

COVID-19 – POTENTIAL IMPACTS TO THE 2020 RESERVE CAPACITY CYCLE

ISSUES PAPER

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1. INTRODUCTION

The Australian Energy Market Operator (AEMO) is working collaboratively with Western Australia's Wholesale Electricity Market (WEM) stakeholders to ensure the South West interconnected system (SWIS) is operating in a secure and reliable state, as the nation responds to the fast moving COVID-19 pandemic threat. Businesses across the globe are having to adapt and cope with unprecedented levels of uncertainty. AEMO is currently determining short-term and long-term impacts on the energy industry.

Year 1 activities for the 2020 Reserve Capacity Cycle (related to the 2022-23 Capacity Year) have commenced in line with the Reserve Capacity Mechanism (RCM) timetable¹. AEMO is consulting with Market Participants to determine potential impacts of COVID-19 on Market Participants' ability to meet the remaining Year 1 Reserve Capacity Cycle timeframes. AEMO is focusing on the timelines associated with the 2020 Reserve Capacity Cycle, particularly the Certification of Reserve Capacity (CRC) process.

References to specific clauses of the WEM Rules within this issues paper in bold and square brackets [**clause XX**] are current as of 30 March 2020.

2. BACKGROUND

2.1. 2020 Reserve Capacity Cycle

AEMO may modify or extend a date or time for most aspects of the Reserve Capacity Mechanism [**MR 4.1.1C**]. However, AEMO's longstanding practice is to exercise that discretionary power only in exceptional circumstances.

Given the unprecedented nature of COVID-19, AEMO is assessing potential impacts on Market Participants' ability to meet the remaining Year 1 obligations associated with the 2020 Reserve Capacity Cycle. This assessment will inform AEMO's decision-making process to modify the current timetable.

2.2. The RCM processes

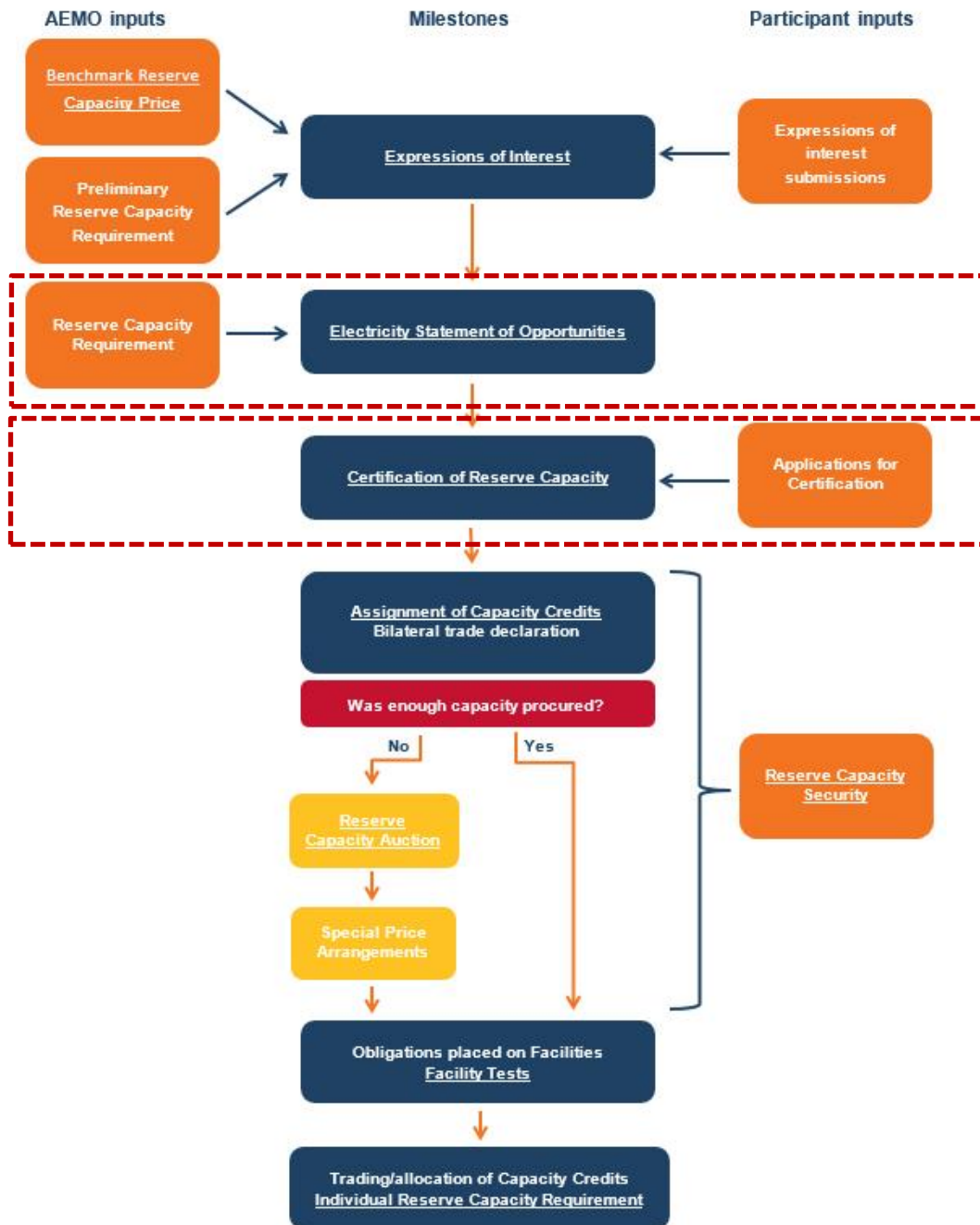
The RCM process and activities undertaken in the Reserve Capacity Cycle are summarised in Figure 1. The key milestones undertaken in Year 1 that are being considered in this issues paper include:

- **Electricity Statement of Opportunities (ESOO):** AEMO prepares the ESOO annually. The ESOO provides forecasts and analysis of peak demand and operational consumption in the SWIS for the next 10 years. These forecasts are used to determine the Reserve Capacity Requirement (RCR) – the amount of generation and Demand Side Management (DSM) capacity required to meet the forecast peak demand for the relevant Reserve Capacity Cycle.
- **Certification of Reserve Capacity (CRC):** Market Participants wishing to apply for Capacity Credits must first receive certification for that capacity. This requires a technical review of the capability of the Facility, and determines the maximum quantity of Capacity Credits that can be allocated to each Facility. CRC is assigned to Scheduled Generators, Intermittent Non-Scheduled Generators (INSGs), and Demand Side Programmes (DSP) based on several parameters and technical inputs (refer to Appendices A-C).

¹ 2020 Reserve Capacity timetable, at https://aemo.com.au/-/media/files/electricity/wem/reserve_capacity_mechanism/timetable/2020-reserve-capacity-timetable.pdf?a=en.



Figure 1 Reserve Capacity Cycle activities

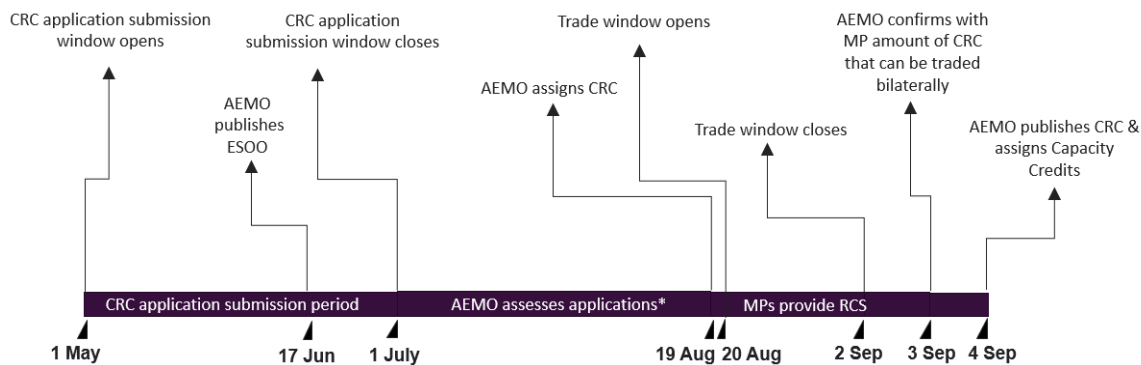


AEMO is consulting on modifying the dates associated with these steps in the 2020 Reserve Capacity Cycle

A summary of the remaining 2020 Reserve Capacity Cycle timetable activities is provided in Figure 2.

AEMO may exercise its discretionary power to extend or modify the date of any activities undertaken in the Reserve Capacity Cycle [MR 4.1.1C]. AEMO is consulting with Market Participants to determine how the impacts of COVID-19 may affect their participation in the RCM to assess if it would be appropriate to exercise AEMO’s discretionary powers.

Figure 2 2020 Reserve Capacity Cycle timetable



3. MATTERS FOR CONSIDERATION

3.1. Proposed amendments to CRC Market Procedure

AEMO has published a Procedure Change Proposal in respect of the Market Procedure: Certification of Reserve Capacity (Market Procedure). The options presented in this issues paper are to be considered in conjunction with the proposed changes to the Market Procedure, which are anticipated to commence on 1 May 2020.

3.2. New Facilities and upgrades

New Facilities and upgrades wishing to be eligible for Capacity Credits need to apply for Committed Status². Only Committed Facilities³ that are not Candidate Fixed Price Facilities are eligible for Capacity Credits. For further information, refer to the New Generator Fact Sheet to Participate in the Reserve Capacity Mechanism⁴.

An INSG Facility that has been in operation for less than five years, or a Facility that has been upgraded, will require an accredited independent expert⁵ report. For further details on the requirements for the independent expert report, refer to the Information guide for independent expert reports in the Reserve Capacity Mechanism⁶.

3.3. ESOO considerations

The 2020 WEM ESOO must be published by 17 June 2020 [MR 4.1.8], unless AEMO exercises its discretionary power to extend the date [MR 4.1.1C].

The WEM Rules require AEMO to publish the RCR in the WEM ESOO. The RCR is required to run the CRC process for the 2020 Reserve Capacity Cycle.

While the COVID-19 pandemic will impact the WEM ESOO forecasts, particularly economic and population drivers in the short term, there is no strong indication to suggest that it will significantly affect 2020

² Committed status refers to a new Facility or upgrade that is under development and its progress to construction, commissioning and completion is highly likely or confirmed.

³ A Network Control Service (NCS) Facility is exempt from applying for Committed Status (and submitting a trade declaration).

⁴ At <https://aemo.com.au/energy-systems/electricity/wholesale-electricity-market-wem/wa-reserve-capacity-mechanism/reserve-capacity-fact-sheets>.

⁵ A list of experts accredited by AEMO can be found on AEMO's website, at <https://aemo.com.au/energy-systems/electricity/wholesale-electricity-market-wem/wa-reserve-capacity-mechanism/certification-of-reserve-capacity>.

⁶ At https://www.aemo.com.au/-/media/Files/Electricity/WEM/Reserve_Capacity_Mechanism/Certification/2019/Information-guide-for-independent-expert-reports-in-the-Reserve-Capacity-Mechanism.pdf.



Reserve Capacity Cycle peak demand forecast outcomes (relevant for the 2022-23 Capacity Year). The RCR is set for the 2022-23 Capacity Year and the economy in WA is anticipated to have recovered by 2023 as informed by latest views of AEMO’s economic consultant. Consequently, AEMO does not consider that current circumstances require an extension of the 2020 WEM ESOO publication date.

3.4. Specific matters to note

Market Participants must ensure that supporting information relevant to the 2020 Reserve Capacity Cycle is provided in their CRC applications. All documents that are being negotiated or renewed must be executed and submitted as part of the CRC application, including (for example) fuel contracts, Electricity Transfer Access Contracts (ETAC), land leases, and financing.

4. AEMO’S DECISION-MAKING PROCESS

AEMO will assess all submissions received to this Issues Paper and determine if any of the 2020 Reserve Capacity Cycle activities will be deferred. Considerations for deferral will be made based on:

- How Market Participants’ business activities have been impacted by State⁷ and Federal⁸ Government advice and requirements on managing COVID-19.
- The Market Participant’s ability to meet the relevant CRC application obligations as a result of COVID-19, as specified in Appendices A-C (as applicable).
- Overall impact of the deferral on the WEM.

5. STAKEHOLDER CONSULTATION PROCESS

AEMO invites written submissions on this issues paper. Please note that submissions will be used for AEMO’s internal decision-making process only and will not be published. A summary of issues provided may be included in any artefact that AEMO publishes to justify keeping the Reserve Capacity cycle as is or for any changes to the cycle, should AEMO chose to publish an artefact.

AEMO’s indicative timeline for this consultation is outlined below.

Deliverable	Indicative date
Issues paper published	9 April 2020
Submissions due on issues paper	23 April 2020

Submissions in response to this issues paper should be sent by email to wa.capacity@aemo.com.au by 5.00 pm (AWST) on 23 April 2020. As part of the submission, Market Participants:

- Must complete the checklists in the submission forms for Scheduled Generators, Intermittent Non-Scheduled Generators, and/or Demand Side Programmes (as relevant).
- May provide any supporting information or evidence related to a) above.
- Must detail how the State or Federal Government’s advice and requirements have affected the Market Participant’s ability to meet the CRC application process deadlines and obligations.
- May comment on any aspects of the 2020 Reserve Capacity Cycle, including how your business may be impacted by a deferral in no more than 200 words.

⁷ State Government business and industry advice is updated regularly, at <https://www.wa.gov.au/organisation/department-of-the-premier-and-cabinet/covid-19-coronavirus-business-and-industry-advice>.

⁸ Federal Government national COVID-19 advice is updated regularly, at <https://www.australia.gov.au/>.



AEMO may not consider submissions received after the closing date and time. Any late submissions should explain the reason for delay and the detriment to you if AEMO does not consider your submission.

AEMO is cognisant of the impacts COVID-19 is having on the energy industry and appreciates that completing the requested information will take some effort, however we have tried to streamline responses through the provision of templates. Your input will assist AEMO in determining the appropriate action to take in relation to any potential changes to the 2020 Reserve Capacity cycle.



Appendix A. SCHEDULED GENERATORS SUPPORTING INFORMATION CHECKLIST

Supporting information	What AEMO requires	Requirement	Can Market Participant fulfil the CRC application obligations?	Comments and supporting evidence on why Market Participant cannot fulfil CRC application obligations (if applicable)
Network access (MR 4.10.1(bA))	Evidence that the Facility has a firm network access arrangement with Western Power that states the level of unconstrained capacity the Facility can offer into the network from a specified date. If the Facility is a Constrained Access Facility, the Market Participant must inform AEMO.	Mandatory		
Network constraints (MR 4.10.1(bA)v)	Details of any activation of runback schemes or other binding network constraints over the previous 24 months, including frequency of occurrence, curtailment amount, time and date of occurrence, and duration of occurrence.	Mandatory		
Temperature dependence information (MR 4.10.1(e)(i))	Information showing the temperature dependence of the Facility's capacity, specifying sent out generation capacity at 41°C. Must be supported by the manufacturer's technical specifications or as determined by an independent engineering firm.	Mandatory		
Fuel supply (MR 4.10.1(e)(v))	Evidence that the Market Participant has secured sufficient fuel supplies (diesel, coal or gas) to operate the Facility during Peak Trading Intervals and, if applicable, its fleet of Facilities. At least 90% of the fuel supply must be on a firm basis, with the remainder able to be sourced on a spot or non-firm basis.	Mandatory		
Fuel transport (MR 4.10.1(e)(v))	Evidence that the fuel being procured by the Market Participant is able to be delivered to the Facility. At least 90% of the fuel transport must be on a firm basis, with the remainder able to be sourced on a spot or non-firm basis.	Mandatory		



Supporting information	What AEMO requires	Requirement	Can Market Participant fulfil the CRC application obligations?	Comments and supporting evidence on why Market Participant cannot fulfil CRC application obligations (if applicable)
Fuel availability (min 14 hours with one day resupply) (MR 4.10.1(e)(v))	Evidence that the Facility has sufficient fuel supplies, either through an on or off-site storage facility or delivered through a gas pipeline, to operate continuously for 14 hours at maximum output, with one day resupply. This may include evidence of fuel storage tanks along with volumetric quantities, minimum stockpile levels and data on fuel used per hour of operation (for example, GJ/MWh). Where the Facility has primary and alternative fuels, outline the process for changing from one fuel to another and the fuel(s) which the Facility is to use in respect to an application for CRC.	Mandatory		
Expected and actual forced and unforced outage rates (MR 4.10.1(e)(vi), 4.10.1(e)(vii) and 4.11.1(h))	The forced and unforced outage rate of the Facility based on manufacturer data. For existing Facilities that have operated for at least 12 months, the forced and unforced outage rates in the past 36 months (or maximum available if the Facility has operated less than 36 months).	Mandatory		
Network Control Services Contract (MR 4.10.1(j))	If applicable, a full copy of any Network Control Services Contract, specifying the terms and conditions. Price information may be redacted.	Optional		
Environmental approvals (MR 4.10.1(c)(ii))	Evidence that any necessary environmental approvals have been granted or evidence supporting the Market Participant’s expectation that any necessary environmental approvals will be granted in time to have the Facility meet its Reserve Capacity Obligations by the date specified in clause 4.10.1(c)(iii)(7) of the WEM Rules.	For New Facility or Upgrade only		
Project plan (MR 4.10.1(c)(iii))	Key project dates as outlined in clause 4.10.1(c)(iii) of the WEM Rules.	For New Facility or Upgrade only		



Supporting information	What AEMO requires	Requirement	Can Market Participant fulfil the CRC application obligations?	Comments and supporting evidence on why Market Participant cannot fulfil CRC application obligations (if applicable)
Land leases (4.10.1(c)(iii))	Details of access rights to land, either through ownership or an appropriate leasing agreement. Leasing arrangements to include duration of tenure, renewal options and signatory pages.	For New Facility or Upgrade only		
Financial commitment and funding arrangements (MR 4.10.1(c)(iii))	Evidence of funding arrangements for the Facility, financial commitment by the Market Participant to a primary equipment supplier (this would usually take the form of a signed contract indicating purchase of the main plant equipment, including penalty clauses associated with non-compliance of the purchase agreement), and formal commitment, including financial approval, on behalf of the company in respect to the project (for example, Board approval).	For New Facility or Upgrade only		
Local government approvals (MR 4.10.1(c)(iii))	Details of relevant local government approvals to operate a power station.	For New Facility or Upgrade only		
Offtake agreement or Power Purchase Agreement (Market Procedure reference: Appendix A of Declaration of Bilateral Trades and the Reserve Capacity Auction)	Where a Facility is being built primarily to supply energy to one or more foundation customers, evidence that relevant power supply contracts are in place.	For New Facility or Upgrade only		



Appendix B. INSG SUPPORTING INFORMATION CHECKLIST

Supporting information	What AEMO requires	Requirement	Can Market Participant fulfil the CRC application obligations?	Comments and supporting evidence on why Market Participant cannot fulfil CRC application obligations (if applicable)
Network access (MR 4.10.1(bA))	Evidence that the Facility has a firm network access arrangement with Western Power that states the level of unconstrained capacity the Facility can offer into the network from a specified date. If the Facility is a Constrained Access Facility, the Market Participant must inform AEMO.	Mandatory		
Network constraints activated (MR 4.10.1(bA)v)	Details of any activation of runback schemes or other binding network constraints over the previous 24 months, including frequency of occurrence, curtailment amount, time and date of occurrence, and duration of occurrence.	Mandatory		
Accredited expert report (MR 4.10.3 and 4.10.3A)	Accredited consultant report and supporting data required under clause 4.10.3 of the WEM Rules (the data submission template is available in the RCM portal). The Accredited expert report must include the expected output of the Facility from 1 April 2015 to 1 April 2020 and the 5% probability of exceedance (PoE).	For a Facility that has been in operation for less than five years or an upgrade		
Environmental approvals (MR 4.10.1(c)(ii))	Evidence that any necessary environmental approvals have been granted or evidence supporting the Market Participant’s expectation that any necessary environmental approvals will be granted in time to have the Facility meet its Reserve Capacity Obligations by the date specified in clause 4.10.1(c)(iii)(7) of the WEM Rules.	For New Facility or upgrade only		
Network Control Services Contract (MR 4.10.1(j))	If applicable, a full copy of any Network Control Services Contract, specifying the terms and conditions. Price information may be redacted.	Optional		



Supporting information	What AEMO requires	Requirement	Can Market Participant fulfil the CRC application obligations?	Comments and supporting evidence on why Market Participant cannot fulfil CRC application obligations (if applicable)
Project plan (MR 4.10.1(c)(iii))	Key project dates as outlined in clause 4.10.1(c)(iii) of the WEM Rules.	For New Facility or upgrade only		
Financial commitment and funding arrangements (MR 4.10.1(c)(iii))	Evidence of funding arrangements for the Facility, financial commitment by the Market Participant to a primary equipment supplier (this would usually take the form of a signed contract indicating purchase of the main plant equipment, including penalty clauses associated with non-compliance of the purchase agreement), and formal commitment, including financial approval, on behalf of the company in respect to the project (for example, Board approval).	For New Facility or upgrade only		
Local government approvals (MR 4.10.1(c)(iii))	Details of relevant local government approvals to operate a power station.	For New Facility or Upgrade only		
Offtake agreement or Power Purchase Agreement (Market Procedure reference: Appendix A of Declaration of Bilateral Trades and the Reserve Capacity Auction)	Where a Facility is being built primarily to supply energy to one or more foundation customers, evidence that relevant power supply contracts are in place.	For New Facility or Upgrade only		
Land leases (MR 4.10.1(c)(iii))	Details of access rights to land, either through ownership or an appropriate leasing agreement. Leasing arrangements to include duration of tenure, renewal options and signatory pages.	For New Facility or Upgrade only		



Appendix C. DSP SUPPORTING INFORMATION CHECKLIST

Supporting information	What AEMO requires	Requirement	Can Market Participant fulfil the CRC application obligations?	Comments and supporting evidence on why Market Participant cannot fulfil CRC application obligations (if applicable)
Loads associated with the DSP (Market Procedure reference: step 6.2.2(b) and (c) of Certification of Reserve Capacity)	A list of all loads, including the National Meter Identifier (NMI), associated to the DSP. Where contracts are not in place, a list of loads (with NMIs) that are intended to be included.	Mandatory		
Contracts for curtailment (Market Procedure reference: step 6.2.2(b) and (c) of Certification of Reserve Capacity)	Evidence of capacity already procured (for example, contracts for load curtailment) or evidence of capacity procurement activity (on a per load basis). Full contracts must be provided and include commencement and end dates, terms outlining curtailment and signatory pages. Price information may be redacted.	Mandatory		
Network Control Services Contract (MR 4.10.1(j))	If applicable, a full copy of any Network Control Services Contract, specifying the terms and conditions. Price information may be redacted.	Optional		