was geared towards generators and not load reduction. However, the issues were able to be rectified with AEMO so this should be less of a problem in any subsequent SRC process.

AEMO noted that the Standard Form Contract was drafted to specifically cover both Energy Producing Systems (production increase) and demand side response (consumption reduction). AEMO considers that this approach was justified because AEMO contracts for a service, and as long as the service quantity is provided, it should not matter whether this is through production increase or consumption reduction.

Stakeholders were supportive of the current definition of Eligible Services, although there was a suggestion that the minimum threshold of 1MW was set at a level which potentially limited the pool of potential providers. AEMO noted that the minimum threshold was set intentionally to capture as many potential service providers as possible while keeping the actual dispatch of the contracted service practical.

Two stakeholders suggested that the definition of Eligible Services requires clarification with regards to increases to existing generation capacity. For generators with Capacity Credits it was unclear if any additional capacity (MW between the maximum generation capacity and the current Capacity Credits) was classified as an Eligible Service.

It was suggested by some stakeholders that a WEM Procedure for the SRC process could increase clarity, in particular around the roles and responsibilities of the different parties involved.

It was noted that AEMO is currently allowed to contract SRC for a maximum period of only 12 weeks while the projected shortfall could be longer than this (i.e. for the full term of the Hot Season as defined in the WEM Rules, or ~16 weeks).

Two stakeholders considered that the SRC price may be too low to attract sufficient participation. AEMO noted that increasing the SRC price further would have increased the cost to customers.

2.2 Roles and responsibilities in the SRC Procurement process

The assessment of stakeholder feedback indicated that Western Power had an important role to play in the SRC process. In particular, action or response from Western Power was required to:

- provide AEMO with contact details for customers, for which AEMO had identified NMIs as potential providers of SRC. While AEMO identified the NMIs through analysis of meter data, it did not hold contact information for the participants associated with the NMIs.
- process requests to temporarily modify Declared Sent Out Capacity (DSOC) values for facilities which could technically provide Eligible Services, but were limited by the applicable DSOC value.
- process access applications for mobile facilities to connect to the network.

Consistent stakeholder feedback was received that the WEM Rules don't provide for a formal role of Western Power in the SRC process. This led to:

- a lack of clarity regarding who to contact at Western Power; and
- perceptions of slow response from Western Power regarding requests from potential SRC providers.

Western Power noted that a number of requests were made by potential SRC providers, who were unlikely to meet the Eligible Service requirements. This, or the technical / commercial readiness of the relevant service provider, increased the time required to process applications.

2.3 Other issues

During its initial assessment EPWA identified a potential issue, which was not covered by stakeholder feedback.

EPWA understands that, in the tender documentation, the maximum notice period for activation of the SRC was set at up to nine (9) hours, compared to the notice for Demand Side Programmes in the WEM Rules of up to two (2) hours. This mismatch may lead to perverse market outcomes and / or higher overall costs given the potential for change in market conditions over the course of nine hours.

3. Proposed improvements

As a result of the feedback summarised in section 2 above, EPWA has identified a number of opportunities to amend the WEM Rules related to the procurement of SRC to address the issues raised by stakeholders. Proposed draft changes to the WEM Rules are provided in Appendix C.

3.1 Process timelines

EPWA's assessment of stakeholder feedback indicated that the short time allowed for the SRC procurement process hindered some possible providers in participating in the process.

EPWA considers that this can lead to inefficient outcomes. EPWA agrees with AEMO's concern that AEMO could become aware of a shortfall even closer to its projected commencement, which could exacerbate the problems experienced by stakeholders.

Proposal 1

EPWA proposes to:

- provide AEMO with the discretion to run a non-binding Expressions of Interest (EOI) process for SRC at any time from 1 April in any year, if it becomes aware of a potential risk that, if eventuating, could require an SRC procurement process;
- require AEMO to assess all responses to the EOI call and prepare a shortlist that includes all potential services that AEMO considers will likely meet the SRC requirements if an SRC tender is subsequently initiated by AEMO; and
- require that only potential services from the shortlist are allowed to participate in a subsequent tender process, if one is subsequently initiated by AEMO.

The existence of an EOI process would not affect the rest of the current WEM Rules regarding the SRC procurement process. It is expected, however, to identify any potential SRC proponents and solutions. It would also allow more time for any enquiries and interactions with Western Power to take place prior to a formal procurement process commencing.

Assessment against the WEM Objectives

EPWA considers that allowing for an EOI process will better achieve WEM Objective 1.2.1(a), (b) and (d) and is consistent with WEM Objective (c) and (e)³.

An EOI process will improve the flow of information between potential providers of SRC services and AEMO. Enhancing information flows provides the opportunity for the SRC mechanism to operate in a more efficient and timely manner by expanding the pool of potential SRC service

³ 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.

providers, and enhancing AEMO's understanding of the market for potential services. This will allow AEMO and Western Power to better prepare for a potential SRC procurement process.

Establishing an EOI process increases the time available for service providers to assess the merits of participation in the provision of SRC. Improvement in information flows and streamlining of the timeframes would also be expected to allow AEMO to achieve a lower total cost of the operation of the SRC provisions through the tendering and direct negotiation stages of the process by expanding the pool of service providers, and AEMO's knowledge and understanding of the available services.

3.2 Contracts for SRC services

3.2.1 The Standard Form of Contract

The assessment of the feedback identified that the Standard Form of Contract and its application can be improved.

EPWA considers that having a Standard Form of Contract that requires too many amendments may not be efficient.

Proposal 2

EPWA proposes to amend the WEM Rules to:

- require AEMO to develop and publish a non-negotiable Standard Form of Contract, that contains the general terms and conditions of the contracts;
- allow for the negotiation of specific terms and conditions for limited aspects of the Standard Form Contract, including prices, of individual contracts.

Assessment against WEM Objectives

EPWA considers that a requirement to develop a more appropriate Standard Form Contract for Eligible Services will better achieve WEM Objective 1.2.1(a) and (d), and is consistent with WEM Objective 1.2.1(b), (c) and (e).

A more appropriate Standard Form Contract will reduce administration and bidding costs, and permit more time for AEMO and SRC service providers to negotiate on material matters in the provision of SRC services. This will help to achieve mutually beneficial outcomes within the framework available under the WEM Rules. This in turn would be expected to achieve a lower total cost provision of SRC services.

3.2.2 Limitation of SRC contract periods to 12 weeks

The WEM Rules currently specify that the SRC process must only allow for respondents to provide a maximum of 12 weeks of SRC service under an SRC contract.

While this length of an SRC contract may have been appropriate at the time the initial section 4.24 of the WEM Rules was made, EPWA considers that AEMO should be allowed to contract SRC for any length of time during the Hot Season as this is currently defined in the WEM Rules.

Proposal 3

EPWA proposes that the maximum duration of contracts for SRC be extended to the current definition of the Hot Season, as defined in Chapter 11 of the WEM Rules), i.e. ~16 weeks.

Assessment against WEM Objectives

EPWA considers that the proposed changes would better achieve WEM Objectives 1.2.1(a), (b) and (d) and is consistent with WEM Objectives 1.2.1(c) and (e).

A misalignment between the maximum permissible contract length and the length of the Hot Season would be expected to result in a requirement for AEMO to contract more capacity / a greater number of individual services than would otherwise be required. This may lead to overlapping contracted volumes which exceed the targeted capacity, or periods where there is inadequate SRC contracted due to misalignment between service availability and needs. Aligning the contracting period to the Hot Season will assist in achieving a lower total cost outcome, improved services and improved reliability.

3.3 Specifying Western Power's role in the SRC process

As indicated in section 2, stakeholders have provided feedback that there were a number of issues, which emerged during the SRC procurement process, centred on the role of Western Power. Resources constraints and a lack of escalation pathways may have been contributors to these issues. It is likely, however, that these perceptions have been exacerbated in the context of the current WEM Rules not specifying a role for Western Power in the SRC processes.

Proposal 4

EPWA proposes to amend the WEM Rules to provide for a formal role of Western Power to support the SRC procurement process.

Assessment against WEM Objectives

EPWA considers that the proposed changes would better achieve WEM Objectives 1.2.1(a), (b) and (d) and are consistent with WEM Objectives 1.2.1(c) and (e).

Clarifying the role and expectations of Western Power in the SRC process, in conjunction with other information-based proposals, supports the operation of an efficient and effective procurement process by increasing information flows and providing both participants and AEMO with improved capacity to deliver mutually beneficial outcomes.

3.4 The SRC WEM Procedure

Currently, under clause 4.24.18 of the WEM Rules, AEMO must document in a WEM Procedure the processes it follows in:

- (a) acquiring Eligible Services;
- (b) entering into Supplementary Capacity Contracts; and
- (c) determining the maximum contract value per hour of availability for any Supplementary Capacity Contract.

EPWA considers that the WEM Procedure would benefit from:

- further clarifying the SRC procurement process;
- clarifying the roles and responsibilities of the different parties involved in the process; and
- specifying timelines for the provision of information and the assessment of requests..

Proposal 5

EPWA proposes to add the following to the relevant WEM Procedure making heads of power:

- that the WEM Procedure documented under clause 4.24.18 must also provide:
 - (a) requirements regarding the information and assistance AEMO requires from Western Power;

- (b) requirements, developed in consultation with Western Power, on the information that must be provided by those applying to provide Eligible Services, who request assessment of related aspects of their application from Western Power;
 - (c) timelines for the provision of requested information and for the assessment of requests that relate to the provision of SRC; and
 - (d) the name and contact details, provided by Western Power, which must be used when assistance or assessment by Western Power is requested.
- that a request for assistance or assessment to Western Power by those applying to provide Eligible Services or AEMO must:
 - (a) be in writing and addressed to the person nominated by Western Power in the WEM Procedure;
 - (b) allow sufficient time to enable Western Power to make the requested assessment in accordance with the timelines set out in the Procedure; and
 - (c) contain sufficient information and analysis as prescribed under the WEM Procedure.

Assessment against WEM Objectives

EPWA considers that, in conjunction with other information-based proposals, this proposal better achieves the WEM Objectives 1.2.1(a), (b), (c) and (d) and is consistent with WEM Objective (e).

Clarifying the process and adequately managing the expectations of all parties in the SRC process supports the operation of an efficient and effective procurement process by increasing information flows and providing both the participants and AEMO with improved capacity to deliver mutually beneficial outcomes.

3.5 Proponent readiness and submission quality

Stakeholder feedback identified that there may have been SRC submissions made by potential SRC service providers, which were lacking in detail and clarity. This included the technical readiness of the proposed services, and the commercial maturity and capacity of the proponent to deliver on the commitments of an SRC contract.

EPWA also observed that the tender pre-qualification questions, and tender assessment process, gave limited regard to supplier readiness, and the technical and / or commercial viability of SRC services proposed.

This may have contributed to some of the issues and concerns held by tender respondents regarding the timeliness of Western Power's response, and its ability to meet the deadlines imposed on it by the SRC process.

Stakeholder feedback noted that AEMO's tender assessment criteria were limited to a series of self-assessed pre-qualification questions, as well as offered volume and price. There are a number of additional service quality-related aspects of a contract for provision of SRC, which are material to the achievement of the outcomes of the SRC process, and the WEM Objectives more broadly.

Proposal 6

While the proposed EOI process would help to resolve some of these issues, EPWA is considering whether to amend the WEM Rules to introduce additional qualitative assessment criteria to ensure that tender submissions are of sufficient quality and maturity. EPWA is seeking feedback on whether such changes are necessary. In particular, whether the WEM Rules should specify:

- the level of certainty regarding access to the network required for an Eligible Service; and
- the level of compliance with the Technical Rules required for an Eligible Service.

3.5.2 Activation notice period

EPWA understands that the maximum notice period specified in the SRC was nine hours. The WEM Rules currently don't provide any guidance on the length of the notice period for activation of SRC services.

EPWA considers that market conditions can change significantly over nine hours, which makes it difficult for AEMO to forecast with certainty the need to activate SRC services. This may lead to perverse market outcomes and higher costs to the market.

Proposal 7

EPWA proposes to amend the WEM Rules to require that the length of the notice period for activation of Eligible Services is, to the extent practicable, aligned with the length of the notice period for activation for equivalent type of services under the WEM Rules (e.g. Demand Side Programmes).

Assessment against WEM Objectives

EPWA considers that the proposed change would better achieve WEM Objectives 1.2.1(a) and (d) and is consistent with WEM Objectives 1.2.1(b), (c) and (e).

A lack of specification on notice periods in the WEM Rules, and the way this was addressed through a maximum notice period in the 2022 SRC period, may result in an inefficient outcome by triggering a need for AEMO to pre-emptively and / or prematurely activate the SRC provisions.

3.6 Other proposed changes

Proposal 8

EPWA also proposes to replace “generation” with “production” of electricity throughout section 4.24 of the WEM Rules to ensure Electric Storage Resources are not prevented from offering “Eligible Services”.

Assessment against WEM Objectives

EPWA considers that the proposal will better achieve WEM Objectives 1.2.1(a), (b), (c), (d) and (e).

EPWA considers that proving clarity that the scope of the services, which can be contracted to provide SRC, includes all technology types would have a positive impact on cost, emission reduction objectives and reliability of supply.

Proposal 9

EPWA also proposes a number of other changes to improve clarity and consistency, and avoid ambiguity in the current provisions in section 4.24, including changes to the definition of Eligible Services in clause 2.24.3. All proposed changes are presented consistently as text in red underlined and ~~strikethrough~~ in Appendix C.

Appendix A. WEM Rules about Addressing Shortages of Reserve Capacity

4.24. Supplementary Reserve Capacity

- 4.24.1. If, at any time after the day which is six months before the Capacity Year AEMO considers that, in its opinion, 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) 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.
- 4.24.2. 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, but excluding reductions associated with the operation of Registered Facilities (including registered Loads) and reductions provided by a Market Participant with a Demand Side Programme that does not satisfy its Reserve Capacity Obligations for the current Reserve Capacity Cycle in accordance with clause 4.8.3(d) at the time AEMO seeks to acquire supplementary capacity;
 - (b) the generation of electricity by Energy Producing Systems that are not Registered Facilities;
 - (c) the generation of electricity by Energy Producing Systems, or load reductions provided by loads, that are Registered Facilities but only to 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 Reserve Capacity Cycle; and
 - ii. has not held Capacity Credits in the current Reserve Capacity Cycle or a previous Reserve Capacity Cycle; and

- iii. holds Capacity Credits in a subsequent Reserve Capacity Cycle,
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 at which 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;
- (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 of copies of the standard Supplementary Capacity Contracts on the WEM Website; 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 clause 4.24.3, AEMO may at its discretion enter into any negotiated Supplementary Capacity Contract, but must employ reasonable endeavours to minimise the cost of Eligible Services acquired in this manner.
- 4.24.12. AEMO must 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 generation, 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 12 weeks;
 - ii. the sources of the net consumption reduction or generation increase;
 - iii. the amount of net consumption reduction or generation 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.

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- 4.24.14. Despite the existence of the standard form Supplementary Capacity Contract, AEMO may enter into Supplementary Capacity Contracts in any form it considers appropriate.
- 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 the procedures it follows in:
- (a) acquiring Eligible Services;
 - (b) entering into Supplementary Capacity Contracts; and
 - (c) determining the maximum contract value per hour of availability for any Supplementary Capacity Contract.
- 4.24.19. Following each call for tenders for supplementary capacity or otherwise acquiring Eligible Services, the Coordinator must review the Supplementary Reserve Capacity provisions of this section 4.24 of the WEM Rules with regard to the Wholesale Market Objectives and must undertake a public consultation process in respect of the outcome of the review.

Appendix B. Consultation Questions

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

Pre-tender process

1. From your perspective is the definition of Eligible Services⁴ appropriate? Would any changes to the definition lead to a more efficient outcome for consumers?
2. Were the SRC requirements adequately explained and sufficiently clear in documents / other communications by AEMO? In providing your response please consider the following:
 - a. tender documentation.
 - b. information conveyed in the Industry Forum; and
 - c. pre-qualification questions.
3. 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 outcome for you?
4. Was the pro-forma contract sufficient to enable you to understand the commercial and legal agreement proposed by AEMO for the provision of SRC? If not, what additional information was missing?

Tender preparation, submission and evaluation

5. From your organisation's perspective, when thinking about the procurement process generally, what went well and what did not?
6. Were there any barriers or limitations for you participating in the tender process to the extent you believe was in the WEM best interests?
7. 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 prevented you in making a submission, or impacted on the services you could offer in your submission?
8. 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?
9. Based on your experience with this SRC procurement process, would you participate in future SRC procurement processes if a need arose? Why or why not?

⁴ See Appendix A for the definition

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):

4.24. Supplementary Reserve 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, ~~in its opinion~~, 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. 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. If AEMO advertises a call for expressions of interest for supplementary capacity in accordance with clause 4.24.1A, the notice must include:

- (a) the date and time at which any person wishing to respond to the call for expressions of interest must have completed and lodged with AEMO the form published by AEMO on the WEM Website;
- (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 the AEMO later decides to seek to acquire supplementary capacity;
- (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 Contracts entered into as a result of a subsequent call for tenders;
- (g) AEMO's preliminary estimate of the maximum contract value per hour of availability for any Supplementary Capacity Contract that AEMO will accept if it decides to seek to acquire supplementary capacity;
- (h) the location of copies of the standard Supplementary Capacity Contracts on the WEM Website;

- (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 published in accordance with clause 4.14.18.

4.24.1C. Following the close of the call for expressions of interest for supplementary capacity published under clause 4.24.1A, AEMO must:

- (a) assess all responses received;
- (b) prepare a shortlist of potential services that AEMO expects will be able to meet AEMO's requirements for supplementary capacity; and
- (c) inform all respondents whether their proposed services have been shortlisted.

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, but excluding ~~reductions associated with the operation of Registered Facilities (including registered Loads) and~~ reductions provided by a Market Participant with a Demand Side Programme that does not satisfy its Reserve Capacity Obligations ~~for during~~ the current ~~Reserve Capacity Year Cycle~~ or a previous ~~Capacity Year~~ in accordance with clause 4.8.3(d) at the time AEMO seeks to acquire supplementary capacity;
- (b) the generation production of electricity by Energy Producing Systems that are not Registered Facilities;
- (c) the generation production of electricity by Energy Producing Systems that are Registered Facilities, or load reductions provided by loads, but only to 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 ~~Reserve Capacity Cycle Year~~; and
 - ii. has not held Capacity Credits in the current ~~Reserve Capacity Cycle Year~~ or a previous ~~Reserve Capacity Cycle Year~~; and
 - iii. hold Capacity Credits in a subsequent ~~Reserve Capacity Cycle 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 at which 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;
- (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 of copies of the standard Supplementary Capacity Contracts on the WEM Website; 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;

(aA) If AEMO advertised a call for expressions of interest for supplementary capacity under clause 4.24.1A, AEMO must only accept an offer for the provision of a service, which was shortlisted under clause 4.24.1C(b);

- (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 and 4.24.14, AEMO may at its discretion enter into any negotiated Supplementary Capacity Contract, but must employ reasonable endeavours to minimise the cost of Eligible Services acquired in this manner.

4.24.11A. For the avoidance of doubt, AEMO must not enter into negotiations under clause 4.24.11 before the completion of a tender, called by AEMO in accordance with clause 4.24.2.

4.24.12. AEMO must 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 generation 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 12 weeks~~ must be within the Hot Season;
 - ii. the sources of the net consumption reduction or generation energy production increase;
 - iii. the amount of net consumption reduction or generation energy production increase required;
 - iv. the notification time to be given for activation, where the time must be aligned, to the extent practicable, with the notification time for equivalent services under the WEM Rules;
 - 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 Supplementary Capacity Contracts in the form of the relevant standard form Supplementary Capacity Contract. AEMO may allow a Supplementary Capacity Contract to vary from the standard form contract where AEMO considers that those variations are reasonably required, having regard to the specific characteristics of the Facility providing supplementary capacity and to any other matter that AEMO considers appropriate.

~~4.24.14. Despite the existence of the standard form Supplementary Capacity Contract, AEMO may enter into Supplementary Capacity Contracts in any form it considers appropriate.~~

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 ~~the procedures it follows in:~~

(a) the process it follows in:

~~(a) acquiring Eligible Services;~~

~~(b) entering into Supplementary Capacity Contracts; and~~

~~(c) determining the maximum contract value per hour of availability for any Supplementary Capacity Contract.~~

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; and

(b) requirements regarding the information and assistance AEMO requires from Western Power;

(c) requirements, developed in consultation with Western Power, regarding the information that must be provided by those applying to provide Eligible Services, who request assessment of related aspects of their application from Western Power;

- (d) timelines for the provision of requested information and for the assessment of requests submitted; and
- (e) the name and contact details, provided by Western Power, which must be used when assistance or assessment by Western Power is requested.

4.24.18A. Western Power must provide information and respond to requests 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 for assistance or assessment to Western Power by those applying to provide Eligible Services or AEMO must:

- (a) be in writing and addressed to the person nominated by Western Power in the WEM Procedure;
- (b) enable Western Power to make the requested assessment in accordance with the timelines specified under clause 4.24.18A(d); and
- (c) contain sufficient information and analysis as prescribed under the WEM Procedure.

4.24.19. Following each call for tenders for supplementary capacity or otherwise acquiring Eligible Services, the Coordinator must review the ~~Supplementary Reserve Capacity~~ supplementary capacity provisions of this section 4.24 of the WEM Rules with regard to the Wholesale Market Objectives and must undertake a public consultation process in respect of the outcome of the review.

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