

# USER GUIDE: SYSTEM MANAGEMENT'S MARKET PARTICIPANT INTERFACE

| PREPARED BY:    | AEMO System Management (WA) |
|-----------------|-----------------------------|
| VERSION:        | 3.1                         |
| EFFECTIVE DATE: | 13 October 2021             |
| STATUS:         | FINAL                       |

 Approved for distribution and use by:

 APPROVED BY:
 Ryan Emanuel

 TITLE:
 Manager - Operations, Governance and Integration, System Management (WA)

Australian Energy Market Operator Ltd ABN 94 072 010 327

www.aemo.com.au info@aemo.com.au

NEW SOUTH WALES QUEENSLAND SOUTH AUSTRALIA VICTORIA AUSTRALIAN CAPITAL TERRITORY TASMANIA WESTERN AUSTRALIA



## **IMPORTANT NOTICE**

## Purpose

The purpose of this user guide is to assist Market Participants in communicating with AEMO using the System Management Market Participant Interface (MPI).

This publication is generally based on information available to AEMO as at 1 December 2020. More recent information may have been included where practical.

## Disclaimer

AEMO has made every effort to ensure the quality of the information in this publication but cannot guarantee that information, forecasts and assumptions are accurate, complete or appropriate for your circumstances. This publication does not include all of the information that an investor, participant or potential participant in the Wholesale Electricity Market might require, and does not amount to a recommendation of any investment.

Anyone proposing to use the information in this publication (including information and reports from third parties) should independently verify and check its accuracy, completeness and suitability for purpose, and obtain independent and specific advice from appropriate experts.

Accordingly, to the maximum extent permitted by law, AEMO and its officers, employees and consultants involved in the preparation of this publication:

- make no representation or warranty, express or implied, as to the currency, accuracy, reliability or completeness of the information in this publication; and
- are not liable (whether by reason of negligence or otherwise) for any statements, opinions, information or other matters contained in or derived from this publication, or any omissions from it, or in respect of a person's use of the information in this publication.

## Copyright

© 2021 Australian Energy Market Operator Limited. The material in this publication may be used in accordance with the <u>copyright permissions on AEMO's website</u>



## VERSION RELEASE HISTORY

| Version | Effective Date  | Summary of Changes                    |
|---------|-----------------|---------------------------------------|
| 1.0     | 1 February 2020 | Initial AEMO release                  |
| 2.0     | 13 October 2020 | Initial SMST release                  |
| 3.0     | 1 December 2020 | Post-SMST release                     |
| 3.1     | 13 October 2021 | Updated for Two Factor Authentication |



## CONTENTS

| IMPO                  | RTANT NOTICE   | 2                     |
|-----------------------|--|-----------------------|
| 1.<br>1.1.<br>1.2.    | INTRODUCTION<br>Purpose<br>Definitions and Glossary  | <b>6</b><br>6<br>6    |
| 2.                    | NEW MARKET PARTICIPANT MPI REGISTRATION PROCESS  | 6                     |
| 3.<br>3.1.<br>3.2.    | END-USER ACCESS PROVISIONING & DE-PROVISIONING<br>Registration of new Market Participant end-user<br>Deregistration of a Market Participant end-user | <b>6</b><br>6<br>7    |
| 4.                    | END-USER PASSWORD RESET  | 7                     |
| 5.                    | LOGGING ON TO THE MPI  | 7                     |
| 6.<br>6.1.            | MPI TWO FACTOR AUTHENTICATION<br>Two Factor Authentication reset   | <b>7</b><br>9         |
| 7.                    | MAIN MENU  | 9                     |
| 8.                    | OUTAGE REVIEW  | 10                    |
| 9.                    | TYPES OF OUTAGE REQUESTS   | 12                    |
| 10.<br>10.1.<br>10.2. | CREATING A PROPOSED OUTAGE PLAN (POP)<br>Outage scheduling<br>Outage Approval  | <b>12</b><br>12<br>16 |
| 11.                   | OPPORTUNISTIC MAINTENANCE  | 16                    |
| 12.<br>12.1.<br>12.2. | FORCED OUTAGES<br>Creating a Forced Outage<br>Cancelling a Forced Outage   | <b>18</b><br>18<br>19 |
| 13.                   | LOADING FORCED OUTAGES VIA CSV   | 20                    |
| 14.<br>14.1.          | DISPATCH<br>Dispatch Instruction Acknowledgement   | <b>21</b><br>21       |
| 15.                   | CONTACTING SYSTEM MANAGEMENT – OPERATIONAL QUERIES/TWO FACTOR<br>AUTHENTICATION ISSUES   | 22                    |
| 16.                   | CONTACTING AEMO SUPPORT HUB – USER ACCESS AND PASSWORD RESET   | 22                    |



## FIGURES

| Figure 1  | Login screen  | . 7 |
|-----------|---|-----|
| Figure 2  | QR Code Image   | . 8 |
| Figure 3  | Microsoft Authenticator setup for AEMO SM-MPI   | . 8 |
| Figure 4  | Two Factor Authentication code verification   | . 9 |
| Figure 5  | Two Factor Authentication reset   | . 9 |
| Figure 6  | Closed navigation menu  | 10  |
| Figure 7  | Opened navigation menu  | 10  |
| Figure 8  | Expanded navigation menu  | 10  |
| Figure 9  | Popular links   | 11  |
| Figure 10 | Outage Review screen  | 11  |
| Figure 11 | Outage search criteria  | 12  |
| Figure 12 | Menu selection for creating a Proposed Outage Plan  | 12  |
| Figure 13 | Create Outage screen for creating a Proposed Outage Plan                                    | 13  |
| Figure 14 | Create Outage screens with entry errors   | 14  |
| Figure 15 | Outage Successfully Submitted screen  | 15  |
| Figure 16 | Automatic receipt of confirmation of outage submission                                      | 15  |
| Figure 17 | Outage Approval request   | 16  |
| Figure 18 | Selecting Opportunistic Maintenance in the Outage Type drop-down menu                       | 17  |
| Figure 19 | Error message for an outage request that has been raised before the allowable time          | 17  |
| Figure 20 | Error message for an outage request that has been raised after the allowable time           | 17  |
| Figure 21 | Error message for an outage request that has been raised within 24 hours before the Start   |     |
|           | Time of any future Opportunistic Maintenance  | 17  |
| Figure 22 | Error message for an outage request that has been raised within 24 hours after the End Time |     |
|           | of the previous Opportunistic Maintenance   | 18  |
| Figure 23 | Error message for an outage request that has been raised for longer than a 24 hour period   | 18  |
| Figure 24 | Selecting Forced Outage in the Outage Type drop-down menu                                   | 18  |
| Figure 25 | Outage Successfully Submitted screen  | 19  |
| Figure 26 | Cancel Outage screen  | 19  |
| Figure 27 | Example CSV file for uploading Forced Outage details  | 20  |
| Figure 28 | Selecting a CSV file in Forced Outage via CSV screen  | 20  |
| Figure 29 | List of Forced Outages uploaded in Forced Outage via CSV screen                             | 20  |
| Figure 30 | Forced Outage Result screen   | 21  |
| Figure 31 | Example of a failed upload on Forced Outage via CSV screen                                  | 21  |
| Figure 32 | Dispatch Instruction Acknowledgement List screen  | 21  |
| Figure 33 | Example of a successful Dispatch Instruction acknowledgement                                | 22  |

## TABLES

| Table 1 | Abbreviations and specific terms, | s, and their definitions | 6 |
|---------|-----------------------------------|--------------------------|---|
|---------|-----------------------------------|--------------------------|---|



## 1. INTRODUCTION

#### 1.1. Purpose

The purpose of this user guide is to assist Market Participants in communicating with AEMO via the System Management Market Participant Interface (MPI).

## 1.2. Definitions and Glossary

The words, phrases and abbreviations in the table below have the meaning set out opposite them when used in this user guide.

#### Table 1 Abbreviations and specific terms, and their definitions

| Term       | Definition  |
|------------|---|
| MPI        | Market Participant Interface  |
| POP        | Proposed Outage Plan  |
| SM Ops     | System Management Operations  |
| SMST       | System Management System Transition   |
| WEM        | Wholesale Electricity Market  |
| IT Contact | Contact within a Market Participant organisation that is responsible for<br>managing their organisations' end user accounts |

## 2. NEW MARKET PARTICIPANT MPI REGISTRATION PROCESS

For a Market Participant to manage System Management MPI end user accounts, they must nominate an AEMO IT Contact with the AEMO Support Hub team. AEMO SM Operations will contact the Market Participant as part of the registration process to arrange for an AEMO IT Contact nomination. The AEMO IT Contact will be responsible for registering and de-registering of System Management MPI users, as well as resetting of end user passwords, when required. The AEMO IT Contact need not be an IT specialist, it is merely a coordination and key contact point for the AEMO Support Hub team in relation to new user creations/ de-registrations and password resets.

The following key information will be required for the AEMO IT Contact nominee:

- 1. Full name;
- 2. Email address; and
- 3. Contact phone number.

## 3. END-USER ACCESS PROVISIONING & DE-PROVISIONING

#### 3.1. Registration of new Market Participant end-user

If an end user requires access to the System Management MPI they would need to advise their dedicated AEMO IT Contact. The AEMO IT Contact will call the AEMO Support Hub team to arrange System Management MPI access for the end user.



## 3.2. Deregistration of a Market Participant end-user

If an end user has left the organisation or no longer requires access, the AEMO IT Contact must call the AEMO Support Hub team to arrange the removal of System Management MPI access for that end user.

## 4. END-USER PASSWORD RESET

If an end user has forgotten their password to access the System Management MPI, they need to advise their organisations' AEMO IT Contact. The AEMO IT Contact would then call the AEMO Support Hub team to arrange for the end user's password to be reset. Once the AEMO Support Hub team has reset the end user's password, it will be communicated to the AEMO IT Contact, who will advise the end user of their new password.

## 5. LOGGING ON TO THE MPI

Participants can access the System Management MPI via one of the following options:

- 1. The URL directly via https://mpi.wasm.aemo.com.au/online/mpi2/do/Login;
- 2. The portal via the AEMO website > Access Market Portals > System Management MPI; or
- 3. The Market Participant Interface link via the AEMO website as per the below URL: <u>https://aemo.com.au/energy-systems/electricity/wholesale-electricity-market-wem/system-operations/outages-and-commissioning</u>.

#### Figure 1 Login screen

| AEMO | Market Participant Interface  |
|------|---|
|      | Login   |
|      | Market Participant Interface is a password protected application; please log in to continue.  |
|      | User Id:<br>Password:<br>For security reasons, your session will automatically expire after it has been idle for 60 minutes. You will |
|      | then be asked to login again.   |
|      | Help Information  |
|      | For any Market Participant user access queries please contact your organisation's AEMO IT Contact. The IT                             |
|      | Contact will have to contact AEMO Support Hub on 1300 236 600 for assistance.   |
|      | Log in  |

Enter your User Id and Password to login.

For security purposes, the system will log the user out if the System Management MPI has been idle for 60 minutes, and any unsaved data that has been entered will be lost. A keystroke is not classified as an interaction with MPI. A link must be selected within the application for it to remain active.

## 6. MPI TWO FACTOR AUTHENTICATION

AEMO has introduced two factor authentication for logging into the System Management MPI due to the associated security risk of relying on single factor authentication (*User Id/Password* combination).

AEMO's preferred application for Two Factor authentication is Microsoft Authenticator which is available on the iOS and Android store.



Following log on using the *User Id* and *Password*, if the end user has not logged into the MPI before (or registered for Two Factor Authentication), the end user will be presented with a QR code for scanning

#### Figure 2 **QR Code Image**

| Market Participant Interface  |
|---|
| Code verification<br>Please scan the QR image and enter the code generated by your authenticator  |
| Enter the verification code Verify Code Help Information For any Market Participant QR Code/Two Factor Authentication queries/issues please contact System Management Operations for assistance - by phone on 1300 989 797. Option 2 or by email at |
| wa.sm.operations@aemo.com.au.   |

Scanning the QR Code as shown in Figure 2 using the Microsoft Authenticator application will add the account to the end user's device as seen below in Figure 3.

#### Figure 3 Microsoft Authenticator setup for AEMO SM-MPI

| 📑 Authe       | enticator                          | +         |
|---------------|------------------------------------|-----------|
| AEMC<br>wasmi | 9 SM-MPI<br>mpitest1<br>3 673 (18) | >         |
|               |                                    |           |
|               |                                    |           |
|               |                                    |           |
|               |                                    |           |
|               |                                    |           |
| •             | P                                  | 0         |
| Authenticator | Passwords                          | Addresses |

Entering the code generated by the Microsoft Authenticator application for *AEMO SM-MPI* will log the end user into the System Management MPI.



| Market Participant Interface   |
|--|
| Code verification  |
| code venication  |
| Please enter the code generated by your authenticator  |
| Enter the verification code Verify Code  |
| I don't have a verification code. Send me a One Time Password to my email instead  |
| Help Information<br>For any Market Participant QR Code/Two Factor Authentication queries/issues please contact System          |
| Management Operations for assistance - by phone on 1300 989 797, Option 2 or by email at <u>wa.sm.operations@aemo.com.au</u> . |

#### Figure 4 **Two Factor Authentication code verification**

## 6.1. Two Factor Authentication reset

If the original authenticator device is unavailable (e.g., new phone/device), clicking on "I don't have a verification code. Send me a One Time Password to my email instead" will send a One Time Password email to the User Id's associated email account for Two Factor Authentication reset.

Note: If Microsoft Authenticator is already setup on the device for the SM MPI, for some devices you may need to remove the existing entry first. Otherwise, an error may occur when it attempts to overwrite the existing setup.

Figure 5 **Two Factor Authentication reset** 

| Market Participant Interface   |
|--|
|  |
| Code verification  |
| Enter One Time Password Verify OTP Re-send One time Password(OTP)  |
| Help Information   |
| For any Market Participant QR Code/Two Factor Authentication queries/issues please contact System                              |
| Management Operations for assistance - by phone on 1300 989 797, Option 2 or by email at <u>wa.sm.operations@aemo.com.au</u> . |
|  |

The end user will have three minutes to enter the One Time Password (under Figure 3). After such time, it will expire, and a new One Time Password will need to be requested by clicking on the "*Resend One Time Password (OTP)*" URL.

Following successful Code verification of the One Time Password, the end user will be presented with a QR Code to scan using the Microsoft Authenticator application. See Figure 2 above.

#### 7. MAIN MENU

Once logged in, the home page will appear. Popular links can be found to the right of the screen which allows for quick searching or entering of outages, and a hidden navigation menu on the left. To view this menu, move the mouse above the purple box and white tip arrows.



#### Figure 6 Closed navigation menu

| Acting as: Synergy - Market Generator &<br>Welcome to System Manageme | ant Interface  |  | Logged in as hivkosi<br>Refresh Logout |
|---|--|--|--|
| <<< The navigation menu is here!                                      | System details<br>• User session times out after 60 minutes idle time<br>Contact Information<br>• Feedback: wa,sm.operations@aemo.com.au<br>• Report Bugs: wa.sm.operations@aemo.com.au<br>Help information<br>• System Management Operations 1300 989 797 | Popular Links<br>• Outage Review<br>• Create Proposed Outage Plan (POP)<br>• Create Forced Outage<br>• Lead Forced Outages via CSV |  |

Moving the mouse over the purple box will allow a menu to appear.

Figure 7 Opened navigation menu

| Market Participant Interface            |   |  |  |  |
|---|---|--|--|--|
| Acting as: Synergy - Market Generator 🔱 |   |  |  |  |
| Welcome to System Manageme              | nt's Market Participant Interface   |  |  |  |
| MPI Navigation<br>Outages<br>Dispatch   | Home<br>ystem details<br>• User session times out after 60 minutes idle time                                  |  |  |  |
| <<< The navigation menu is here!        | Contact Information   |  |  |  |
|   | <ul> <li>Feedback: wa.sm.operations@aemo.com.au</li> <li>Report Bugs: wa.sm.operations@aemo.com.au</li> </ul> |  |  |  |
|   | Help information <ul> <li>System Management Operations 1300 989 797</li> </ul>                                |  |  |  |

Select one of the options to expand the selection.

#### Figure 8 Expanded navigation menu

| cting as: Alinta Sales Pty Ltd - Market Generator 🔱 |                       |
|---|-----------------------|
| Welcome to System Management's Market               | Participant Interface |
| IPI Navigation                                      | Home                  |
| lutages   |                       |
| Outage Review                                       | dle time              |
| Create POP  |                       |
| Create Opportunistic Maintenance                    |                       |
| Create Forced Outage                                | au                    |
| Load Forced Outages via CSV                         | im.au                 |

## 8. OUTAGE REVIEW

All Market Participants can view all other Market Participants' outages, but only when the outages are in their *Approved* or *Approved with Conditions* stage.

When an item in a category is selected, to unselect it, hold *Ctrl* and click on the previously selected resources.



Searching based upon a nominated *Outage Number* or *Equipment Description* will cause other search criteria to be ignored, and *Wildcard* searching is supported in the Equipment Description field using either \* (asterisk) or % (percent) characters to represent multiple missing characters.

Example:

Searching for a description of \*clearing\* will cause search results to include all records where "clearing" appears anywhere in the Equipment Description field, whereas searching for a description of \*clearing (note no trailing asterisk) will cause search results to include records where the description field starts with "clearing".

To view outages, select Outage Review from either the hidden menu or Popular Links.

#### Figure 9 Popular links

| ting as: Alinta Sales Pty Ltd - Market Generator 🔱 |                       |   |
|--|-----------------------|---|
| Welcome to System Management's Market I            | Participant Interface |   |
| PI Navigation                                      | Home                  |   |
| tages  |                       | Popular Links                                   |
| Outage Review                                      | dle time              | Outage Review                                   |
| Create POP   |                       | Create Proposed Outage Plan                     |
| Create Opportunistic Maintenance                   |                       | Create Forced Outage                            |
| Create Forced Outage                               | au                    | <ul> <li>Load Forced Outages via CSV</li> </ul> |
| Create Provisional Outage                          | im.au                 |   |
| Load Forced Outages via CSV                        |                       |   |

#### Figure 10 Outage Review screen

|                 | NO  | Market               | Participant In   | terface  |           | <u> </u>           |   |         |                   |               |                |            | Logged in as hivkosic<br>Refresh Logout |
|-----------------|---|----------------------|------------------|--|-----------|--------------------|---|---------|-------------------|---------------|----------------|------------|---|
| Acting as: Syne | ergy - Market G   | enerator 8           |                  |  |           |                    |   |         |                   |               |                |            |   |
| Outag           | je Review   |                      |                  |  |           |                    |   |         |                   |               |                |            |   |
| - Filters       | Filters Start Date: 24/07/2019  |                      |                  |  |           |                    |   |         |                   |               |                |            |   |
| Start D         |   |                      |                  | Equipment: (Select)(Clear) Equipment Description: Resources: Addante, DAT, Mol Betwee, DAY, Mol Clear) Betwee, DAY, Mol Clear) |           | Outa               | Outage Categories:  |         |                   |               |                |            |   |
| 24/07/2         |   |                      |                  |  |           | Circu              | Gircuit Outage / Network Event<br>Generator Outage<br>Load Outage                         |         |                   |               |                |            |   |
| End Da          | End Date:   |                      |                  |  |           |                    |   |         |                   | Gene          |                |            |   |
| 2 02/08/2       | 02/08/2019 If<br>Outage Number:<br>Switching Required:<br>All V<br>Display Only My Outages: |                      |                  |  |           | Outa               |   |         |                   |               |                |            |   |
| Outage          |   |                      |                  |  |           | Cons               | Consequential Outage  |         |                   |               |                |            |   |
| Switch          |   |                      |                  |  |           | Force              | Forced Outage - Network Limitation<br>Opportunity Maintenance - Day Ahead  Outage Status: |         |                   |               |                |            |   |
| All             |   |                      |                  |  |           | Oppo               |   |         |                   |               |                |            |   |
| Display         |   |                      |                  |  |           | Outa               |   |         |                   |               |                |            |   |
| Latest          | Version Only:   |                      |                  |  | COCKB     | URN 🔺              |   |         | Accep             | oted          |                | Pendin     | a                                       |
|                 |   |                      |                  |  | GAS       |                    |   |         | Accep             | ted by SW     | OP             |            | -                                       |
|                 |   |                      |                  |  | HO_MC     | *                  |   |         | Appro             | oved with C   | onutions       | Арргом     | ed                                      |
|                 |   |                      |                  |  |           |                    |   |         | Appro             | oved With C   | onditions 💌    | Non-Appr   | oved                                    |
|                 |   |                      |                  |  |           |                    |   |         |                   |               | Reset          |            | Filter                                  |
|                 | Launch Time L   | ine                  |                  |  |           |                    |   |         |                   |               |                |            |   |
|                 | Outage#\$   | Version <sup>©</sup> | Start            | ≑ <u>End</u>   | \$        | Type               | 4   | Status  |                   | ≑ <u>MW</u> ≎ | Resource / Equ | uipment \$ | Description \$                          |
|                 | 235968  | 4                    | 19/07/2019 08:00 | 09/08/2  | 019 16:30 | Proposed Outage P  | lan   | Approve | d With Conditions | 143.0         | ALINTA_PNJ_U1  |            |   |
|                 | 238154  | 3                    | 08/02/2018 07:00 | 31/12/2  | 019 17:30 | Forced Outage - Ne | twork Limitation  | Approve | d                 | N/A           | KOJ T2 L       |            |   |

Fill out the search criteria as required. Note that multiple criteria can be selected.

To select or unselect, hold Ctrl and click on the selection with the mouse.



#### Figure 11 Outage search criteria

| g as: Synergy - Market Generator 🔱   |  |   |
|--|--|---|
| Outage Review  |  |   |
| Start Date:<br>24/07/2019 III<br>End Date:<br>02/08/2019 III<br>Outage Number:<br>Switching Required:<br>All ▼<br>Display Only My Outages:<br>Latest Version Only: Ø | Equipment: (Select)(Clear)<br>Equipment Description:<br>Resources:<br>ALBANY VHT_OLD<br>BREIRE DAY NG1<br>BREIRE DAY NG1<br>BREIRE DAY NG1<br>BREIRE DAY NG1<br>COCCULE<br>COCCULE<br>CAS<br>HO_MC • | Outage Categories:<br>Circuit Outage / Network Event<br>Generator Outage<br>Outage Type:<br>Opportunity Mointenance - Day Ahead<br>Opportunity Mointenance - Day Ahead<br>Opportunity Maintenance - Day Ahead<br>Proposed Outage Plan<br>Outage Status:<br>Coutage Status:<br>Coutage Status:<br>Approved With Conditions<br>Reset<br>Filer |

## 9. TYPES OF OUTAGE REQUESTS

There are three main types of outage requests that can be entered in the System Management MPI. The type of request to select depends on how far in advance of the outage the request is made. For specific timeframes, refer the Power System Operation Procedure (PSOP): Facility Outages<sup>1</sup>.

## 10. CREATING A PROPOSED OUTAGE PLAN (POP)

The process for Proposed Outage Plans (POP) follows:

- 1. Submitting a plan to conduct a proposed outage (outage scheduling).
- 2. Requesting approval of a proposed outage (outage approval).

## 10.1. Outage scheduling

An outage can be created by selecting either *Create POP* from the left-hand side hidden menu or *Create Proposed Outage Plan (POP)* from the *Popular Links* list.

Figure 12 Menu selection for creating a Proposed Outage Plan

| Weissens to System Management's Market Participant Inter | face     |  |
|--|----------|--|
| MPI Navigation   | Home     | Ropular Links  |
| Outages<br>Outage Raview<br>Create PDP                   | dle time | Outage Review     Create Proposed Outage Plan (      |
| Create Upportunistic Maintenance<br>Create Forced Outage | au       | Create Forced Outage     Load Forced Outages via CSV |
| Create Provisional Outage<br>Load Forced Outages via CSV | )m.au    |  |

<sup>&</sup>lt;sup>1</sup> AEMO. Available at: <u>https://aemo.com.au/en/energy-systems/electricity/wholesale-electricity-market-wem/procedures-policies-and-guides/procedures</u>



| ng as: Synergy - Market Generator 🔱                    |                                   |                                   |
|--|-----------------------------------|-----------------------------------|
| Create Outage  |                                   |                                   |
| Note: * indicates mandatory attribute; # indicates con | nditionally mandatory attribute.  |                                   |
| Main Details   |                                   |                                   |
| Outage Type:   | * Resource:                       | * Outage Description:             |
| Proposed Outage Plan                                   | Please Select a Workgroup First 🔻 |                                   |
| Status Type:   | * Outage MW:                      |                                   |
| Y  | 0.0                               |                                   |
| * Workgroup:   | * Recovery Time (Hours):          | Related Outages: (Select) (Clear) |
| T  |                                   |                                   |
|  |                                   |                                   |
| Outage Schedule  |                                   |                                   |
| Input fields are in Western Standard Time              |                                   |                                   |
| * Start Date/Interval:                                 | * End Date/Interval:              |                                   |
|  |                                   |                                   |
|  |                                   |                                   |

#### Figure 13 Create Outage screen for creating a Proposed Outage Plan

Complete the details (refer to Market Rule 3.18.6) using the drop-down boxes where applicable<sup>2</sup>. Below is a description of each field:

- 1. Outage Type: type of outage the user would like to submit.
- 2. Status Type: the Status Type appears once the outage has been created.
- 3. Workgroup: select from a dropdown list. It is the authority group linked to this Outage (Mandatory).
- 4. Resource: selected from a drop-down list. This is the resource that will be used in the Outage (Mandatory).
- 5. Outage MW: this is the value in MW that is unavailable. It is <u>not</u> the remaining capacity of the unit (Mandatory).
- 6. Recovery Time: this is the time it will take to bring the resource back in service if requested by AEMO to end the outage before the End Time. The time unit of measure is in hours, with a maximum allowable number of 4 digits (Mandatory).
- 7. Start Date: select from the calendar. Indicates the start date for the Outage (Mandatory).
- 8. End Date: select from the calendar. Indicates the end date for the Outage (Mandatory). Should the associated Facility be dispatched at this point, it must be able to synchronize with the power system within the times indicated in the Facility's *Standing Data*.
- 9. Start Time<sup>3</sup>: use drop down box. Indicates the Start Time Interval of the Outage (Mandatory).
- 10. End Time<sup>3</sup>: use drop down box. Indicates the End Time Interval of the Outage (Mandatory).
- 11. Outage Description: a descriptive text of the Outage being requested (Mandatory). Maximum characters allowed in this field is 100.
- 12. Related Outages: any outages that may correspond to and impact the outage. This may be a transmission line entering the power station or a transformer.

<sup>&</sup>lt;sup>2</sup> For information on timeframes applicable to proposed outages, please refer to:

https://aemo.com.au/en/energy-systems/electricity/wholesale-electricity-market-wem/system-operations/outages-andcommissioning/rule-change-rc 2013 15

<sup>&</sup>lt;sup>3</sup> Start and End Times are based on Trading Intervals. For example, Interval 08:00 is anytime between 08:00:00 and 08:29:59, and if the outage is to finish at 16:20, then interval 16:00 is to be selected.



- 13. Risk of outage extending beyond requested End Time: textual description indicating the risk assessment of the Outage extending past the requested End Date and End Time (Mandatory). Maximum characters allowed in this field is 250.
- 14. Contingency Plan: textual description indicating the approach if the unit is requested by AEMO to return from Outage sooner than scheduled (Mandatory). Maximum characters allowed in this field is 250.
- 15. Operational Information: textual description indicating the impact on the operation (Mandatory). Maximum characters allowed in this field is 720. If applicable, Participants should include information on whether the proposed outage is Mandatory Routine Maintenance.
- 16. Switching required: indication of whether a Switching Operator will be required to isolate the outage equipment.
- 17. Points of Isolation: required if a Switching Operator is required to do switching. Click on the 'Select' link for options.
- 18. Points of Isolation Description: a textual description of the Points of Isolation if specific Points of Isolation aren't known to user.
- 19. Declaration: required for Participants to declare that the relevant capacity or capability meets the availability requirements set out in the Market Rules, or provide an exception to this declaration, as appropriate<sup>4</sup> (Mandatory).

Select the *Check Details* button once details are completed to validate entries. Any errors will be indicated in pink.

| Outage Schedule<br>Input fields are in Western Standard Time.<br>* Start Date/Interval:<br>Start Date/Interval WDST: | * End Date/Interval: | ×  |
|--|----------------------|--|
| Operational Impact Description   |                      | WD Switching Dequired  |
| Operational Impact Description:  | -                    | WP Switching Required: # Points of Isolation: ( <u>Select</u> ) ( <u>Clear</u> ) |
| * Risk of Outage Exceeding Time:   |                      | 4  |
|  |                      | # WP Points of Isolation Description:  |
| * Contingency Plan:  |                      | Commissioning Plan:  |
|  |                      |  |
| * Declaration  |                      |  |
| OI agree to the <u>Declaration</u>   |                      |  |
| Exception (Please enter details of exception in the below  | ow text field)       |  |
|  | A                    |  |
|  |                      | Check Details Create Outage Reset Form Close Form                                |

#### Figure 14 Create Outage screens with entry errors

Once all errors have been corrected, select the *Create Outage* button to submit the outage. The *Outage Successfully Submitted* screen should appear and an outage number will appear at the top of the screen.

<sup>&</sup>lt;sup>4</sup> AEMO. Outage declaration requirements available at: <u>https://aemo.com.au/en/energy-systems/electricity/wholesale-electricity-market-wem/system-operations/outages-and-commissioning/outage-declaration</u>



#### Figure 15 Outage Successfully Submitted screen

| Ģ     |  | Market Participant I                                     | nterface                |  |  |  |  |
|-------|--|--|-------------------------|--|--|--|--|
| Ac    | Acting as: Synergy - Market Generator 🔉                              |  |                         |  |  |  |  |
|       | Outage Success   | fully Submitted  |                         |  |  |  |  |
|       | <ul> <li>Your Outage was</li> <li>Your Outage has been su</li> </ul> | successfully created.<br>Ibmitted. The details of the re | equest are shown below. |  |  |  |  |
| ^ ^ ^ | Identification<br>Outage Number:<br>243809                           |  | Version:                |  |  |  |  |

Please quote the *Outage Number* provided when calling AEMO regarding this outage. Once the outage has been submitted, an email will be sent to the users' inbox confirming any details of the outage along with its current status.

AEMO will evaluate the outage and advise the Participant by email whether the proposal is acceptable.

#### Figure 16 Automatic receipt of confirmation of outage submission



If the outage has been *Accepted* and the user wishes it to be cancelled, the outage may be cancelled from the *Outage Review* screen by selecting the red cancel icon to the left of the outage number in (under the action column).



## 10.2. Outage Approval

After an Outage Plan has been *Accepted by AEMO* and it is still the intention of the Market Participant to go ahead with the outage, the Market Participant is required to request *Approval* from AEMO.

Once the relevant outage has been found, click the *Request Approval for Outage* icon to the lefthand side of the outage number. The icon has an orange arrow protruding from the box

The icon will take the user to the *Outage Approval Request* page. If the details of the outage are still correct, scroll to the bottom of the page and select the *Request Approval* button.

#### Figure 17 Outage Approval request

| Last Modication Time:<br>Jul 24, 2019 2:52:59 PM |                  |            |            |
|--|------------------|------------|------------|
| Check Details                                    | Request Approval | Reset Form | Close Form |

The *Outage Successfully Submitted* will appear at the top of the page. Once the request for approval has been submitted, select *Close Form* on the bottom right of the screen. Note that if the End Time interval of the outage is estimated due to outage circumstances, the End Time can be changed by clicking on the *Shrink Outage Dates* icon. The icon has a blue arrow protruding from a white folder

## 11. OPPORTUNISTIC MAINTENANCE

The information required for this form of outage is the same as that required for the *Proposed Outage Plan*.

Enter the details and click *Check Details*, then click the *Create Outage* button. The *Outage Successfully Submitted* screen should appear if there are no errors.

Select *Outages* > *Create Opportunistic Maintenance* from the hidden menu.



#### Figure 18 Selecting Opportunistic Maintenance in the Outage Type drop-down menu

| AEMO<br>Market Participant Interface  |                                   |
|---|-----------------------------------|
| as: Alinta Sales Pty Ltd - Market Generator 🔉   |                                   |
| Create Outage   |                                   |
| Note: * indicates mandatory attribute; # indicates conditionally mandatory attribute. |                                   |
| Outage Type:  | * Resource:                       |
| Opportunity Maintenance   | Please Select a Workgroup First 🔻 |
| Status Type:  | * Outage MW:                      |
| T   | 0.0                               |
| * Workgroup:  | * Recovery Time (Hours):          |
| Outage Schedule   |                                   |
| Guage Schedule  |                                   |
| Input fields are in Western Standard Time.  |                                   |
| * Start Date/Interval:  | * End Date/Interval:              |
|   |                                   |
| Start Date/Interval WDST:   | End Date/Interval <u>WDST</u> :   |
|   |                                   |

If any outage has been raised before the allowable time, the message in Figure 19 will appear after you select *Check Details*.

Figure 19 Error message for an outage request that has been raised before the allowable time

| AEMO                        | Market Participant Interface                                  | · ·                             | Logg  |
|-----------------------------|---|---------------------------------|---|
| Acting as: Alinta Sales Pty | Ltd - Market Generator 🔒                                      |                                 |   |
| Create Outag                | e   |                                 |   |
| Opportunisti                | Maintenance outage must be requested any time after 10:00 AM, | two days prior to the Trading D | bay on which the outage is expected to commence |
|                             | and the state of the second states                            |                                 |   |

If any outage has been raised after the allowable time. the message in Figure 20 will appear on the top of the screen after you select *Check Details*.

#### Figure 20 Error message for an outage request that has been raised after the allowable time

| AEMO                        | Market Participant Interface                                      | Logged in a   |
|-----------------------------|---|---|
| Acting as: Alinta Sales Pty | Ltd - Market Generator 🔱  |   |
| Create Outag                | je 🖉  |   |
| Opportunisti                | Maintenance outage must be requested 30 minutes prior to Balancin | ing Gate Closure for the Trading Interval during which the outage is expected to commence |

If any outage has been raised within 24 hours before the Start Time of any future Opportunistic Maintenance, the message in Figure 21 will appear on the top of the screen after you select *Check Details*.

## Figure 21 Error message for an outage request that has been raised within 24 hours before the Start Time of any future Opportunistic Maintenance





If any outage has been raised within 24 hours after the End Time of the previous Opportunistic Maintenance, the message in Figure 22 will appear on the top of the screen after you select *Check Details*.

## Figure 22 Error message for an outage request that has been raised within 24 hours after the End Time of the previous Opportunistic Maintenance



If any outage has been raised for longer than a 24 hour period, the message in Figure 23 will appear on the top of the screen after you select *Check Details*.

#### Figure 23 Error message for an outage request that has been raised for longer than a 24 hour period



Note that if the End Time interval of the outage is estimated due to outage circumstances, the End Time can be shrunk by clicking on the *Shrink Outage Dates* icon. The icon has a blue arrow protruding from a white folder

#### 12. FORCED OUTAGES

Forced Outages are outages without approval (refer to Market Rule 3.21).

*Forced Outages* can be submitted via the MPI a maximum of 15 days after the event and up to 60 days ahead of time.

#### 12.1. Creating a Forced Outage

Select *Outages > Create Forced Outage* from the either the hidden menu or Popular Links.

#### Figure 24 Selecting Forced Outage in the Outage Type drop-down menu

| G     | AEMO Market Participant In                             | Iterface                          |
|-------|--|-----------------------------------|
| Actin | g as: Synergy - Market Generator 🔉                     |                                   |
|       | Create Outage  |                                   |
|       | Note: * indicates mandatory attribute; # indicates cor | ditionally mandatory attribute.   |
|       | Main Details   |                                   |
| ſ     | Outage Type:   | * Resource:                       |
|       | Forced Outage  | Please Select a Workgroup First 🔻 |
| >     | Status Type:   | * Outage MW:                      |
| >     | T  | 0.0                               |
|       | * Workgroup:   | Recovery Time (Hours):            |
|       | T  | N/A                               |
|       |  |                                   |

Enter details in the appropriate fields (refer to Market Rule 3.21.4).



Note that if the End Time interval of the outage is estimated due to outage circumstances, the End Time can be later shrunk by clicking on the *Shrink Outage Dates* icon. The icon has a blue arrow protruding from a white folder

Once the details have been entered, click on the *Create Outage* button. The *Outage Successfully Submitted* screen should appear.

Please quote the Outage Number provided when calling AEMO regarding this outage.

#### Figure 25 Outage Successfully Submitted screen

| 6      | Market Participant Interface  |
|--------|---|
| Act    | ing as: Synergy - Market Generator 🔉  |
|        | Outage Successfully Submitted   |
|        | Your Outage was successfully created.                                       |
|        | Your Outage has been submitted. The details of the request are shown below. |
|        | ☐ Identification  |
| ><br>> | Outage Number: Version:   |
| >      | 0   |

## 12.2. Cancelling a Forced Outage

A Forced Outage may be cancelled up to 15 Trading Days after the outage Start Time.

The outage may be cancelled from the outage review screen, by selecting the red cancel icon under the action column end will be red icon may not appear until approximately 5 minutes after the outage is entered, and will be a grey icon if it is after 15 Trading Days.

The Cancel Request Screen will then appear.

| AEMO Market Participant Interface  |  | Loged in as<br>Refree                           |
|--|--|---|
| g at: Synergy - Market Generator 88<br>Cancel Outage   |  |   |
| Outage Number:<br>243810   | Version:   |   |
| Hain Details<br>Outage Type:<br>Hemosef Outage Pan<br>Status Type:<br>Having Acceptant *<br>Warkgroup:<br>Collision *  | Resource:<br>INTENDAG, G4 •<br>Outupe HW (Facility & ISC) (Generation Information)<br>120.0<br>Recovery Time (Hours):<br>8 | Outage Description:<br>Int<br>Related Outages:  |
| Outage Schedule<br>Input Folds vr Western Standard Time.<br>Start Data (Interval)<br>Start Data (Interval)<br>Start Data (Interval WSS)<br>2070/2019 in 0:00 | End Data/Informat<br>2020/2218<br>End Data/Informat 202011<br>2020/2218 66:00  |   |
| Outage Details<br>Operational Impact Description:  | WP Switching Required:   |   |
| Risk of Outage Exceeding Time:<br>Test<br>Contingency Plan:<br>Test  | Paints d'Esclations<br>WP Paints d'Esclation Discr<br>Commissioning Plan   |   |
| Modifier Details<br>Originaterr<br>Erkesic   | Last Hodifier:<br>hickoic  | Last Modication Timei<br>2d 24, 2019 2100-23 PM |
|  |  | Cancellation Request Close                      |

Select *Cancellation Request* on the bottom right of the screen. The *Outage Successfully Submitted* should then appear.



## 13. LOADING FORCED OUTAGES VIA CSV

A list of Forced Outages can be submitted via a CSV file upload if this file is in the format required by MPI<sup>5</sup>.

To upload a CSV file, select the *Load Forced Outages via CSV* from the left-hand menu. The information entered into the CSV file should be in the following format:

<<action,outage\_number,resource\_id,workgroup,outage\_mw,start\_date,start\_interva L,end\_date,end\_interval,operational\_impact\_desc,outage\_description>>

#### Figure 27 Example CSV file for uploading Forced Outage details

| ForcedOutageadd                                       | csv - Notepad   |                |
|---|---|----------------|
| File Edit Format Help                                 |   |                |
| ACTION,OUTAGE_NUMBER,RESG<br>Add,,resource id,workgro | OURCE_ID,WORKGROUP,OUTAGE_MW,START_DATE,START_INTERVAL,END_DATE_END_INTERVAL,OPERATIONAL_IMPACT_DESC,OUTAGE_DESCRIPTI<br>up id,145,12/11/2007,18:00,12/11/2007,19:30,demo of operational impact field, demo of outage description field | DN A           |
| T   |   | <b>&gt;</b> // |

Save the CSV file. Select the Choose File button and select the CSV file, then click Load.

Figure 28 Selecting a CSV file in Forced Outage via CSV screen

| 6           | Market Participant Interface                 |   |
|-------------|--|---|
| Act         | ting as: Synergy - Market Generator 🔉        |   |
|             | Forced Outage via CSV<br>Details             |   |
|             | CSV File:<br>Choose File No file chosen Load | ] |
| ><br>><br>> | No data available                            |   |

#### Figure 29 List of Forced Outages uploaded in Forced Outage via CSV screen

| AEMO  | Market Parti              | cipant Interface                |                 |                       |                    |                        |                   |  | Logged in as hivkosi<br>Refresh Logou            |
|---|---------------------------|---------------------------------|-----------------|-----------------------|--------------------|------------------------|-------------------|--|--|
| Acting as: Synergy - Mar                              | ket Generator 🔏           |                                 |                 |                       |                    |                        |                   |  |  |
| Forced Outa<br>Details<br>CSV File:<br>Choose File No | ge via CSV                | Load                            |                 |                       |                    |                        |                   |  |  |
| Action Out<br>Add                                     | age# Resource Id<br>41184 | Workgroup<br>Alcoa_Ops_Pinjarra | Outage MW<br>50 | Start Date 10/07/2019 | Start Time<br>8:00 | End Date<br>10/07/2019 | End Time<br>18:00 | Impact Desc<br>CSV Forced Outage Upload te | Description<br>est CSV Forced Outage Upload test |
|   |                           |                                 |                 |                       |                    |                        |                   |  |  |
|   |                           |                                 |                 |                       |                    |                        |                   |  |  |
|   |                           |                                 |                 |                       |                    |                        |                   |  |  |
|   |                           |                                 |                 |                       |                    |                        |                   | _  |  |
|   |                           |                                 |                 |                       |                    |                        |                   |  | Submit Reset                                     |

Click on the Submit button once the file has been loaded.

<sup>&</sup>lt;sup>5</sup> CSV template is available at: <u>https://www.aemo.com.au/energy-systems/electricity/wholesale-electricity-market-wem/procedures-policies-and-guides/guides</u>



#### Figure 30 Forced Outage Result screen

| C.C.             | AEMO Market Participant Interface                                     |
|------------------|---|
| Acti             | ng as: Synergy - Market Generator 🔉                                   |
| $\left( \right)$ | Forced Outage Result <ul> <li>The file has been processed!</li> </ul> |
|                  | Details<br>CSV File :<br>Forced Outage 1.csv                          |

An Outage Number will be created once the correct confirmation has been received.

If the upload is not successful, the result will state *AddFail* under *Action*, with a reason specified under the *Comment* field.

Figure 31 Example of a failed upload on Forced Outage via CSV screen

| 6    | AEMO                                  | C             | Market Pa      | rticipant Interfa  | ce           |               |               |            |             |                                  |                                  | Logged in as<br>Refres                 | hivkosic<br>sh Logout |
|------|---------------------------------------|---------------|----------------|--------------------|--------------|---------------|---------------|------------|-------------|----------------------------------|----------------------------------|--|-----------------------|
| Acti | ng as: Synergy                        | / - Market Ge | nerator 🔉      |                    |              |               |               |            |             |                                  |                                  |  |                       |
|      | Forced                                | Outage F      | Result         |                    |              |               |               |            |             |                                  |                                  |  |                       |
|      | • The f                               | file has been | processed!     |                    |              |               |               |            |             |                                  |                                  |  |                       |
| ~ ~  | Details -<br>CSV File :<br>Forced Out | tage 1.csv    |                |                    |              |               |               |            |             |                                  |                                  |  |                       |
| >    | Action                                | Outage#       | Resource<br>Id | Workgroup          | Outage<br>MW | Start<br>Date | Start<br>Time | End Date   | End<br>Time | Impact Desc                      | Description                      | Comment                                |                       |
|      | AddFail                               |               | 41184          | Alcoa_Ops_Pinjarra | 50           | 10/07/2019    | 8:00          | 10/07/2019 | 18:00       | CSV Forced Outage<br>Upload test | CSV Forced Outage<br>Upload test | Could not create Outag<br>Transaction! | )°                    |

#### 14. DISPATCH

#### 14.1. Dispatch Instruction Acknowledgement

Dispatch Instructions are issued through the Market Participant Interface, and must be acknowledged here if the unit is not on Automatic Balancing Control or Automatic Generation Control. An email is also sent to the Market Participant confirming the details (refer to Market Rule 7.7.3).

Select the Dispatch then Dispatch Instruction Acknowledgement link from the hidden menu.

Figure 32 Dispatch Instruction Acknowledgement List screen

| as: Alinta Sali                          | es Pty Ltd - Market Generator  | 34   |  |   |   |  |  |   |     |
|--|--|--|--|---|---|--|--|---|-----|
| Dispatch                                 | Instruction Acknowl  | edgement List  |  |   |   |  |  |   |     |
| Details                                  |  |  |  |   |   |  |  |   |     |
| From Date:                               |  |  |  |   |   |  |  |   |     |
| 26/07/2019                               | 100  |  |  |   |   |  |  |   |     |
| lesources:                               |  |  |  |   |   |  |  |   |     |
| Al                                       | ~  |  |  |   |   |  |  |   |     |
| ALLINEA SYNY                             |  |  |  |   |   |  |  |   |     |
| ALINTA_PNJ                               | U1   |  |  |   |   |  |  |   |     |
| ALINTA_PNJ<br>ALINTA_PNJ                 |  |  |  |   |   |  |  |   |     |
| ALINTA_PNJ<br>ALINTA_PNJ<br>Show DIs w   | U1<br>U2 v<br>ith Future Response Time 0   | indy:  |  |   |   |  |  |   | Bee |
| ALINTA_PRO<br>ALINTA_PRO<br>Show DIs w   | U1<br>U2<br>ith Future Response Time 0   | mby: 🗆   |  |   |   |  |  | Filter                                    | Res |
| ALINTA_PNJ<br>ALINTA_PNJ<br>Show DIs w   | U1 v<br>U2 v<br>th Future Response Time 0<br>Resource Name   | nity: ]<br>: Instruction Timestamp (WST)   | 2 Response Time  | † Trade Date  | 0 Target NW                                       | 2 Ramp Rate                                    | Acknowledgement Date   | Filter                                    | Res |
| ALINTA_PNJ<br>ALINTA_PNJ<br>Show DIs w   | UI<br>U2 v<br>th Future Response Time 0<br>Resource Name<br>ALINTA_PHI_U1  | nhyc   <br>= Instruction Timestame (WST)<br>26/07/2019 08:50   | 2 Response Time<br>26/07/2019 09:00  | * Irade Date<br>26/07/2019  | Target HW     130.5                               | 2 Ramp Rate<br>9.4                             | 2 Acknowledgement Date                                       | Filter                                    | Res |
| ALINTA_PNJ,<br>ALINTA_PNJ,<br>Show DIs w | UI VII VIII VIII VIII VIIII VIIIII VIIII VIIIII VIIIIII | NMpc<br>S Instruction Timestamp (VVET)<br>26(07)2019 00:50<br>26(07)2019 00:50   | 2 <u>Besponse Time</u><br>26/07/2019 09:00<br>26/07/2019 09:00                                   | <ul> <li>Trade Date<br/>26/07/2019<br/>26/07/2019</li> </ul>                | <sup>0</sup> Taront NW<br>130.5<br>136.1          | 2 <u>Ramp Rate</u><br>9.4<br>9.4               | 2 Acknowledgement Date                                       | *Rer<br>2 Acknowledged by                 | Res |
| ALINTA PNI)<br>ALINTA PNI)<br>Show DIs w | UI<br>UZ<br>The Future Response Time O<br>Resource Name<br>ALINTA_PHU_UI<br>ALINTA_PHU_UI<br>ALINTA_PHU_UI   | Instruction Timestamo (WET)           2007/2019 00:50           2007/2019 00:50           2007/2019 00:50                  | <ul> <li>Hesponse Time<br/>26/07/2019 09:00<br/>26/07/2019 09:00<br/>26/07/2019 09:00</li> </ul> | * Irade Date<br>26/07/2019<br>26/07/2019<br>28/07/2019                      | <sup>0</sup> Taront NW<br>130.5<br>136.1<br>138.8 | 2 <u>Ramp Rate</u><br>9.4<br>9.4<br>9.4        | <ul> <li>Acknewledgement Date</li> <li>26/07/2019</li> </ul> | Filter<br>1 Arknowledaed inv<br>denderson | Re  |
| ALINTA_PRO<br>ALINTA_PRO<br>Show DIS w   | UI<br>U2<br>Essaurce Name<br>ALINTA_PRI_U2<br>ALINTA_PRI_U2<br>ALINTA_PRI_U2<br>ALINTA_PRI_U2  | Wey: C<br>2 Instantion Timestame (1931)<br>24(07)0909 08:55<br>240(07)0909 08:55<br>240(07)0919 08:25<br>240(07)0919 08:25 | 2 Response Timp<br>26/07/2019 09:00<br>26/07/2019 09:00<br>26/07/2019 08:20<br>26/07/2019 08:20  | * <u>Trade Date</u><br>26/07/2019<br>26/07/2019<br>26/07/2019<br>26/07/2019 | 0 Target NW<br>130.5<br>136.1<br>130.8<br>136.5   | 2 <u>Ramp Rate</u><br>9.4<br>9.4<br>9.4<br>9.4 | 2 Acknowledgement Data<br>26/07/2019<br>26/07/2019           | Filter  Acknowledged by  denderson        |     |

Following a review of the Dispatch Instruction, click on *Acknowledge*. The *Acknowledgement Success* screen will appear.



#### Figure 33 Example of a successful Dispatch Instruction acknowledgement



## 15. CONTACTING SYSTEM MANAGEMENT – OPERATIONAL QUERIES/TWO FACTOR AUTHENTICATION ISSUES

For operational queries or QR Code/Two Factor Authentication issues regarding the use of the System Management Market Participant Interface, please contact System Management Operations on 1300 989 797 (Option 2).

## 16. CONTACTING AEMO SUPPORT HUB – USER ACCESS AND PASSWORD RESET

For technical queries regarding end-user access provisioning & de-provisioning, or end-user password reset please contact AEMO Support Hub on 1300 AEMO 00 (1300 236 600).