

WEMS MPI USER GUIDE

Version 6.22

April 2023

Important notice

PURPOSE

AEMO has prepared this document to provide information about the market systems support process available to Market Participants for the Wholesale Electricity Market System (WEMS), as at the date of publication.

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1. Introduction

The purpose of this document is to describe the functions and capabilities of the Wholesale Electricity Market System Market Participant Interface and act as a guide to users. The WEMS Market Participant Interface (**WEMS MPI**) is the medium between the Market Participant and AEMO to exchange and submit registration information, trading submissions, and facilitate the extraction of reports.

This document is intended for MPI users.

2. System Requirements

Please refer to the <u>Market Procedure</u>: <u>Data and IT Interface Requirements</u> for more information on the necessary technical details and standards, software and hardware specifications, and security standards required for Market Participants to operate in the Wholesale Electricity Market (WEM).

3. Accessing the System

The WEMS MPI is located at https://wems.aemo.com.au/mpi

Upon visiting the site, the MPI will require the user to authenticate with their WEMS RSA SecurID token before the user is able to access the MPI. The RSA SecurID token can be identified by the RSA SecurID dark blue and red logo with white writing (see Figure 1).

New users must apply for WEMS access by contacting their Market Participant Administrator (**MPA**) as well as completing the WEMS Token Request Form. This form, along with the RSA Quick Reference Guide, is available from the MPI login page or from WA Market Operations at wa.operations@aemo.com.au.

New users must also be assigned the appropriate roles by their MPA to ensure they have the correct access privileges. Refer to the <u>Market Participant Administrator Guide</u> for more information.

RSA SecurID tokens are managed and issued by AEMO; however individual roles and user accounts are managed by each MPA.

Figure 1 RSA SecurID token example



Figure 2 WEMS MPI login screen



4. Common Information

Every webpage within the MPI contains the standard navigation items in Table 1.

Table 1 Standard MPI navigation items

Item	Description
Contact Us	Provides AEMO contact details for queries related to the MPI and WEMS.
Disclaimer	Site specific disclaimer for MPI user.
Help	Provides the user guide of the application (this document).
Logout	Allows the user to logout from the application.
Menu	Allows navigating across the application. Home, Notifications, Energy Market, Reserve Capacity, Balancing, LFAS, Registration, Settlements, Reports, Configuration, Help, and Logout menu items are available.
User Name	Name of the user that is logged in.
WEMS Market Time	Displays the time of the WEMS (Australian Western Standard Time)

5. Dashboard

Upon successfully logging into the MPI, users will be directed to the Market Summary dashboard (see Figure 3). Each of the individual components of the dashboard (see Table 2) is refreshed periodically, ensuring the latest information is presented to users without the need for the user to refresh the page. The functionality of the dashboard components are explained in more detail in Sections 5.1, 5.1.2, 5.2 and 5.3.

For assistance with the Dashboard, please contact WA Market Operations at wa.operations@aemo.com.au.

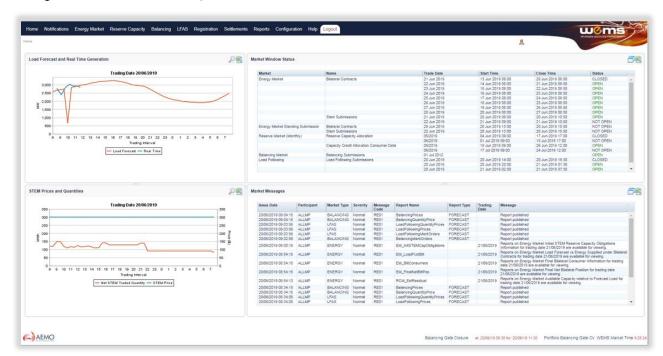


Figure 3 Market Summary dashboard

Table 2 Market Summary dashboard component descriptions

Dashboard Item	Description
Load Forecast and Real Time Generation Graph	Provides a graph of the forecasted load and real time load for the current trading day. Refreshes every 60 seconds. Can be enlarged or downloaded to CSV.
STEM Prices and Quantities Graph	Provides a graph of the STEM Traded Quantities and Prices for each trading interval of the current trading day. Refreshes every time the dashboard loads or the page is refreshed. Can be enlarged or downloaded to CSV.
Market Window Status	Displays all the Market Windows which are in an "Open state", at any point of time. Refreshes every 60 seconds. Can be enlarged or downloaded to CSV.

Dashboard Item	Description
Market Messages	Displays the latest 20 WEMS market messages.
	Displays market messages by Issue Date, Participant, Market Type, Trading Date and Message.
	Refreshes every 60 seconds.
	Can be enlarged or downloaded to CSV.

5.1 Market Summary Graphs

5.1.1 Enlarging the graphs

All graphs on the dashboard can be enlarged by clicking the magnifier icon in the header of the graph (see Figure 4). The graph will then enlarge to cover the MPI screen (see Figure 5).

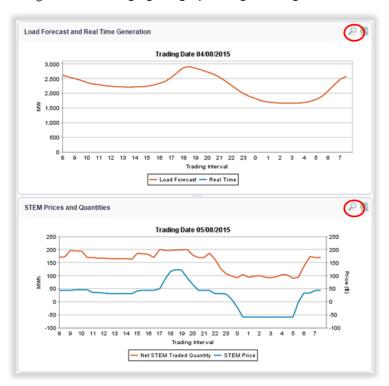


Figure 4 Enlarging the graph using the magnifier icon

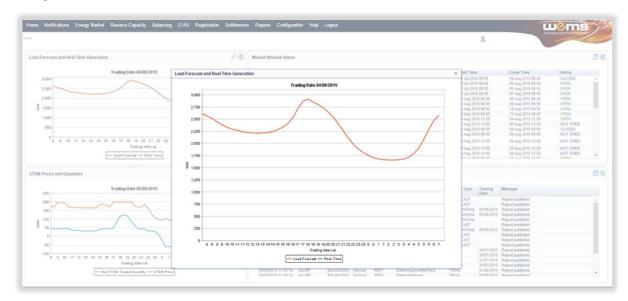


Figure 5 Result from clicking on the magnifier icon

5.1.2 Downloading data from graphs

The underlying data from each of the graphs can be downloaded directly from within the dashboard into a comma delimited (CSV) file format by clicking the icon in the header of the graph (see Figure 6). The user will be prompted with a File Download dialog box at the bottom left of the screen.

The default file names for the data are:

- Load Forecast and Real Time Data LoadFcstRealTime_ddmmyyyyhhmmss
- STEM Prices and Quantities StemPriceQuantity_ddmmyyyyhhmmss

where ddmyyyyhhmmss is the time the user initiated the download.



Figure 6 Downloading data from graph using the download icon

5.2 Market Windows Status

The Market Window Status display provides all Energy Data Submission Window details (see Figure 7). For Reserve Capacity submission window details refer to Section 7.

The Market Window Status fields are described in Table 3.

Use the scroll bar to view all Market Window Statuses on the dashboard.

To open the Market Window Status display in a separate tab/window, click on the window icon at the top right of the Market Window Status display (see Figure 7). The full Market Window page provides details of all the current and future Market Windows and their respective status (see Figure 8).

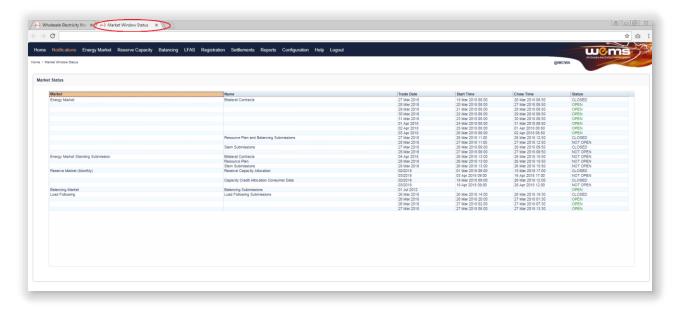
Table 3 Market Window Status field descriptions

Field Name	Field Description
Market	Can be BALANCING, LFAS, ENERGY, or RESERVE MARKET
Name	Name of submission type
Trade Date	Trading Date for which the market window is open
Start Time	Date and time when the Market Window opens
Close Time	Date and time when the Market Window closes
Status	Market Window status

Figure 7 Market Window Status display



Figure 8 Market Window Status displayed in a separate tab/window



5.3 Market Messages

The Market Messages display provides information headlines on recent market events, such as automated report publication and availability to the market. Events that have been initiated manually by WA Market Operations will also appear here.

Market Messages are categorised by the following severity types:

- Normal (N): Automated market messages generated by the system.
- Urgent (U): Urgent messages.
- Emergency (E): Emergency messages.

The Market Messages display fields are described in Table 4.

Use the scroll bar to view all Market Messages on the dashboard.

To view the Market Messages in separate tab/window, click on the window icon at the top right of the display (see Figure 9). Market Messages can then be filtered by Issue Date, Market Type, and Severity of the message. The results from the Market Message search query will populate the right-hand side of the browser (see Figure 10).

To download the Market Messages from the Home dashboard, click on the file icon at the top right of the window (see Figure 9). The user will be prompted with a File Download dialog box where the message information can either be saved to disk or opened directly. The format of the file is comma delimited (CSV).

The default file name for the data is:

notification.marketmessages_[MP SHORTNAME]_YYYYMMDDHHMMSS

Table 4 Market Messages display fields

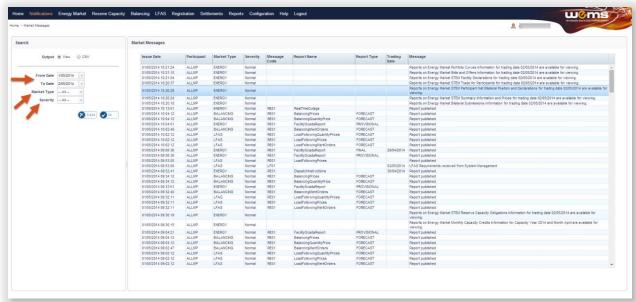
Field Name	Field Description
Issue Date	Date and time of the message issued
Participant	Participant the Message is applicable to – most messages are applicable to all participants and this field shows ALLMP

Field Name	Field Description	
Market Type	Can be BALANCING, LFAS, or ENERGY	
Severity	Can be NORMAL, URGENT, or EMERGENCY	
Message Code		
Report Name	The name of report the message is applicable to (if message is not specific to a report then this field will be blank)	
Report Type	Can be FORECAST, PROVISIONAL, or FINAL	
Trading Date	The trading date the report is applicable to (if message is not specific to a report then this field will be blank)	
Message	Market Message description	

Figure 9 Market Messages display

ssue Date	Participant	Market Type	Severity	Message Code	Report Name	Report Type	Trading Date	Message	
11/09/2014 15:05:02	ALLMP	ENERGY	Normal	RE01	FacilityScadaReport	PROVISIONAL		Report published	
11/09/2014 15:04:08	ALLMP	BALANCING	Normal	RE01	BalancingPrices	FORECAST		Report published	
11/09/2014 15:04:08	ALLMP	BALANCING	Normal	RE01	BalancingQuantityPrice	FORECAST		Report published	
11/09/2014 15:02:35	ALLMP	BALANCING	Normal	RE01	BalancingMeritOrders	FORECAST		Report published	
11/09/2014 15:02:07	ALLMP	LFAS	Normal	RE01	LoadFollowingQuantityPrice s	FORECAST		Report published	
11/09/2014 15:02:07	ALLMP	LFAS	Normal	RE01	LoadFollowingPrices	FORECAST		Report published	
11/09/2014 15:02:07	ALLMP	LFAS	Normal	RE01	LoadFollowingMeritOrders	FORECAST		Report published	
11/09/2014 14:35:32	ALLMP	ENERGY	Normal	RE01	FacilityScadaReport	PROVISIONAL		Report published	
11/09/2014 14:35:18	ALLMP	ENERGY	Normal					Reports on Energy Market Ex Post Outages Information for trading date 23/08/2014 are available for viewing.	
11/09/2014 14:34:08	ALLMP	BALANCING	Normal	RE01	BalancingPrices	FORECAST		Report published	-

Market Messages displayed in a separate tab/window



5.4 Market Messages Search

Figure 10

The Market Messages search functionality enables users to search historical messages for a date range. The date range is configured and controlled by AEMO.

To access the search function, select **Notifications > Market Messages** (see Figure 11).

Upon clicking the menu, the system navigates to a screen with default search criteria (see Figure 12). The search criteria is described in Table 5 and the search result data fields are described in Table 6.

Once the search criteria have been selected, click on the Go button to retrieve the results. For the example shown in Figure 13, Energy is selected under Market Type and Normal is selected under Severity.

Once the search criteria has been selected, select the CSV option to download the file (see Figure 14).

Table 5 Market Messages search criteria fields

Field Name	Field Description			
From Date	Start Date of the date range for searching			
To Date	nd Date of the date range for searching			
Market Type	Market Type for which the message belongs to. Available options are as follows: ALL ENERGY RESERVE BALANCING LFAS STEM			

Field Name	Field Description
Severity	Message Severity. Available options are as follows.
	• ALL
	• NORMAL
	• URGENT
	• EMERGENCY

Table 6 Market Messages search results fields

Field Name	Field Description
Issue Date	Market Message issued date and time
Participant	Participant name for which the message is belongs to
Market Type	The market type
Severity	The severity type
Message Code	Used for AEMO internal
Report Name	The name of the report
Report Type	FINAL or PROVISIONAL
Trading Date	Trading date for which the report was issued
Message	The message description

Figure 11 Market Messages search



Figure 12 Market Messages search display

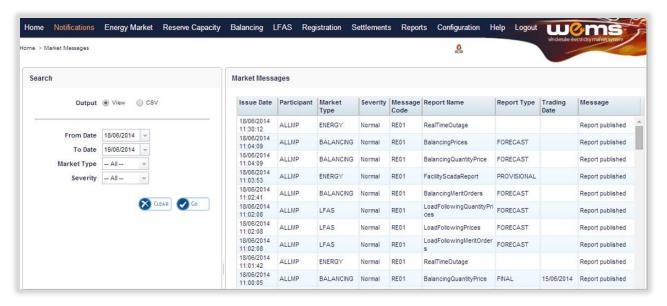


Figure 13 Market Messages search criteria example

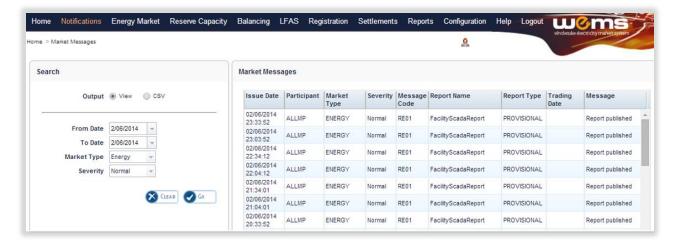
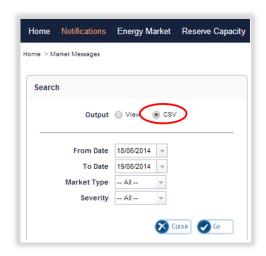


Figure 14 Market Messages download



5.5 Market Status

The Market Status display is a dashboard to view the expected timeline for when market windows will open and close. It also displays the current status.

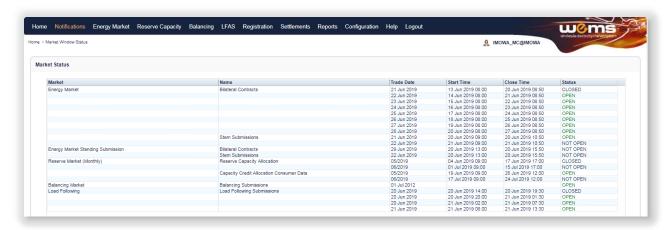
To view the Market Status display, select **Notifications > Market Status** (see Figure 15).

The Market Status display fields are described in Figure 15.

Table 7 Market Status display fields

Field Name	Field Description
Market	Can be BALANCING, LFAS or ENERGY or RESERVE MARKET
Name	Name of submission type
Trade Date	Trade date for which the submission applies
Start Time	Time that the window opens
Close Time	Time that the window closes
Status	Can be OPEN/CLOSED/NOT OPEN

Figure 15 Market Status display



6. Reports

This section should be read in conjunction with the <u>WEMS Reports and Web Service Specification</u> document. For assistance with Reports, please contact WA Market Operations at <u>wa.operations@aemo.com.au</u>.

6.1 Available Reports

The operational reports available in the MPI are outlined in Table 8.

The reports in Table 9 have been archived and are no longer available to users.

Refer to Section 7 for where to find the latest RCM information in the RCM portal.

Table 8 Operational reports available in MPI

No	Report Name	Report Title	Report Type	Report Group	Access Type
1	PRM_Indicator	Prudential Risk Indicators (MP)	Energy Market → Scheduling	Daily	MP SPEC
2	EM_LoadFcst	Operational Load Forecast	Energy Market → Scheduling	Daily	All MP
3	BLT_StndConv	Bilateral Contract Standing Data Conversion	Energy Market → Scheduling	Daily	MP SPEC
4	EM_InitNetBiltPos	Initial Net Bilateral Position(MP)	Energy Market → Scheduling	Daily	MP SPEC
5	EM_InitBiltConsumers	Initial Bilateral Consumer Information (MP)	Energy Market → Scheduling	Daily	MP SPEC
6	EM_AncServ	Ancillary Service Energy excluded from STEM (MP)	Energy Market → Scheduling	Daily	MP SPEC
7	EM_AncServFacilities	Ancillary Service Facilities (MP)	Energy Market → Scheduling	Daily	MP SPEC
8	EM_SchPlannedOutages	Schedule of Outages (SWIS)	Energy Market → Scheduling	Daily	All MP
9	EM_FacilityLimit	Facility Limits(MP)	Energy Market → Scheduling	Daily	MP SPEC
10	EM_PartLimit	Participant Limits(MP)	Energy Market > Scheduling	Daily	MP SPEC
11	EM_STEMStndCurt	Standing STEM Submission Curtailment Information (MP)	Energy Market → Scheduling	Daily	MP SPEC
12	EM_FinalNetBiltPos	Final Net Bilateral Position(MP)	Energy Market → Scheduling	Daily	MP SPEC
13	EM_BiltConsumers	Final Bilateral Consumer Information (MP)	Energy Market → Scheduling	Daily	MP SPEC
14	RCM_EstResidual	Available Capacity Relative to Forecast Load (SWIS)	Energy Market → Scheduling	Daily	All MP

No	Report Name	Report Title	Report Type	Report Group	Access Type
15	EM_InitSTEMCapObligations	Initial STEM Reserve Capacity Obligations (MP)	Energy Market -> Scheduling	Daily	MP SPEC
16	EM_LoadFcstBilt	Load Forecast vs. Energy Supplied under Bilateral Contracts (SWIS)	Energy Market → Scheduling	Daily	All MP
17	EM_STEMStndConv	STEM Standing Data Conversion	Energy Market → Scheduling	Daily	MP SPEC
18	EM_FinalSTEMCapObligation s	STEM Reserve Capacity Obligations (MP)	Energy Market → Scheduling	Daily	MP SPEC
19	EM_BiltSubmission	Bilateral Submissions (MP)	Energy Market → Scheduling	Daily	MP SPEC
20	EM_STEMResultPartInfo	STEM Trade Results for Participants (MP)	Energy Market → Scheduling	Daily	MP SPEC
21	EM_STEMPartInfo	STEM Participant Net Bilateral Position and Declarations (MP)	Energy Market → Scheduling	Daily	MP SPEC
22	EM_STEMBidsAndOffer	STEM Bids and Offers (MP)	Energy Market → Scheduling	Daily	MP SPEC
23	EM_STEMResInfo	STEM Facility Declarations	Energy Market → Scheduling	Daily	MP SPEC
24	EM_STEMPortCrv	STEM Portfolio Curves (MP)	Energy Market → Scheduling	Daily	MP SPEC
25	EM_STEMSummaryInfo	STEM Summary Information and Prices	Energy Market → Scheduling	Daily	All MP
26	ARCHIVED				
27	EM_BalSubmission	Balancing Data Submissions (MP)	Energy Market → Scheduling	Daily	MP SPEC
28	EM_DispMeritOrder	Dispatch Merit Order (SWIS)	Energy Market → Scheduling	Daily	All MP
29	ARCHIVED				
30	EM_CommisioningTest	Commissioning Generation Test (MP)	Energy Market → Dispatch	Daily	All MP
31	All_Ancillary_Declarations	All Participant STEM Ancillary Service Declarations	Others	Daily	All MP
32	All_Bids_and_Offers	STEM Bids and Offers by Participant	Others	Daily	All MP
33	All_Facility_Declarations	All Participant STEM Facility Declarations	Others	Daily	All MP
34	All_STEM_Trades	Quantities bought and sold in the STEM by Participant	Others	Daily	All MP
35	EM_AdminBalPrices	Administered Balancing Prices (SWIS)	Energy Market → Dispatch	Daily	All MP

No	Report Name	Report Title	Report Type	Report Group	Access Type
36	EM_ExPostOutages	Ex-Post Outages (MP)	Energy Market → Dispatch	Daily	MP SPEC
37	EM_OperLoad	Operational Load (SWIS)	Energy Market → Dispatch	Daily	All MP
38	EM_SysMgtSched	System Management Schedules (MP)	Energy Market → Dispatch	Daily	MP SPEC
39	PUB_AdvInfo	Advisory Information (PUBLIC)	Others	Daily	All MP
40	PUB_DispSummaryInfo	Balancing Prices and Dispatch Load Forecast Information (PUBLIC)	Energy Market → Dispatch	Daily	All MP
41	PUB_LoadSummaryInfo	Load Summary Information (PUBLIC)	Energy Market → Dispatch	Monthly	All MP
42	PUB_NcsDispatchInfo	NCS Dispatch Information (PUBLIC)	Energy Market → Dispatch	Monthly	All MP
43	ARCHIVED				
44	PUB_NearRTInfo	Real Time Information (PUBLIC)	Energy Market → Dispatch	Daily	All MP
45	PUB_RulePartClassInfo	Rule Participant Class Information (PUBLIC)	Registration	Daily	All MP
46	PUB_RulePartDetails	Rule Participant Details (PUBLIC)	Registration	Daily	All MP
47	PUB_RulePartFacilityInfo	Rule Participant Facility Information(PUBLIC)	Registration	Daily	All MP

Table 9 Archived reports

Report Name	Report Title	Report Type	Report Group	Access Type	Available to
RCM_ApprvBltDeclarations	Approved Reserve Capacity Bilateral and DSP Declarations	Reserve Capacity → Annual	Yearly	MP SPEC	2019-20 Capacity Year
RCM_CCFinalAllocation	Final Capacity Credit Allocation (MP)	Reserve Capacity → Monthly	Monthly	MP SPEC	September 2017
RCM_CCFinalAllocationSup	Final Supplier Capacity Credit Allocation (MP)	Reserve Capacity → Monthly	Monthly	MP SPEC	September 2017
RCM_CCInitialAllocation	Initial Capacity Credit Allocation (MP)	Reserve Capacity → Monthly	Monthly	MP SPEC	September 2017
RCM_CCInitialAllocationSup	Initial Supplier Capacity Credit Allocation (MP)	Reserve Capacity → Monthly	Monthly	MP SPEC	September 2017
RCM_CertResCapInfo	Certified Reserve Capacity Information	Reserve Capacity → Annual	Yearly	MP SPEC	2019-20 Capacity Year

Report Name	Report Title	Report Type	Report Group	Access Type	Available to
RCM_MonthlyCC	Monthly Capacity Credit (MP)	Reserve Capacity → Monthly	Monthly	MP SPEC	September 2017
RCM_Det_Generator	Detailed Report for Generators	Reserve Capacity → Monthly	Monthly	MP SPEC	September 2017
RCM_Det_DSMFacility	Detailed Report for DSM Facility	Reserve Capacity → Monthly	Monthly	MP SPEC	September 2017
EM_RPStndConv	Resource Plan Standing Data Conversion	Energy Market → Scheduling	Daily	MP SPEC	30 June 2019 Retired due to changes in RC_2014_06.
EM_ResPlan	Resource Plan Data Submissions (MP)	Energy Market → Scheduling	Daily	MP SPEC	30 June 2019 Retired due to changes in RC_2014_06.
PUB_MetSchAndResPlanInfo	Metered Schedules and Resource Plan Information (PUBLIC)	Energy Market → Dispatch	Daily	All MP	30 June 2019 Retired due to changes in RC_2014_06.

6.2 View Reports

The MPI allows users to view and download reports by the methods outlined in Table 10.

To view and download reports, select **Reports > View** (see Figure 16).

Table 10 Report access methods

Access Method	Description
By Report Name	Allows the user to view and download the report by name for a date range.
By Trade Date	Allows users to download multiple reports published for a single trade date, while viewing of reports within the browser is limited to one report at a time.
	The number of reports a user can download at a time is controlled and configurable by AEMO.

Figure 16 View and Download reports



6.2.1 By Report Name

By default, the system navigates to the By Report tab in the Reports display. In this tab, users are able to select a report from the dropdown list for viewing or downloading (see Figure 17).

Once the report name is selected, the system will automatically populate the available search criteria and control parameters which are specific to the report, in the left-hand search area of the page.

The control parameters are outlined in Table 11 and the search criteria are outlined in Table 12.

All report parameters are controlled and configurable by AEMO, including the number of days of data available to users for download at a time per report. These parameters may be modified from time to time by AEMO to improve usability and performance.

Once the search criteria have been chosen, the report can be viewed by clicking on the View button in the left-hand search area. Depending on the availability of data, the MPI will respond in one of the following ways:

- 1. Returns the report data matching the search criteria.
- 2. Report Not Published.
- 3. No data found.

An example of a report displayed using the View button is shown in Figure 19.

Table 11 Report parameters display

Field Name	Field Description
Max Days/Months/Years	Maximum number of days/months/years a report can be retrieved in a single request (dependant on report group).
Earlier Date	Earliest date for which the report data is available.

Table 12 By Report display search criteria fields

Field Name	Field Description
Start Date	Start date of a date range for the search, which defaults to the current trading date.
End Date	End date of a date range for the search, which defaults to the current trading date.

Figure 17 Selecting a report

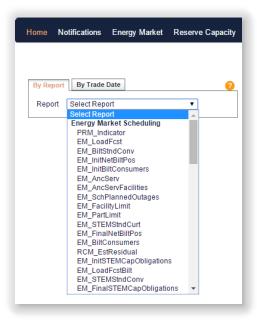
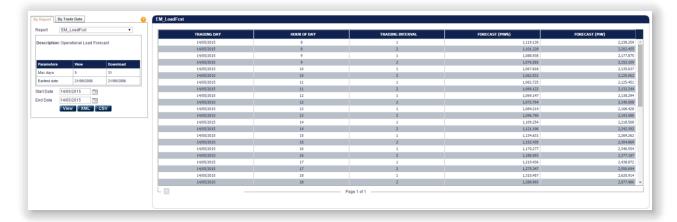


Figure 18 Options once a report is selected



Figure 19 Viewing a selected report



6.2.2 By Trade Date

The By Trade Date option allows users to search multiple reports at a time for a particular date. Once a date has been chosen, the left-hand search menu will populate itself with a list of all the available reports for the chosen date (see Figure 20).

Users can refresh the report list at any time, or select reports for another date, by modifying the date in the Date box and clicking on the Refresh button.

Users are able to view a list of published reports only.

The selection criteria are outlined in Table 13.

To view reports from the By Trade Date screen, users need to click on the report name hyperlink in the left-hand search area. The single report will then be viewable to the right of the search criteria (see Figure 21).

While it is not possible to view multiple reports simultaneously in the browser, it is possible to download multiple reports at once by enabling the check boxes of the required reports and clicking on the desired download format (either XML or CSV) (see Section 6.3).

Table 13 By Trade Date display search criteria fields

Field Name	Field Description
Date	Report Date
Report List	List of reports applicable to the chosen report date. The total number of reports that a user can select to download at a time is controlled and configurable by AEMO.

Figure 20 By Trade Date display

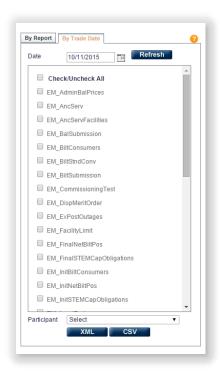
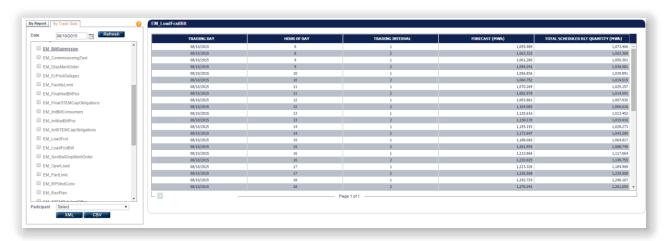


Figure 21 By Trade Date display results



6.3 Download Reports

The MPI supports XML and CSV download formats.

To download the report data to a file, choose which format to download, and click on the appropriate button. Users can choose to download the reports directly or view the report first and then initiate the download.

Multiple reports are available for download as a single ZIP file which contains each of the individual report files for the selected date. Only 30 reports can be downloaded at once.

The default file names for the data are shown in Table 14.

Table 14 Default file names for report download

Download Format	File Name Format
XML	 {Reportname}_{participant}_{ddmmyyyyhhmmss}.xml Reportname: name of the report being downloaded Participant: name of the Participant to which the report belongs ddmyyyyhhmmss: download time
CSV	 {Reportname}_{participant}_{ddmmyyyyhhmmss}.csv Reportname: name of the report being downloaded Participant: name of the Participant to which the report belongs ddmyyyyhhmmss: download time
ZIP	Reports_{ddmmyyyyhhmmss}.zip • ddmmyyyyhhmmss: user initiated download time

6.4 Report Help

Users are able to view a full list of available report names and descriptions by clicking on the orange question mark button at the top left of the Reports display (see Figure 22).

This provides the list of reports with the report name, title and category (see Figure 23).

Figure 22 Report Help button

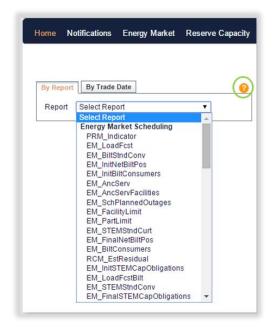


Figure 23 Report Help results



6.5 Report Attributes

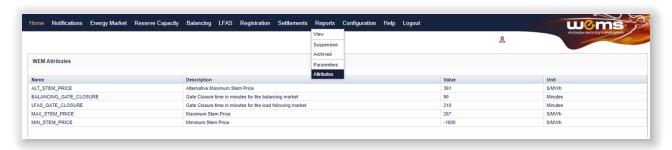
Users are able to view the set market parameters relating to:

- Alternative Maximum STEM Price;
- Gate closure time in minutes for the balancing market;
- Gate closure time in minutes for the load following market;
- Maximum reserve capacity price;
- Maximum STEM Price; and
- Minimum STEM Price.

To view the WEM Attributes parameters, select **Reports > Attributes** (see Figure 24).

This page is particularly helpful to users that wish to view the current effective market parameters in order to adjust for submissions.

Figure 24 Report Attributes display



7. Reserve Capacity

To access the RCM portal, select Reserve Capacity > Reserve Capacity Mechanism.

For assistance with NTDL Applications, Capacity Credit Allocation and IRCR please contact WA Market Operations at wa.operations@aemo.com.au. For all other queries relating to Reserve Capacity please contact Reserve Capacity (WA) at wa.capacity@aemo.com.au.

7.1 Reserve Capacity Mechanism dashboard

The Reserve Capacity Mechanism (**RCM**) dashboard ("Home" tab) displays a snapshot of Reserve Capacity (**RC**) information. This includes a summary of the number of Capacity Credits assigned for each price category and the Individual Reserve Capacity Requirement (IRCR) by Market Customer for the relevant Capacity Year selected (see Figure 25). The Facility list includes the price type for each Facility holding Capacity Credits, where the type can be T for the Transitional Reserve Capacity Price, F for the Fixed Reserve Capacity Price, or blank for the Reserve Capacity Price.

All tabs within the RCM portal are described in Table 16.

Historical Capacity Credits for all Facilities from all Market Participants participating in the RCM for the respective Capacity Year can be downloaded from the RCM dashboard. This report includes any changes to Capacity Credits throughout the Capacity Year. Navigate to the bottom of the RCM dashboard and select Download All to download the historical Capacity Credit report (see Figure 26).

The RCM portal initially displays the five most recent Capacity Years in the banner above the Reserve Capacity summary information. To view data from previous Capacity Years, click on the arrow in the banner, which will open a horizontal scrollbar (see Figure 27). Click on the arrow to close the horizontal scrollbar.

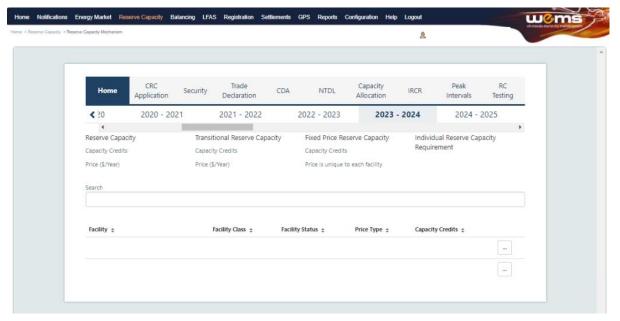


Figure 25 RCM dashboard

Table 15 RCM dashboard descriptions

Tab Name	Description
Fixed Price Reserve Capacity	The number of Capacity Credits assigned to Facilities that are subject to a Fixed Reserve Capacity Price. The relevant price is not displayed since it is unique to each Facility.
IRCR	The MW quantity determined by AEMO in respect of a Market Customer, in accordance with clause 4.28.7 and, if applicable, as revised in accordance with clause 4.28.11.
Reserve Capacity	The number of Capacity Credits assigned to Facilities that are subject to the Reserve Capacity Price, and the associated price in dollars per MW.
Transitional Reserve Capacity	The number of Capacity Credits assigned to Facilities that are subject to the Transitional Reserve Capacity Price, and the associated price in dollars per MW.

Table 16 Description of RCM portal tabs

Tab Name	Description
Capacity Allocation	The allocation of Capacity Credits traded outside of the WEM.
CDA	A Consumption Deviation Application is an application from a Market Customer to AEMO to replace Trading Intervals, which are considered unrepresentative of the consumption of a Load, for the purpose of determining the Relevant Demand of a DSP.
CRC Application	Applications for Certified Reserve Capacity.
IRCR	The Participant Information Reports (PIR) and Log files for the Individual Reserve Capacity Requirement for Trading Months from June 2019 onwards. IRCR information for earlier Trading Months is available in the Settlements Portal.
NTDL	Non-Temperature Dependent Load Applications and results.
Peak Intervals	Displays the 4 and 12 Peak SWIS Trading Intervals used in the IRCR.
RC Testing	View and download Reserve Capacity Test and Verification Test results for the summer and winter testing periods.
Security	Displays a summary of the Reserve Capacity Security and DSM Reserve Capacity Security held by AEMO.
Trade Declarations	Market Participants nominate how much capacity they intend to trade bilaterally and how much will not be made available to the market through the trade declaration process.

Figure 26 Historical Capacity Credit report

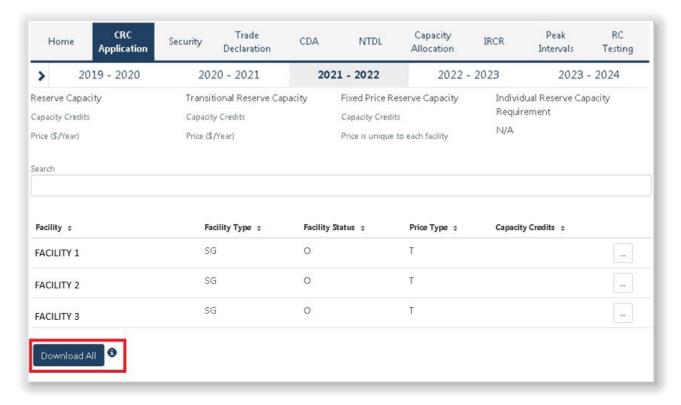
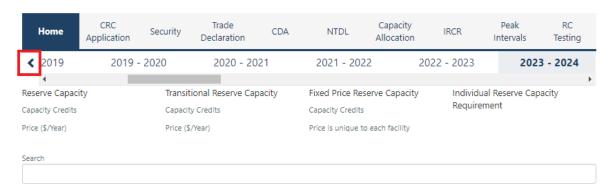


Figure 27 Viewing data for previous Capacity Years



7.2 Facility Management

To access the Facility Management dashboard, select **RCM portal > Home** for the relevant Capacity Year. Select the ellipsis ("...") to the right of the Facility details and select Facility Management (see Figure 28).

The Facility Management dashboard displays the Facility Class, Equivalent Planned Outage Hours, Capacity Credit information, Price Type and duration, and the RC status effective dates (Commercial Operation, Committed or Proposed).

For a Scheduled Facility or Semi-Scheduled Facility, the dashboard displays the Components table which lists the Components associated with the Facility and the latest Capacity Credit information (see Figure 29). To view a detailed breakdown of Capacity Credit changes for a Component select "Details", which will display the Component Capacity Credit timeline and Required Level information (see Figure 30).

For a Non-Scheduled Facility or Demand Side Programme, the dashboard displays the Capacity Credit changes for the Facility in the Capacity Credit timeline (Figure 31).

Figure 28 Facility Management navigation

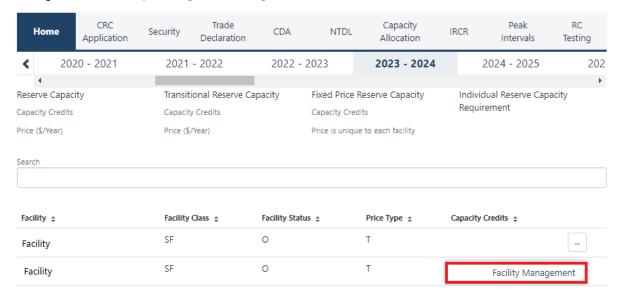


Figure 29 Facility Management dashboard for a Scheduled Facility or Semi-Scheduled Facility

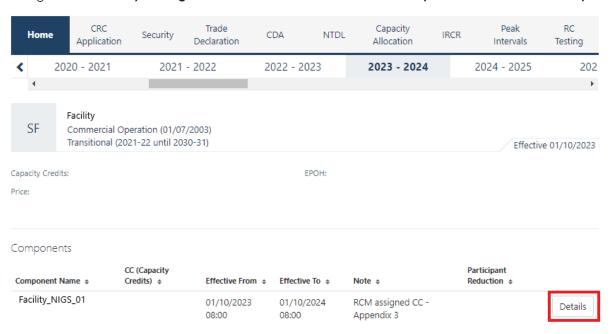


Figure 30 Component Capacity Credit timeline

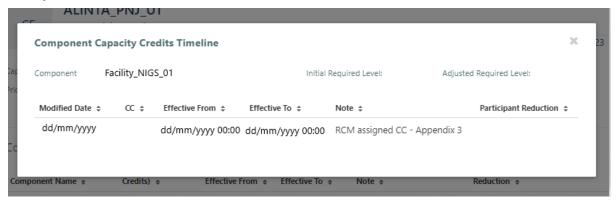
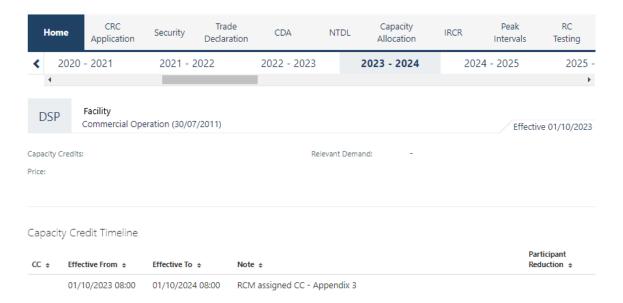


Figure 31 Facility Management dashboard for a Non Scheduled Facility or Demand Side Programme



7.3 Certified Reserve Capacity applications

This section must be read in conjunction with the <u>WEM Procedure: Certification of Reserve Capacity</u> and clauses 4.9 and 4.10 of the WEM Rules.

To access the CRC application homepage, select **RCM Portal** > **CRC Application** for the relevant Capacity Year. The CRC Applications tab displays the Market Participant's Facilities, the Facility Class, Reserve Capacity Status, Application Status, and a timestamp showing when the application was submitted (see Figure 32). The Application Status is described in Table 17.

The Facility Class reflects the Indicative Facility Class or RCM Facility Class, as relevant to the Facility.

Note:

• Early, Conditional and New Small Generator CRC applications cannot be submitted through the RCM Portal. Market Participants wishing to make these types of submission should contact Reserve Capacity (WA) at wa.capacity@aemo.com.au in the first instance.

Figure 32 CRC Application tab homepage

I	Home	CRC Application	Security	Trade Declaration	CDA	NTDL	Capacity Allocation	IRCR	Peak Intervals	RC Testing
>	2	019 - 2020	20	20 - 2021	202:	1 - 2022	2022 -	- 2023	2023	- 2024

Applications for Certification

Certification Submission Window dd/mm/yyyy hh:mm - dd/mm/yyyy hh:mm Closes in 3 months

Application ¢	Facility Class 💠	Facility Status 💠	Application Status	Submitted On ¢
Facility 1 name	SF	Р	PENDING	-
Facility 2 name	SSF	0	OPEN	-

Table 17 Application status description

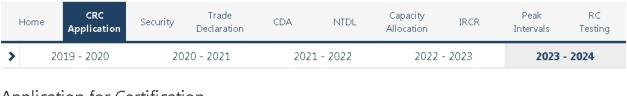
Status	Description
OPEN	The certification window for the relevant Capacity Year is open and the user can submit a CRC application to AEMO.
PENDING	The application has been edited and saved but is yet to be submitted to AEMO.
SUBMITTED	The application has been submitted to AEMO for review.
WITHDRAWN	The submitted application was withdrawn by the user prior to the closure of the certification window.
LAPSED	The application was not submitted prior to the closure of the certification window.
ACCEPTED	AEMO has accepted the CRC application.
REJECTED	AEMO has rejected the CRC application.

7.3.1 Facility CRC application

When a Market Participant user clicks on the name of a Facility, a new page opens which displays static information about the Facility (see Figure 33).

When the page is in edit mode (after clicking the 'Edit' button), Market Participants can enter information into the Facility's CRC application (see Figure 34). This can include document uploads or data entry fields. Mandatory fields that are required to be completed to submit the CRC application are denoted by a red asterisk. The 'Cancel' button discards all changes made, while the 'Save' button updates the database with the information entered. Market Participants may save their CRC application and return to it later to continue working.

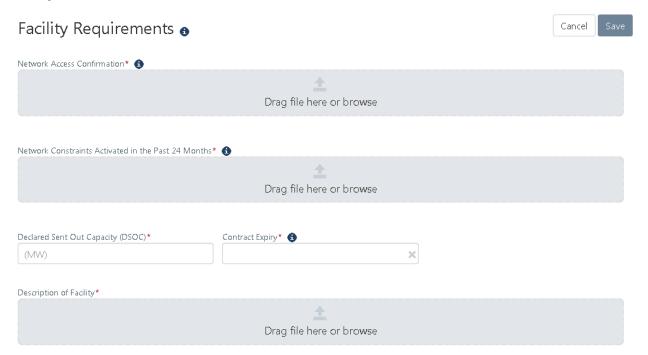
Figure 33 Static information in the Facility CRC application



Application for Certification



Figure 34 Example Facility CRC application in edit mode



7.3.2 Components and upgrades

Scheduled Facilities and Semi-Scheduled Facilities will have components (including upgrades) listed in a table in the Facility CRC application page (see Figure 35). Clicking on the Component name in the table will open a new page showing static information for the component.

The Component CRC Application page includes a 'Back' button that returns the user to the Facility's CRC application page (see Figure 36). When the page is in edit mode, the checkbox to include the component in the CRC application can be selected, indicating that the Market Participant would like to apply for CRC for the component. Only components where this checkbox has been selected will be assessed by AEMO. Applications must include at least one component.

Note: A table of components is displayed for Non-Scheduled Facilities but clicking on a component name does not navigate to a component page. Non-Scheduled Facilities are assessed as a whole Facility, with the components automatically included in the application.

Figure 35 Component table in CRC application

Components 6

Components	Technology Type	Assigned CRC (MW)	Include 🚯	Updated On
Component 1	Electric Storage Resource	-	INCLUDED	dd/mm/yyyy hh:mm
Component upgrade 1	Electric Storage Resource	-	INCLUDED	dd/mm/yyyy hh:mm
Component 2	Intermittent Generating System	-	INCLUDED	dd/mm/yyyy hh:mm

Figure 36 Static information in the component page

H	Home	CRC Application	Security	Trade Declaration	CDA	NTDL	Capacity Allocation	IRCR	Peak Intervals	RC Testing
>	2	019 - 2020	20.	20 - 2021	202:	1 - 2022	2022	- 2023	2023	- 2024

Component CRC Application 6



Facility Class:	Scheduled Facility
Component Name:	

Assigned CRC:

☐ Include component in CRC application

7.3.3 Submitting a CRC application

When the Market Participant user has finished editing the CRC application and clicked 'Save', the 'Submit' button will become available on the Facility page (see Figure 37). On clicking 'Submit', the RCM portal verifies that all mandatory fields have been completed on both the Facility and component pages.

If information is missing for a mandatory field, an error message will display, detailing the missing information (see Figure 37).

Note: There is no 'Submit' button on the component page. The 'Submit' button on the Facility page submits the application for the Facility and any components where the checkbox to include the component has been selected.

Figure 37 Submit button and error message example on the Facility CRC application page

ŀ	Home	CRC Application	Security	Trade Declaration	CDA	NTDL	Capacity Allocation	IRCR	Peak Intervals	RC Testing
>	2	019 - 2020	20.	20 - 2021	202:	1 - 2022	2022 -	- 2023	2023	- 2024

Application for Certification



There was an error submitting your application

- 'BalancingFacility' must not be empty.
- 'ConditionalCrcConfirmation' must not be empty.
- 'DescriptionOfFacilityDocuments' must not be empty.
- 'Dsoc' must not be empty.
- · 'DsocExpiry' must not be empty.
- 'NcsContract' must not be empty.
- 'NetworkAccessConfirmationDocuments' must not be empty.
- 'NetworkConstraintsDocuments' must not be empty.
- 'OperatingRestrictionsDocuments' must not be empty.

7.4 Upgrades

Once an Upgrade has been assigned Capacity Credits, a user can view the Facility Upgrade details in the Facility Management dashboard for the relevant Capacity Year. Select the ellipsis ("...") to the right of the Facility details and select Facility Management (see Figure 38). A Facility with an Upgrade will be marked with a "U" symbol.

The Associated Upgrades table displays the Upgrade Name, Reserve Capacity Status, Capacity Credits information, and Obligation Date (see Figure 39).

To update the Reserve Capacity Status of an Upgrade, please contact Reserve Capacity (WA) at wa.capacity@aemo.com.au.

Figure 38 Facility Upgrade management

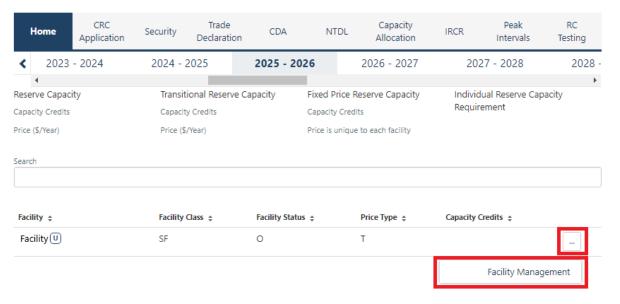
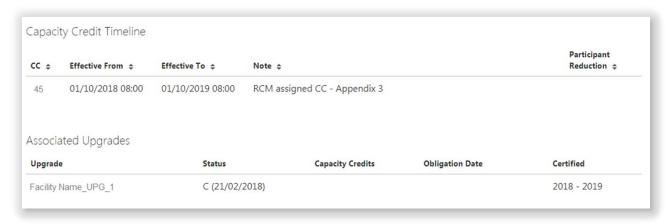


Figure 39 Facility Upgrade information



7.5 Reserve Capacity Security

This section should be read in conjunction with the Market Procedure: Reserve Capacity Security.

To view the Reserve Capacity Security or DSM Reserve Capacity Security, select RCM portal > Security.

The Security tab displays a snapshot of Reserve Capacity Security or DSM Reserve Capacity Security details for the relevant Capacity Year (see Figure 40). Facilities with upgrades will be marked with a 'U' symbol.

The user can click on the Facility name to view more details regarding the Security Transactions (see Figure 41).

For a DSP, the Security Requirement section assists in implementing the requirements from clauses 4.13A.3 and 4.13A.4 of the WEM Rules (see Figure 42). Clicking on the 'Details' button in the Security Requirement section (shown in Figure 42) will open a window that displays all security transactions made for the DSP by the Market Participant (Figure 43).

Relevant fields of the Security Transactions are described in Table 18.

Figure 40 Security display

Home	e CRC Application	Security	Trade Declaration	CDA	NTDL	Capacity Allocation	IRCR	Peak Intervals	RC Testing
>	2021 - 2022	202	22 - 2023	202	3 - 2024	2024	- 2025	2025	- 2026

Security



Figure 41 Security transactions information

Home	CRC Application	Security	Trade Declaration	CDA	NTDL	Capacity Allocation	IRCR	Peak Intervals	RC Testing
> 2	021 - 2022	202	22 - 2023	202	23 - 2024	2024	- 2025	2025	- 2026
Security Transactions									
Participant:	Partio	cipant name			Capacity Year:	2025	- 2026		
Facility Name:	Facil	ity name			Security Category:	Upgr	ade		
Facility Class:	Non	-Scheduled Fa	cility						
Facility Status:	Com	nmercial Opera	tion (dd/mm/yyy	y)					
Component: (Upgi	rade name							
Security Lodge	d: \$18,	750.00			Traded CRC:	1.5M	W		
Security Return	ned: \$0.0	0			Security Calculated	l: \$17,2	12.50		
Security Retain	ed: \$0.0	0							
Effective From	n Action	Amoun	t Balaı	nce	Security Details	5	Supporting Docu	ıments	

dd/mm/yyyy

LODGE

\$18,750.00

\$18,750.00

Figure 42 Security page for a DSP

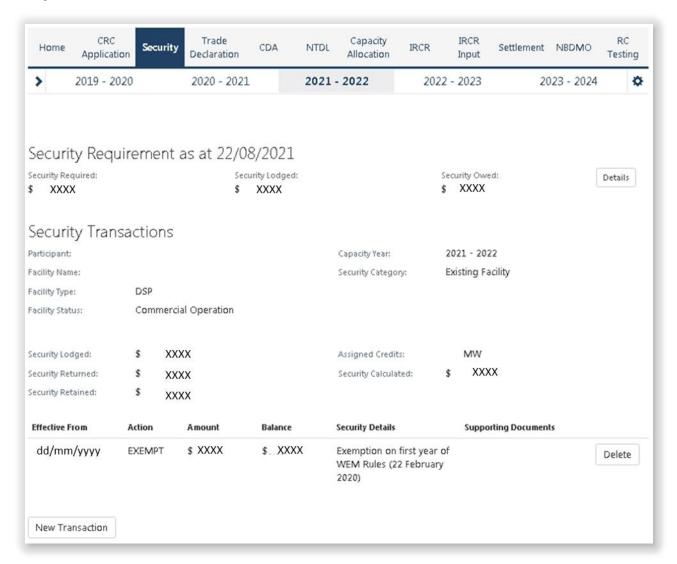


Figure 43 'Details' window showing all security transactions for a DSP

Effective From ¢	Action ¢	Amount ¢	Balance \$	Security Details ÷	Capacity Year ‡
19/08/2019	EXEMPT	\$	\$	Exemption on first year of WEM Rules (22 February 2020)	2021
27/07/2020	LODGE	\$	\$		2022
28/07/2020	LODGE	\$	\$		2023
28/07/2020	RETURN	\$	\$		2023
28/07/2020	EXEMPT	\$	\$		2023
28/07/2020	LODGE	\$	\$		2023

Table 18 Security field description

Field Name	Field Description
Status	The current RC Status of the Facility/Upgrade/DSP (Proposed (P), Committed (C), Commercial Operation (CO)) and the effective date.
Security Calculated	 For a generator, the level of RC Security the Market Participant is required to provide to AEMO for the relevant Facility/Upgrade. For a DSP, the amount of RC Security calculated for the relevant Capacity Year.
Security Category	RC Security is required for Upgrades, New Facilities, and DSPs.
Component	List of all upgrades that have been included in the Security Calculated amount.
Security Lodged	The cumulative amount of RC Security held by AEMO, less any amount retained.
Security Owed	Calculated as RC Security Required less RC Security Lodged and represents the amount of DSM Reserve Capacity Security that must be paid by the Market Participant.
Security Required	The maximum amount of DSM Reserve Capacity Security calculated for each active Capacity Year. It may not equal the Security Calculated for the current Capacity Year.
Security Returned	RC Security which has been returned to the Market Participant.
Security Retained	RC Security which has been retained by AEMO.
Action	The last RC Security transaction with AEMO (LODGE, RETURN, RETAIN).
Amount	The amount of RC Security relating to the relevant security transaction (Action).
Balance	The total RC Security balance held with AEMO.
Security Details	The type of RC Security (Bank Undertaking, Cash Deposit) or any other information AEMO considers relevant.
Supporting Documentation	The supporting documents for the relevant RC Security uploaded by AEMO.

7.6 Trade Declarations

This section should be read in conjunction with the WEM Procedure: Declaration of Bilateral Trades.

The Trade Declaration tab in the RCM Portal allows Market Participants to submit trade declarations for Facilities, components, and upgrades that have been assigned CRC in the relevant Capacity Year. The Trade Declaration tab displays the opening and closing dates, as well as summary information about the Market Participant's trade declarations for its Facilities (see Figure 44).

For Scheduled Facilities and Semi-Scheduled Facilities, each record will include at least one component, and may include upgrades (if applicable), based on the information from the Facility's CRC application. If a component or upgrade was either excluded from the CRC application or rejected by AEMO, it will not appear in the Facility's trade declaration.

Trade declarations for Non-Scheduled Facilities and Demand Side Programmes are completed at the Facility level and components will not be displayed. Non-Scheduled Facility upgrades appear separately to the parent Facility.

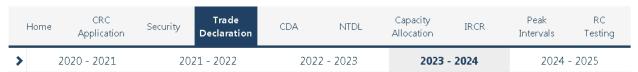
To update a trade declaration, click on the 'Edit' button to allow the 'Traded' and 'Unavailable' fields to be edited. For a Scheduled Facility or Semi-Scheduled Facility, these fields are editable at the component (or upgrade) level (see Figure 45), while for a Non-Scheduled Facility or Demand Side Programme, the fields are editable at the Facility level (see Figure 46). Click 'Save' when editing is complete. The Fixed Price Candidate

checkbox allows a Market Participant with an eligible Facility to choose the Fixed Reserve Capacity Price. If the Facility or upgrade is in Proposed Status, the Minimum Capacity Credits Quantity must be provided (see Figure 47).

Trade declarations must be submitted by clicking on the 'Submit' button after saving (see Figure 48). To successfully submit a trade declaration, the 'Remaining' calculated field must display zero. A confirmation message will appear, and the Trade Declaration Status will update to Submitted (see Table 19 for a description of each possible status). A submitted trade declaration may be withdrawn while the window is open by clicking 'Withdraw' (see Figure 49).

Once AEMO has run the trade methodology in accordance with Appendix 3 of the WEM Rules, the Traded CRC, which confirms the amount of CRC that can be traded for each Facility, will be available for each Facility (see Figure 50).

Figure 44 Trade Declaration display



Trade Declarations

Trade Declaration Dates: dd/mm/yyyy to dd/mm/yyyy Closes in X days



Figure 45 Edit a trade declaration for a Scheduled Facility or Semi-Scheduled Facility

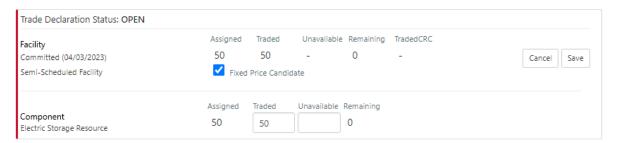


Figure 46 Edit a trade declaration for a Non-Scheduled Facility or Demand Side Programme

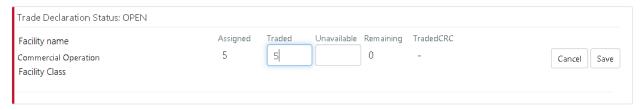


Figure 47 Edit a trade declaration for a Proposed Facility

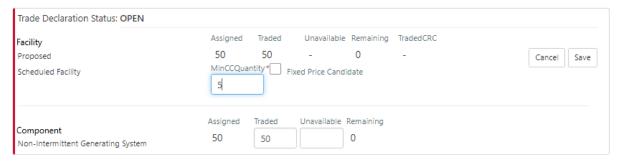


Figure 48 Submit a trade declaration

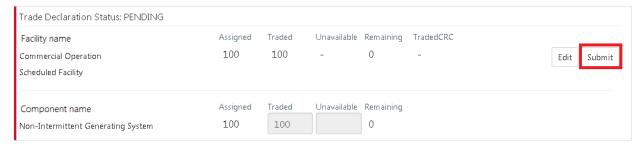


Figure 49 Withdraw a trade declaration

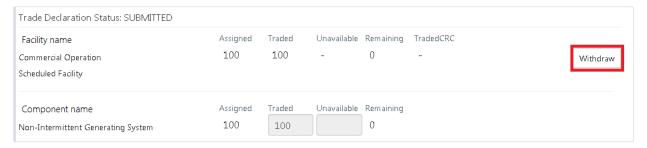


Figure 50 Traded CRC



Table 19 Trade declaration status description

Status	Description
OPEN	The user can submit a Bilateral Trade Declaration for Facilities with CRC if the relevant trade declaration window is open.
PENDING	The trade has been edited and saved but is yet to be submitted.
SUBMITTED	The trade has been submitted to AEMO for review.

Status	Description
WITHDRAWN	The trade was submitted then withdrawn by the user prior to the closure of the trade declaration window.
LAPSED	The trade was not submitted prior to the closure of the trade declaration window.
ACCEPTED	AEMO has accepted the trade.
REJECTED	AEMO has rejected the trade.

7.7 Relevant Demand

To access the Relevant Demand dashboard, select **RCM portal > Home** for the relevant Capacity Year. Select the ellipsis ("...") on the right of the DSP details and select Relevant Demand (see Figure 51).

The Relevant Demand dashboard displays the current Relevant Demand and effective date, NMI count, source of the Relevant Demand calculation, previous Relevant Demand calculations and their effective dates, and downloadable supporting documentation (see Figure 52).

Figure 51 Relevant Demand navigation

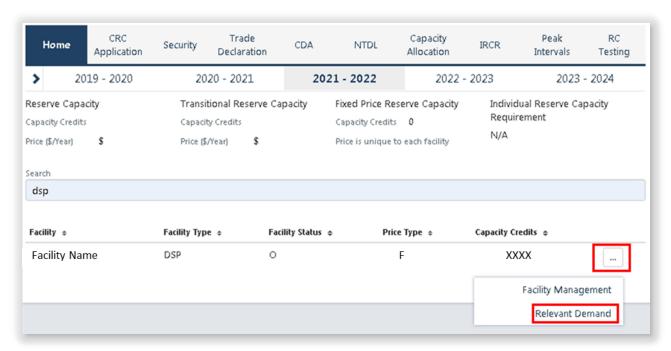
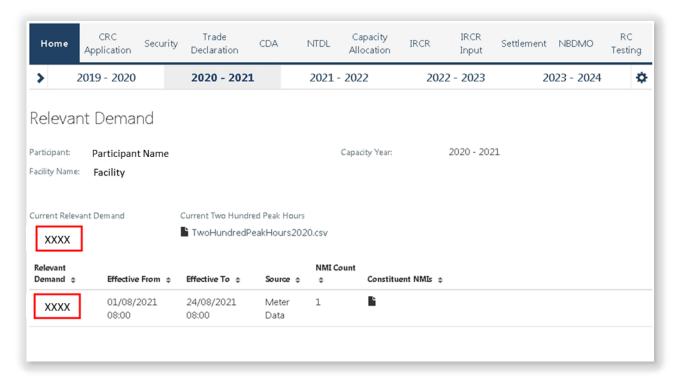


Figure 52 Relevant Demand display



7.8 Consumption Deviation Applications for Associated Loads of a Demand Side Programme

Consumption Deviation Applications (**CDA**) for Associated Loads of a Demand Side Programme are submitted through the RCM portal.

The steps to submit a CDA are:

- 1. Select RCM portal > CDA, ensure the current Capacity Year is selected, and select New Application (see Figure 53).
- 2. Select the NMI that the CDA relates to from the drop-down menu (see Figure 54).
- 3. Download the maintenance interval template CSV file by clicking Download Template and populate for all intervals to be considered in the CDA (see Figure 54).
- 4. Upload the maintenance interval CSV file. Ensure the formatting of the interval column is in dd/mm/yyyy mm:hh time format or the upload will fail.
- 5. Upload evidence file(s) (see Figure 54) in accordance with the <u>Market Procedure: Consumption Deviation</u>
 <u>Applications.</u>
- 6. By clicking the Save button, the CDA can be stored at any time to work on at a later date. After all relevant documentation has been uploaded, click Submit.

Once the application has been submitted, it can be withdrawn by clicking the Withdraw button. A withdrawn application can be edited and re-submitted prior to the close of the application window.

Submitted applications will be reviewed by AEMO and additional information will be requested where necessary.

The Application Status of a submitted CDA can be viewed on the CDA dashboard under the relevant Capacity Year (see Figure 55).

If AEMO requests more information for a CDA submission, the Application Status will change to Information Requested. By clicking the application, additional information can be uploaded and submitted.

For assistance with CDAs for Associated Loads of a Demand Side Programme, please contact Reserve Capacity (WA) at wa.capacity@aemo.com.au.

Figure 53 Create a new CDA for Associated Loads of a DSP

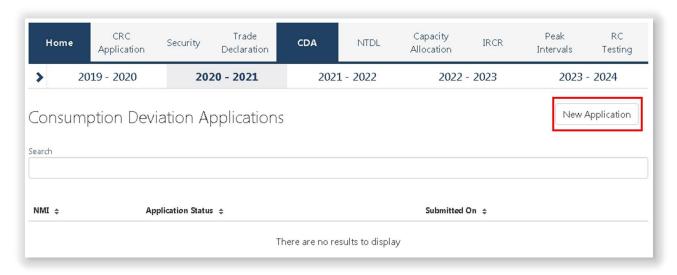


Figure 54 Edit and save a CDA

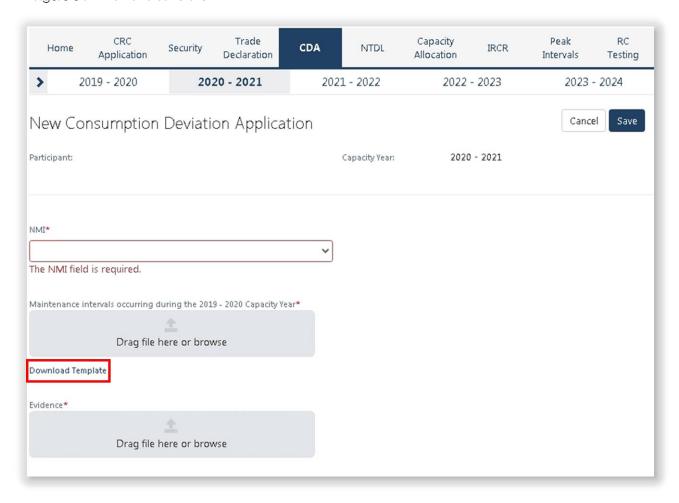
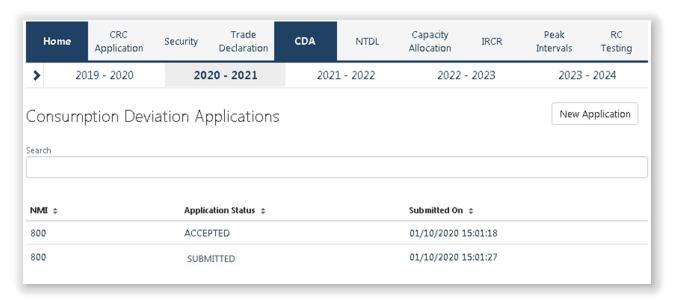


Figure 55 CDA status display



7.9 NTDL Application and Consumption Deviation Application

This section should be read in conjunction with the <u>Market Procedure: Individual Reserve Capacity</u> <u>Requirements</u> and the <u>Market Procedure: Consumption Deviation Applications</u>.

Loads nominated as Non-Temperature Dependent Loads (NTDL), and Consumption Deviation Applications (CDA) for Loads nominated as Non-Temperature Dependent Loads, are submitted through the RCM portal.

The steps to submit an NTDL application and CDA are:

- 1. Select RCM portal > NTDL, ensure the correct Capacity Year is selected, and select New Application (see Figure 56).
- 2. Enter the 10 digit NMI of the interval meter associated with the Market Participant.
- 3. Select the Trading Month that the NTDL application relates to from the drop-down menu.
- 4. To provide a list of all Trading Intervals during which the level of consumption of the Load was affected:
- 4.1. Download the maintenance intervals template CSV file by clicking Download Template and populate for all Trading Intervals to be considered in the CDA¹.
- 4.2. Upload the maintenance intervals CSV file to the "Intervals consuming below capacity" field. Ensure the formatting of the Trading Interval column is correct or the upload will fail.
- 5. To provide a written statement² from the operator of the Load or to provide any other information the Market Participant wants AEMO to consider in its CDA assessment:
- 5.1. Upload the written statement and any other file(s) to the "Evidence" field.
- 6. By clicking the Save button, the CDA can be stored and edited up until the closure of the NTDL application window. Once an application has been saved, the Application Status will change to Pending (see Figure 57). Continue to edit the application by clicking Edit.
- 7. In order to finalise and submit an application to AEMO, the user must click Submit. No further changes can be made to the application. Once an application has been submitted, the Application Status will change to Submitted (see Figure 58).

¹ A Trading Month includes all Trading Intervals from 08:00 on the first day of the calendar month up to and including 07:30 on the first day of the following calendar month e.g. Trading Month November 2019 includes all Trading Intervals from 01/11/2019 08:00 to 01/12/2019 07:30 inclusive.

² If a list of Trading Intervals is provided, then a written statement must also be provided.

Please note:

• All applications with an Application Status of Pending will automatically be lapsed by the system on closure of the NTDL application window and will not be assessed by AEMO.

Once the application has been submitted, it can be withdrawn prior to being assessed by clicking the Withdraw button (see Figure 58).

Results of NTDL assessments will be made available in the MPI once the processing has been completed by AEMO. An automated email will be sent to the Main Contact and the user that submitted the NTDL application and CDA.

If AEMO requests more information for a CDA, the Application Status will change to Information Requested. By clicking the application, the requested additional information can be provided and submitted.

For assistance with CDAs for Non-Temperature Dependent Loads, please contact WA Market Operations at wa.operations@aemo.com.au.

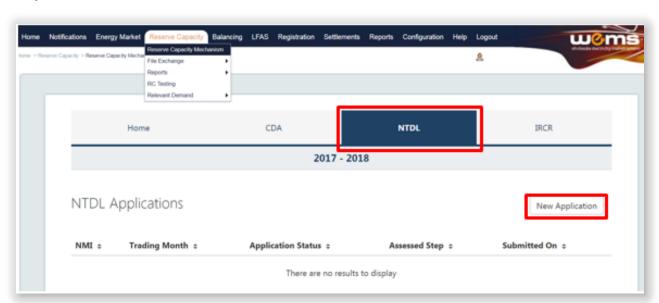


Figure 56 Create a new NTDL Application and CDA

Figure 57 NTDL Application and CDA pending

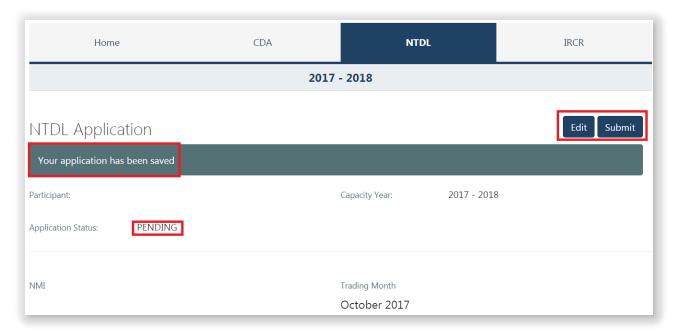
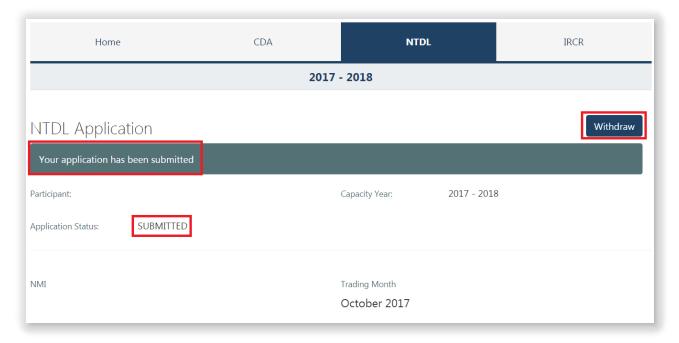


Figure 58 NTDL Application and CDA submitted



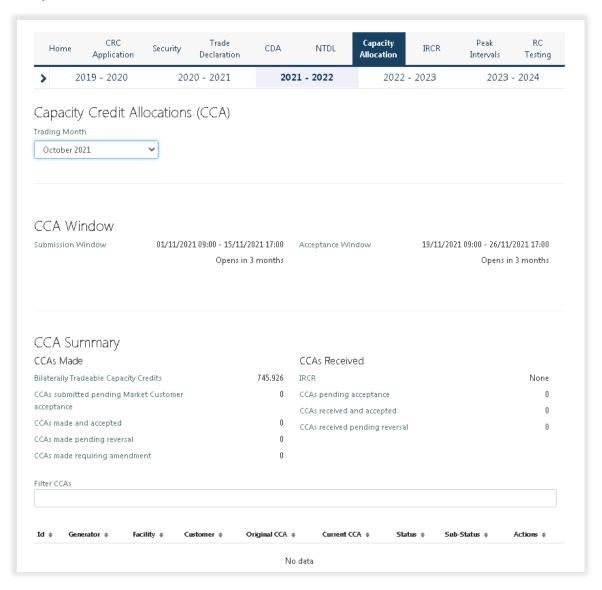
7.10 Capacity Credit Allocation

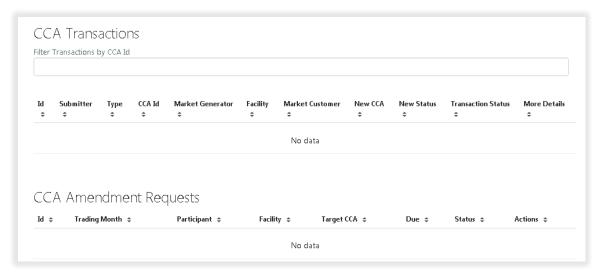
This section should be read in conjunction with the Market Procedure: Capacity Credit Allocations.

Capacity Credit Allocations are managed in the RCM portal.

The Capacity Allocation tab displays a snapshot of Capacity Credit Allocation details (see Figure 59). Any emails relating to Capacity Credit Allocations are sent to the Main Contact User and any user that has been associated with the Capacity Credit Allocation.

Figure 59 Capacity Credit Allocation display





7.10.1 Market Participant Capacity Credit Allocation

The steps for a Market Participant to submit a Capacity Credit Allocation are:

- 1. Navigate to the Capacity Allocation tab, ensure the correct Trade Month is selected (see Figure 60).
- 2. Click the New CCA Submissions button (see Figure 60).
- 3. This button will open a CCA Submissions window as a pop-up (see Figure 61). The CCA Submissions window lists all Facilities in alphabetical order registered to the Market Participant for all or part of the Trading Month. Existing CCAs will not be displayed as this is only to generate new CCAs.
- 4. Select the Market Participant the Capacity Credit Allocation relates to from the drop-down menu (see Figure 61). An amount must be specified for every Facility-Market Customer combination. Please note when making a CCA Submission:
 - A Market Participant can duplicate a Facility entry on the CCA Submission window to allow them to allocate from one Facility to a different Market Customer using the "+" icon.
 - Every duplicate of a Facility-Market Customer allocation can be removed using the "x" icon.
 - Each Facility-Market Customer allocation is draggable to allow prioritisation
- 5. Enter the Allocation amount/s.
- 6. Click the Submit button. The CCA Submissions window has a single "Submit" button which submits all capacity allocations in order (where the top submission is submitted first). Please note, the "Submit" button is disabled when either the Market Customer or Capacity Credits Amount field is empty but the other respective value in the Facility-Market Customer combination is not empty.
- 6.1. In the instance of a successful Capacity Credit Allocation, a message will be shown in green (see Figure 62).
- 6.2. In the instance a Market Participant that made the Capacity Credit Allocation has over allocated their Capacity Credits, the amount will be shown in red (see Figure 63).
- 7. An email notification will be sent to both the Market Participant that made the Capacity Credit Allocation and the respective Market Customer informing them that a Capacity Credit Allocation has been approved by AEMO and is awaiting acceptance from the Market Customer.
- 8. Once the application has been Submitted, the Allocated and Unallocated Capacity will be reflected under CCA Summary and the Capacity Credit Allocations will be displayed below the summary table (see Figure 64).
- 9. The history of Capacity Credit Allocations can be viewed in the CCA Transactions table, along with the Status of each transaction. The CCA Transaction table includes an option to filter transactions by CCA Id (see Figure 65).

Figure 60 Market Participant Capacity Credit Allocation Submission button

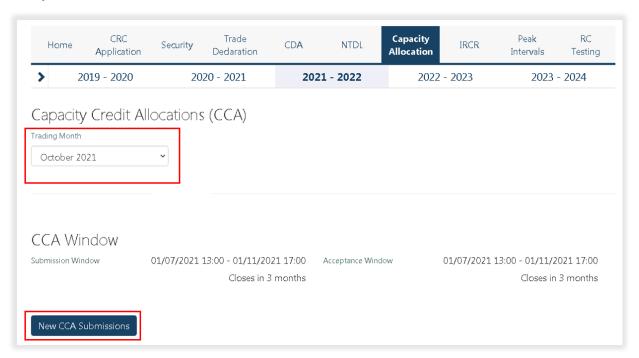


Figure 61 Market Participant Capacity Credit Allocation Submission pop out window



Figure 62 New Capacity Credit Allocation

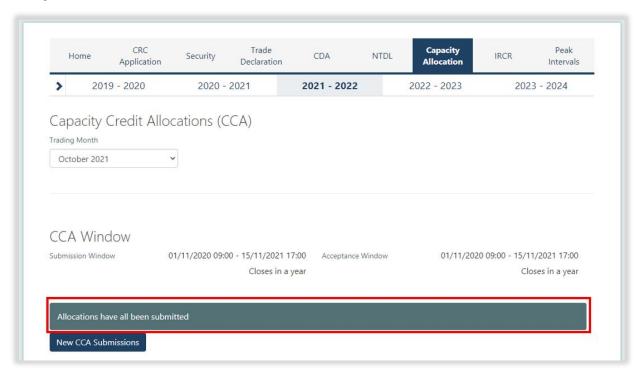


Figure 63 Over Allocation of Capacity Credits

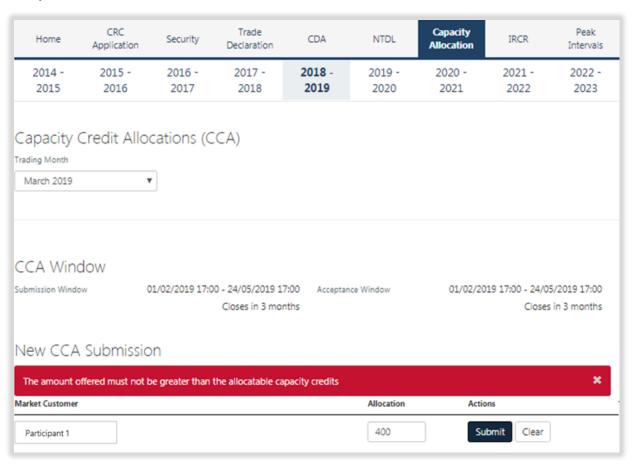


Figure 64 Capacity Credit allocation submitted

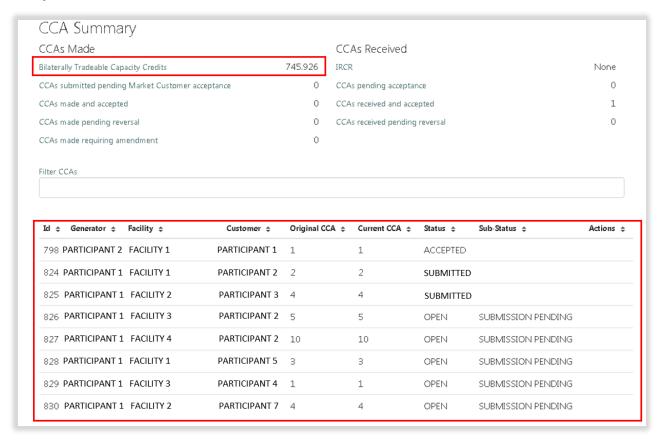
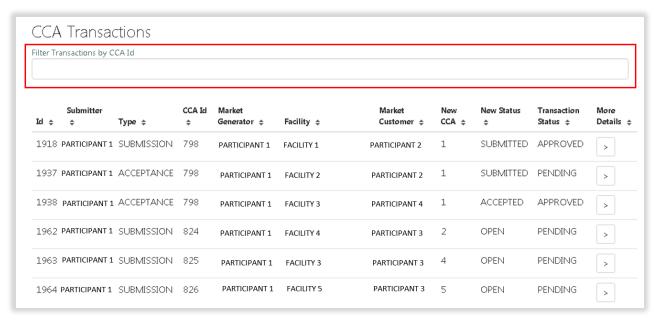


Figure 65 Capacity Credit Allocation transactions



7.10.2 Market Participant Withdraws Capacity Credit Allocation

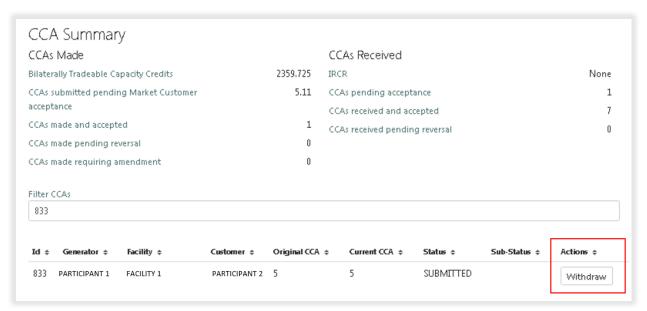
The steps for a Market Participant to withdraw a Capacity Credit Allocation are:

- 1. Navigate to the Capacity Allocation tab, ensure the correct Trade Month is selected, and scroll down to the CCA Summary.
- 2. Find the Capacity Credit Allocation that you would like to withdraw and click the Withdraw button (see Figure 66)
- 3. Once the Capacity Credit Allocation withdrawal is successful, the CCA Summary will show the Capacity Credit Allocation with a status of Withdrawn (see Figure 67)
- 4. An email notification will be sent to both the Market Participant specified as the provider of Capacity Credits and the Market Customer specified as the receiver of the Capacity Credits informing them that a Capacity Credit Allocation has been withdrawn.

Note:

• A Market Participant will not be able to make a CCA that will result in a negative Trading Margin for that Market Participant.

Figure 66 Withdraw Capacity Credit Allocation



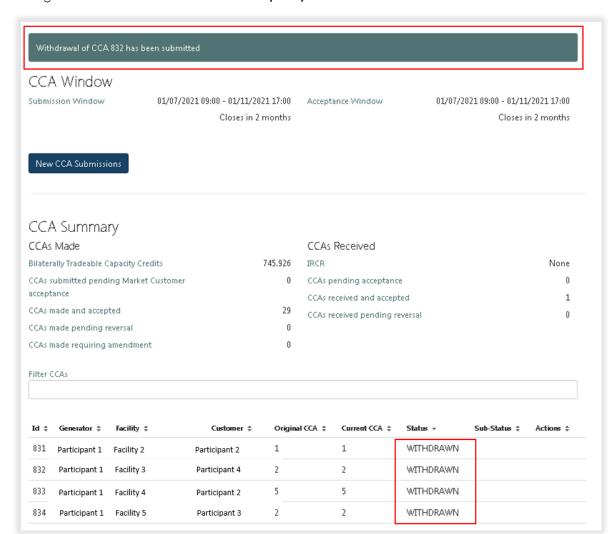


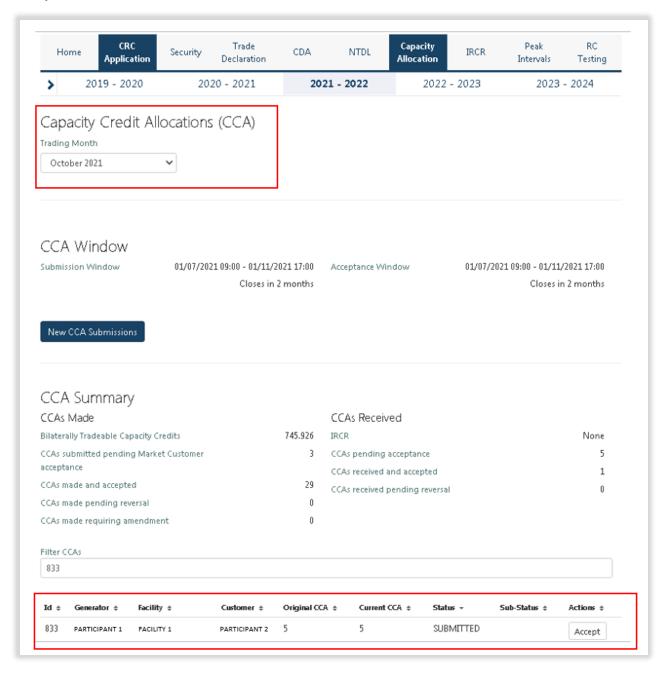
Figure 67 Successful withdrawal of Capacity Credit Allocation

7.10.3 Market Customer Accepts Capacity Credit Allocations

The steps for a Market Customer to accept Capacity Credit Allocations are:

- 1. Navigate to the Capacity Allocation tab and ensure the correct Trade Month is selected (see Figure 68).
- 2. View Capacity Credit Allocations submitted from a Market Participant in the CCA Summary, to accept the Capacity Credit Allocation, click the Accept button (see Figure 69).
- 3. Once the allocation has been accepted the CCA Summary will be updated to show that no Capacity Credits are pending acceptance and the amount accepted will sit in "CCAs received and accepted" (see Figure 70)
- 4. An email notification will be sent to both the Market Participant that made the Capacity Credit Allocation and the respective Market Customer informing them that a Capacity Credit Allocation has been accepted.
- 5. The history of Capacity Credit Allocations can be viewed in the CCA Transactions table, along with the Status of each transaction (see Figure 71).

Figure 68 Market Customer Capacity Credit Allocation view



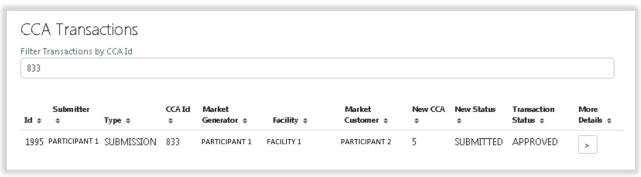


Figure 69 Capacity Credit Allocation ready to be accepted

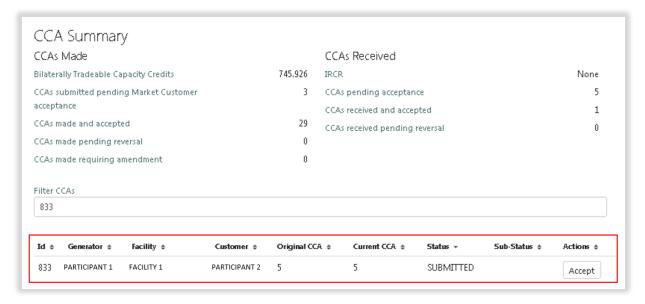


Figure 70 Capacity Credit Allocation accepted

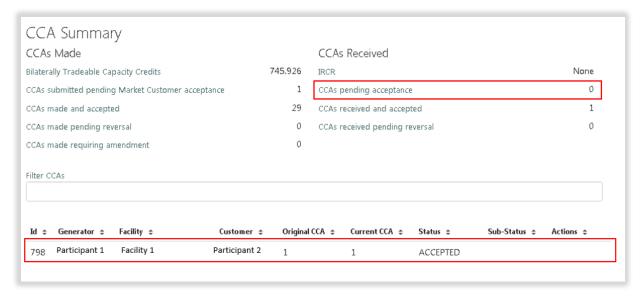
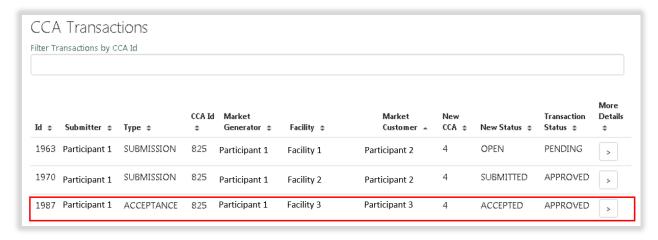


Figure 71 View of Capacity Credit Allocation transaction list



7.10.4 Market Participant requests Capacity Credit Allocation reversal

The steps for a Market Participant to reverse Capacity Credit Allocations are:

- 1. Navigate to the Capacity Allocation tab, ensure the correct Trade Month is selected, and scroll down to the CCA Summary.
- 2. Find the Capacity Credit Allocation that you would like to reverse and click the Reverse button (see Figure 72)
- 3. Once the Capacity Credit Allocation reversal is successful, the CCA Summary will show the Capacity Credit Allocation with a status of Reversal Requested (see Figure 73)
- 4. An email notification will be sent to both the Market Participant specified as the provider of the Capacity Credits and the respective Market Customer informing them that a Capacity Credit Allocation reversal has been submitted.
- 5. To cancel a reversal before the Market Customer has accepted click Cancel Reversal (see Figure 73).

Figure 72 Capacity Credit Allocation Submitted

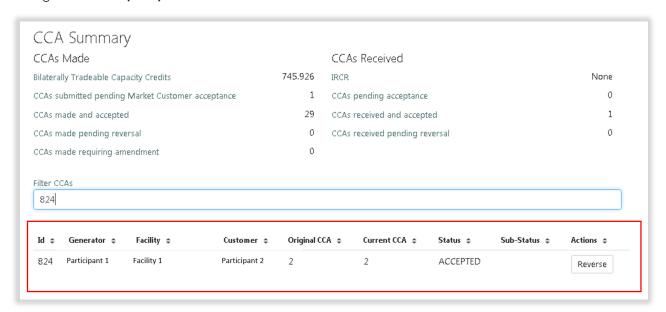
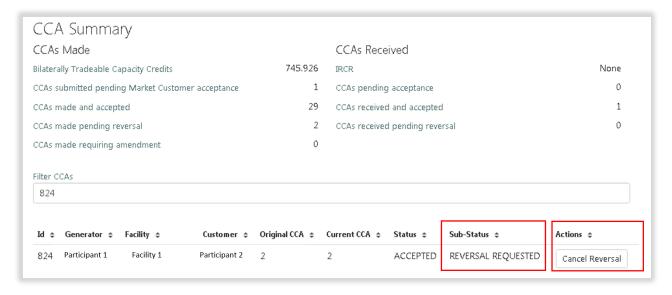


Figure 73 Capacity Credit Allocation reversal requested



7.10.5 Market Customer accepts Capacity Credit Allocation reversal

The steps for a Market Customer to accept a Capacity Credit Allocation reversal are:

- 1. Navigate to the Capacity Allocation tab, ensure the correct Trade Month is selected, and scroll down to the CCA Summary.
- 2. Find the Capacity Credit Allocation reversal that you would like to accept and click the Accept Reversal button (see Figure 74)
- 3. Once the Capacity Credit Allocation reversal is accepted, the CCA Summary will show the Capacity Credit Allocation with a status of Reversed (see Figure 75)
- 4. An email notification will be sent to both the Market Participant specified as the provider of the Capacity Credits and the respective Market Customer informing them that a Capacity Credit Allocation reversal has been accepted.

Note:

• A Market Customer will not be able to accept a CCA reversal that will result in a negative trading margin for that Market Customer.

Figure 74 Accepting Capacity Credit reversal

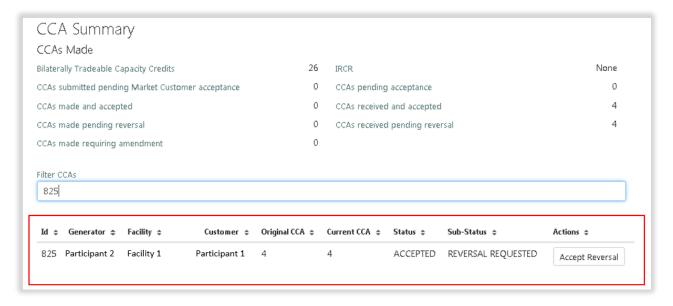
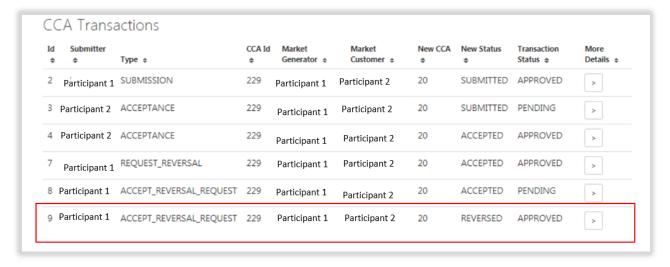


Figure 75 Capacity Credit reversal accepted



7.10.6 Market Participant resolves over allocation of Capacity Credits

The steps for a Market Participant that made the Capacity Credit Allocation to resolve over allocation of Capacity Credits are:

- 1. Navigate to the Capacity Allocation tab, ensure the correct Trade Month is selected, and scroll down to the CCA Summary.
- 2. Find the Capacity Credit Allocation that you would like to resolve in the CCA Amendment Requests and click the Resolve button (see Figure 76)
- 3. Nominate the new Capacity Credit Allocation value and click the Amend CCA button (see Figure 77)
- 4. An email notification will be sent to both the Market Participant that made the Capacity Credit Allocation and the respective Market Customer informing them that a Capacity Credit Allocation has been resolved.
- 5. If a higher value of Capacity Credits is entered into the "New CCA" field, an error will occur and the Market Participant that made the Capacity Credit Allocation must enter a new value (see Figure 78).

Figure 76 Resolving Capacity Credit over allocation

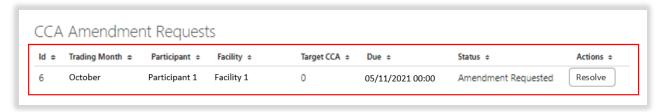


Figure 77 Updating Capacity Credit Allocation

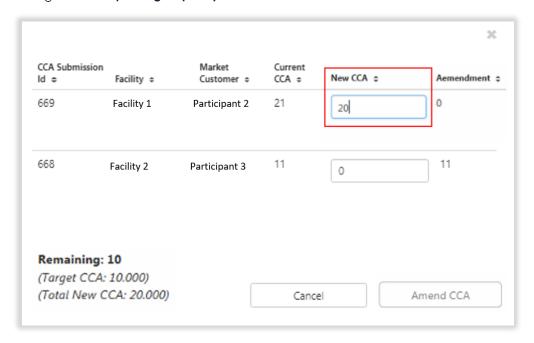
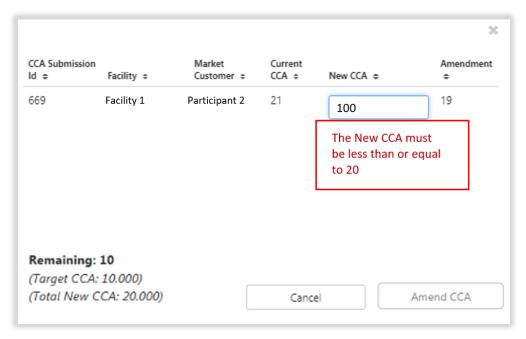


Figure 78 Error resolving Capacity Credit allocation



7.11 IRCR

This section should be read in conjunction with the <u>Market Procedure</u>: <u>Individual Reserve Capacity Requirements</u>.

To view IRCR results, select **RCM portal > IRCR** for the relevant Capacity Year (see Figure 79).

This will display all IRCR runs by Trading Month with their respective date of publication and the Run ID representing the number of IRCR runs (see Figure 79 and Figure 80).

In order to view the IRCR details, click on Summary (see Figure 80).

The Summary displays a snapshot of IRCR results, including the ratios, the 12 Peak SWIS Trading Intervals (from the preceding Hot Season"), the 4 Peak SWIS Trading Intervals of the relevant month, and the Run Type (see Figure 81).

The Run Type will be displayed as one of the following settlement runs; settlement run information is detailed in the <u>Settlement Cycle Timeline</u>:

- Indicative;
- Initial; or
- Adjustment 1, 2 or 3.

The IRCR Participant Information Record (PIR) and IRCR Logs for Trading Months June 2019 onwards can be downloaded from the PIR and LOG hyperlinks next to the relevant run (see Figure 82). IRCR PIR and IRCR Logs prior to June 2019 remain in the Settlements Portal.

Figure 79 IRCR dashboard



Figure 80 IRCR summary

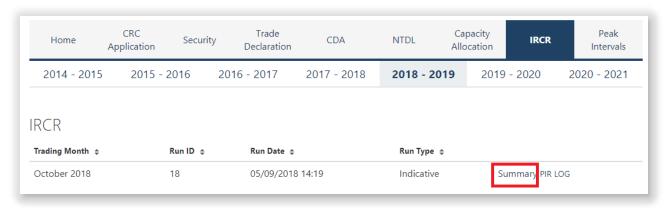


Figure 81 IRCR details

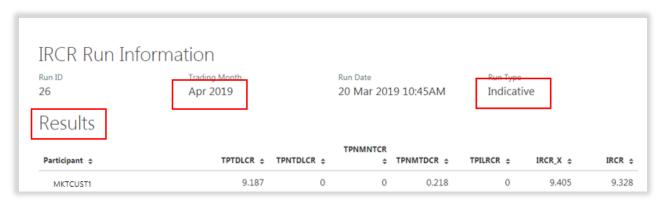




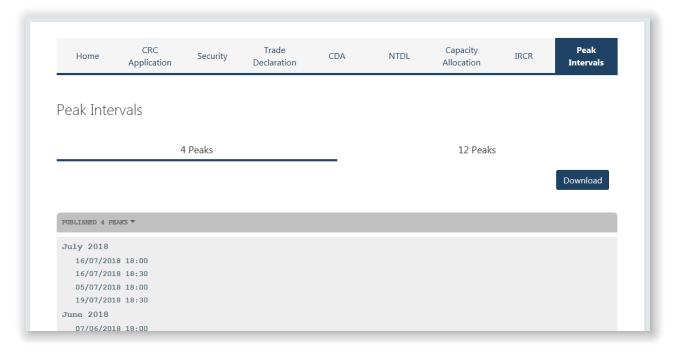
Figure 82 IRCR PIR and IRCR Log



7.12 Peak SWIS Trading Intervals

To view or download the 4 and 12 Peak SWIS Trading Intervals, select **RCM portal > Peak Intervals** (see Figure 83).

Figure 83 Peak SWIS Trading Intervals



7.13 RC Testing

This section should be read in conjunction with the Market Procedure: Reserve Capacity Testing.

To access the RC Testing page in the RCM portal, select **RCM Portal > RC Testing**. The RC testing page displays either the summer (1 October to 31 March) or winter (1 April to 30 September) testing periods for the selected Capacity Year (see Figure 84).

Note: RC Testing results for periods prior to the 2020-21 Capacity Year winter testing period will not be available through the RCM portal. All Testing results reports for periods prior to the 2020-21 Capacity Year winter testing period can be accessed through **Reports > View> By Report > RCM_Det_Generator** (see Figure 85).

To view the RC Testing results, select the relevant Capacity Year, and select either the summer or winter testing period. The user can view the interactive components of each Facility/Facilities owned by the Market Participant as an individual record where:

- Scheduled Generator (SG) results can be viewed during both summer and winter testing periods (see Figure 86).
- Demand Side Programme (DSP) results can only be viewed during the summer testing period (see Figure 87).

Each field the user can view for the relevant Facility type is described in Table 20.

The user can view/download a detailed report for the summer or winter test period for each Facility by clicking on the Detailed Report button. A pop-up window will show (see Figure 88) the email address (Market Participant account holder) the report will be sent to.

For a DSP Facility, the Request Verification Test button is used to notify AEMO of the Trading Intervals during which a Market Participant intends to perform a Verification Test. A pop-up window is used to select the Trading Intervals (Figure 89). This button is only available between 1 October and 30 November and will be greyed out at other times.

Figure 84 RC Testing page

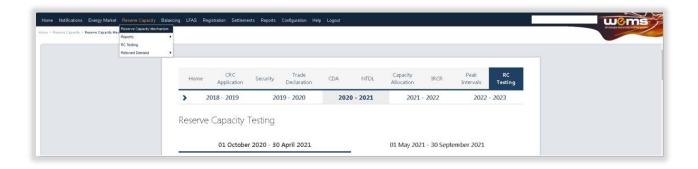


Figure 85 Accessing archive RC Testing results

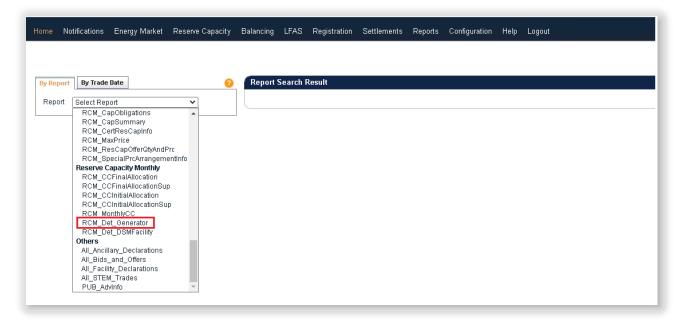


Figure 86 Facility records for a Scheduled Generator

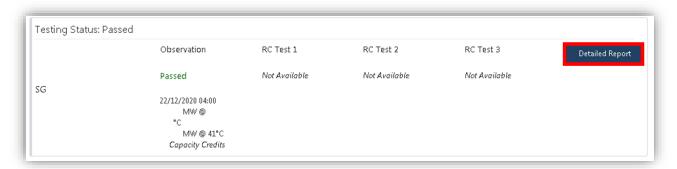


Figure 87 Facility records for a DSP

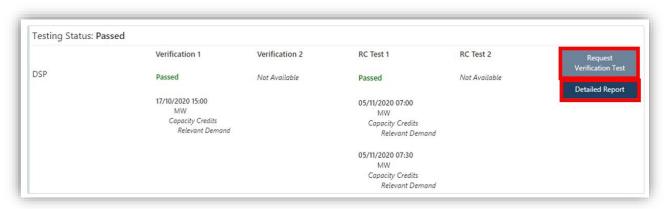


Figure 88 Detailed Report pop-up window

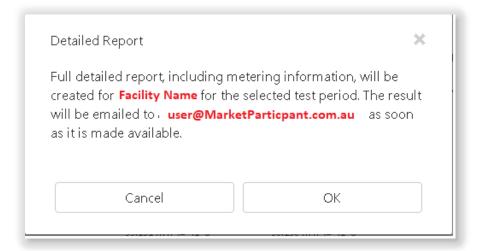


Figure 89 Verification Test pop-up window

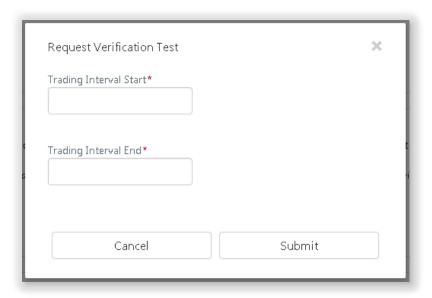


Table 20 RC Testing results fields description

Field Name	Facility Type		
	Scheduled Generator	DSP	
Facility identification information	 Facility short name. Fuel type (from certification records for the relevant Capacity Year). Facility Class. 	Facility short name.Facility Class.	
Testing status	Overall testing status of the most recent result which can be either: Not Passed (for the observation test phase only). Passed. Failed.	 Overall testing status of the most recent result which can be either: Not Available (where a Verification Test has not been requested). Passed. Failed. 	
Observation	Displays the result for the Trading Interval with the highest output over the observation period and the following information: Output at the ambient temperature. Output adjusted to 41°C. Capacity Credits.	NA	
Verification (1 and 2)	NA	Displays the outcome of the first and second (if required) Verification Tests, and, for the Trading Interval with the highest curtailment, the following information: • Actual meter reading. • Capacity Credits. • Relevant Demand. Where a Verification Test has not been scheduled, the status will be Not Available.	
RC Test 1	Displays the outcome of the first Reserve Capacity Test (Passed or Failed) and, for each Trading Interval, the following information: Output at the ambient temperature.	Displays the outcome of the first Reserve Capacity Test (Passed or Failed) and, for each Trading Interval, the following information: Output at the ambient temperature.	

Field Name	Facility Type	
	Scheduled Generator	DSP
	Output adjusted to 41°C. Consists Condition	Output adjusted to 41°C Connector Condition
	Capacity Credits. Where test data has not been received, the status will be Failed and the results will show as Not Available.	Capacity Credits. Where test data has not been received, the status will be Failed and the results will show as Not Available.
RC Test 2	Displays the same information as for the first Reserve Capacity Test.	Displays the same information as for the first Reserve Capacity Test.
RC Test 3	Displays the same information as for the first Reserve Capacity Test, but the outcome is Third Test Executed.	NA

8. Participant Registration

This section should be read in conjunction with the <u>Market Procedure</u>: <u>Rule Participant Registration and De-Registration Procedure</u> and the <u>WEMS Registration Technical Guide</u>.

The Registration function of the MPI supports Participant related activities in the WEM.

To access the Participant Registration dashboard, select Registration from the menu.

In order to gain access to WEMS, the Rule Participant must <u>submit an application</u> in writing to AEMO. Once the access has been approved, AEMO will grant the user a profile in WEMS.

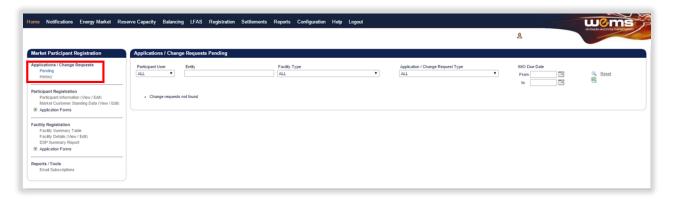
For assistance with Participant Registration, please contact WA Market Operations at wa.operations@aemo.com.au.

8.1 Applications/Change Requests

The Applications/Change Requests function in WEMS allows users to make the submissions required to register or de-register as a Participant, and to update existing registration information.

To access pending or historical Applications/Change Requests, select the relevant option under the Applications/Change Requests heading (see Figure 90).

Figure 90 Applications/Change Requests display



8.1.1 Pending

Click on Pending to show all the pending applications associated with Applications/Change Requests. These will be displayed in the main display (see Figure 91).

"Pending" means the application is yet to be approved by AEMO.

The steps to search for pending Applications/Change Requests are:

- 1. Select one or more categories from the drop-down menus at the top of the window (see Figure 91):
- 1.1. Participant User
- 1.2. Facility Type
- 1.3. Application/Change Request Type
- 2. Use the AEMO Due Date field to filter the pending Applications/Change Requests by the date that they are due to be approved by AEMO as per the WEM Rules. The Applications/Change Requests will already be filtered between the current date and one week in the future. These due dates are not fixed dates since

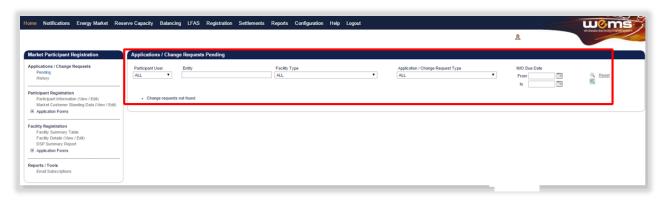
AEMO is able to approve a date that the change can be facilitated (usually this will be within the Due Date).

- 2.1. Enter the start and end dates of the search period into the From and To boxes by clicking on the calendar and selecting a date.
- 2.2. Alternatively, the user can type the date directly into the box in the format dd/mm/yyyy.
- 3. Once the categories and/or dates have been selected, click the Search button (the magnifying glass). This will list the pending applications matching the selected categories.
- 4. In order to reset the search parameters, click Reset.

To download the search results as a CSV file, click the Excel icon (under the magnifying glass). The default file name for the data is:

Change_request_pending_YYYYMMDDHHMISS

Figure 91 Search for pending Applications/Change Requests



8.1.2 History

The History window shows all the Applications/Change Requests that have been submitted by the user. This includes Applications/Change Requests that have been:

- Accepted by AEMO;
- Rejected by AEMO;
- Withdrawn by the user; and
- Cancelled by the user.

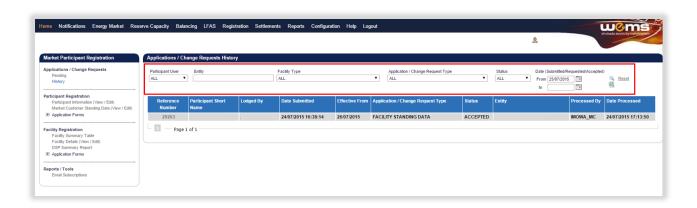
The user can view the Application/Change Request by clicking the Reference Number on the far left of the application log.

The steps to search for historical Applications/Change Requests are:

- 1. Select one or more categories from the drop-down menus at the top of the window (see Figure 92):
- 1.1. Participant User
- 1.2. Facility Type
- 1.3. Application/Change Request Type
- 1.4. Status
- 2. Use the Submitted Date field to filter the historical Applications/Change Requests by the date that they were submitted to AEMO. The Applications/Change Requests will already be filtered between the current date and ten days in the past.

- 2.1. Enter the start and end dates of the search period into the From and To boxes by clicking on the calendar and selecting a date.
- 2.2. Alternatively, the user can type the date directly into the box in the format dd/mm/yyyy.
- 3. Once the categories and/or dates have been selected, click the Search button (the magnifying glass). This will list the historical applications matching the selected categories.
- 4. In order to reset the search parameters, click Reset.

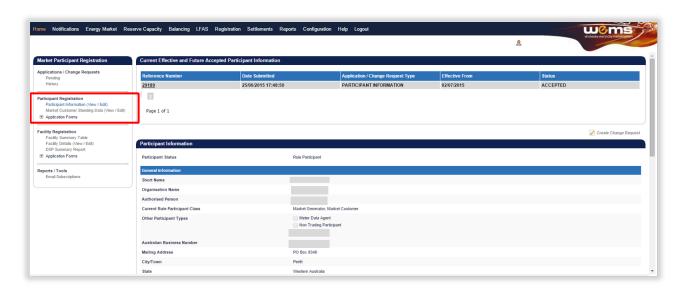
Figure 92 View all Applications/Change Requests



8.2 Participant Information (View/Edit)

The Participant Information (View/Edit) display (see Figure 93) allows the Participant to view Generation Information and Financial Information, to submit a Change Request to update information, or to view submitted Change Requests.

Figure 93 View Participant Information



8.2.1 Current Effective and Future Accepted Participant Information

The Current Effective and Future Accepted Participant Information displays the log of relevant submitted Change Requests that have been accepted by AEMO.

The Change Requests are listed chronologically from most recently accepted.

The status of the Change Requests in this display is always listed as Accepted (see Figure 94); refer to Section 8.1 to view other Change Requests.

The user can browse through the submitted Change Requests by clicking on the page numbers below the table, or by clicking the Next/Last buttons.

Figure 94 Current Effective and Future Accepted Participant Information



8.2.2 Participant Information

The Participant Information display provides the current effective information and includes the following subsections (see Figure 95):

- Participant Status;
- General Information (including short name, organisation name, Rule Participant Class, main contact details); and
- Financial Information.

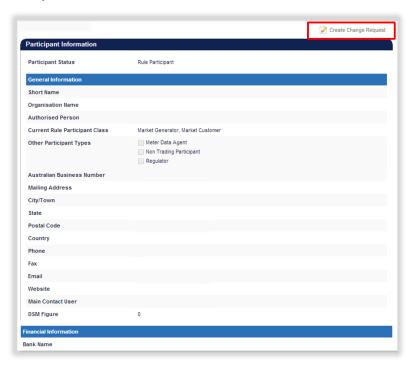
This display will be partially completed when the user first gains access to WEMS, prior to the Participant Registration process being finalised.

The user should review all information in their profile and add or update data by submitting a Change Request (see Section 8.2.3).

Note:

• It is the Participant's responsibility to ensure that the information provided is up to date and relevant for each of the respective sections.

Figure 95 Participant Information



8.2.3 Participant Information Change Request

The steps to submit a Change Request to add or update Participant Information are:

- 1. Click the Create Change Request button on the top right of the Participant Information display (see Figure 95). This will open a Change Request form (see Figure 96).
- 2. Enter a date for the Proposed Effective Date. This is the date from which the Participant Information will be made effective in WEMS if it is approved by AEMO. The user can select a date from the calendar or enter a date manually in the format dd/mm/yyyy.
- 3. The Previous Effective Data column displays the data that has been previously approved by AEMO and was effective immediately preceding the new requested Effective Date for the current Change Request.
- 4. Input new information into the fields within the New Effective Data column. All the fields must be completed. If only a few fields are to be changed, the user can click "Copy Previous Data to New Data Fields" at the top right. This will copy all the previous data to the new form. The user can then edit the fields that are most relevant to their Change Request.
- 5. When the Change Request form has been completed, click Submit to provide the information to AEMO for review. If the user decides not to submit the Change Request, click Back.
- 6. After clicking Submit, a pop-up window will be displayed asking the user to confirm they wish to "Submit the information for review". After clicking Ok, the user will be directed to the Pending Approval window, where the Change Request will be logged.

PARTICIPANT INFORMATION Change Request Type 26/06/2014 Proposed Effective Date * Organisation Name * Authorised Person * Other Participant Types Non Trading Participant Non Trading Participant Regulator Regulator Australian Business Number Mailing Address State Postal Code Australia ▼ Country Phone Fax Website Main Contact User DSM Figure

Figure 96 Participant Information Change Request

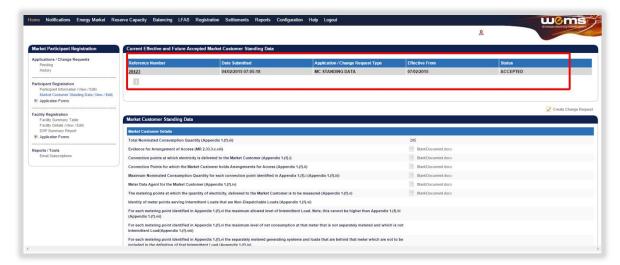
8.3 Market Customer Standing Data (View/Edit)

The Market Customer Standing Data (View/Edit) display (see Figure 97) allows the Participant to view Market Customer Standing Data, to submit a Change request to update the data, or to view submitted Change Requests.

The Standing Data is in the form of documents which have been uploaded to WEMS by the user. Market Customer Standing Data is required for those participants that are registered in the Market Customer Rule Participant Class.

Branch Name Branch Description

Figure 97 Market Customer Standing Data (View/Edit)



8.3.1 Current Effective and Future Accepted Market Customer Standing Data

The Current Effective and Future Accepted Market Customer Standing Data displays the log of relevant submitted Change Requests that have been accepted by AEMO (see Figure 97).

The Change Requests are listed chronologically from most recently accepted.

Each submission details the date which it was submitted and its effective date.

The status of the Change Requests in this display is always listed as Accepted; refer to Section 8.1 to view other Change Requests.

The user can navigate through the submitted Change Requests by clicking on the page numbers below the table, or by clicking the Next/Last buttons.

If the Effective Date for the Change Request to be implemented is in the future, the user can withdraw the Change Request before it becomes effective. Click on the Withdraw button at the bottom of the Market Customer Standing Data display to cancel this Change Request.

8.3.2 Market Customer Standing Data

The Market Customer Standing Data display provides the Standing Data that has been submitted by the user, and has been accepted by AEMO (see Figure 98).

To view a Standing Data document, click on the document filename.

Figure 98 Market Customer Standing Data

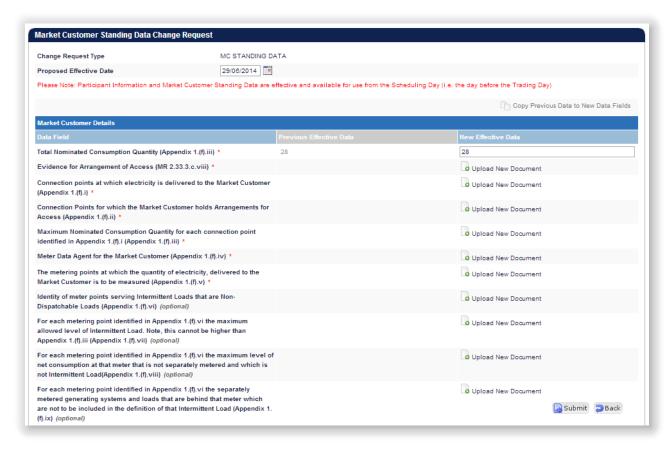


8.3.3 Market Customer Standing Data Change Request

The steps to submit a Change Request to add or update Market Customer Standing Data are:

- 1. Click the Create Change Request button at the top right of the Market Customer Standing Data display. This will open the Change Request form (see Figure 99).
- 2. Complete all fields on the form; mandatory fields are marked with an asterisk (*). If only a few fields are to be changed, the user can click "Copy Previous Data to New Data Fields" at the top right. This will copy all the previous accepted effective data to the new form. The user can then edit the fields that are most relevant to their Change Request. The user can discard a copied document by clicking the red cross button beside the filename.
- 3. To upload a document to the form, click "Upload New Document". A pop-up window will appear allowing the user to select the file to upload. To remove a copied or uploaded document, click the red cross icon.
- 4. When the Change Request form has been completed, click Submit to provide the data to AEMO for review. If the user decides not to submit the Change Request, click Back.
- 5. After clicking Submit, a pop-up window will be displayed asking the user to confirm they wish to "Submit the information for review". After clicking Ok, the user will be directed to the Pending Approval window, where the Change Request will be logged.

Figure 99 Market Customer Standing Data Change Request



8.4 Participant Registration Application Forms

The application forms that can be submitted in relation to Participant Registration are (see Figure 100):

- Rule Participant Registration
- Rule Participant Deregistration

If the Participant has not yet registered, then the Rule Participant Deregistration form will be greyed out and if the Participant has already registered, then the Rule Participant Registration form will be greyed out.

While registering a Participant, a user will have a restricted view of the MPI.

Figure 100 Rule Participant Application Forms



8.4.1 Rule Participant Registration Application Form

The Registration system will automatically populate the respective fields of the form with the current effective information from the Participant Information and Market Customer Standing Data. It is therefore important to have up to date information and data before submitting the form.

The steps to submit an Application to Register as a Rule Participant are:

- 1. Complete the Registration Information section of the form by selecting the radio buttons relevant to the application, and nominating a date on which the Rule Participant Registration will be effective from, upon approval by AEMO. The date will automatically default to 2 Business Days from the current date. The user can select a date from the calendar or enter a date manually in the format dd/mm/yyyy.
- 2. The Contact Information, Invoicing and Tax Details, and Additional Market Customer Information sections will populated automatically from the Participant Information and Market Customer Standing Data. The user should review the information to ensure it is accurate and up to date.
- 3. Complete the Declaration section (see Figure 102). The user must tick all the relevant boxes, and if necessary, upload documents to support the application if required by AEMO.
- 4. When the application form has been completed, click Submit to provide the information to AEMO for review. If the user decides not to submit the form, click Back.
- 5. After clicking Submit, a pop-up window will be displayed asking the user to confirm they wish to "Submit the information for review". After clicking Ok, the user will be directed to the Pending Approval window, where the application form will be logged.

Figure 101 Rule Participant Registration Form

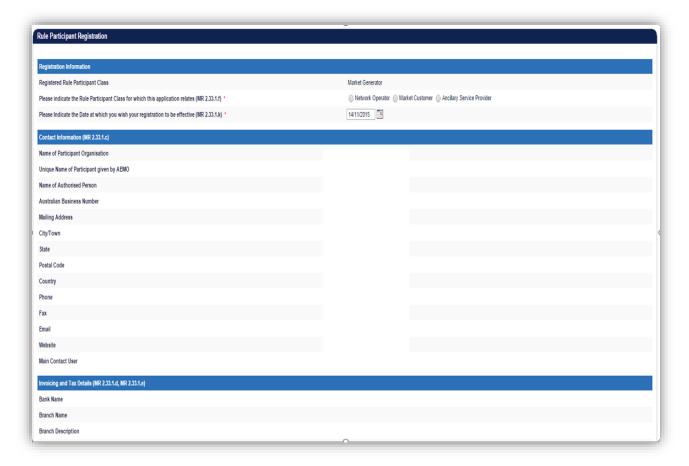
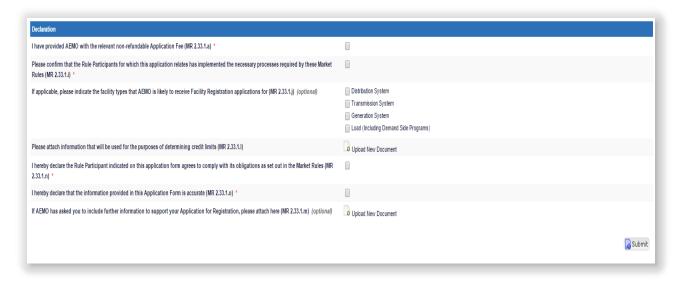


Figure 102 Declaration section of Rule Participant Registration Form



8.4.2 Rule Participant Deregistration Application Form

The steps to submit an Application for Rule Participant Deregistration are (see Figure 103):

- 1. Click on Rule Participant Deregistration under the Application Forms section.
- 2. Select the relevant Participant Class(es) from which the Participant wants to de-register.

- 3. Insert the date that was provided in the approved Declaration of Rule Participant Deregistration Form. The date will automatically default to 2 Business Days from the current date. The user can select a date from the calendar or enter a date manually in the format dd/mm/yyyy.
- 4. Complete the Declaration section. If necessary, upload documents to support the application if required by AEMO.
- 5. When the application form has been completed, click Submit to provide the information to AEMO for review. If the user decides not to submit the form, click Back.
- 6. After clicking Submit, a pop-up window will be displayed asking the user to confirm they wish to "Submit the information for review". After clicking Ok, the user will be directed to the Pending Approval window, where the application form will be logged.

Figure 103 Rule Participant Deregistration Form



9. Facility Registration

This section should be read in conjunction with the <u>Market Procedure: Facility Registration, Deregistration and Transfer</u> and the relevant <u>Power System Operation Procedures</u>.

The Facility Registration function of the MPI supports Facility related activities in the WEM.

To access the Facility Registration dashboard, select Registration from the menu.

For assistance with Facility Registration, please contact WA Market Operations at wa.operations@aemo.com.au.

9.1 Facility Summary Table

The Facility Summary Table (see Figure 104) displays the current state of the Participant's facilities and includes Facility Name, Aggregated Facility Status, Balancing Status, LFAS MW Limit, Facility Type, Intermittent Load Status, Demand Side Management Program, Associated Demand Side Management Program, Date of Registration, and Date of Deregistration.

The Facilities are grouped into Active (i.e. registered), Candidates for Registration (i.e. facilities that have been created but not registered), Deregistered, Transferred or Intended for Transfer to other Participants.

To filter the list by the Effective Date of Commencement of the Facility (see Figure 105), select a date from the calendar, or enter a date manually in the format dd/mm/yyyy. Click the Magnifier button to filter.

Figure 104 Facility Registration

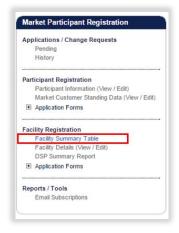
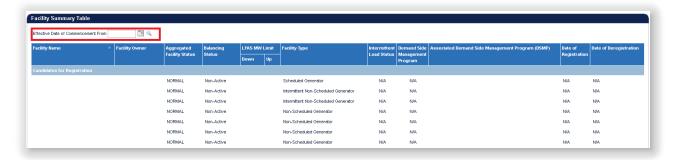


Figure 105 Facility Summary Table



9.2 Facility Details (View/Edit)

The Facility Details display (see Figure 106) contains the following sub-sections, which detail the specific data related to the registration of each Facility:

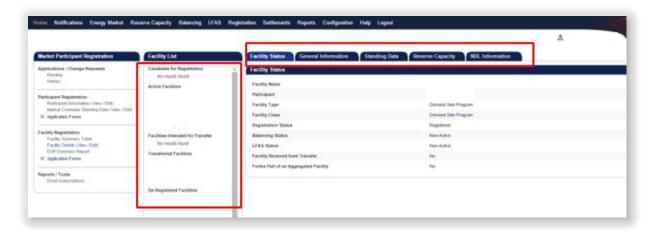
- Facility List
- Facility Status
- General Information
- Standing Data
- Reserve Capacity
- NDL Information (if the facility is an NDL).

These sub-sections are outlined in more detail in the below sections.

Note:

• It is the Participant's responsibility to ensure that the information provided is up to date and relevant for each of the respective sections.

Figure 106 Facility Details (View/Edit)



9.2.1 Facility List

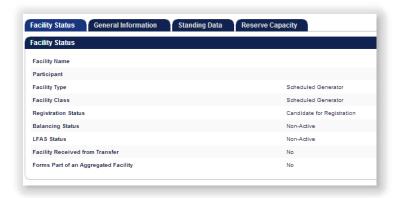
The Facility List menu lists the Facility Codes representing the Participant's facilities that are Active (i.e. registered), Candidates for Registration (i.e. facilities that have been created but not yet registered), Transferred or Intended for Transfer, and Deregistered.

Select an individual Facility by clicking on its Facility Code in the list; and the information in the corresponding tabs will updated accordingly.

9.2.2 Facility Status

The Facility Status tab displays the current effective information about the Facility, its Registration status, and its Transfer status (see Figure 107).

Figure 107 Facility Status



9.2.3 General Information

The General Information tab features two sub-sections:

Current Effective and Future Accepted Facility General Information

The Current Effective and Future Accepted Facility General Information section displays the log of relevant submitted Change Requests that have been accepted by AEMO.

The data submitted as part of the Change Request is displayed in the Facility General Information section.

If the Effective Date for the Change Request to be implemented is in the future, the user can withdraw the Change Request before it becomes effective. Click on the Withdraw button at the bottom of the Facility Information section to cancel this Change Request.

Facility General Information

The Facility General Information section displays the current effective Facility General Information, Other Facility Registration Information, and Commencement Information.

This information can be updated by submitting a Change Request (see Section 9.2.4).

Figure 108 Current Effective and Future Accepted Facility General Information



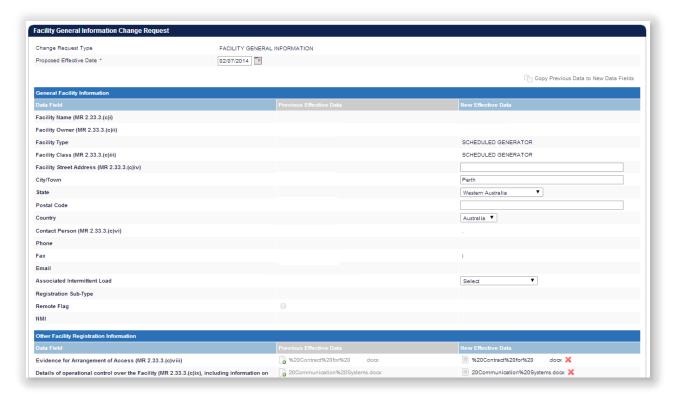
9.2.4 Facility General Information Change Request

The steps to submit a Change Request to add or update Facility General Information are:

- 1. Click the Create Change Request button on the top right of the Facility General Information section. This will open a Change Request form (see Figure 109).
- 2. Enter a date for the Proposed Effective Date. This is the date from which the Facility Information will be made effective in WEMS if it is approved by AEMO. The date will automatically default to 2 calendar days from the current date. The user can select a date from the calendar or enter a date manually in the format dd/mm/yyyy.

- 3. Input new information into the fields within the New Effective Data column. All the fields must be completed. If only a few fields are to be changed, the user can click "Copy Previous Data to New Data Fields" at the top right. This will copy all the previous data to the new form. The user can then edit the fields that are most relevant to their Change Request.
- 4. To upload a document to the form, click "Upload New Document". A pop-up window will appear allowing the user to select the file to upload. To remove a copied or uploaded document, click the red cross icon.
- 5. When the Change Request form has been completed, click Submit to provide the information to AEMO for review. If the user decides not to submit the Change Request, click Back.
- 6. After clicking Submit, a pop-up window will be displayed asking the user to confirm they wish to "Submit the information for review". After clicking Ok, the user will be directed to the Pending Approval window, where the Change Request will be logged.

Figure 109 Facility General Information Change Request



9.2.5 Standing Data

The Standing Data tab features two sub-sections:

Current Effective and Future Accepted Facility Standing Data

The Current Effective and Future Accepted Facility Standing Data section displays the log of relevant submitted Change Requests that have been accepted by AEMO (see Figure 110).

The status of the Change Requests in this section is always listed as Accepted; refer to Section 8.1 to view other Change Requests.

The data submitted as part of the Change Request is displayed in the Facility Standing Data section.

If the Effective Date for the Change Request to be implemented is in the future, the user can withdraw the Change Request before it becomes effective. Click on the Withdraw button at the bottom of the Facility Standing Data section to cancel this Change Request.

Facility Standing Data

The Facility Standing Data section displays the current effective standing data relevant to the selected Facility.

The types of facility in which the Facility can be classed are:

- Scheduled Generator
- Non-Scheduled Generator
- Intermittent Non-Scheduled Generator
- Interruptible Load
- Dispatchable Load
- Network
- Non-Dispatchable Load
- Demand Side Program (DSP)

The Supporting Evidence Comment section may be used to include supporting documentation in relation to a standing data Change Request.

The user should review all information in the Facility's profile and add or update data by submitting a Change Request (see Section 9.2.6).

Figure 110 Current Effective and Future Accepted Facility Standing Data



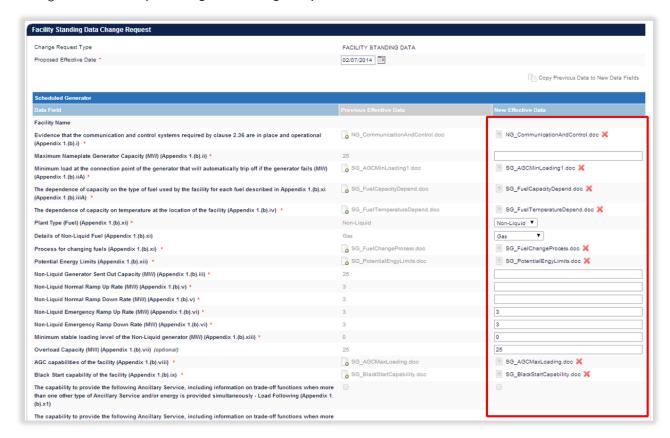
9.2.6 Facility Standing Data Change Request

The steps to submit a Change Request to add or update Facility Standing Data are:

- 1. Click the Create Change Request button on the top right of the Facility Standing Data window. This will open a Change Request form (see Figure 111).
- 2. Enter a date for the Proposed Effective Date. This is the date from which the Facility Standing Data will be made effective in WEMS if it is approved by AEMO. The date will automatically default to 2 calendar days from the current date. The user can select a date from the calendar or enter a date manually in the format dd/mm/vyyy.
- 3. Input new information into the New Effective Data column. All the fields relevant to the facility class must be completed. If only a few fields are to be changed, the user can click "Copy Previous Data to New Data Field" at the top right. This will copy all the previous data to the new form. The user can then edit the fields that are most relevant to their Change Request.
- 4. To upload a document to the form, click "Upload New Document". A pop-up window will appear allowing the user to select a file to upload. To remove a copied or uploaded document, click the red cross icon.
- 5. When the Change Request form has been completed, click Submit to provide the information to AEMO for review. If the user decides not to submit the Change Request, click Back.

6. After clicking Submit, a pop-up window will be displayed asking the user to confirm they wish to "Submit the information for review". After clicking Ok, the user will be directed to the Pending Approval window, where the Change Request will be logged.

Figure 111 Facility Standing Data Change Request



9.2.7 Reserve Capacity

The Reserve Capacity tab features varied sub-sections depending on the type of Facility being viewed (see Figure 112).

Reserve Capacity

The Facility Reserve Capacity Status section displays the status of a Facility. This status will be either Proposed, Committed, or Commercial Operation, depending on the development stage of the Facility.

The status can be changed from Proposed to Committed by submitting a Change Request (see Section 9.2.8). To update the Reserve Capacity Status of an Upgrade, please contact Reserve Capacity (WA) at wa.capacity@aemo.com.au.

Current Effective and Future Accepted Facility Reserve Capacity Temperature Information

The Current Effective and Future Accepted Facility Reserve Capacity Temperature Information section displays the log of relevant submitted Change Requests that have been accepted by AEMO (see Figure 113).

The data submitted as part of the Change Request is displayed in the Facility Reserve Capacity Temperature Information section.

If the Effective Date for the Change Request is to be implemented in the future, the user can withdraw the Change Request before it becomes effective. Click on the Withdraw button at the bottom of the Facility Reserve Capacity Temperature Information section to cancel this Change Request.

Facility Reserve Capacity Temperature Information

The Facility Reserve Capacity Temperature Information section displays the temperature recording method that will be used to monitor the ambient temperature at the Facility for the next three Capacity Years. It will show the data submitted as part of the Change Request in the Facility Reserve Capacity Temperature Information section. The user can add or update the data by creating a Change Request (see 9.2.9).

Figure 112 Facility Reserve Capacity

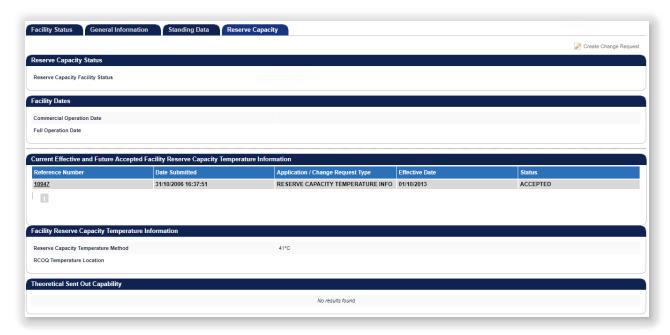


Figure 113 Current Effective and Future Accepted Facility Reserve Capacity Temperature Information

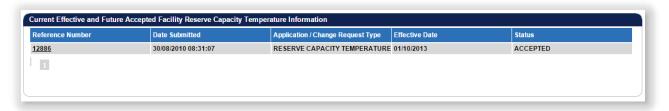


Figure 114 Facility Reserve Capacity Temperature Information



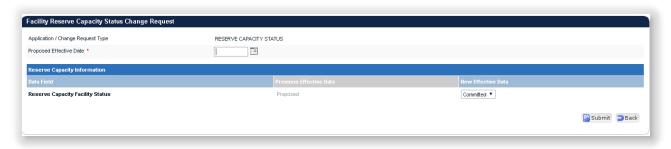
9.2.8 Facility Reserve Capacity Status Change Request

The steps to submit a Change Request to add or update the Facility Reserve Capacity Status are:

1. Click the Create Change Request button on the top right of the Facility Reserve Capacity Status section. This will open the Change Request form (see Figure 115). The button will only appear if the Facility status is Proposed and not Committed.

- 2. Enter a date for the Proposed Effective Date. This is the date from which the new Reserve Capacity Status will be made effective in WEMS if it is approved by AEMO. The date will automatically default to the current date. The user can select a date from the calendar or enter a date manually in the format dd/mm/yyyy. AEMO recommends that the Proposed Effective Date is 2 to 3 Business Days in the future from the day of submission to allow for processing time.
- 3. Select a new Facility status from the drop-down menu within the New Effective Data column.
- 4. When the Change Request form has completed, click Submit to provide the information to AEMO for review. If the user decides not to submit the Change Request, click Back.
- 5. After clicking Submit, a pop-up will be displayed asking the user to confirm they wish to submit the information for review. After clicking Ok, the user will be directed to the Pending Approval window, where the Change Request will be logged.

Figure 115 Facility Reserve Capacity Status Change Request form

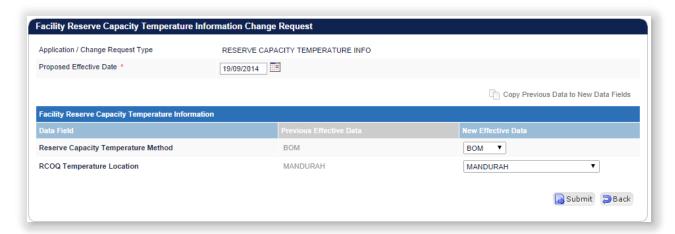


9.2.9 Facility Reserve Capacity Temperature Information Change Request

The steps to submit a Change Request to add or update Facility Reserve Capacity Temperature Information are:

- 1. Click the Create Change Request button at the top right of the Facility Reserve Capacity Temperature Information section (see Figure 116). This will open the Change Request form.
- 2. Enter a date for the Proposed Effective Date. This is the date from which the Facility Reserve Capacity Temperature Information will be made effective in WEMS if it is approved by AEMO. The date will automatically default to the current date. The user can select a date from the calendar or enter a date manually in the format dd/mm/yyyy. AEMO recommends that the Proposed Effective Date is 2 to 3 Business Days in the future from the day of submission to allow for processing time.
- 3. Complete all fields on the form; mandatory fields are marked with an asterisk (*). If only a few fields are to be changed, the user can click "Copy Previous Data to New Data Fields" at the top right. This will copy all the previous accepted effective data to the new form. The user can then edit the fields that are most relevant to their Change Request.
- 4. When the Change Request form has been completed, click Submit to provide the data to AEMO for review. If the user decides not to submit the change request, click Back.
- 5. After clicking Submit, a pop-up window will be displayed asking the user to confirm they wish to "Submit the information for review". After clicking Ok, the user will be directed to the Pending Approval window where the Change Request will be logged.

Figure 116 Facility Reserve Capacity Temperature Information Change Request

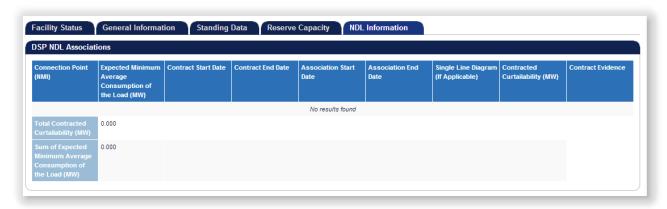


9.2.10 NDL Information

The NDL Information tab provides a detailed summary on the loads currently associated with a Demand Side Programme registered to the Participant. The table lists the loads by NMI and provides a summary of contract and association dates as well as the curtailability of each load (see Figure 117).

To modify which loads are associated with a Demand Side Programme, the user can submit a DSP NDL Association application or a DSP NDL Contract Termination application which are available from the Facility Application Forms section.

Figure 117 NDL Information

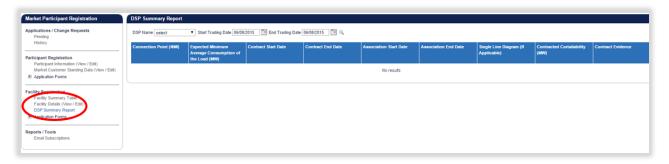


9.3 DSP Summary Report

The DSP Summary Report allows the Participant to review a DSP over a selected time period (see Figure 118).

To use the DSP summary Report, select the DSP from the drop-down, and select the Start Trading Date and End Trading Date to be included in the results.

Figure 118 DSP Summary Report display



9.4 Facility Registration Application Forms

The application forms that can be submitted in relation to Facility Registration are (see Figure 119):

- Facility Registration
- Facility Deregistration
- Exemption from Funding Spinning Reserve
- Facility Transfer Intention
- Facility Transfer
- DSP NDL Association
- DSP NDL Contract Termination
- Balancing Declaration
- LFAS Registration
- LFAS Registration Parameter Change

Figure 119 Application Forms for Facility Registration



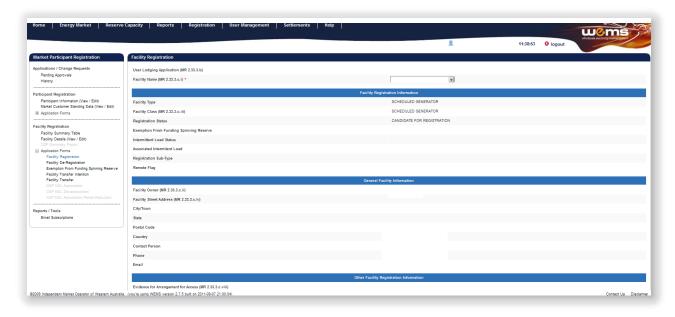
9.4.1 Facility Registration Application Form

The Facility Registration Application Form (see Figure 120) contains sections which are specific to the Facility Type, and as such, not all sections will need to be completed.

The steps to submit a Facility Registration Application Form are:

- 1. Click on Facility Registration in the Application Forms section.
- 2. Select the Facility Name from the drop-down menu in the Facility Registration Information section. The Facility Names in the drop-down menu are listed as Candidates for Registration. If the Facility Name does not appear in the list, contact WA Market Operations at wa.operations@aemo.com.au for assistance.
- 3. Complete the Facility Details section. The information associated with that facility will populate the relevant fields in the form. Review all the information on the form is correct.
- 4. Enter the Proposed Date for Commencement of Operation (In Energy Market). The date will automatically default to 2 calendar days from the current date. The user can select a date from the calendar or enter a date manually in the format dd/mm/yyyy.
- 5. Complete the Declaration section. The user must tick all boxes.
- 6. When the application form has been completed, click Submit to provide the information to AEMO for review. If the user decides not to submit the form, click Back.
- 7. After clicking Submit, a pop-up window will be displayed asking the user to confirm they wish to "Submit this information for review". After clicking Ok, the user will be directed to the Pending Approval window, where the application form will be logged.

Figure 120 Facility Registration Application Form



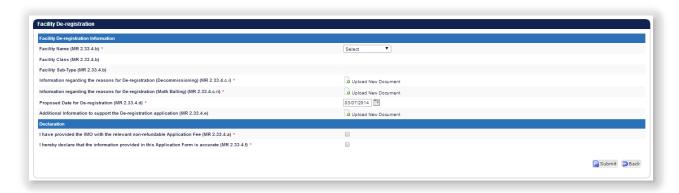
9.4.2 Facility Deregistration Application Form

The steps to submit a Facility Deregistration Application Form are (see Figure 121):

- 1. Click on Facility Deregistration in the Application Forms section.
- 2. Select the name of the Facility to deregister from the drop-down menu beside the Facility Name field.
- 3. To upload a document to the form, click "Upload New Document". A pop-up window will appear allowing the user to select the file to upload. To remove an uploaded document, click the red cross icon
- 4. Enter a Proposed Date for the Deregistration of the Facility. The date will automatically default to 2 calendar days from the current date. The user can select a date from the calendar or enter a date manually in the format dd/mm/yyyy.
- 5. Complete the Declaration section. The user must tick all boxes..
- 6. When the application form has been completed, click Submit to provide the information to AEMO for review. If the user decides not to submit the form, click Back.

7. After clicking Submit, a pop-up window will be displayed asking the user to confirm they wish to "Submit information for review". After clicking Ok, the user will be directed to the Pending Approval window where the application form will be logged.

Figure 121 Facility Deregistration Application Form



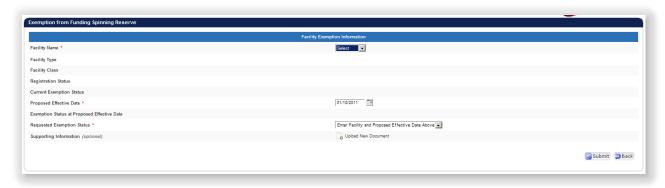
9.4.3 Exemption from Funding Spinning Reserve Application Form

This form is only applicable if the Facility is an Intermittent Non-Scheduled Generator (see WEM Rules).

The steps to submit an Exemption from Funding Spinning Reserve Application Form are (see Figure 122):

- 1. Click on Exemption from Funding Spinning Reserve in the Application Forms section.
- 2. Complete all fields on the form; mandatory fields are marked with an asterisk (*).
- 3. Enter a date for the Proposed Effective Date. This is the date from which the exemption will be made effective in WEMS if it is approved by AEMO. The user can select a date from the calendar or enter a date manually in the format dd/mm/yyyy. The date should be the first Trading Day of the month.
- 4. To upload a document to the form, click "Upload New Document". A pop-up window will appear allowing the user to select the file to upload. To remove an uploaded document, click the red cross icon.
- 5. When the application form has been completed, click Submit to provide the information to AEMO for review. If the user decides not to submit the form, click Back.
- 6. After clicking Submit, a pop-up window will be displayed asking the user to confirm they wish to "Submit the information for review". After clicking Ok, the user will be directed to the Pending Approval window, where the application form will be logged.

Figure 122 Exemption from Funding Spinning Reserve Application Form



9.4.4 Facility Transfer Intention Application Form

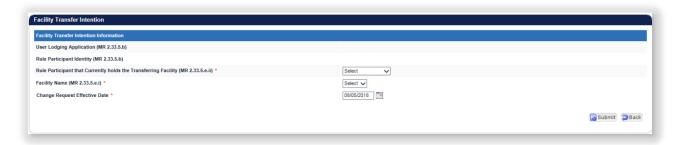
It is the responsibility of the Participant receiving the Facility to initiate the transfer process and submit the necessary information in WEMS.

The steps to submit a Facility Transfer Intention Application Form are (see Figure 123):

- 1. Click on Facility Transfer Intention in the Application Forms section.
- 2. Select the Participant the Facility is being transferred from.
- 3. Select the name of the Facility to be transferred.
- 4. Enter a proposed Change Request Effective Date. This is the date from which the Facility Transfer will be made effective in WEMS if it is approved by AEMO. The date will automatically default to 1 calendar day from the current date. The user can select a date from the calendar or enter a date manually in the format dd/mm/yyyy.
- 5. When the application form has been completed, click Submit to provide the information to AEMO for review. If the user decides not to submit the application form, click Back.
- 6. After clicking Submit, a pop-up window will be displayed asking the user to confirm they wish to "Submit the information for review". After clicking Ok, the user will be directed to the Pending Approval window where the application form will be logged.

Once the Facility Transfer Intention becomes effective, the Participant receiving the Facility will be able to view the Facility in the MPI.

Figure 123 Facility Transfer Intention Application Form



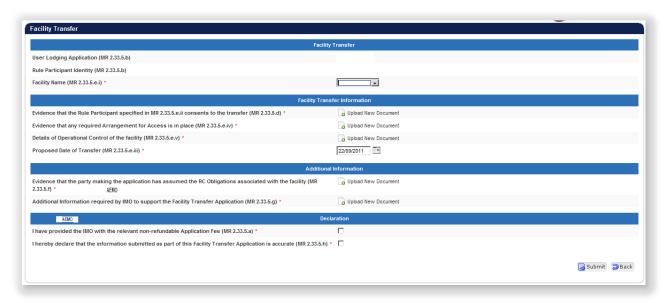
9.4.5 Facility Transfer Application Form

The Registration system will automatically populate the respective fields of the form with the current effective Facility General Information and Facility Standing Data. It is therefore important to have up to date information before submitting the form.

The steps to submit a Facility Transfer Application Form are (see Figure 124):

- 1. Click on Facility Transfer in the Application Forms section.
- 2. Complete all fields on the form; mandatory fields are marked with an asterisk (*).
- 3. To upload a document to the form, click "Upload New Document". A pop-up window will appear allowing the user to select the file to upload. To remove an uploaded document, click the red cross icon.
- 4. When the application form has been completed, click Submit to provide the information to AEMO for review. If the user decides not to submit the application form, click Back.
- 5. After clicking Submit, a pop-up window will be displayed asking the user to confirm they wish to "Submit the information for review". After clicking Ok, the user will be directed to the Pending Approval window, where the application form will be logged.

Figure 124 Facility Transfer Application Form



9.4.6 DSP NDL Association Application Form

The steps to associate a Non-Dispatchable Load (NDL) to a Demand Side Programme (DSP) are:

- 1. Click on DSP NDL Association in the Application Forms section (see Figure 125).
- 2. Complete all fields on the form; mandatory fields are marked with an asterisk (*). The application form allows the user to select the DSP they wish to associate the load to, as well as enter the details associated with the load itself.
- 3. WEMS allows bulk association/disassociation with the use of CSVs. Table 21 provides details of the file format. Sample bulk NDL association/disassociation file format:

```
8001000863,18/2/2014,FROM_FACILITY_1,TO_FACILITY_1
8001000333,18/2/2014,FROM_FACILITY_2,TO_FACILITY_2
8001000637,18/2/2014,FROM_FACILITY_3,TO_FACILITY_3
```

- 4. When the application form has been completed, click Submit to provide the information to AEMO for review. If the user decides not to submit the application form, click Back.
- 5. After clicking Submit, a pop-up window will be displayed asking the user to confirm they wish to "Submit the information for review". After clicking Ok, the user will be directed to the Pending Approval window, where the application form will be logged.

Figure 125 DSP NDL Association Application Form

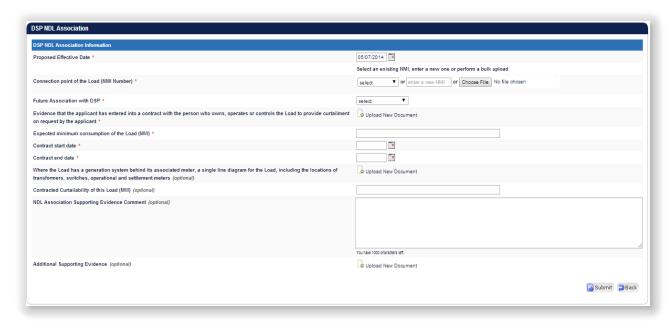


Table 21 File format for bulk NDL association/disassociation

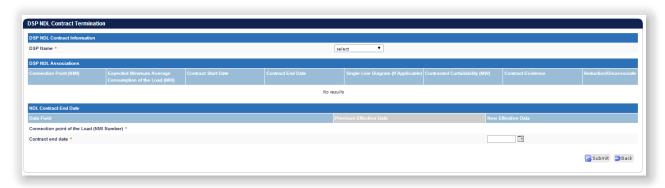
Column	Column Description
1	NMI being reassociated
2	Effective date of the proposed association. The disassociation effective date will be the calendar day prior to this date
3	Facility name which the NMI is currently associated with
4	Facility name which the NMI will be associated to from the effective date

9.4.7 DSP NDL Contract Termination Application Form

The steps to disassociate the association period a Non-Dispatchable Load (NDL) has with a Demand Side Programme (DSP) are:

- 1. Click on DSP NDL Contract Termination in the Application Forms section (see Figure 126).
- 2. Select the relevant DSP Name from the drop-down menu.
- 3. A radio button will appear under the Reduction/Disassociate column for each NDL associated. Select the radio button to highlight the load to reduce/disassociate. The NDL Association Period Reduction Information table will be populated.
- 4. Enter a date for the Association End Date. The user can select a date from the calendar or enter a date manually in the format dd/mm/yyyy.
- 5. When the application form has been completed, click Submit to provide the information to AEMO for review. If the user decides not to submit the application form, click Back.
- 6. After clicking Submit, a pop-up window will be displayed asking the user to confirm they wish to "Submit the information for review". After clicking Ok, the user will be directed to the Pending Approval window, where the application form will be logged.

Figure 126 DSP NDL Contract Termination Application Form

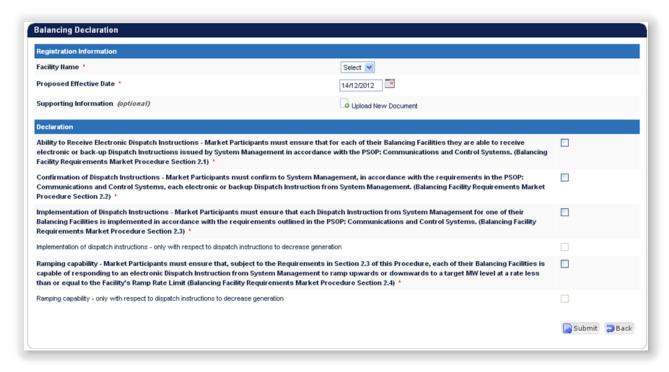


9.4.8 Balancing Declaration

The steps to submit an application form for a Facility to become Balancing Active are:

- 1. Click on Balancing Declaration in the Application Forms section (see Figure 127).
- 2. Select the Facility Name from the drop-down menu.
- 3. Enter a date for the Proposed Effective Date. This is the date from which the Facility will become Balancing Active in WEMS if it is approved by AEMO. The user can select a date from the calendar or enter a date manually in the format dd/mm/yyyy.
- 4. To upload a document to the form, click "Upload New Document". A pop-up window will appear allowing the user to select the file to upload. To remove an uploaded document, click the red cross icon.
- 5. Complete the Declaration section. The user must confirm that the Facility meets the requirements as defined in the Market Procedure: Balancing Facility Requirements.
- 6. When the application form has been completed, click Submit to provide the information to AEMO for review. If the user decides not to submit the application form, click Back.
- 7. After clicking Submit, a pop-up window will be displayed asking the user to confirm they wish to "Submit the information for review". After clicking Ok, the user will be directed to the Pending Approval window, where the application form will be logged.

Figure 127 Balancing Declaration Application Form

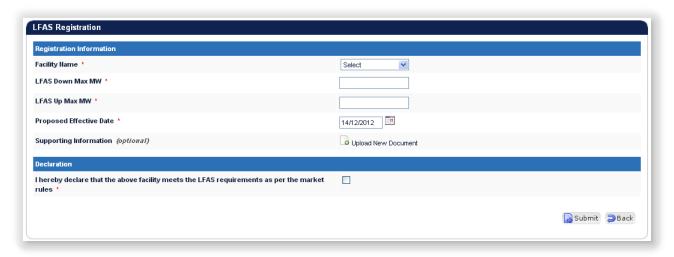


9.4.9 LFAS Registration Application Form

The steps to submit an application form for a Balancing Facility to participate in the LFAS Market are:

- 1. Click on LFAS Registration in the Application Forms section (see Figure 128).
- 2. Select the Facility Name from the drop-down menu.
- 3. Complete all fields on the form; mandatory fields are marked with an asterisk (*).
- 4. Enter a Proposed Effective Date. This is the date from which the LFAS Registration will be made effective in WEMS if it is approved by AEMO. The user can select a date from the calendar or enter a date manually in the format dd/mm/yyyy.
- 5. To upload a document to the form, click "Upload New Document". A pop-up window will appear allowing the user to select the file to upload. To remove an uploaded document, click the red cross icon.
- 6. Complete the Declaration section. The user must confirm the Facility meets the requirements as defined in the Power System Operation Procedure: Communications and control systems.
- 7. When the application form has been completed, click Submit to provide the information to AEMO for review. If the user decides not to submit the application form, click Back.
- 8. After clicking Submit, a pop-up window will be displayed asking the user to confirm they wish to "Submit the information for review". After clicking Ok, the user will be directed to the Pending Approval window, where the application form will be logged.

Figure 128 LFAS Registration Application Form

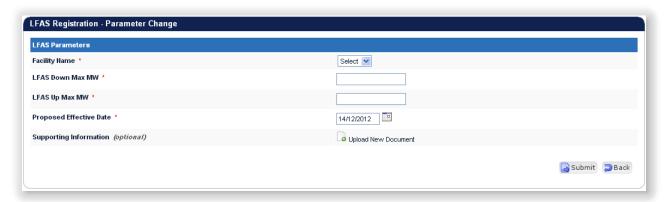


9.4.10 LFAS Registration – Parameter Change Application Form

The steps to submit an application form to update the maximum LFAS Down/Up capacity (in MW) are:

- 1. Click on LFAS Registration Parameter Change in the Application Forms section (see Figure 129).
- 2. The application form allows the user to select which Facility they wish to update the LFAS Down Max MW or LFAS Up Max MW parameters.
- 3. After all the required fields are completed as denoted by a red asterisk (*), click Submit at the bottom of the form. If the user decides not to submit the information upgrade request, click Back. After clicking the Submit button, a popup screen will appear and click OK, and the user will be directed to the Pending Window, where the Change Request will be logged.

Figure 129 LFAS Registration – Parameter Change Application Form



10. Email Subscriptions

To access the Email Subscriptions, select Registration > Reports/Tools (see Figure 130).

This section allows the user to manage which WEMS users are sent email notifications and updates of their registration applications and change requests.

The steps to change the Email Subscription settings are:

- 1. Click the Edit button.
- 2. Select the registered WEMS users to receive notifications on the form by ticking or un-ticking the box under "Send Notifications".
- 3. When the selections have been made, click Submit. If the user decides not to submit the changes, click Back.
- 4. After clicking Submit, a pop-up screen will appear and click OK, and the user will be directed to the Pending Window, where the Change Request will be logged.

Figure 130 Email Subscriptions



Figure 131 Email Subscriptions display



11. File Exchange

To access the File Exchange, select Energy Market > File Exchange (see Figure 132).

Selecting Balancing > File Exchange or LFAS > File Exchange will also redirect to this display.

The File Exchange allows users to make Balancing Submissions, Bilateral Contracts, LFAS Submissions, and STEM Submissions in either XML or CSV format via the MPI Interface. A submission may consist of a single XML file, or a set of CSV files.

Detailed file specifications and templates can be found under **Guides and Useful Information**.

The functionality of the File Exchange dashboard components is explained in more detail in the sections below.

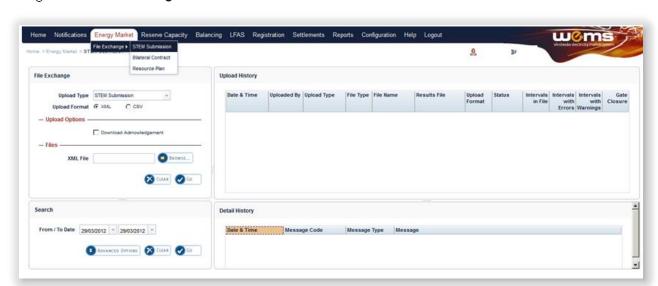


Figure 132 File Exchange dashboard

Table 22 File Exchange dashboard component descriptions

Item	Description
File Exchange	Provides a facility for uploading submissions to AEMO
Search	Provides a search facility for viewing historical submissions based on selected criteria
Upload History	Displays the file history based on selected search criteria
Detail History	Displays additional details of a selected historical upload selected from the Upload History dashboard item

11.1 File Exchange Options

Depending on the Upload Format (XML or CSV), the File Exchange display will provide different fields and options (see Figure 133).

The default File Exchange display is for XML uploads.

For CSV uploads, the File Exchange display will change depending upon the type of submission selected in the Upload Type drop-down menu.

The File Exchange display fields are described in Table 23.

Figure 133 File Exchange display options for XML and CSV

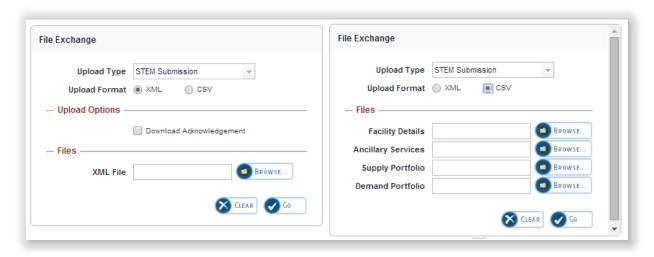


Table 23 File Exchange display field descriptions

Field Name	Field Description
Upload Type	Type of file to be uploaded: Balancing Submission Bilateral Contracts LFAS Submission STEM Submission
Upload Format	File format to be uploaded: XML CSV
File Type	Type of submission (does not apply to all Upload Types): • Standing • Variation
Upload Options	Options associated with Upload Types: Allow Gate Closure Violations Discard Entire File on Errors Download Acknowledgement
XML File	Read-only display of the XML file name selected

11.2 XML Submissions

The steps to upload an XML file are:

- 1. Select the type of submission from the Upload Type drop-down menu.
- 2. Select the XML radio button.

- 3. If required, tick the Download Acknowledgement option (optional).
- 4. Click Browse and select the relevant file from the "Choose file to upload" window.
- 5. Once the file is selected, the file name of the selected file is displayed in the "XML File" text box.
- 6. Click Go to submit the file. If the user decides not to submit the file, click Clear.

11.3 CSV Submissions

For CSV submissions, the File Exchange display changes depending upon the type of submission selected from the Upload Type drop-down menu. The exception is Bilateral Contracts which use the same File Exchange display as the XML submissions.

The steps to upload a CSV file are:

- 1. Select the type of submission from the Upload Type drop-down menu.
- 2. Select the CSV radio button.
- 3. If required, tick the relevant Upload Options (optional) (see Table 23).
- 4. Click Browse and select the relevant file(s) from the "Choose file to upload" window:
- 4.1. Balancing Submissions consist of a single CSV file (see Figure 134). A Balancing Submission can be either a Standing submission, or a Variation submission which will overwrite a submission which had previously been made by the Participant for the Trading Intervals specified in the file.
- 4.2. Bilateral Contracts consist of a single CSV file that contains details for bilateral market submissions (see Figure 135).
- 4.3. LFAS Submissions consists of a single CSV file (see Figure 136).
- 4.4. STEM Submissions require four CSV files to be uploaded (see Figure 137 and Table 24).
- 5. Once the file(s) is selected, the file name(s) of the selected file(s) is displayed in the text box.
- 6. Click Go to submit the file(s). If the user decides not to submit the file(s), click Clear.

Figure 134 Balancing Submission in CSV format



Figure 135 Bilateral Contracts in CSV format



Figure 136 LFAS Submissions in CSV format



Figure 137 STEM Submissions in CSV format

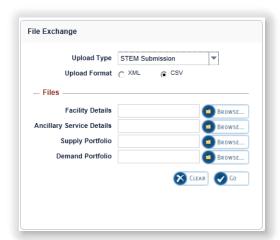


Table 24 STEM Submissions file name descriptions

File Name	File Description
Facility Details	Facility details, standing submission information
Ancillary Service Details	Ancillary Services
Supply Portfolio	Supply portfolio curve
Demand Portfolio	Demand portfolio curve

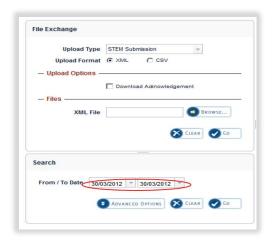
11.4 File Exchange Search

The File Exchange Search display enables users to search for historical submissions using the relevant search criteria provided in Table 25.

The steps to search for historical submissions are:

- 1. Click on Advanced Options from the File Exchange Search display (see Figure 138).
- 2. Enter the required search criteria. To clear all search criteria, click the Clear button.
- 3. Once the user has completed the search criteria, click the Go button.
- 4. The results are displayed in the Upload History section.

Figure 138 File Exchange Search display



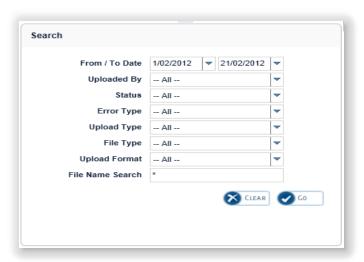


Table 25 File Exchange Search fields description

File Name	File Description	
From / To Date	Date range of submissions	
Participant	Participant that made the submission	
Uploaded By	User that uploaded the submission	
Status	Status of a submission: Successful Failed	
Error Type	Error type: • Errors • Warning • Gate Closure	
Upload Type	Type of file uploaded: Bilateral ContractsSTEM Submission Balancing Submission LFAS Submission Resource Plan (for historical purposes) STEM Submission	
Upload Format	XML or CSV	
File Name Search	Free-text file name search (wildcard options e.g. *.*)	

11.5 File Exchange Upload History

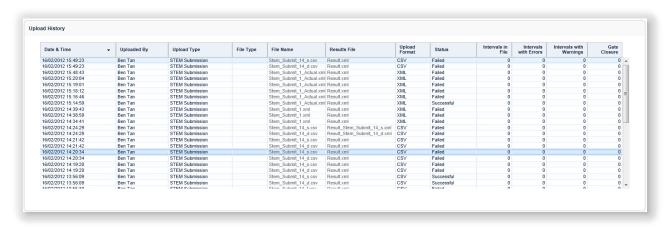
The Upload History display defaults to displaying submissions for the current day (see Figure 139).

The display can be filtered by using the File Exchange Search (see Section 11.4).

To download the contents of a historical submission, click on the file name under the File Name column.

To download the results file of a historical submission, click on the file name under the Results File column.

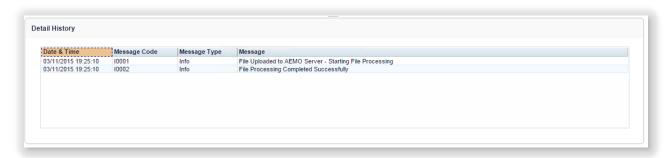
Figure 139 File Exchange Upload History display



11.6 File Exchange Detail History

The Detail History display provides additional information about an upload selected in the Detail History display (see Figure 140).

Figure 140 File Exchange Detail History display



12. Prudential-Settlements

This section should be read in conjunction with the <u>Market Procedure: Settlement</u> and <u>Market Procedure: Prudential Requirements</u>

For information about Settlements, please contact WA Market Operations at wa.operations@aemo.com.au.

12.1 Calculation Formulation

The Wholesale Electricity Market Prudential and Settlement Service (WEM PaSS) is built on the basis of the independently certified WEM Metering, Settlement and Prudential Calculation document (the "Formulation"). This document creates a mathematically accurate representation of the WEM Rules, including:

- Representation of sets for use within the document;
- Mathematical equation representation of the WEM Rules;
- Specifications for variables used by the WEM PaSS system;
- Trading Margin calculation for Participants on a given Trading Day;
- Monthly (NSTEM) and Weekly (STEM) settlement; and
- Input estimation methodology for Prudential calculations.

This Formulation is the foundation for the prudential and settlement calculations implemented in AEMO's software.

An extract of the Formulation is shown in Figure 141.

The latest version of the Formulation can be found under <u>guides and useful information</u>³ on the AEMO Website.

³ https://aemo.com.au/energy-systems/electricity/wholesale-electricity-market-wem/procedures-policies-and-guides/guides

Figure 141 Example of the STEM Payments and Charges section in the Formulation

4.4.1 STEM Payments and Charges

These equations are based on the equations stated in 9.6.1. They have been modified to aggregate to a Trading Day and to separate quantities into supply and demand.

$$STEMSAS_P_D(p,d) = \sum_{i \in I(d)} STEMSAS_P_I(p,i) \tag{102} \label{eq:102}$$

$$STEMSAD_P_D(p, d) = \sum_{i \in I(d)} STEMSAD_P_I(p, i)$$
 (103)

$$STEMSAS_P_I(p,i) = \begin{cases} STEMP_G_I(i) \times STEMSQ_P_I(p,i) & SSF_G_D(i) = 1 \\ 0 & SSF_G_D(i) = 0 \end{cases}$$

$$(104)$$

$$STEMSAD_P_I(p, i) =$$

$$\begin{cases}
STEMP_G_I(i) \times STEMDQ_P_I(p, i) & SSF_G_D(i) = 1 \\
0 & SSF_G_D(i) = 0
\end{cases}$$
(105)

$$STEMSQ_P_I(p, i) = max(0, STEMQ_P_I(p, i) \times SSF_G_D(i))$$
 (106)

$$STEMDQ_P_I(p, i) = -min(0, STEMQ_P_I(p, i) \times SSF_G_D(i))$$
 (107)

Variable	Units	SC	GR	Rule	Description	Ref
STEMSAS_P_D(p, d)	\$	Р	D	9.6.1	Settlement amount for energy sold in STEM for Market Participant p in Trading Day d	(102)
STEMSAD_P_D(p, d)	\$	Р	D	9.6.1	Settlement amount for energy purchased in STEM for Market Participant p in Trading Day d	(103)
STEMSAS_P_I(p, i)	\$	P	I	9.6.1	Settlement amount for energy sold in STEM for Market Participant p in Trading Interval i	(104)
STEMSAD_P_I(p, i)	\$	P	I	9.6.1	Settlement amount for energy pur- chased in STEM for Market Partici- pant p in Trading Interval i	(105)
STEMSQ_P_I(p, i)	MWh	Р	I		Energy sold in STEM by Market Par- ticipant p in Trading Interval i	(106)
STEMDQ_P_I(p, i)	MWh	P	I		Energy bought in STEM by Market Participant p in Trading Interval i	(107)
STEMQ_PJ(p, i)	MWh	P	I	6.9.13(b), 6.9.13(c), 6.10.2	Energy purchased (sold) in STEM by Market Participant p in Trading In- terval i	I
SSF_G_D(d)	Flag	G	D		0 if STEM was suspended in Trading Day d, and 1 otherwise	I
STEMP_G_I(i)	\$/MWh	G	I	6.9.7, 6.10.2	STEM Clearing Price declared for Trading Interval i	I
I(d)	{}	G	D		Set of Trading Intervals in Trading Day d	I

12.2 Prudential-Settlements Portal

To access the Prudential-Settlements portal, select Settlements > Prudential-Settlements.

The Prudential-Settlements portal provides Participants with access to their Settlement outcomes and data, Prudential performance, and Credit Support and Credit Limit information.

12.3 Settlements

This section applies to Invoices, including Adjustment Invoices, issued on or after 1 August 2021.

This section should be read in conjunction with the <u>Market Procedure: Settlement</u>, the <u>WEM Settlement</u> <u>Statement and Invoice Technical Guide</u> and the <u>WEM Metering Settlement and Prudential Calculations</u> Formulation.

To access the Settlements dashboard, select Prudential-Settlements portal > Settlements.

The Settlements dashboard provides an overview of a Participant's Non-STEM and STEM settlement outcomes and provides access to the corresponding Settlement Statement Summary, Settlement Statement Detail, and Settlement Invoices.

The default display is the Non-STEM tab for the current calendar year (see Figure 142).

Change the market by toggling between the "Non-STEM" and "STEM" tabs.

Change the calendar year using the "Year" drop-down menu.

Settlement outcomes are displayed according to the Invoice Period for the given market:

- Non-STEM outcomes are displayed by Trading Month for the Initial, Adjustment 1, Adjustment 2 and Adjustment 3 settlements (see Figure 143).
- STEM outcomes are displayed by Trading Week (see Figure 144).

Note:

- The Settlements dashboard will only display a row with dollar values once the corresponding Settlement Statements have been published for that Invoice Period.
- Settlement Invoices may be published at a different time or date to the Settlement Statements depending on the Settlement Cycle Timeline.

Figure 142 Settlements dashboard

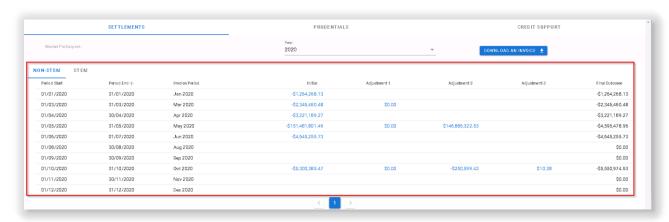


Figure 143 Non-STEM display

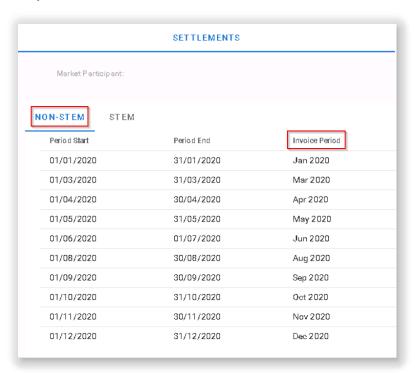


Figure 144 STEM display



12.3.1 Download Settlement Statement Summary, Settlement Detail (PIR) and Invoices

The Prudential-Settlements portal supports CSV, JSON and PDF download formats depending on the data:

- Settlement Statement Summary is provided as a single CSV file for the Trading Week or Trading Month.
- Settlement Statement Detail⁴ is provided as a single ZIP file containing one CSV file for each day in the Trading Week or Trading Month.
- Settlement Invoices are provided as a single PDF or single JSON file.

The steps to download settlement data to a file are:

- 1. Click on the dollar amount for the Non-STEM/STEM Invoice Period (see Figure 145).
- 2. Select the required data and format (see Figure 146):
- 2.1. **Settlement Statement Summary**: contains each line item found on the Invoice (see Figure 147).
- 2.2. **Settlement Statement Detail**: contains all values used as inputs and the values resulting from the calculated variables (see Figure 148).

⁴ Prior to 1 August 2021, Settlement Statement Detail was known to Participants as the PIR.

- 2.3. **Invoice**: contains an itemised list of payments and charges associated to a trading period (see Figure 149 and Figure 150).
- 3. Click the Download button.

The default file names for the settlement data are provided in Table 26.

Settlement variables align with the WEM Metering Settlement and Prudential Calculations Formulation.

Refer to the <u>WEM Settlement Statement and Invoice Technical Guide</u> for information on understanding the content of Statements and Invoices.

Note:

Download may take a while depending on the selection and will continue after the window is closed.

Figure 145 Settlements display with a published Settlement Statement

NON-STEM	STEM			
Period Start		Period End	Invoice Period	Initial
01/01/2020		31/01/2020	Jan 2020	-\$1,264,268.13

Figure 146 Download dialog for Settlement data

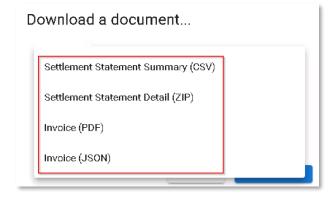


Figure 147 Example of March 2021 NSTEM Initial Settlement Statement Summary for Participant A

Figure 148 Example of March 2021 NSTEM Initial Settlement Statement Detail (PIR) for Participant A

```
RunId, PublishedAt, MarketType, Designation, Period, PeriodFrom, PeriodTo, ParticipantId, Settlement Trading Day, Variable, Scope, Timestamp, Value 50101, 2021-06-21T15:32:04, NSTEM, INITIAL, Mar-21, 1/03/2021, 31/03/2021, ALINTA, 1/03/2021, A.P. I, ALINTA, 1/03/2021 8:00, 528.962 50101, 2021-06-21T15:32:04, NSTEM, INITIAL, Mar-21, 1/03/2021, 31/03/2021, ALINTA, 1/03/2021, ASPP_P_D, ALINTA, 1/03/2021, 154044.7756 50101, 2021-06-21T15:32:04, NSTEM, INITIAL, Mar-21, 1/03/2021, 31/03/2021, ALINTA, 1/03/2021, ASSGEN_P_I, ALINTA, 1/03/2021, 154044.7756 50101, 2021-06-21T15:32:04, NSTEM, INITIAL, Mar-21, 1/03/2021, 31/03/2021, ALINTA, 1/03/2021, ASSGEN_P_I, ALINTA, 1/03/2021 8:00, 0 650101, 2021-06-21T15:32:04, NSTEM, INITIAL, Mar-21, 1/03/2021, 31/03/2021, ALINTA, 1/03/2021, ARA_P_D, ALINTA, 1/03/2021, 0 50101, 2021-06-21T15:32:04, NSTEM, INITIAL, Mar-21, 1/03/2021, 31/03/2021, ALINTA, 1/03/2021, ARA_P_D, ALINTA, 1/03/2021 8:00, 0 9 50101, 2021-06-21T15:32:04, NSTEM, INITIAL, Mar-21, 1/03/2021, 31/03/2021, ALINTA, 1/03/2021, ARA_P_D, ALINTA, 1/03/2021 8:00, 0 9 50101, 2021-06-21T15:32:04, NSTEM, INITIAL, Mar-21, 1/03/2021, 31/03/2021, ALINTA, 1/03/2021, ARA_P_D, ALINTA, 1/03/2021, 0 50101, 2021-06-21T15:32:04, NSTEM, INITIAL, Mar-21, 1/03/2021, 31/03/2021, ALINTA, 1/03/2021, ASSA_P_D, ALINTA, 1/03/2021, 7:1961.15 1 50101, 2021-06-21T15:32:04, NSTEM, INITIAL, Mar-21, 1/03/2021, 31/03/2021, ALINTA, 1/03/2021, ASSA_P_D, ALINTA, 1/03/2021, 7:1961.15 1 50101, 2021-06-21T15:32:04, NSTEM, INITIAL, Mar-21, 1/03/2021, 31/03/2021, ALINTA, 1/03/2021, BSA_P_D, ALINTA, 1/03/2021, 7:1961.15 50101, 2021-06-21T15:32:04, NSTEM, INITIAL, Mar-21, 1/03/2021, 31/03/2021, ALINTA, 1/03/2021, BSA_P_D, ALINTA, 1/03/2021, 7:1961.15 50101, 2021-06-21T15:32:04, NSTEM, INITIAL, Mar-21, 1/03/2021, 31/03/2021, ALINTA, 1/03/2021, BSA_P_D, ALINTA, 1/03/2021, 1801210.517 50101, 2021-06-21T15:32:04, NSTEM, INITIAL, Mar-21, 1/03/2021, 31/03/2021, ALINTA, 1/03/2021, BSA_P_D, ALINTA, 1/03/2021, 1801210.517 50101, 2021-06-21T15:32:04, NSTEM, INITIAL, Mar
```

Figure 149 Example of March 2021 NSTEM Initial Settlement Invoice PDF for Participant A



Payment Summary

ABN 94 072 010 327

Level 45 152 St Georges Terrace Perth WA 6000

PO Box 7096 Cloisters Square Perth WA 6850

T +61 8 9469 9800

E wa.operations@aemo.com.au

Summary:

Issued Date: 10/05/2021 Due Date: 10/05/2021

WEM NSTEM March 2021 - Initial

Description	Amount
Charge for the cost of Load Following Services	0.00
Charge for the cost of Capacity associated with Load Following	0.00
Payment for Interest associated with NSTEM *	0.00
Charge for Interest associated with NSTEM *	0.00
Charge for Intermittent Load Refunds	0.00
Payment for GST associated with NSTEM *	(110,916.98)
Charge for GST associated with NSTEM *	995.25
Payment for non-allocated Capacity Credits (excluding DSM and SPA)	(247,290.66)
Payment for DSM Capacity Credits	0.00
Payment for Tranche 3 DSM Dispatch Payments	0.00
Payment for Tranche 2 DSM Dispatch Payments	0.00
Charge for the cost of Load Rejection Service and System Restart Service	0.00
Charge for the cost of Dispatch Support Services	0.00
Payment for Constrained On Compensation	0.00
Payment for Constrained Off Compensation	(861,879.10)
Payment for Outage compensation	0.00
Charge for the cost of Outage compensation	0.00
Service Fee Settlement Amount paid to the Coordinator *	0.00

Figure 150 Example of March 2021 NSTEM Initial Settlement Invoice JSON for Participant A

```
"id" :
"party" : {
 "id" :
 "name" :
 "addressLinel" :
 "addressLine2" :
  "abn" :
"invoiceDate" : "2021-05-10",
"dueDate": "2021-05-10",
"market" : "NSTEM",
"tradeMonth" : "2021-03",
"adjustment" : 0,
"title" : "NSTEM March 2021 - Initial",
"paymentSummary" : {
  "lineItems" : [ {
   "code" : "LFMC_P_X",
   "description" : "Charge for the cost of Load Following Services",
   "amount" : 0.00,
   "gstApplicable" : true
  }, {
   "code" : "LFCC_P_X",
   "description": "Charge for the cost of Capacity associated with Load Following",
   "amount" : 0.00,
   "gstApplicable" : true
    "code" : "INTNSTEMP P X",
   "description" : "Payment for Interest associated with NSTEM",
   "amount" : 0.00,
    "gstApplicable" : false
  }, {
    "code" : "INTNSTEMC P X",
   "description" : "Charge for Interest associated with NSTEM",
    "amount" : 0.00,
    "gstApplicable" : false
  }, {
    "code" : "IMLR_P_X",
    "description" : "Charge for Intermittent Load Refunds",
    "amount": 0.00,
```

Table 26 Default file names for Settlement data file download

Download Format	File Name Format
CSV	 {participant}_SUMMARY_{market}_{periodStart}_{designation}_{timestamp}.csv participant: short name for the Participant market: STEM NSTEM periodStart: first day of the Trading Week or Trading Month as yyyymmdd designation: INITIAL ADJ1 ADJ2 ADJ3 timestamp: user initiated download time as yyyymmddhhmmss
ZIP	 {participant}_DETAILS_{market}_{periodStart}_{designation}_{timestamp}.zip participant: short name for the Participant market: STEM NSTEM periodStart: first day of the Trading Week or Trading Month as yyyymmdd designation: INITIAL ADJ1 ADJ2 ADJ3 timestamp: user initiated download time as yyyymmddhhmmss
CSV in ZIP	 {market}_{participant}_{tradingDay}_{designation}.csv market: STEM NSTEM participant: short name for the Participant tradingDay: Trading Day within the Trading Week or Trading Month as yyyymmdd designation: INITIAL ADJ1 ADJ2 ADJ3
PDF	INV_{invoiceNumber}_{participant}_yyyy-mm-dd.pdf • invoiceNumber: unique id of the invoice • participant: short name for the Participant • yyyy-mm-dd: date the invoice was generated by AEMO
JSON	 INV_{invoiceNumber}_{participant}_yyyy-mm-dd.json invoiceNumber: unique id of the invoice participant: short name for the Participant yyyy-mm-dd: date the invoice was generated by AEMO

12.3.2 Download Invoice by Invoice Number

The steps to download a Settlement Invoice by a known invoice number are:

- 1. Select Prudential-Settlements portal > Settlements.
- 2. Click the Download an Invoice button (see Figure 151).
- 3. Type in the invoice number (see Figure 152).
- 4. Select the file format as PDF or JSON (see Figure 153).
- 5. Click the Download button.

Figure 151 **Download an Invoice button**



Figure 152 Download an Invoice enter invoice number

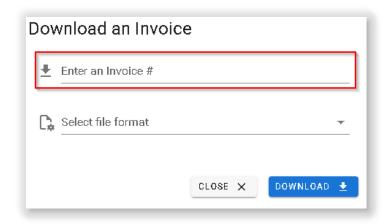


Figure 153 Download an Invoice select file format



12.3.3 Archived Settlements Portal

This section applies to Invoices, including Adjustment Invoices, issued prior to 1 August 2021.

To access settlement information for Invoices issued prior to 1 August 2021, select Settlements > Archived Portal (see Figure 154 and Figure 155).

Use the following tabs to select the required settlement information:

- Invoices
- Statements
- PIRs
- IRCR Log

Use the drop-down menu to select one of the following settlement mechanisms:

- DSM
- IRCR
- NSTEM
- STEM

Figure 154 Archived Settlements Portal menu

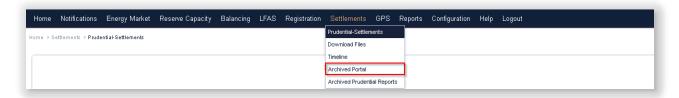
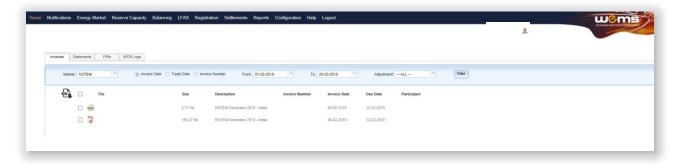


Figure 155 Archived Settlements Portal display



12.4 Prudential Monitoring

This section applies to Prudential information for Trading Days on or after 24 August 2020.

This section should be read in conjunction with the <u>Market Procedure: Prudential Requirements</u> and the <u>WEM Metering Settlement and Prudential Calculations</u> formulation.

To access the Prudential display, select Prudential-Settlements portal > Prudential.

This display provides a graph of the Participant's prudential performance (see Figure 159). There are three elements to this functionality, listed from top to bottom of the screenshot:

- A graph of the Market Participant's prudential data
- A period selector (based on the Market Participant's Trading Margin)
- A table of the data used to drive the graph and period selector.

Below this functionality there is an additional table (see Figure 160) which provides a breakdown of Cumulative Estimated Exposure by invoice period. For example, on 23 June 2020, there are 53 days of Non-STEM exposure and 5 days of STEM exposure contributing to the Cumulative Estimated Exposure value. This is broken down into the following invoicing periods:

- 31 days of Non-STEM exposure in May 2020
- 22 days of Non-STEM exposure in June 2020
- 5 days of STEM exposure in TW 25/20

The As-at radio button determines whether the breakdown is of the current Outstanding Amount calculation or the forecast Outstanding Amount calculation.

At the bottom of the display (see Figure 160) three new buttons are provided that allow the underlying data used in the Outstanding Amount calculation to be downloaded for the latest As of Date. Each button provides a compressed zip file containing one or more CSV files with details from the calculation.

Download Summary file

The Prudential Summary file contains the summary information of the calculation at the highest level of the calculation. This data is contained within a single file, which contains data for each market (STEM and Non-

STEM) for each Trading Day within the exposed period. This data is at a similar level to the line items on Invoices (see Figure 156 and Section 12.3).

Download Details file

The Prudential Details file contains the detailed information of the calculation including all values used as inputs and the values resulting from the calculated variables under the WEM Rules. This data is presented in multiple files with a single file relating to a market (STEM or Non-STEM) for a single Trading Day. This data is intended to be used by Participants in conjunction with the <u>WEM Metering Settlement and Prudential</u> <u>Calculations</u> formulation to allow them to reconcile the calculation. The data is at a similar level to the data in Settlement Statement Detail (PIR) files (see Figure 157 and Section 12.3).

Download Estimation file

The Prudential Estimation file contains the detailed information of settlement input estimation calculations based on the proposed Market Procedure: Prudential Requirements and detailed in the <u>WEM Metering</u> <u>Settlement and Prudential Calculations</u> formulation. This data is at a similar level to the Prudential Details file outlined above (see Figure 158).

Figure 156 Extract from a Prudential Summary file

```
As of Date, Participant, Market, Variable, Timestamp, P or C, GST Applicable, Value

"2020-06-23", "PARTYX", "NSTEM", "CASSR_P_D", "2020-05-01", "Payment", "Y", "0.00000000"

"2020-06-23", "PARTYX", "NSTEM", "COFFC_P_D", "2020-05-01", "Payment", "Y", "0.00000000"

"2020-06-23", "PARTYX", "NSTEM", "DIPT3_P_D", "2020-05-01", "Payment", "Y", "0.00000000"

"2020-06-23", "PARTYX", "NSTEM", "LFMC_P_D", "2020-05-01", "Charge", "Y", "0.00000000"

"2020-06-23", "PARTYX", "NSTEM", "SRAC_P_D", "2020-05-01", "Charge", "Y", "0.00000000"

"2020-06-23", "PARTYX", "NSTEM", "CASD_P_D", "2020-05-01", "Payment", "Y", "0.00000000"

"2020-06-23", "PARTYX", "NSTEM", "COCC_P_D", "2020-05-01", "Payment", "Y", "0.00000000"

"2020-06-23", "PARTYX", "NSTEM", "CONC_P_D", "2020-05-01", "Payment", "Y", "0.00000000"

"2020-06-23", "PARTYX", "NSTEM", "DSMCCSA_P_D", "2020-05-01", "Charge", "N", "0.00000000"

"2020-06-23", "PARTYX", "NSTEM", "MFSAD_P_D", "2020-05-01", "Charge", "N", "0.00000000"

"2020-06-23", "PARTYX", "NSTEM", "MFSAD_P_D", "2020-05-01", "Charge", "N", "0.00000000"
```

Figure 157 Example from a Prudential Details file

```
As of Date, Participant, Settlement Trading Day, Variable, Scope, Timestamp, Value
     "2020-06-23", "PARTYX", "2020-05-01", "MAXPGR_P_CY", "PARTYX", "2019-10-01", "0.0"
    "2020-06-23", "PARTYX", "2020-05-01", "DSMRCP_G_CY", "Global", "2019-10-01", "16990.38"
"2020-06-23", "PARTYX", "2020-05-01", "DSMRCP_G_M", "Global", "2019-10-01", "1415.865"
 4
     "2020-06-23", "PARTYX", "2020-05-01", "RCP_G_CY", "Global", "2019-10-01", "126683.47"
     "2020-06-23", "PARTYX", "2020-05-01", "RCP_G_M", "Global", "2019-10-01", "10556.95583333"
     "2020-06-23", "PARTYX", "2020-05-01", "TDTM_G_M", "Global", "2019-10-01", "31.0"
     "2020-06-23", "PARTYX", "2020-05-01", "MAXPGR_P_D", "PARTYX", "2019-10-01", "0.0"
     "2020-06-23", "PARTYX", "2020-05-01", "RCP G D", "Global", "2019-10-01", "340.54696237"
9
     "2020-06-23", "PARTYX", "2020-05-01", "DSMRCP_G_D", "Global", "2019-10-01", "45.67306452"
10
     "2020-06-23", "PARTYX", "2020-05-01", "RCP_G_D", "Global", "2019-10-02", "340.54696237"
11
     "2020-06-23", "PARTYX", "2020-05-01", "DSMRCP_G_D", "Global", "2019-10-02", "45.67306452"
     "2020-06-23", "PARTYX", "2020-05-01", "MAXPGR_P_D", "PARTYX", "2019-10-02", "0.0"
13
14 "2020-06-23", "PARTYX", "2020-05-01", "MAXPGR P D", "PARTYX", "2019-10-03", "0.0"
```

Figure 158 Example from a Prudential Estimation file

```
As of Date, Participant, Settlement Trading Day, Variable, Scope, Timestamp, Value
    "2020-06-23", "PARTYX", "2020-02-01", "_CASD_P_M", "PARTYX", "2020-02-01", "0.0"
"2020-06-23", "PARTYX", "2020-02-01", "_CASR_P_M", "PARTYX", "2020-02-01", "0.0"
2
3
     "2020-06-23", "PARTYX", "2020-02-01", "CASL_P_M", "PARTYX", "2020-02-01", "0.0"
4
    "2020-06-23", "PARTYX", "2020-02-01", "CASSRQmwh_P_I", "PARTYX", "2020-01-31 08:00", "0.0"
5
    "2020-06-23", "PARTYX", "2020-02-01", "CASSRQmwh_P_I", "PARTYX", "2020-01-31 08:30", "0.0"
6
7
    "2020-06-23", "PARTYX", "2020-02-01", "CASSRQmwh P I", "PARTYX", "2020-01-31 09:00", "0.0"
8
    "2020-06-23", "PARTYX", "2020-02-01", "CASSRQmwh P I", "PARTYX", "2020-01-31 09:30", "0.0"
    "2020-06-23", "PARTYX", "2020-02-01", "CASSRQmwh P I", "PARTYX", "2020-01-31 10:00", "0.0"
9
    "2020-06-23", "PARTYX", "2020-02-01", "CASSRQmwh_P_I", "PARTYX", "2020-01-31 10:30", "0.0"
.0
     "2020-06-23", "PARTYX", "2020-02-01", "CASSRQmwh_P_I", "PARTYX", "2020-01-31 11:00", "0.0"
1
    "2020-06-23", "PARTYX", "2020-02-01", "CASSRQmwh_P_I", "PARTYX", "2020-01-31 11:30", "0.0"
```

Figure 159 Prudential Monitoring display

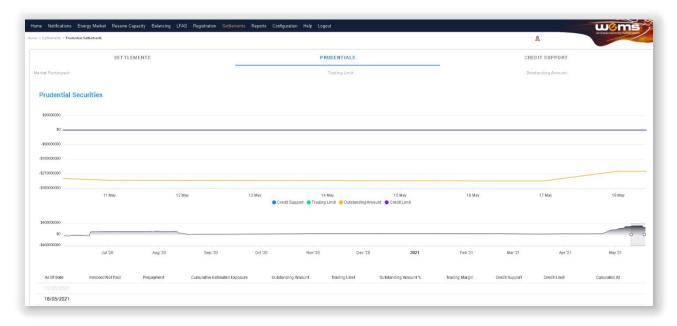
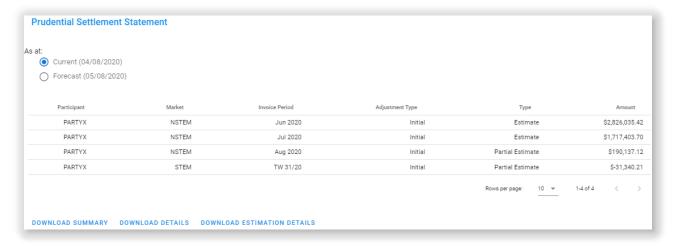


Figure 160 Breakdown of Cumulative Estimated Exposure by invoice period



12.4.1 Archived Prudential Reports

This section applies to Prudential information for Trading Days prior to 24 August 2020.

To access Prudential information for Trading Days prior to 24 August 2020, select Settlements > Archived Prudential Reports (see Figure 161).

The Prudential Security display fields are described in Table 27

Figure 161 Archived Prudential Security display

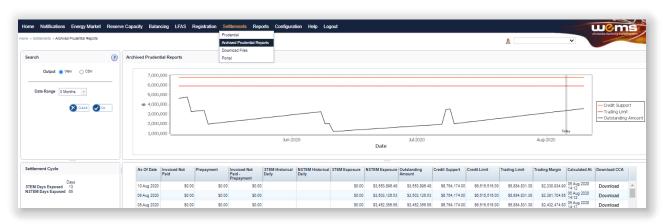


Table 27 Archived Prudential Reports display field descriptions

Dashboard Item	Description
Search	Allows the output to be Viewed on screen or Downloaded for set Date Ranges (3, 6, 12 or 24 months)
Help ③	Provides definitions for items in the Prudential Security Graph and Table
Settlement Cycle	Provides the current STEM Days Exposed and NSTEM Days Exposed
Prudential Security Graph	Displays the currently selected Participants Prudential Performance over the last 6 months
Prudential Security Table	Displays the currently selected Participants Prudential security information

12.5 Credit Support

This section should be read in conjunction with the Market Procedure: Prudential Requirements.

To access the Credit Support display, select Prudential-Settlements portal > Credit Support.

The Credit Support display (see Figure 162) provides the breakdown of Participants' Credit Support instruments (Bank Guarantee or Security Deposits) and the history of Credit Limit as determined by AEMO.

Credit Support

The effective Credit Support is determined as any instruments currently held by AEMO as listed in the Credit Support section with the 'Held' or 'Received' state. The history of Credit Support instruments is available as indicated by the 'Returned' or 'Drawn Down' state, to indicate the action AEMO had taken for that instrument.

Note: With the release of Prudential Service 1.4 AEMO will enter the Credit Support instruments with their corresponding effective date and value. For Security Deposits only the Security Deposit Deed will be included with an additional record to adjust the balance to the value as at 20 August 2020.

Note: With the release of the 'Supporting Documents' functionality in Prudential Service 1.5 AEMO will upload all supporting documents (i.e. Bank Guarantees or Security Deposit Deeds/Directions) in relation to any Credit Support that is in place as at 1 February 2021.

While Bank Guarantees can only be actioned for the full quantity. Security Deposits may be partially returned/drawn down. This is shown by deducting any Security Deposits in a 'returned/drawn down' state from the total Security Deposits in a 'received' state.

Credit Limit

The Credit Limit table includes the history of Credit Limit determinations made by AEMO for the Participant. The history is limited to the current Credit Limit effective after 1 July 2020 and any subsequent determinations by AEMO. The effective Credit Limit is determined by the 'Effective Date' as applicable from that date until the next 'Effective Date'.

Note: With the release of Prudential Service 1.4 AEMO will enter the details of the Market Participant's last Credit Limit determination only.

Note: With the release of the 'Supporting Documents' functionality in Prudential Service 1.5 AEMO will upload supporting documents in relation to any Credit Limit reviews (i.e. Credit Limit Review letters) undertaken from February 2021.

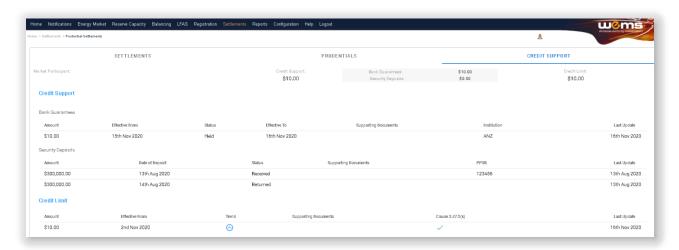


Figure 162 Credit Support display

12.6 Forms

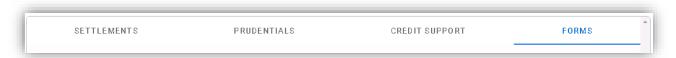
This section should be read in conjunction with the Market Procedure: Prudential Requirements.

To access the Forms display, select Prudential-Settlements portal > Forms.

The Prudential-Settlements portal has a Forms tab which provides access to the following functionality (see Figure 163):

- Prepayments: to submit notification to AEMO of a voluntary prepayment funds transfer.
- Standing Prepayments: to activate or deactivate the standing prepayment agreement with AEMO.
- **Notices of Disagreement**: to submit any disagreement information in accordance with the disagreement deadline published in the <u>Settlement Cycle Timeline</u>.

Figure 163 Forms tab in Prudential-Settlements portal



12.6.1 Prepayments Form

The standard Prepayment direction form has been integrated into the Forms tab of the Prudential-Settlements portal (see Figure 164).

A standard Prepayment direction may be submitted by any Participant User with settlements permissions enabled in WEMS MPI.

This feature allows Participants to:

- Submit notification to AEMO of a voluntary Prepayment amount and date of payment; and,
- Track the status of a submission through the dashboard.

Submit a new Standard Prepayment Direction

The steps to submit a new Prepayment direction are:

- 1. Select the Prudential-Settlements portal > Forms > Prepayments tab.
- 2. Click the Submit button (see Figure 165).
- 3. Review the terms and conditions (see also Section 12.6.2).
- 4. Click Next to continue, or Cancel to exit without saving (see Figure 166).
- 5. Enter the following information in the dialog box (see Figure 167):
- 5.1. **Prepayment Amount**: Enter the amount (in AUD) that will be transferred to AEMO. The amount must be greater than zero.
- 5.2. **Date of Prepayment**: Select the date the payment will be provided to AEMO. The date must be today or in the future.
- 5.3. **Austraclear or Bank**: Select the method by which the payment will be transferred to AEMO. Only one method is permitted per prepayment.
- 6. Click Submit to provide the information to AEMO, or Cancel to exit without saving.
- 7. A green confirmation message is displayed on the screen (see Figure 168). Click the "X" to close.
- 8. The submitted Prepayment is available to view in the Prepayments tab, with status "Payment Pending" (see Figure 169).

Note:

• Once cleared funds are received by AEMO, the Participant's prepayment balance will be updated by the prescribed amount and the status will change to "Payment Received".

Withdraw an existing Prepayment:

A Participant may wish to withdraw an existing Prepayment direction if they made an error with the prepayment amount or date of payment. An existing Prepayment direction can only be withdrawn if the status is "Payment Pending".

The steps to withdraw a Prepayment direction are:

- 1. Select the Prudential-Settlements portal > Forms > Prepayments tab.
- 2. Locate the relevant Prepayment direction and click the Withdraw button for that row (see Figure 169).
- 3. The withdrawn Prepayment direction is available to view in the Prepayments tab, with status "Withdrawn" (see Figure 170).
- 4. No further action can be taken on a withdrawn Prepayment direction.

Note:

• Withdrawal only notifies AEMO that the participant no longer intends to transfer the prepayment amount to AEMO. It does not stop any funds transfers that are already in progress (i.e. If the participant has an Austraclear trade or a bank transfer authorised, then withdrawal will not prevent the trade from settling).

Figure 164 Prepayments tab



Figure 165 Submit button for new Prepayment



Figure 166 Standard Prepayment Direction Form page 1

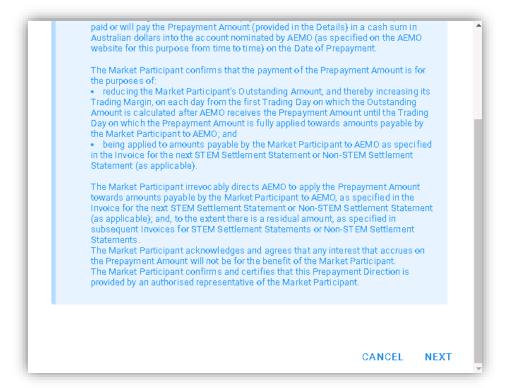


Figure 167 Standard Prepayment Direction Form page 2

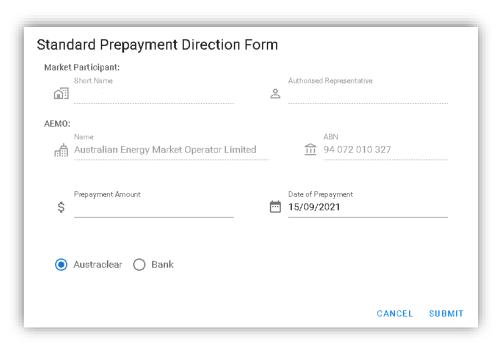


Figure 168 Confirmation of successful Prepayment submission



Figure 169 Prepayments dashboard

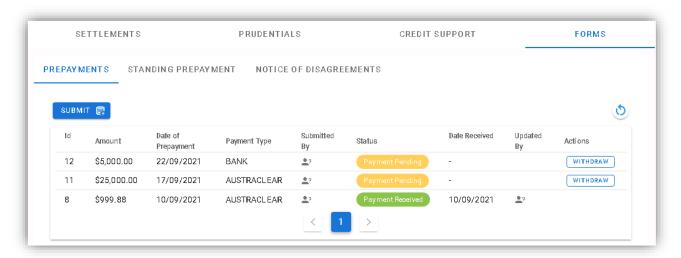


Figure 170 Withdrawn Prepayment direction



12.6.2 Prepayment Terms and Conditions

The terms and conditions for a standard Prepayment direction as displayed in the WEMS MPI forms are:

A Market Participant may make a voluntary prepayment to AEMO at any time for the purposes of (a) reducing the Market Participant's Outstanding Amount; and (b) being applied to amounts payable by the Market Participant to AEMO, as specified in the Invoice, for the next STEM Settlement Statement or Non-STEM Settlement Statement (as applicable). A Market Participant must provide a completed prepayment direction and cleared funds to AEMO [section 5.3 of the Market Procedure: Prudential Requirements].

Declaration:

Words having a defined meaning in the Wholesale Electricity Market Rules have the same meaning when used in this Prepayment Direction. The Market Participant has paid or will pay the Prepayment Amount (provided in the Details) in a cash sum in Australian dollars into the account nominated by AEMO (as specified on the AEMO website for this purpose from time to time) on the Date of Prepayment.

The Market Participant confirms that the payment of the Prepayment Amount is for the purposes of:

- reducing the Market Participant's Outstanding Amount, and thereby increasing its Trading Margin, on each
 day from the first Trading Day on which the Outstanding Amount is calculated after AEMO receives the
 Prepayment Amount until the Trading Day on which the Prepayment Amount is fully applied towards
 amounts payable by the Market Participant to AEMO; and
- being applied to amounts payable by the Market Participant to AEMO as specified in the Invoice for the next STEM Settlement Statement or Non-STEM Settlement Statement (as applicable).

The Market Participant irrevocably directs AEMO to apply the Prepayment Amount towards amounts payable by the Market Participant to AEMO, as specified in the Invoice for the next STEM Settlement Statement or Non-STEM Settlement Statement (as applicable); and, to the extent there is a residual amount, as specified in subsequent Invoices for STEM Settlement Statements or Non-STEM Settlement Statements.

The Market Participant acknowledges and agrees that any interest that accrues on the Prepayment Amount will not be for the benefit of the Market Participant.

The Market Participant confirms and certifies that this Prepayment Direction is provided by an authorised representative of the Market Participant.

12.6.3 Standing Prepayment Agreement Form

The Standing Prepayment agreement is integrated into the Forms tab of the Prudential-Settlements portal.

A Standing Prepayment agreement may be submitted by any Participant User with settlements permissions enabled in WEMS MPI.

This feature allows Participants to:

- Activate a new Standing Prepayment agreement with AEMO.
- View the status of their Standing Prepayment agreement through the dashboard.
- Deactivate an active Standing Prepayment agreement or activate an inactive Standing Prepayment agreement.
- View the terms of the Standing Prepayment agreement.

Note:

• A Standing Prepayment agreement is effective immediately when the status is changed to "Active" and ceases immediately when the status is changed to "Inactive".

Activate a new Standing Prepayment

A Participant can only have one Standing Prepayment agreement with AEMO. If no agreement is recorded in the Prudential-Settlements portal, then a new agreement may be created and activated.

The steps to create and activate a new Standing Prepayment agreement are:

- 1. Select the Prudential-Settlements portal > Forms > Prepayments tab.
- 2. Click the Activate button (see Figure 172).
- 3. Review the terms and conditions (see also Section 12.6.4).
- 4. Click Next to continue, or Cancel to exit without saving (see Figure 173).
- 5. Review the hardcoded fields (see also Section 12.6.4).
- 6. Click Activate to activate the agreement with AEMO, or Cancel to exit without saving (see Figure 174).
- 7. The active Standing Prepayment agreement is available to view in the Standing Prepayments tab, with status "Active" (see Figure 175).
- 8. To deactivate the agreement refer to Section .

Note:

- Once a Standing Prepayment agreement is activated:
 - The terms and conditions can be viewed by clicking the View Terms button (see Figure 172), or by referring to Section 12.6.4.
 - The Activate button is greyed out and can no longer be used.

Deactivate an existing Standing Prepayment

A Standing Prepayment can only be deactivated if the status is "Active".

The steps to deactivate an existing Standing Prepayment are:

- 9. Select the Prudential-Settlements portal > Forms > Prepayments tab.
- 10. Click the Deactivate button (see Figure 175).
- 11. The inactive Standing Prepayment agreement is available to view in the Standing Prepayments tab, with status "Inactive" (see Figure 176).

Activate an existing Standing Agreement

A Standing Prepayment can only be activated if the status is "Inactive".

The steps to activate an existing Standing Prepayment are:

- 1. Select the Prudential-Settlements portal > Forms > Prepayments tab.
- 2. Click the Activate button (see Figure 176).
- 3. The active Standing Prepayment agreement is available to view in the Standing Prepayments tab, with status "Active" (see Figure 175).

Figure 171 Standing Prepayment agreement tab



Figure 172 Activate button



Figure 173 Standing Prepayment Agreement page 1

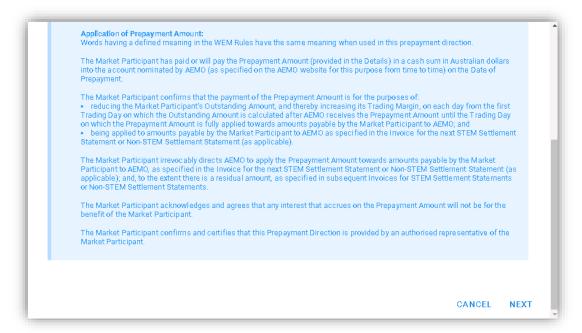


Figure 174 Standing Prepayment Agreement page 2

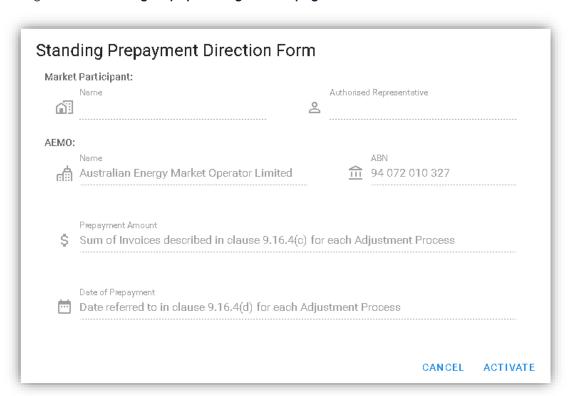


Figure 175 Active Standing Prepayment agreement



Figure 176 Inactive Standing Prepayment agreement



12.6.4 Standing Prepayment Terms and Conditions

The terms and conditions for a Standing Prepayment agreement as displayed in WEMS MPI are:

Standing Prepayment Direction:

The Market Participant (the Relevant Participant) submits this standing prepayment direction for the purposes of the Wholesale Electricity Market Rules (WEM Rules) and section 5.2 of the Market Procedure: Prudential Requirements.

This standing prepayment direction applies when (and only when):

- AEMO issues adjusted Settlement Statements (STEM Settlement Statements or Non-STEM Settlement Statements) to the Relevant Participant under clause 9.19.1(b) of the WEM Rules;
- AEMO issues an Invoice for each adjusted Settlement Statement under clause 9.22.1 of the WEM Rules; and
- the net amount payable under the Invoices (Net Adjustment Amount) is an amount payable by AEMO to the Relevant Participant.

Unless otherwise directed by the Relevant Participant in writing, the Relevant Participant directs AEMO to apply the Net Adjustment Amount in the following manner on the Invoice settlement date (as determined under clause 9.16.4(d) of the WEM Rules):

- The Net Adjustment Amount is deemed to be a "Prepayment Amount" for the purposes of the prepayment direction form.
- AEMO must apply the Net Adjustment Amount (as a deemed "Prepayment Amount") towards amounts payable by the Relevant Participant to AEMO in the manner specified in the prepayment direction form.

This standing prepayment direction applies from the date this form is submitted in WEMS and remains in effect until either party notifies the other party in writing that it no longer applies.

Application of Prepayment Amount:

Words having a defined meaning in the WEM Rules have the same meaning when used in this prepayment direction.

The Market Participant has paid or will pay the Prepayment Amount (provided in the Details) in a cash sum in Australian dollars into the account nominated by AEMO (as specified on the AEMO website for this purpose from time to time) on the Date of Prepayment.

The Market Participant confirms that the payment of the Prepayment Amount is for the purposes of:

- reducing the Market Participant's Outstanding Amount, and thereby increasing its Trading Margin, on each
 day from the first Trading Day on which the Outstanding Amount is calculated after AEMO receives the
 Prepayment Amount until the Trading Day on which the Prepayment Amount is fully applied towards
 amounts payable by the Market Participant to AEMO; and
- being applied to amounts payable by the Market Participant to AEMO as specified in the Invoice for the next STEM Settlement Statement or Non-STEM Settlement Statement (as applicable).

The Market Participant irrevocably directs AEMO to apply the Prepayment Amount towards amounts payable by the Market Participant to AEMO, as specified in the Invoice for the next STEM Settlement Statement or Non-STEM Settlement Statement (as applicable); and, to the extent there is a residual amount, as specified in subsequent Invoices for STEM Settlement Statements or Non-STEM Settlement Statements.

The Market Participant acknowledges and agrees that any interest that accrues on the Prepayment Amount will not be for the benefit of the Market Participant.

The Market Participant confirms and certifies that this Prepayment Direction is provided by an authorised representative of the Market Participant.

Prepayment Amount:

Sum of Invoices described in clause 9.16.4(c) for each Adjustment Process.

Date of Prepayment:

Date referred to in clause 9.16.4(d) for each Adjustment Process.

12.6.5 Notice of Disagreement Form

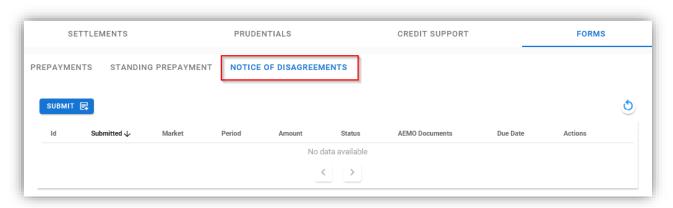
The Notice of Disagreement form has been integrated into the Forms tab of the Prudential-Settlements portal (see Figure 177).

A Notice of Disagreement may be submitted by any Participant User with settlements permissions enabled in WEMS MPI.

This feature allows Participants to:

- Submit a new Notice of Disagreement in accordance with the Market Procedure: Settlement.
- Track the progress of a submission through the dashboard (see Figure 182).
- Respond to AEMO when it requests more information in accordance with WEM Rule 9.20.4A.
- View the revised due date when AEMO extends the deadline to respond to a Notice of Disagreement in accordance with WEM Rule 9.20.7A.
- Download the decision document when AEMO completes its assessment and provides a response in accordance with WEM Rule 9.20.7.
- Receive automated email notifications in relation to a submission.

Figure 177 Notices of Disagreement tab



Submitting a new Notice of Disagreement

A Notice of Disagreement may be submitted by any Participant User with settlements permissions enabled in WEMS MPI.

The steps to submit a Notice of Disagreement are:

- 1. Select Prudential-Settlements portal > Forms > Notices of Disagreement.
- 2. Click the Submit button (see Figure 178).
- 3. The participant Short Name and Authorised Representative are automatically pre-filled based on the details of the logged-in user.
- 4. Enter the following information in the dialog box:
- 4.1. Market: Select Non-STEM or STEM.
- 4.2. Invoice Period: Select the Trading Month or Trading Week. Only one period can be selected. If the disagreement relates to multiple periods, then submit a new disagreement for each.
- 4.3. Click Next to continue or Cancel to exit without saving.
- 4.4. Reason for Disagreement: Enter a brief description. Please provide sufficient detail outlining the submission. The information to be provided is outlined in clause 9.20.4 of the WEM Rules.
- 4.5. Expected Settlement Amount: Enter a dollar value if known. Provide any justification for the value in the supporting documents fields.
- 4.6. Spreadsheet: Attach supporting evidence. Only one attachment may be provided.
- 4.7. Additional Information (optional): Attach any additional information that may support the disagreement. Multiple attachments may be provided.
- 5. Click Submit to provide the Notice of Disagreement to AEMO, or Cancel to exit without saving.
- 6. Once a Notice of Disagreement has been submitted, an automated acknowledgement will be emailed to the Main Contact user, the Participant User making the submission, and copied to WA Market Operations (see Figure 181).
- 7. The submitted Notice of Disagreement is available to view in the Notice of Disagreements tab, with status "AEMO Assessment" (see Figure 182).

AEMO Request for Information

AEMO may, if it reasonably considers it is required to assess or resolve a Notice of Disagreement, request clarification or further information regarding any aspect of the Notice of Disagreement [WEM Rule 9.20.4A].

If AEMO requests clarification or further information:

- AEMO will change the Notice of Disagreement status to "Information Requested" (see Figure 183).
- AEMO may attach information to the "AEMO Documents" field and/or include a brief message.
- An automated notification will be emailed to the Main Contact user, the Participant User making the submission, and copied to WA Market Operations.

To provide more information to AEMO (see Figure 184):

- 1. Select Prudential-Settlements portal > Forms > Notices of Disagreement.
- 2. Locate the relevant submission.
- 3. Review any attached information in the "AEMO Documents" field.
- 4. Click the Resubmit button (see Figure 184).
- 5. Review any message provided by AEMO in the "Request for Further Information" field.
- 6. Attach the required documents in the "Additional information" field.
- 7. Click Resubmit to provide the information to AEMO, or Cancel to exit without saving
- 8. Once a Notice of Disagreement has been resubmitted, an automated acknowledgement will be emailed to the Main Contact user, the Participant User making the submission, and copied to WA Market Operations.
- 9. The resubmitted Notice of Disagreement is available to view in the Notice of Disagreements tab, with status "AEMO Assessment" (see Figure 182).

AEMO Extends the Deadline to Respond

AEMO may extend the deadline to respond to a Notice of Disagreement where it requires additional time to respond to the Notice of Disagreement, including additional time to assess relevant information or determine the actions it will take [WEM Rule 9.20.7A].

If AEMO extends the deadline to respond to a Notice of Disagreement:

- AEMO will change the "Due Date" field to the revised date.
- AEMO may request more information (see AEMO Request for Information).
- An automated notification will be emailed to the Main Contact user, the Participant User making the submission, and copied to WA Market Operations (see Figure 185).

AEMO Responds to Notice of Disagreement

AEMO must, as soon as practicable, but within 20 Business Days of receipt of a Notice of Disagreement respond to a Rule Participant who issued a Notice of Disagreement indicating the actions (if any) AEMO will take in response to the Notice of Disagreement [WEM Rule 9.20.7].

When AEMO responds to a Notice of Disagreement:

- AEMO will attach a decision document to the "AEMO Documents" field.
- An automated notification will be emailed to the Main Contact user, the Participant User making the submission, and copied to WA Market Operations.

To view AEMO's response to a Notice of Disagreement:

- 1. Select Prudential-Settlements portal > Forms > Notices of Disagreement.
- 2. Locate the relevant submission.
- 3. Click on the green icon in the "AEMO Documents" field.

Any further correspondence will occur outside of the Prudential-Settlements portal.

Figure 178 Submitting a new Notice of Disagreement

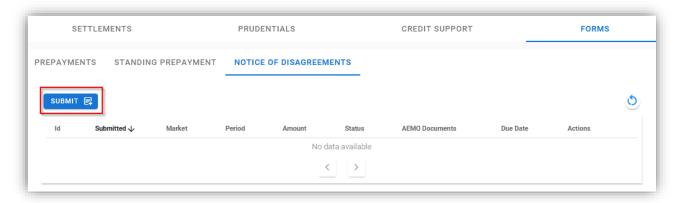


Figure 179 Notice of Disagreement Form page 1

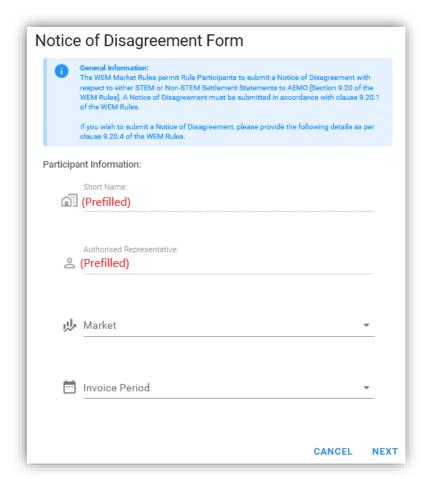


Figure 180 Notice of Disagreement Form page 2

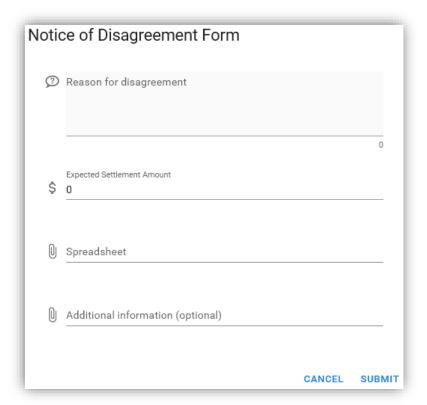


Figure 181 Notice of Disagreement acknowledgement email



Figure 182 Notice of Disagreement dashboard

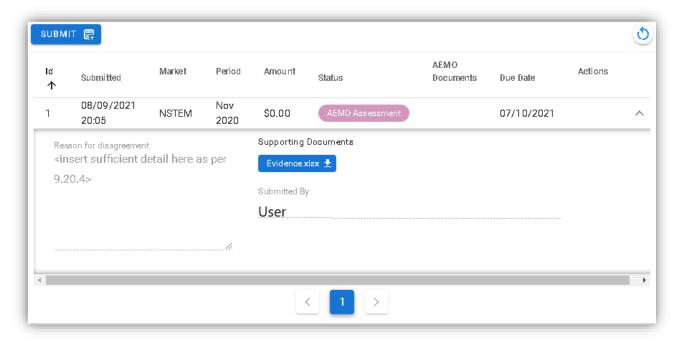


Figure 183 Resubmitting a Notice of Disagreement

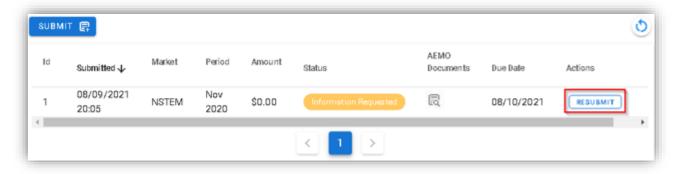


Figure 184 Request for Further Information dialog box

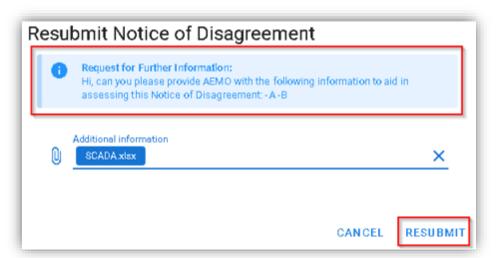


Figure 185 Notice of Disagreement due date email

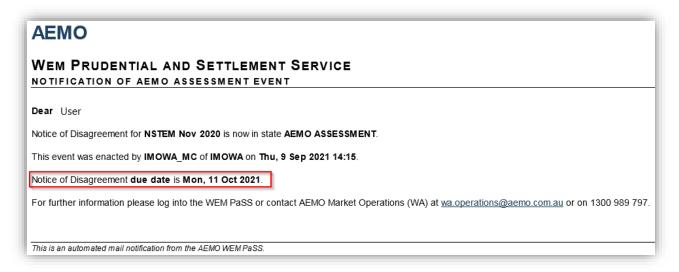
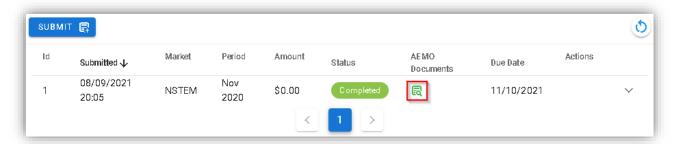


Figure 186 AEMO response to a Notice of Disagreement



12.7 Prudential and Settlements APIs

AEMO uses the third party Swagger platform to document the Prudential and Settlements APIs and share the information with Participants.

To utilise the APIs, a web certificate must be obtained from AEMO. Please contact WA Market Operations on wa.operations@aemo.com.au if you require a certificate. Web certificates are issued by Digicert and are replaced annually. Participants using web services should ensure their systems trust certificates issued by this authority.

Table 28 Documentation for Prudential and Settlement APIs

API Information	URL
Swagger documentation	Production: https://wems.aemo.com.au/prudential/api/docs/ Market Trial: https://wems-mkt.aemo.com.au/prudential/api/docs/
End points (hostname)	Production: wems.aemo.com.au Market Trial: wems-mkt.aemo.com.au

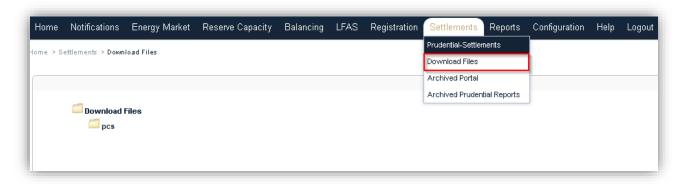
12.8 Download Files

To access the Download Files display, select Settlements > Download Files (see Figure 187).

The Download Files display allows users to download the following:

- PCS documents for RCM Settlements and WEMS Settlements for Invoices issued prior to 1 August 2021.
- PCS document for the IRCR calculation.
- WEM Metering, Settlement and Prudential Calculation Formulation.

Figure 187 Download Files menu



13. User Management

This section should be read in conjunction with the <u>Market Participant Administrator Guide</u>. For assistance with user accounts, please contact Market Operations (WA) at <u>wa.operations@aemo.com.au</u>.

13.1 Change Pin

To access the Change Pin display, select Configuration > User Management > Change Pin (see Figure 188). The Change Pin functionality allows users to change the pin on their assigned RSA SecurID token.

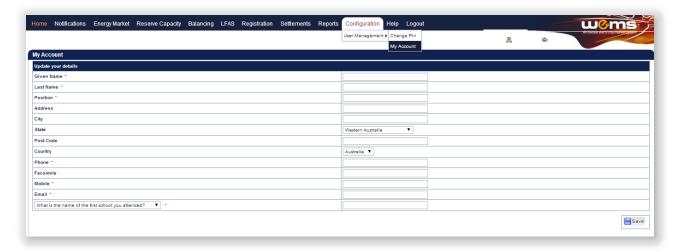
Figure 188 Change Pin display



13.2 My Account

To access the My Account display, select Configuration >User Management >My Account (see Figure 189). Users are responsible for keeping their contact details up to date.

Figure 189 My Account display



13.3 Switch Participant Functionality

A user may represent more than one Participant. Once the user is logged into the MPI, they can switch to another Participant that they represent without being required to log out. The switch takes into consideration any access permissions for that Participant.

14. Balancing

This section should be read in conjunction with the <u>Market Procedure</u>: <u>Balancing Market Forecasts Procedure</u> and the <u>WEMS Reports and Web Service Specification</u> document.

For assistance with the Balancing Market, contact Market Operations (WA) at wa.operations@aemo.com.au.

14.1 Balancing File Exchange

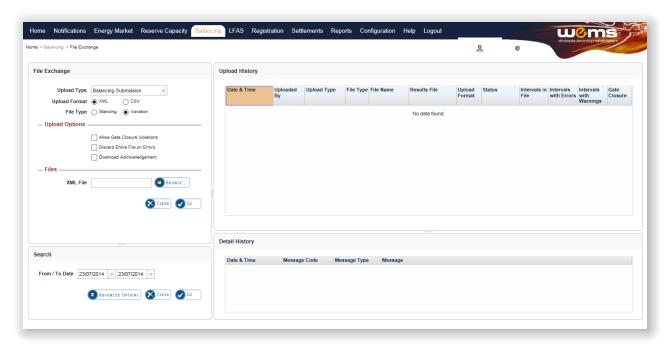
To access the Balancing File Exchange, select **Balancing > File Exchange**.

The display will default to Upload Type "Balancing Submission" and Upload Format "XML" (see Figure 190).

The Balancing File Exchange allows users to make Balancing Submissions in either XML or CSV format via the MPI Interface. A submission may consist of a single XML file, or a set of CSV files.

File Exchange options are described in more detail in Section 11.

Figure 190 Balancing File Exchange display



14.2 Balancing Merit Order

To access the Balancing Merit Order (BMO), select Balancing > Balancing Merit Order (see Figure 191).

The Search options allow the output to be filtered on the criteria in Table 29.

Energy Market Reserve Capacity Balancing LFAS Registration Settlements Reports Configuration Help Logout wems Balancing Merit Order Details (Final for 03/06/2014) Balancing Merit Order (Final for 03/06/2014) Output

View

CSV

XML Price (S/MW) | General A-scillar) | General A-scill Price Band Size S5 Merit Order Type

Lates Final CLEAR GO 18:00 - 18:30 18:00 - 18:30 18:00 - 18:30 18:00 - 18:30 18:00 - 18:30 18:00 - 18:30 18:00 - 18:30 18:00 - 18:30 Anonymous Own LFAS
Commissioning Test Other AS

Figure 191 Balancing Merit Order display

Table 29 Balancing Merit Order search criteria fields

Field Name	Field Description
Output	View the output in the display or download as a CSV or XML file
View Mode *	Display the View by either a Trading Day or a Trading Interval
Date	The Trading Day for the output, which can be any day since the start of the Balancing Market
Price Band Size *	The granularity of the bids in the View output
Merit Order Type *	Balancing Merit Order (BMO) for one of the following: Latest Forecast Provisional Final
Calculated As At *	If Forecast is selected as the Merit Order Type, the user can then select the time the Forecast BMO was calculated at.

^{*}This field is only applicable when Output is selected as View.

14.3 Balancing Prices

To access the Balancing Prices, select **Balancing > Balancing Prices** (see Figure 192).

The Search options allow the output to be filtered on the criteria in Table 30.

Figure 192 Balancing Prices display

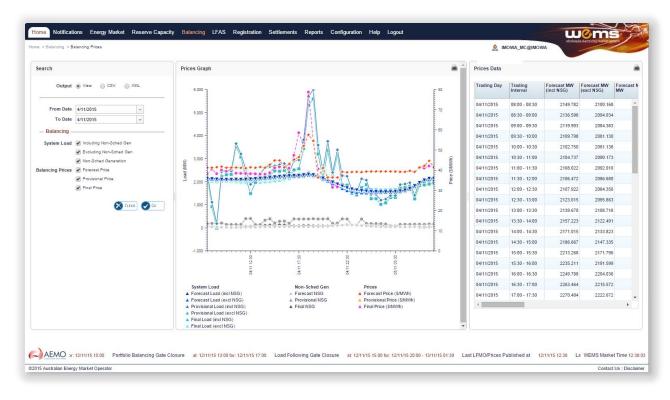


Table 30 Balancing Prices search criteria fields

Field Name	Field Description
Output	View the output in the display or download as an CSV or XML file
From Date	The first Trading day for the output
To Date	The last Trading day for the output
System Load	 EOI value in MW of the System Load attributable to one or more of the following: Including Non-Scheduled Generation Excluding Non-Scheduled Generation Non-Scheduled Generation
Spare Capacity	Spare Capacity in MW and can be one or more of the following: • Forecast Spare Capacity • Provisional Spare Capacity (Ex-ante Outages) • Provisional Spare Capacity (Ex-post Outages)
Participant Total	Aggregated sum of the Participant's facilities EOI values in MW
Balancing Prices	Balancing Prices in \$/MWh for one or more of the following: • Forecast • Provisional • Final

14.4 Balancing Schedules

To access the Balancing Schedules, select Balancing > Balancing Schedules (see Figure 193).

The Search options allow the output to be filtered on the criteria in Table 31.

Figure 193 Balancing Schedules display

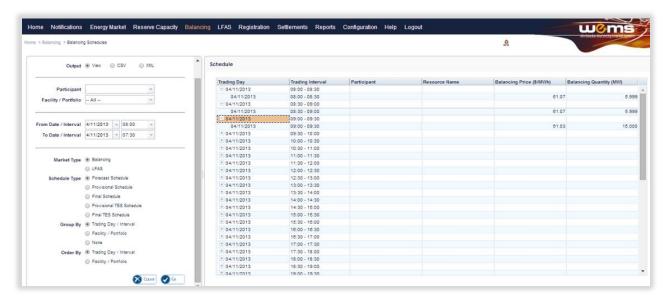


Table 31 Balancing/LFAS Schedules search criteria fields

Field Name	Field Description
Output	View the output in the display or download as an CSV or XML file
Participant	The Participant the output relates to
Facility / Portfolio	The Facility or the Balancing Portfolio the output relates to
From Date / Interval	The first Trading day and Trading Interval for the output
To Date / Interval	The last Trading day and Trading Interval for the output
Market Type	Schedule for one of the following: Balancing LFAS
Schedule Type	Schedule for one of the following: • Forecast Schedule • Final Schedule If Balancing is selected as the Market Type, the following are also available: • Provisional Schedule • Provisional TES Schedule • Final TES Schedule

Field Name	Field Description
Group By	Based on the criteria selected, the output can be grouped by one of the following: Trading Day / Interval Facility / Portfolio None
Order By	Based on the criteria selected, the output can be ordered by one of the following: Trading Day / Interval Facility / Portfolio

14.5 Balancing Submissions

Select Balancing > Balancing Submissions to show the Balancing Submissions display as shown in Figure 194. The search options allow the output to be filtered on number of criteria listed below:

Figure 194 Balancing Submissions display

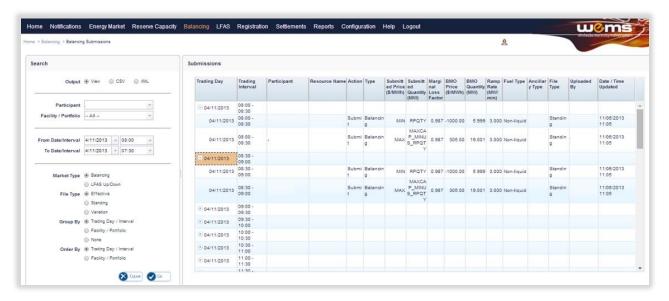


Table 32 Balancing/LFAS Submissions Search field descriptions

Search Field	Description
Output	View the output in the display or download as a CSV or XML file
Participant	The Participant the output relates to
Facility / Portfolio	The Facility or the Balancing Portfolio the output relates to
From Date / Interval	The first Trading Day and Trading Interval for the output
To Date / Interval	The last Trading Day and Trading Interval for the output
Market Type	Submissions for one of the following: Balancing LFAS Up/Down LFAS Backup Up/Down

Search Field	Description
File Type	Submissions for one of the following: • Effective • Standing • Variation
Group By	Based on the criteria selected, the output can be grouped by one of the following: Trading Day / Interval Facility / Portfolio None
Order By	Based on the criteria selected, the output can be ordered by one of the following: • Trading Day / Interval • Facility / Portfolio

14.6 Balancing Gate Closure Violations

To access the Balancing Gate Closure Violations, select **Balancing > Balancing Gate Closure Violations** (see Figure 195).

The Search options allow the output to be filtered on the criteria in Table 33.

Figure 195 Balancing Gate Closure Violations display

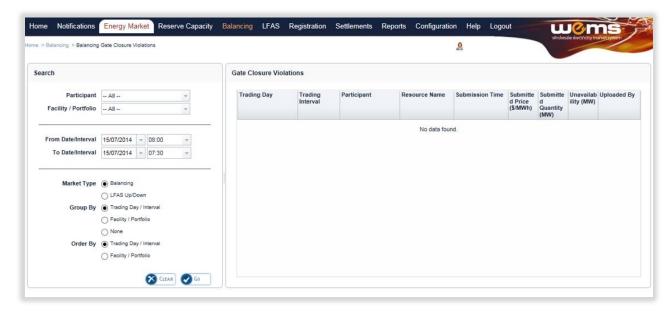


Table 33 Balancing/LFAS Gate Closure Violations search criteria fields

Field Name	Field Description
Participant	The Participant the output relates to
Facility/Portfolio	The Facility or Balancing Portfolio the output relates to
From Date/Interval	The first Trading Day and Trading Interval for the output
To Date/Interval	The last Trading Day and Trading Interval for the output

Field Name	Field Description
Market Type	Gate Closure Violations for one of the following: Balancing LFAS Up/Down LFAS Backup Up/Down
Group By	Based on the criteria selected, the output can be grouped by one of the following: Trading Day / Interval Facility / Portfolio None
Order By	Based on the criteria selected, the output can be ordered by one of the following: • Trading Day / Interval • Facility / Portfolio

15. LFAS

This section should be read in conjunction with the <u>Market Procedure: Balancing Market Forecasts</u>, the <u>Power System Operation Procedure: Ancillary Services</u> and the <u>WEMS Reports and Web Service Specification</u> document.

For assistance with the LFAS Market, please contact Market Operations (WA) at wa.operations@aemo.com.au.

15.1 LFAS File Exchange

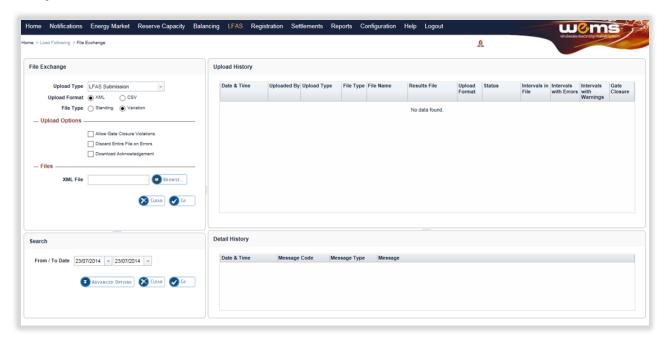
To access the LFAS File Exchange, select LFAS >File Exchange.

The display will default to Upload Type "LFAS Submission" and Upload Format "XML" (see Figure 196).

The LFAS File Exchange allows users to make LFAS Submissions in either XML or CSV format via the MPI Interface.

File Exchange options are described in more detail in Section 11.

Figure 196 LFAS File Exchange display



15.2 LFAS Merit Order

To access the LFAS Merit Order, select **LFAS >LFAS Merit Order** (see Figure 197).

The Search options allow the output to be filtered on the criteria in Table 34.

Figure 197 LFAS Merit Order

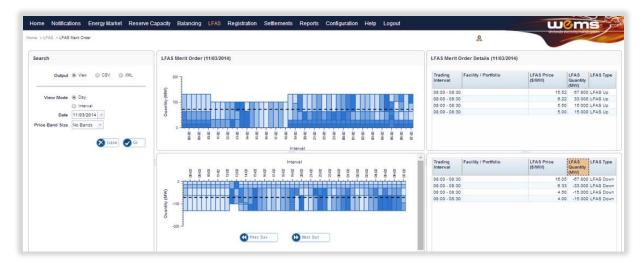


Table 34 LFAS Merit Order search criteria fields

Field Name	Field Description
Output	View the output in the display or download as a CSV or XML file
View Mode *	View can be for a Trading Day or a Trading Interval
Date	The first Trading Day for the output, which can be any day from the start of the Balancing Market
Price Band Size *	The granularity of the bids in the View output

^{*}This field is only applicable when Output is selected as View.

15.3 LFAS Prices

To access the LFAS Prices, select LFAS > LFAS Prices (see Figure 198).

The Search options allow the output to be filtered on the criteria in Table 35.

Figure 198 LFAS Prices display



Table 35 LFAS Prices search criteria fields

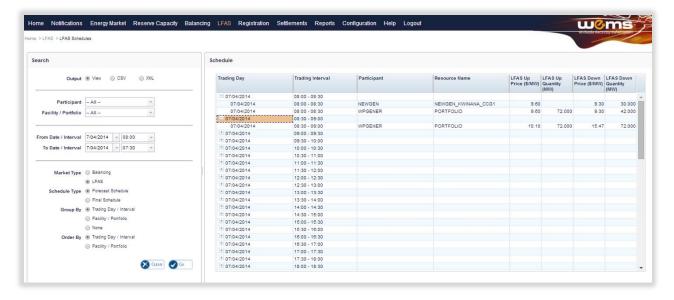
Field Name	Field Description
Output	View the output in the display or download as an CSV or XML file
From Date	The first Trading Day for the output
To Date	The last Trading Day for the output
Participant Total	The Participant's total Load Following quantity in MW
LFAS Prices	LFAS Prices in \$/MWh for one or more of the following: Up Price Down Price Backup Up Price Backup Down Price
LFAS Rqmts	LFAS Requirement in MW for one or more of the following: • LFAS Up Requirement • LFAS Down Requirement

15.4 LFAS Schedules

To access the LFAS Schedules, select LFAS >LFAS Schedules (see Figure 199).

The Search options allow the output to be filtered on the criteria in Table 31.

Figure 199 LFAS Schedules display

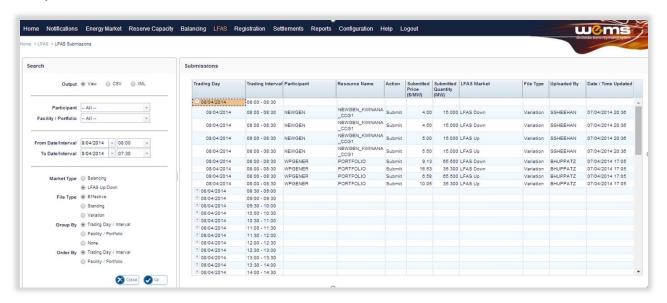


15.5 LFAS Submissions

To access the LFAS Submissions, select LFAS >LFAS Submissions (see Figure 200).

The Search options allow the output to be filtered on the criteria in Table 32.

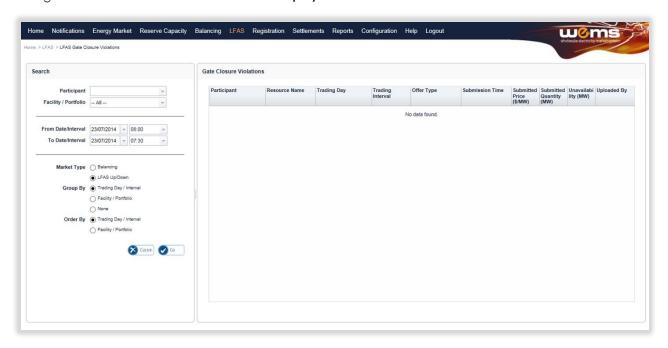
Figure 200 LFAS Submissions display



15.6 LFAS Gate Closure Violations

To access the LFAS Gate Closure Violations, select LFAS > LFAS Gate Closure Violations (see Figure 201). The Search options allow the output to be filtered on the criteria in Table 33.

Figure 201 LFAS Gate Closure Violations display



16. Generator Performance Standards (GPS) System

For assistance with the GPS System, please contact the AEMO WA System Management Operations at wa.sm.operations@aemo.com.au.

16.1 Overview

This User Guide will assist a Market Participant to perform the following tasks using the GPS System in the WEMS MPI Portal:

- View and download Generator Performance Standard (GPS) Submissions (Section 16.3)
- View and download Generator Monitoring Plans (GMP) (Section 16.5)
- Report Non-Compliances for GPS or GMP (Section 16.6)
- Submit Rectification Plans for GPS or GMP (Section 16.7)
- View Progress of Non-Compliances and Rectification Plan for GPS or GMP (Section 16.8)
- Amend Approved Rectification Plans for GPS or GMP (Section 16.9)

Refer to the following documents and sites for more detailed information on processes, procedures, roles and responsibilities:

- WEM Procedure <u>GENERATOR PERFORMANCE STANDARDS FOR EXISTING TRANSMISSION</u>
 <u>CONNECTED GENERATING SYSTEMS</u> (This is a Western Power document)
- WEM Procedure <u>GENERATION SYSTEM MODEL SUBMISSION AND MAINTENANCE</u> (This is a Western Power document)
- WEM Procedure Generator Monitoring Plans

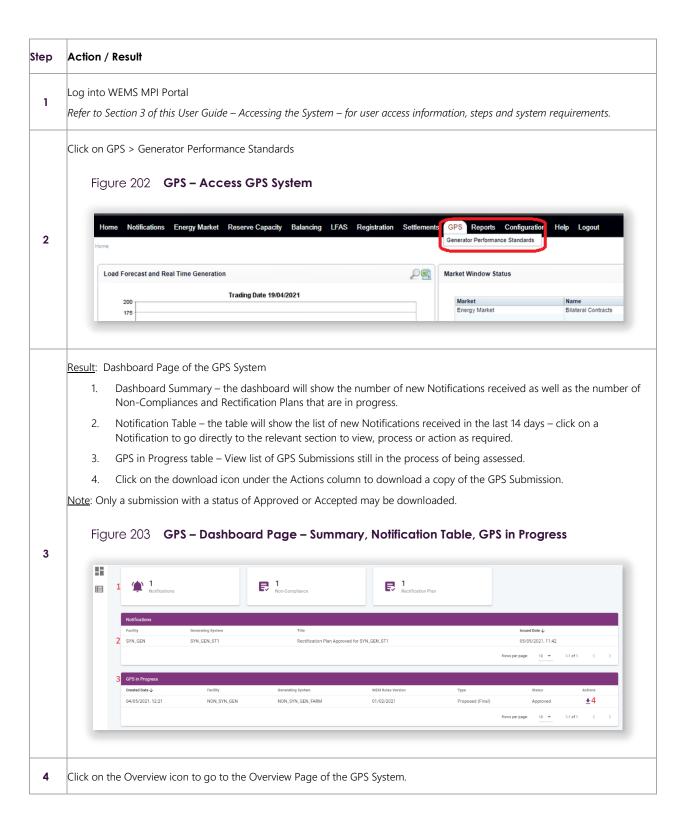
16.2 GPS Submission Process

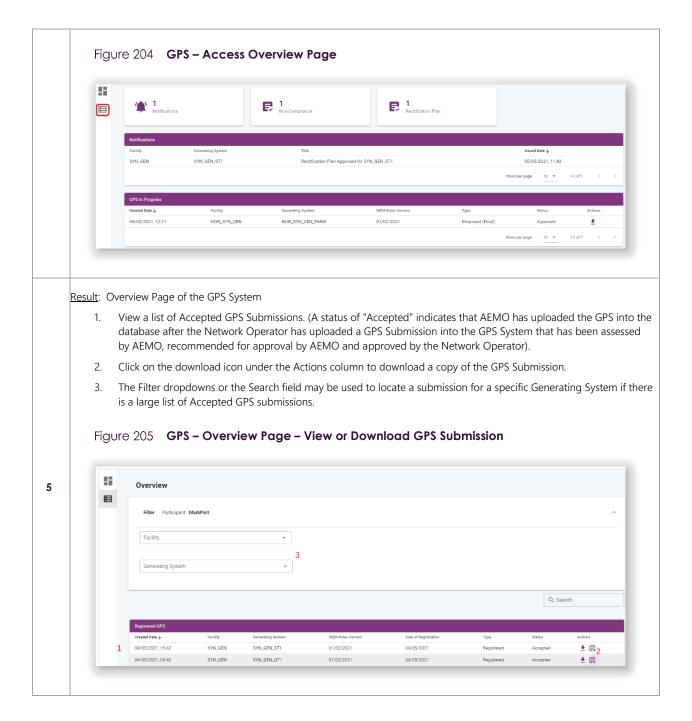
A Market Participant will submit a GPS Submission using the approved template from the Network Operator using processes and systems approved with the Network Operator. This first step is completed outside of the GPS System.

16.3 View and download a GPS Submission

The Market Participant will be able to view and download their GPS Submission in the GPS System only once it has achieved Approved or Accepted status. During all other statuses, the Market Participant will only be able to view the status of the GPS Submission.

Follow the steps below to view or download a GPS Submission in the GPS System.





16.4 Generator Monitoring Plan (GMP) Submission Process

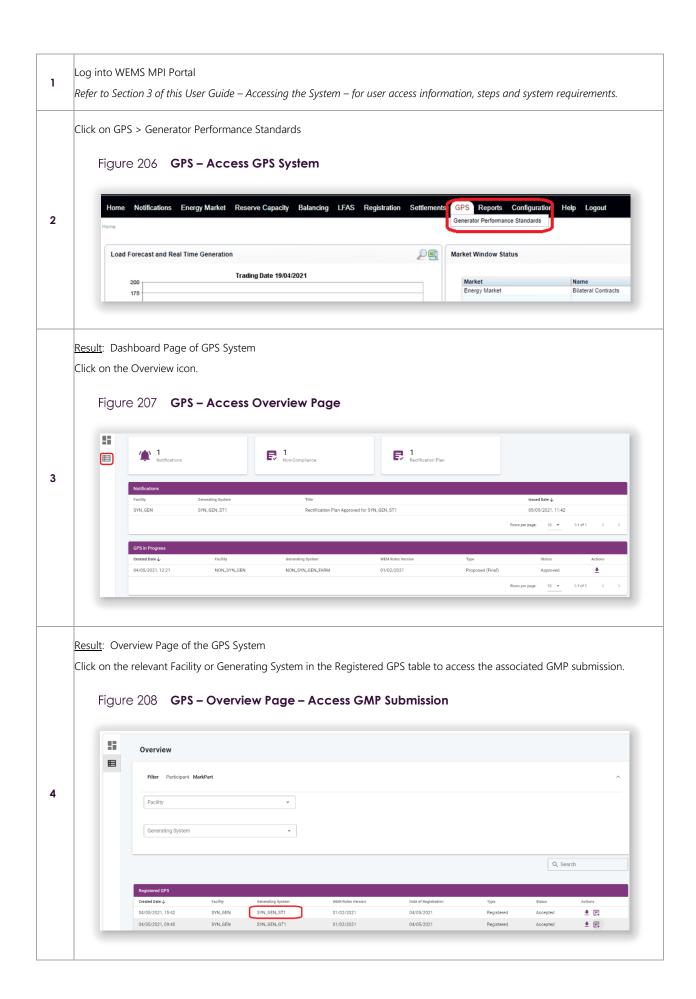
A Market Participant will submit a Generator Monitoring Plan (GMP) using the approved template from AEMO. This first step is completed outside of the GPS System.

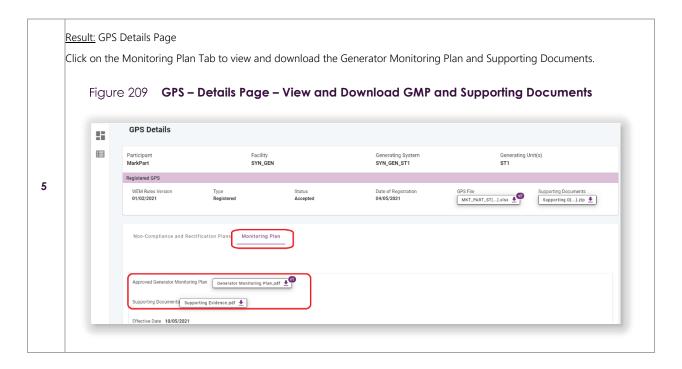
The Market Participant will receive an email notification when they are able to view and download their GMP in the GPS System only once it has been approved and uploaded to the GPS System by AEMO.

16.5 View and Download a GMP

Follow the steps below to view or download a GMP in the GPS System. Focus areas are highlighted in red.

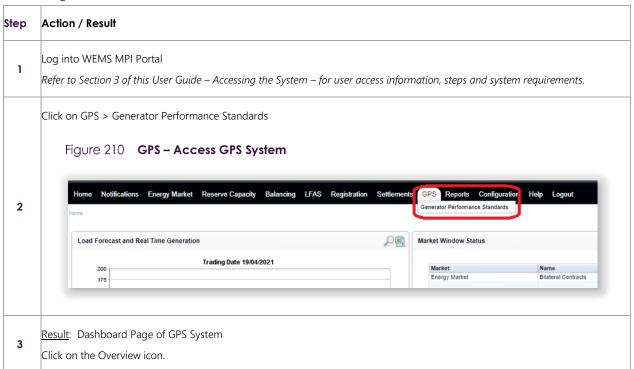
Step	Action / Result
------	-----------------



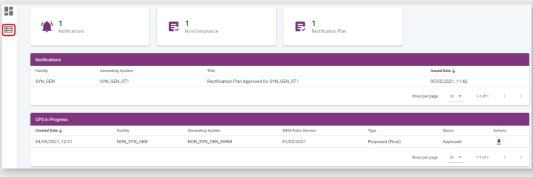


16.6 Report Non-Compliances for GPS or GMP

Follow the steps below to report Non-Compliances for either Generator Performance Standards or Generator Monitoring Plans.







Result: Overview Page of the GPS System

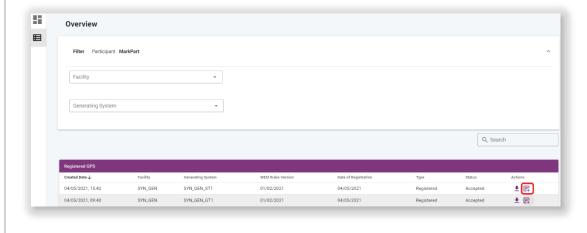
Click on the Add Non-Compliance icon relative to the GPS for which you would like to submit a Non-Compliance.

Note: The Filter dropdowns or the Search field may also be used to locate a submission for a specific Generating System if there is a large list of Accepted GPS or GMP submissions.

Figure 212 GPS - Overview Page - Add Non-Compliance

4

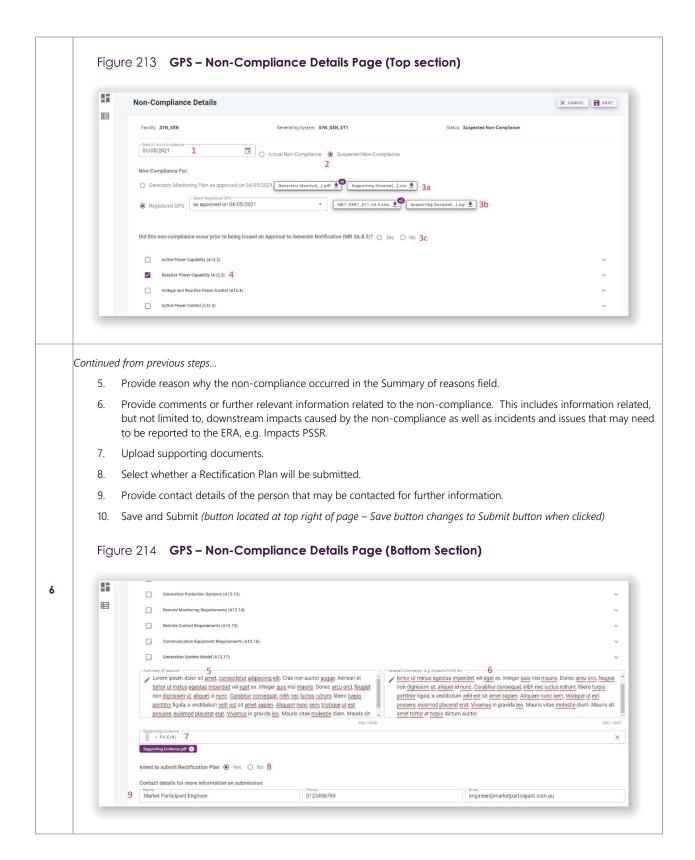
5



Result: Non-Compliance Details Page

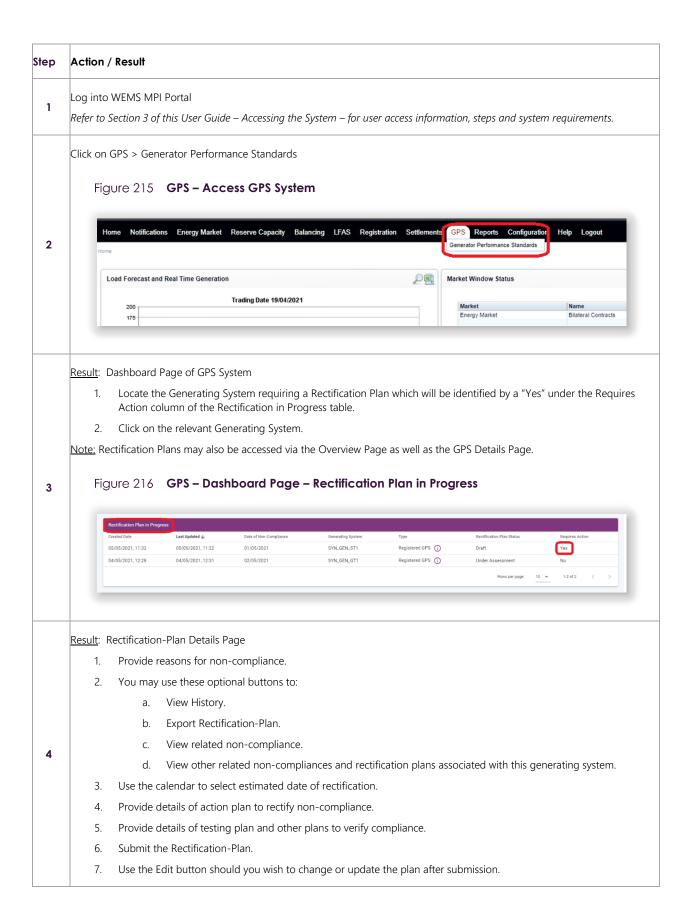
This is a dynamic form and further options and fields may appear based on your selection. Complete the dynamic form as follows:

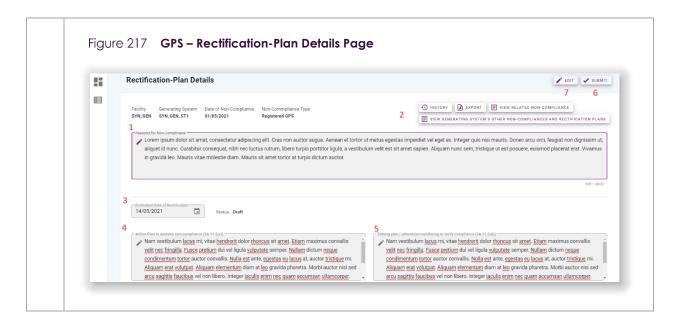
- 1. Use the calendar to select the date when the Non-Compliance first occurred.
- 2. Select whether actual or suspected Non-Compliance (default is Suspected Non-Compliance)
- 3. Select whether the Non-Compliance is related to a GMP or GPS
 - a. If GMP is selected, the latest GMP and Supporting Documents will be available for download.
 - b. If GPS is selected, select the approved GPS that was in force on the date of the Non-Compliance from the dropdown that will appear the relevant GPS and Supporting Documents will be available for download.
 - c. Select Yes or No to the question that will appear "Did this non-compliance occur prior to being issued an Approval to Generate Notification (MR 3A.8.5)?"
- 4. Select the specific section or clause related to the non-compliance. Click on the section name to expand and view:
 - a. the associated clauses,
 - b. the criteria description for each clause, and
 - c. the Statement of Compliance associated with the clause.



16.7 Submit Rectification Plans for GPS or GMP

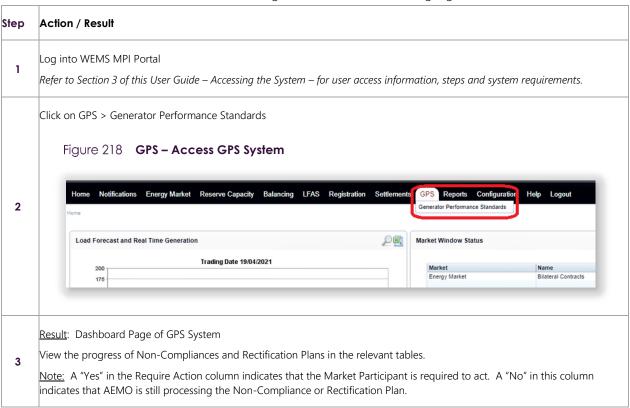
Follow the steps below to submit Rectification Plans for either Generator Performance Standards or Generator Monitoring Plans. This step is only available once AEMO has confirmed the alleged non-compliance in the GPS System. Focus areas are highlighted in red.



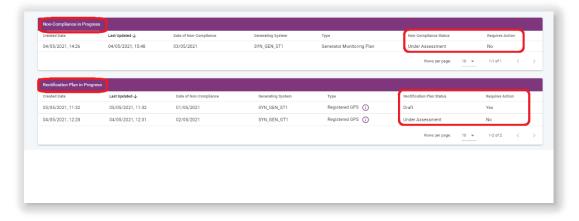


16.8 View Progress of Non-Compliances and Rectification Plans for GPS or GMP

Follow the steps below to view the progress of Non-Compliances and Rectification Plans for either Generator Performance Standards or Generator Monitoring Plans. Focus areas are highlighted in red.



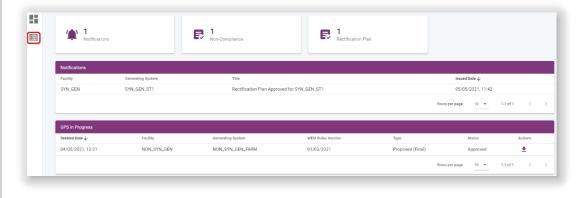




Click the Overview icon to view further progress of Non-Compliance and Rectification Plans.

Figure 220 GPS - Access Overview Page

4



Result: Overview Page of the GPS System

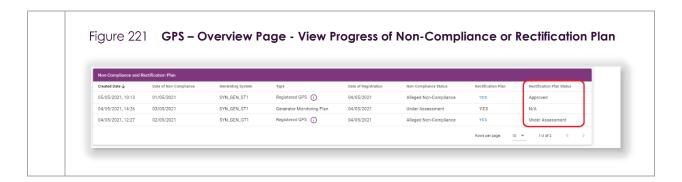
- 1. View the progress of Non-Compliances and Rectification Plans in the Non-Compliance and Rectification Plan table.
- 2. Click on a relevant non-compliance to view further details.

Note:

1. A "Yes" under the Rectification Plan column is clickable (blue font):

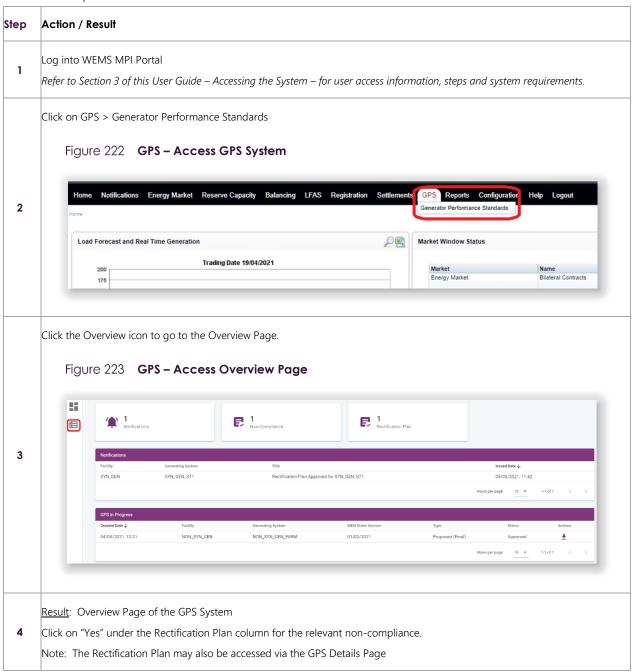
5

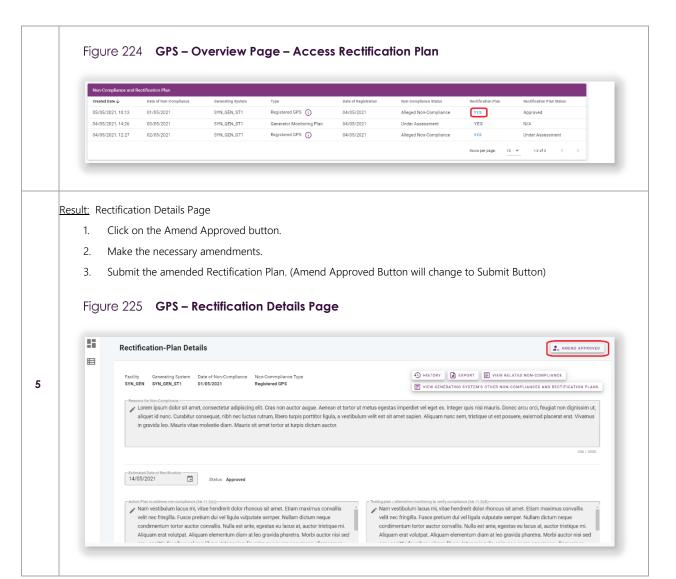
- when AEMO has reasonably considered that an alleged non-compliance has occurred and the Market Participant has indicated they intend to submit a Rectification Plan or,
- when there is an existing Rectification Plan that could be accessed and viewed or,
- when there is an existing Rectification Plan that could be amended if required.
- 2. A "Yes" in grey font is not clickable and indicates that there is an intent to submit a Rectification Plan however AEMO has not completed the assessment or has assessed the non-compliance as an Unconfirmed Non-Compliance.



16.9 Amend Approved Rectification Plans for GPS or GMP

Follow the steps below to amend a Rectification Plan.





17. Web Services

Users have the option to setup a Web Service to facilitate their trading requirements for the STEM, Balancing Market, and LFAS Market.

Web Service requests are delivered using the standard web service protocol SOAP (Simple Object Access Protocol).

In addition to making submissions via Web Services, users are also able to extract the reports available in the MPI through web service definition files (WSDL).

Refer to the WEMS Report and Web Service Specification document for more information.

To utilise Web Services, a certificate must be obtained from AEMO. If you require a new certificate, please contact Market Operations (WA) at wa.operations@aemo.com.au.

WEMS web certificates are issued by Digicert and are replaced annually. Market Participants using web services should ensure their systems trust certificates issued by this authority.

Glossary

This document uses many terms that have meanings defined in the Wholesale Electricity Market Rules (WEM Rules). The WEM Rules meanings are adopted unless otherwise specified.

Term	Definition
AEMO	Australian Electricity Market Operator
IRCR	Individual Reserve Capacity Requirement
LFAS	Load Following Ancillary Services
MPA	Market Participant Administrator
MPI	Market Participant Interface
NDL	Non-Dispatchable Load
NMI	National Meter Identifier
Participant	In the context of this document, Participant is used in general terms to mean any registered Rule Participant, unless otherwise specified
RCM	Reserve Capacity Mechanism
RSA SecurID Token	Third party security token for performing two-factor authentication for a user to a network source
STEM	Short Term Energy Market
SWIS	South West Interconnected System
WEM	Wholesale Electricity Market
WEM PaSS	Wholesale Electricity Market Prudential and Settlement Service
WEM Rules	Wholesale Electricity Market Rules
WEMS	Wholesale Electricity Market Systems