

# New Generators Participating in the WA Reserve Capacity Mechanism

This fact sheet provides a high-level overview of the processes required for a new Generation Facility to participate in the Reserve Capacity Mechanism (RCM) in the Wholesale Electricity Market (WEM). To fully understand their obligations, Market Participants should refer to the Wholesale Electricity Market Rules and relevant Market Procedures.

## Introduction

The following processes are covered:

1. Engagement with the Network Operator for network access.
2. Registration and Facility creation for Rule Participants.
3. Applying for Certified Reserve Capacity and Capacity Credits.

For further details on these processes, links to related documents are provided throughout this fact sheet, where applicable. Full detail of the process outlined in this fact sheet can be found in the following documents:

- [Wholesale Electricity Market \(WEM\) Rules](#).
- [Market Procedure: Rule Participant Registration and De-Registration](#).
- [Market Procedure: Facility Registration, De-Registration and Transfer](#).
- [Market Procedure: Certification of Reserve Capacity](#).
- [Market Procedure: Reserve Capacity Security](#).
- [Market Procedure: Bilateral Trade and Reserve Capacity Auction](#).
- [WEMS<sup>1</sup> MPI<sup>2</sup> Market Participant Administrator Guide](#).
- [WEMS MPI User Guide](#).
- [WEM Registration Technical Guide](#).

References to specific WEM Rules within this fact sheet in bold and square brackets [**clause XX**] are current as of 30 March 2020. These references are included for convenience only and are not part of this fact sheet.

A word or phrase defined in the *Electricity Industry Act 2004*, the *Electricity Industry (Wholesale Electricity Market)*

*Regulations 2004*, the WEM Rules or a Market Procedure has the same meaning when used in this fact sheet.

## Network operator engagement

Western Power participates in the WEM as a Rule Participant in the following classes:

- Network Operator: Western Power owns and operates a transmission network (WP\_TX\_NTWK<sup>3</sup>) and distribution network (WP\_DX\_NTWK<sup>4</sup>) in the South West interconnected system.
- Meter Data Agent:
  - Under clause 8.2 of the WEM Rules Western Power is responsible for keeping the Meter Registry updated and providing metering data to AEMO for its Registered Networks.
  - In order to connect a generation system to Western Power's Registered Network, a prospective Market Participant must arrange access with Western Power. Generally, this takes the form of an electricity transfer access contract (ETAC).

Market Participants are encouraged to contact Western Power in the initial stages of planning a project to discuss Network access requirements including, but not limited to:

- SCADA<sup>5</sup> signals and commissioning requirements.
- Network access arrangements.
- Requirements under the [Technical Rules](#).

## Registration

In order to participate in the WEM, a person or entity (Applicant) must be registered as a Rule Participant in one

<sup>1</sup> Wholesale Electricity Market System.

<sup>2</sup> Market Participant Interface.

<sup>3</sup> Transmission Network Facility code for Western Power.

<sup>4</sup> Distribution Network Facility code for Western Power.

<sup>5</sup> Supervisory control and data acquisition.

or more of the [Rule Participant classes](#). A Rule Participant that is registered in either the Market Generator or a Market Customer class is defined as a Market Participant.

The following section is a high-level overview of the process to gain access to AEMO's Wholesale Electricity Market System (WEMS) and register as a Rule Participant. Full details of the processes are outlined in the [Market Procedure: Rule Participant Registration and De-Registration](#).

## Accessing WEMS

WEMS is the term used for the suite of applications that allow Market Participants to participate in the WEM, as well as to access market data. Access to WEMS is via the [Market Participant Interface](#) (MPI). To initiate the Rule Participant Registration process, the Applicant must follow the process described in section 3.1 and 4.1 of the Market Procedure: Rule Participant Registration and De-Registration which includes:

- Submission of the [Application for WEMS access form](#).
- Determination of Rule Participant short name.
- Submission of the [Market Participant Nomination of Market Participant Administrator \(MPA\) form](#).

## Rule Participant Registration

Once the Applicant has access to the WEMS, the Applicant may progress with the Rule Participant Registration application through the system. The Applicant must follow the process described in section 3.2 and 4.2 of the Market Procedure: Rule Participant Registration and De-Registration which includes:

- Submission of the following forms and information in the WEMS:
  - Market Participant general information.
  - Market Participant financial information.
  - Market Customer Standing Data (if relevant).
- Nomination of a valid Austraclear<sup>6</sup> account<sup>7</sup>.
- Submission of an Agreement for AEMO to issue [Recipient Created Tax Invoices form](#), which allows AEMO to issue a tax invoice on the Market Participant's behalf for transactions in the WEMS. It also allows the Market Participant to create a tax invoice on behalf of AEMO for payment of fees.
- Submission of a [Declaration of Rule Participant Registration form](#), which is a formal declaration on

behalf of the Applicant of its intention to register as a Rule Participant in the WEM.

- Payment of the relevant Rule Participant Registration Application Fee, this can be found in the current document outlining [WA WEM Budget and Fees](#).

AEMO may request additional information from Market Participants where information is missing, or the information provided is inadequate.

The following additional information is provided to assist Applicants with the above processes:

- Detailed instructions on adding or updating information in WEMS can be found in section 8.2.3 of the [WEMS MPI User Guide](#).
- Detailed instructions on submitting an Application for Participant Registration form in WEMS can be found in section 8.4 of the [WEMS MPI User Guide](#).
- The specific format of Rule Participant, Facility and Standing Data information required to be submitted in the WEMS can be found in the [WEM Registration Technical Guide](#).

Upon receipt of a completed Rule Participant Application, AEMO will review the Application. AEMO will accept or reject the Application and notify the Applicant accordingly.

## Facility creation

In order to submit an application for Certified Reserve Capacity, a Rule Participant's Facility must have been created in WEMS and must be a candidate for Registration (Candidate Facility) in one of the following classes:

- Scheduled Generator.
- Non-Scheduled Generator.
- Demand Side Program.

The Applicant must follow the process described in sections 2.1 and 3.1 of the [Market Procedure: Facility Registration, De-Registration and Transfer](#) which includes:

- Submission of the [Request for Facility Creation Form](#) to AEMO to initiate the process.
- Determination by AEMO of a Facility Short Name.

Once the Candidate Facility is created in WEMS, the Applicant will be able to view the Candidate Facility. Applicants may then:

- Submit information in WEMS regarding that Candidate Facility.
- Initiate the Facility registration process.

<sup>6</sup> Austraclear is provided by the ASX. Applicants should refer to the clearing payments section of the AEMO website for more information on Austraclear.

<sup>7</sup> A Market Generator may nominate a valid Austraclear account at the time of Facility Registration.

- Use that Facility in the Reserve Capacity certification process (that is, the Facility may be assigned Capacity Credits by AEMO).

### Next steps

A Candidate Facility is not considered a Registered Facility in the WEM. For information in relation to completing the Facility Registration process, refer to step 3.2 of the [Market Procedure: Facility Registration, De-Registration and Transfer](#).

Facility Registration must be completed prior to commencement of a Market Participant's Reserve Capacity Obligations.

### Application for Certified Reserve Capacity and Capacity Credits

Once a new Facility has been approved as a Candidate Facility in WEMS, the Facility may apply for [Certified Reserve Capacity \(CRC\)](#). This is the first step towards being assigned Capacity Credits.

Note: Facilities do not need to obtain CRC to participate in the WEM. However, it is necessary for any Facility that wishes to be assigned Capacity Credits<sup>8</sup> and participate in the RCM.

### CRC application timing

The closing date for CRC applications is generally the last business day on or before 1 July each year. However, this can be subject to change. Applicants should confirm the relevant dates by checking the [Reserve Capacity Cycle timetable](#).

CRC and Capacity Credits are generally assessed and assigned to Facilities two years ahead of when their Reserve Capacity Obligations commence (e.g. a Facility that successfully applies for CRC for the first time in 2019 will be paid for, and have an obligation to provide capacity, starting from 1 October<sup>9</sup> 2021).

### CRC application documents

Sections 4.9, 4.10 and 4.11 of the WEM Rules outline the process, information requirements, and assessment criteria for assigning CRC. Market Participants are required to upload their information to the WEMS MPI. Some of the key document requirements are outlined below in this section<sup>10</sup>. For full details of documentation requirements, refer to the latest version of the [Market Procedure](#):

[Certification of Reserve Capacity](#), and section 4.10 of the WEM Rules.

Note: All supporting documentation MUST be provided by the certification window closure date.

### Network access

The following evidence must be submitted with the CRC application:

- Evidence that the Facility has a firm network access arrangement with Western Power. Generally, for a new Facility, this would take the form of an interconnection works contract and either an ETAC or Network Access Agreement (NAA).
- The ETAC/NAA must state the level of unconstrained capacity the Facility can offer into the Network from a specified date.
- All documents must clearly show:
  - The expiry date.
  - The Declared Sent Out Capacity of the Facility.
  - Details of any network access constraints.
  - All amendments and other changes relating to network access arrangements.
- All documents must be executed by both Western Power and the entity responsible for the Facility.

### The Independent Expert Report

An Independent Expert report (IER) is a report prepared by an expert accredited by AEMO [Clause 4.11.6] to support CRC applications for any Facility that will be assessed under Appendix 9 (Relevant Level Methodology) of the WEM Rules. Generally, these Facilities are Intermittent Non-Scheduled Generators (INSGs), although Scheduled Generators may be assessed under this methodology, subject to certain conditions [Clause 4.11.2(b)]. Refer to the [Information guide for the independent expert reports in the Reserve Capacity Mechanism](#) for further information.

The requirements are outlined in clause 4.10.3A of the WEM Rules. The data submission template for the supporting data that must accompany the expert report, and a list of accredited experts, is located under the Relevant Level Methodology section of the AEMO [Certification of Reserve Capacity web page](#).

<sup>8</sup> Capacity Credits are valid for one year, and one MW of certified capacity is equal to one Capacity Credit. Capacity holders may trade these with AEMO or Market Customers, based on the customers' contribution to Peak Demand.

<sup>9</sup> Usually this date is the start of the relevant Capacity Year (1 October), but earlier dates may apply if a Facility applies for early entry.

<sup>10</sup> Note that this is a general list of information required. AEMO assesses each Facility on a case-by-case basis, so this information may vary from Facility to Facility.

### *Fuel supply information (Scheduled Generators<sup>11</sup> only)*

- The Market Participant must provide evidence that it has secured sufficient fuel supplies (diesel, coal or gas) to operate its Facility. This may include:
  - Evidence demonstrating a Market Participant’s ability to procure additional fuel through the spot market.
  - Copies of versions of full contracts must be provided that include full details of the fuel quantity to be delivered, signatory pages, and expiry dates, as well as any restrictions on quantities (for example, take or pay clauses, maximum contract quantities). The price information may be redacted on these documents.
- Evidence that the Facility has sufficient fuel supplies to operate continuously for 14 hours at maximum output, with one day resupply. This may include:
  - Evidence demonstrating a Market Participant’s ability to procure additional fuel through the spot market.
  - Copies of versions of full contracts must be provided that include full details of the fuel quantity to be delivered, signatory pages, and expiry dates<sup>12</sup> as well as any restrictions on quantities (for example, take or pay clauses, maximum contract quantities). The price information may be redacted on these documents.
  - Evidence of the existence of fuel storage tanks available to the Market Participant, along with volumetric quantities, or minimum stockpile levels.
- Data on fuel used per hour of operation<sup>13</sup> must be provided (e.g. 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 will use in respect of an application for CRC.
- Evidence detailing how the fuel being procured by the Market Participant is delivered to the Facility. This generally includes:
  - Copies of versions of full contracts must be provided that include full details of the contract

expiry dates and delivery lead times. The price information may be redacted on these documents.

- Evidence demonstrating a Market Participant’s ability to source transport through the spot market.

### *Approvals and Leases*

The following evidence must be submitted with the CRC application:

- Copies of any necessary environmental approvals that have been granted<sup>14</sup>.
- Copies of local government approvals to operate a power station.
- Copies of documents outlining access rights to land, either through ownership or an appropriate leasing agreement.

### **Reserve Capacity Security (RCS)**

New Facilities must pay RCS to secure Capacity Credits. This is calculated as one quarter of the [Benchmark Reserve Capacity Price](#), multiplied by the number of Capacity Credits assigned to the Facility.

#### *Timing*

The window for payment of RCS is generally two weeks, over the same period that bilateral trade declarations (refer to Section 4.5 of this fact sheet) are made. The latest [RCM Timetable](#) provides information on the timeframes for the RCS payment window for the current Reserve Capacity Cycle.

#### *Payment options*

Security can be a bank guarantee, bank undertaking, or a cash deposit. For further information refer to the [Market Procedure: Reserve Capacity Security](#).

#### *Returning the RCS*

RCS is returned if:

- The Facility fails to secure Capacity Credits, or satisfies its capacity obligations by operating as required under clause 4.13.13 of the WEM Rules; or
- At the end of the Capacity Year, the Facility has operated at 90% of required output<sup>15</sup> as per clause 4.13.10 of the WEM Rules.

RCS may be drawn upon if the Facility fails to reach at least 90% of required output prior to the end of the

<sup>11</sup> Scheduled Generators are generally traditional thermal generation facilities. Refer to Chapter 11 of the WEM Rules for a detailed definition. These Facilities generally nominate to have their CRC level assessed using the methodology described in clause 4.11.1(a) of the WEM Rules

<sup>12</sup> Expiry date must not be before the end of the relevant Capacity Year for which the Facility is seeking to receive Capacity Credits

<sup>13</sup> Fuel use calculations should be based on operation at 41 degrees Celsius at the Facility’s geographical elevation.

<sup>14</sup> Alternatively, evidence supporting the Market Participant’s expectation that 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 Market Rules may be acceptable at AEMO’s discretion.

<sup>15</sup> Required output is calculated based on a Facility’s Required Level, as determined in clause 4.11.3B of the WEM Rules and is adjusted to 90% of the level of Capacity Credits specified in clause 4.20.5A of the WEM Rules.

relevant Capacity Year. Where AEMO draws upon a Market Participant's RCS, the Market Participant forfeits its right to the guarantee or bank undertaking, or forfeits the entire amount of its Security Deposit, as applicable.

### Application for committed status

Facilities are automatically assigned proposed status when created by a Market Participant as a Candidate for Registration. Proposed status comprises all Facilities that are not in operation or assigned a committed status. Facilities in committed status have been assessed by AEMO (on a case-by-case basis) and demonstrated irrevocable and binding commitments in relation to the construction of a Facility or Planned Facility Upgrade. Facilities in committed status receive Capacity Credits in preference to Facilities in proposed status.

Full details of how to apply for committed status are provided in Appendix A: Committed Status Application, of the [Market Procedure: Declaration of Bilateral Trade and the Reserve Capacity Auction](#).

#### Timing

A Market participant must apply for committed status at least 10 Business Days prior to the date on which it intends to submit a bilateral trade declaration or Reserve Capacity Offer. This is to allow AEMO sufficient time to assess the application.

#### Application submission

Applications for committed status are to be submitted via email to [wa.capacity@aemo.com.au](mailto:wa.capacity@aemo.com.au).

### Bilateral trade declaration and assignment of Capacity Credits

Assignment of CRC sets the limit for the amount of Capacity Credits that may be assigned to a Facility. However, it does not necessarily guarantee Capacity Credits. In order to be eligible for Capacity Credits, for new Facilities:

- RCS must be paid.
- Facilities must apply for, and be assigned, a committed status, unless a shortfall of capacity is forecast, in which case having a committed status is optional.
- Facilities must submit a bilateral trade declaration to inform AEMO how much capacity they intend to trade bilaterally, which in turn will determine the level of Capacity Credits that are assigned.

New Facilities that accept the floating Reserve Capacity annual price will be assigned Capacity Credits first, then if

an adequate level of capacity is not achieved AEMO will award Capacity Credits to Fixed Price Facilities<sup>16</sup> that opted for a price lock in. The process for assigning Capacity Credits is set out in Appendix 3: Reserve Capacity Auction and Trade Methodology in the WEM Rules.

#### Bilateral trade declaration timing

The window for submitting bilateral trade declarations is generally two weeks in duration. Refer to the current [Reserve Capacity Cycle Timetable](#) for specific timeframes<sup>17</sup>.

#### Bilateral trade declaration submission

Bilateral trade declarations are made via the [WEMS MPI](#). Further details are provided in the [WEMS MPI User Guide](#).

#### Capacity Credit assignment process

Capacity Credits are assigned to Facilities shortly after the bilateral trade declaration deadline. The methodology for assignment of Capacity Credits is defined in Part A of Appendix 3 of the WEM Rules.



#### Where can I find more information?

**For any further enquiries, please contact the Reserve Capacity team via**

- [Wa.capacity@aemo.com.au](mailto:Wa.capacity@aemo.com.au)

<sup>16</sup> A Facility may nominate to be a Fixed Price Facility in accordance with Clause 4,14,1C of the WEM Rules.

<sup>17</sup> In the timetable, this is the time between Market Participants being advised of their CRC assignment and the deadline for Market Participants to advise AEMO how much of their CRC will be traded bilaterally.