

# USER GUIDE: SYSTEM MANAGEMENT'S MARKET PARTICIPANT INTERFACE

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## VERSION RELEASE HISTORY

Version	Effective Date	Summary of Changes
1.0	1 February 2020	Initial AEMO release

## CONTENTS

<b>1.</b>	<b>INTRODUCTION</b>	<b>4</b>
1.1.	Purpose	4
1.2.	Definitions and Glossary	4
<b>2.</b>	<b>LOGGING ON</b>	<b>4</b>
<b>3.</b>	<b>MAIN MENU</b>	<b>4</b>
<b>4.</b>	<b>OUTAGE REVIEW</b>	<b>5</b>
<b>5.</b>	<b>TYPES OF OUTAGE REQUESTS</b>	<b>6</b>
<b>6.</b>	<b>CREATING A PROPOSED OUTAGE PLAN</b>	<b>6</b>
6.1.	Outage Scheduling	7
6.2.	Outage Approval	10
<b>7.</b>	<b>FORCED OUTAGES</b>	<b>11</b>
7.1.	Creating a Forced Outage	11
7.2.	Cancelling a Forced Outage	12
<b>8.</b>	<b>LOADING FORCED OUTAGES VIA CSV</b>	<b>13</b>
<b>9.</b>	<b>DISPATCH</b>	<b>15</b>
9.1.	Acknowledging Dispatch Instruction	15
<b>10.</b>	<b>CONTACTING SYSTEM MANAGEMENT</b>	<b>15</b>

## 1. INTRODUCTION

### 1.1. Purpose

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

### 1.2. Definitions and Glossary

#### 1.2.1. Glossary

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

Term	Definition
MPI	Market Participant Interface
POP	Proposed Outage Plan
WEM	Wholesale Electricity Market

## 2. LOGGING ON

Please note that for security purposes, the system will log you out if there is no user to MPI interaction made for 60 minutes and so unsaved data entered will be lost. A keystroke is not classified as interaction; a link must be selected within the application for it to remain active.

To access MPI, go the following web page:

<https://services.westernpower.com.au/online/nbu/do/restricted/Home>

Enter your *User Id* and *Password* to login.

## 3. MAIN MENU

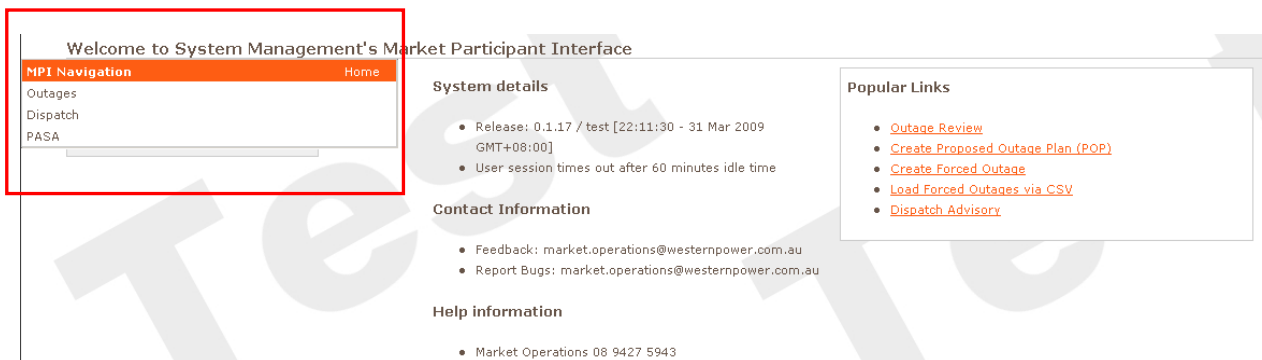
Once logged on, the following page will appear.

The new version of the MPI has some different features such as *Popular Links* for quick searching or entering of outages.

There is also a hidden navigation menu. To view this menu, move the mouse above the box and white arrow tips.



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



Select one of the options to expand the selection i.e. click on *Outages* to expand the selection.

#### 4. OUTAGE REVIEW

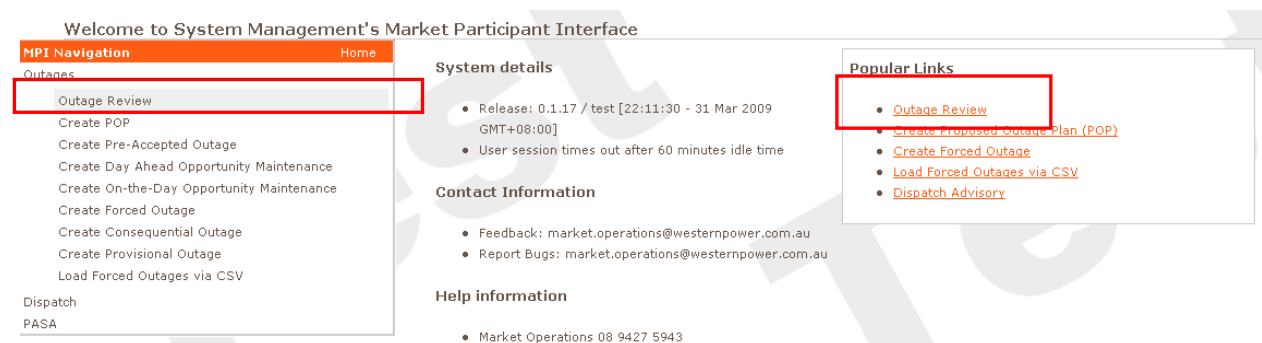
All market participants can view all other market participant outages, but only when the outages are in their *Approved* or *Approved with Conditions* stage.

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 description fields using either \* (asterisk) or % (percent) characters to represent multiple missing characters.

E.G. Searching for a description of *\*clearing\** will cause search results to include all records where "clearing" appears anywhere in the 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 the *Popular Links*.



The following page will appear.

Outage Review

**Filters**

Start Date: 01/04/2009

End Date: 08/04/2010

Outage Number:

Switching Required: All

Display Only My Outages:

Latest Version Only:

Equipment: (Select)

Resources: MUJA\_G1, MUJA\_G2, MUJA\_G3, MUJA\_G4

Workgroups: No workgroupIds configured

Outage Categories: Load Outage, Generator Outage, Circuit Outage / Network Event

Outage Type: Proposed Outage Plan, Pre-Accepted Maintenance, Consequential Outage, Forced Outage, Opportunity Maintenance - Day Ahead

Outage Status: Awaiting Acceptance, Awaiting Approval, Accepted, Accepted With Conditions, Approved

Pending, Approved, Non-Approved

Reset, Refresh

Launch Time Line

Outage#	Version	Start	End	Type	Status	MW	Resource / Equipment	Description
65991	3	22/04/2009	22/04/2009	Proposed Outage Plan	Approved	N/A	A 22, A 502 LD, ALB 501 LD, ALB 505 LD	N0000691000/2271-PJ Printing Test 1 N0000692000/2272-PJ Print Testing #2

Fill out the search criteria to suit desired outages to view.

As shown below, more than one criterion can be selected within each field.

As mentioned earlier, to unselect a selection, hold *Ctrl* and click on the selection with the mouse.

Outage Review

**Filters**

Start Date: 06/04/2009

End Date: 13/04/2009

Outage Number:

Switching Required: All

Display Only My Outages:

Latest Version Only:

Equipment: (Select)(Clear)

Resources: MUJA\_G1, MUJA\_G2, MUJA\_G3, MUJA\_G4

Workgroups: No workgroupIds configured

Outage Categories: Load Outage, Generator Outage, Circuit Outage / Network Event

Outage Type: Proposed Outage Plan, Pre-Accepted Maintenance, Consequential Outage, Forced Outage, Opportunity Maintenance - Day Ahead

Outage Status: Withdrawn, Accepted by SWOP, Not Accepted by SWOP, Modify Enabled by SWOP, Modify Completed by SWOP

Pending, Approved, Non-Approved

Reset, Filter

Launch Time Line

### 5. TYPES OF OUTAGE REQUESTS

There are two main types of outage requests that can be entered in the MPI: Proposed Outage Plan and Opportunistic Maintenance. 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>.

Note that for all Opportunistic Maintenance requests lodged after 8 AM on 1 February 2020, the "Outage Type" field will define this request as "Opportunity Maintenance - On the Day".

### 6. CREATING A PROPOSED OUTAGE PLAN

The process for Proposed Outage Plans (POP) follows:

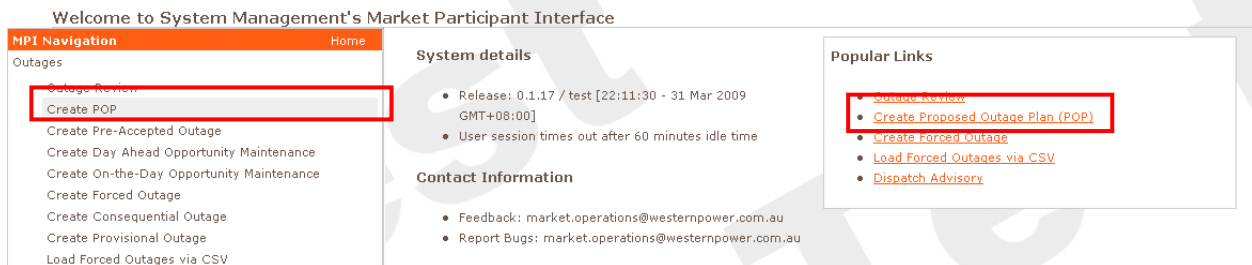
1. *Outage Scheduling*: Market Participants advise System Management of an intention to conduct a Planned Outage.

<sup>1</sup> AEMO. Available at: [https://aemo.com.au/-/media/files/stakeholder\\_consultation/consultations/wa\\_wem\\_consultation\\_documents/2018/aepc\\_2018\\_04/psop-facility-outages-final-clean.pdf](https://aemo.com.au/-/media/files/stakeholder_consultation/consultations/wa_wem_consultation_documents/2018/aepc_2018_04/psop-facility-outages-final-clean.pdf)

2. *Outage Approval*: Market Participants request approval from System Management for a Scheduled Outage or Opportunistic Maintenance.

## 6.1. 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.



Welcome to System Management's Market Participant Interface

**MPI Navigation** Home

Outages

- Outage Review
- Create POP
- Create Pre-Accepted Outage
- Create Day Ahead Opportunity Maintenance
- Create On-the-Day Opportunity Maintenance
- Create Forced Outage
- Create Consequential Outage
- Create Provisional Outage
- Load Forced Outages via CSV

**System details**

- Release: 0.1.17 / test [22:11:30 - 31 Mar 2009 GMT+08:00]
- User session times out after 60 minutes idle time

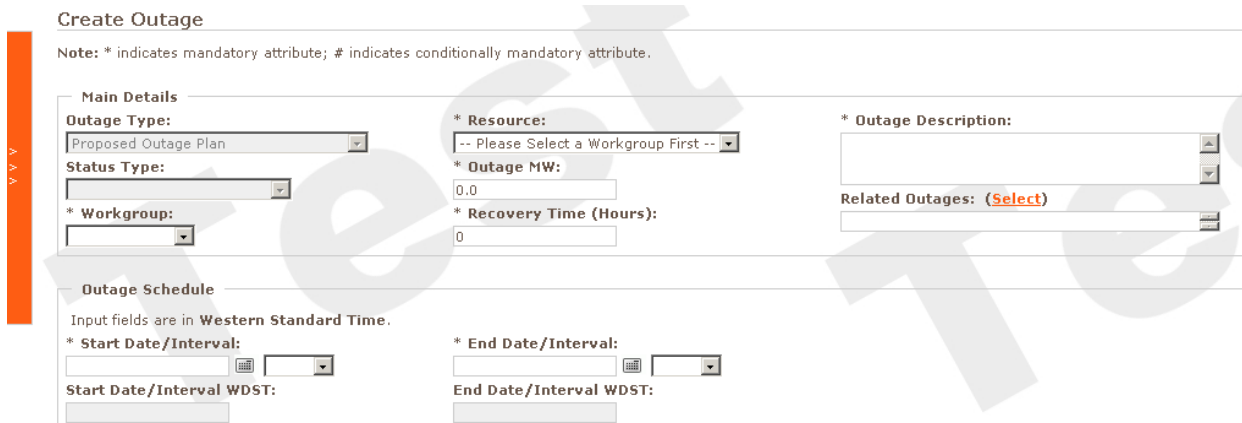
**Contact Information**

- Feedback: market.operations@westernpower.com.au
- Report Bugs: market.operations@westernpower.com.au

**Popular Links**

- Outage Review
- Create Proposed Outage Plan (POP)
- Create Forced Outage
- Load Forced Outages via CSV
- Dispatch Advisory

The following page will display.



**Create Outage**

Note: \* indicates mandatory attribute; # indicates conditionally mandatory attribute.

**Main Details**

**Outage Type:** Proposed Outage Plan

**Status Type:** [Dropdown]

**\* Workgroup:** [Dropdown]

**\* Resource:** -- Please Select a Workgroup First --

**\* Outage MW:** 0.0

**\* Recovery Time (Hours):** 0

**\* Outage Description:** [Text Area]

**Related Outages:** (Select)

**Outage Schedule**

Input fields are in **Western Standard Time**.

**\* Start Date/Interval:** [Calendar] [Time]

**\* End Date/Interval:** [Calendar] [Time]

**Start Date/Interval WDST:** [Dropdown]

**End Date/Interval WDST:** [Dropdown]

Complete the details (refer Market Rule 3.18.6) using the drop-down boxes where applicable.

This information is also in the Appendix.

Below is a description of each field:

- **Outage Type:** Type of outage the user would like to submit. No matter the type of outage, the information submitted is the same
- **Status Type:** The Status Type appears once the outage has been created
- **Workgroup:** Select from a dropdown list. It is the authority group link to this Outage (Mandatory)
- **Resource:** Selected from a drop down list. This is the resource that will be used in the Outage (Mandatory)
- **Outage MW:** This is the value in MW that will be removed from the Market. It is **not** the remaining capacity of the unit (Mandatory)
- **Recovery Time:** This is the time it will take to bring the resource back from Outage. The time unit of measure is Hours (Mandatory)
- **Start Date (Calendar Day):** Select from the calendar. Indicates the start date for the Outage (Mandatory)

- **End Date (Calendar Day):** Select from the calendar. Indicates the end date for the Outage (Mandatory)
- **Start time interval:** Use drop down box. Indicates the start time Interval of the Outage (Mandatory)
- **End time interval:** Use drop down box. Indicates the end time Interval of the Outage. In all other screens this field is (Mandatory)

Note that Start and End times are based on Trading Interval. That is, interval 08:00 is anytime between 08:00:00 and 08:29:59. If the outage is to finish at 16:20, then interval 16:00 must be selected. Outages to System Management are reported only in whole intervals.

- **Outage Description:** A descriptive text of the Outage being requested (Mandatory). Maximum characters allowed in this field are 100
- **Related Outages:** 'Select' any outages that may correspond to and impact the outage. This may be a transmission line entering the power station or a transformer
- **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 are 250
- **Contingency Plan:** Textual description indicating the approach if the unit is requested by System Management to return from Outage sooner than scheduled (Mandatory). Maximum characters allowed in this field are 250
- **Operational Information:** Textual description indicating the impact on the operation (Mandatory). Maximum characters allowed in this field are 720 – in this field:
  - Participants should include their availability declaration
  - If applicable, Participants should include information on whether the proposed outage is Mandatory Routine Maintenance
- **Switching required:** This is to determine whether a Switching Operator will be required to isolate the outage equipment
- **Points of Isolation:** Required if a Switching Operator is required to do switching. Click on the 'Select' link for options
- **Points of Isolation Description:** A textual description of the Points of Isolation if specific Points of Isolation aren't known to user

Select the *Check Details* button once details are completed. This will bring up any errors before submission.



COLLIE \* Recovery Time (Hours): 999

**Outage Schedule**  
 Input fields are in **Western Standard Time**.  
 \* Start Date/Interval: 08/06/2009 08:00 \* End Date/Interval: 10/06/2009 07:30  
 Start Date/Interval W DST: 08/06/2009 at 08:00 End Date/Interval W DST: 10/06/2009 at 07:30

**Outage Details**  
 Switching Required:   
 # Points of Isolation: (Select)  
 # Points of Isolation Description:  
 Operational Impact Description: Outage will impact blah  
 \* Risk of Outage Exceeding Time: nil  
 \* Contingency Plan: machine can not be brought back early.

Check Details Create Outage Reset Form Close Form

Any errors will be trapped in orange. A description may appear at the top of the page depending on the error.

Switching Required:   
 # Points of Isolation: (Select)  
 # Points of Isolation Description:

Microsoft Internet Explorer  
 ⚠ Either one or more mandatory fields are empty or the information provided is invalid.  
 OK

Check Details Create Outage Reset Form Close Form

Once all errors have been corrected, select the *Create Outage* button to submit the outage.

Check Details **Create Outage** Reset Form Close Form

The Outage Successfully Submitted screen should appear.

Once submitted, an outage number will appear at the top of the page.

**Outage Successfully Submitted**

- Your Outage was successfully created.

Your Outage has been submitted. The details of the request are shown below.

Identification  
 Outage Number: 66391  
 Version: 0

Please quote this number when calling System Management about any outage information.

The end time is the interval during which the outage ends. Should the facility be dispatched at this point, it must be able to synchronise onto the system within the times indicated in the *Standing Data*.

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

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.


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 under the action column



## 6.2. Outage Approval

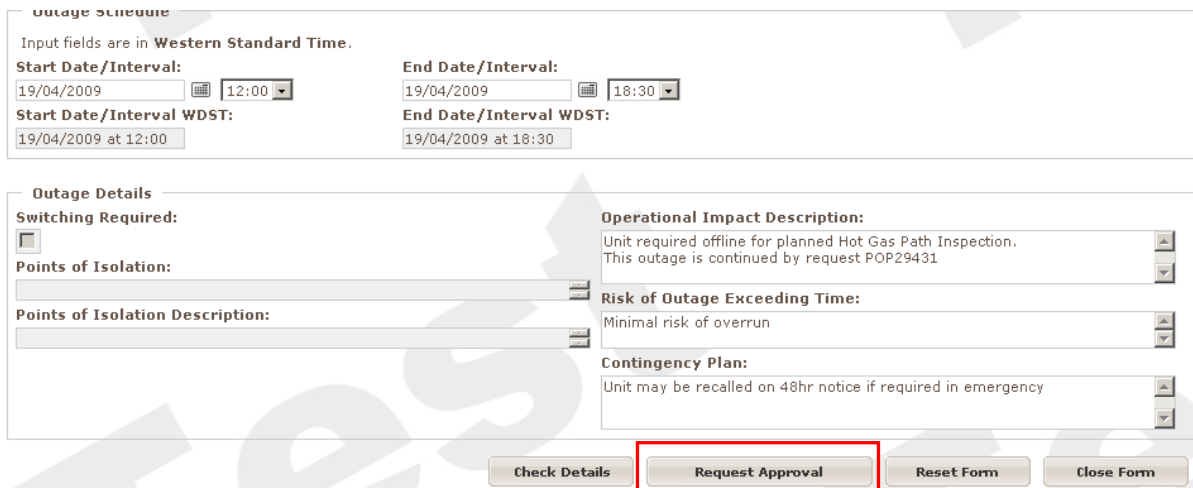
After an outage has been *Accepted* and it is still the intention of the Market Participant to go ahead with the outage, the Market Participant is then required to seek *Approval*.

Note that these times are Western Standard Time.

Once the relevant outage has been found, click the *Approval* icon to the left hand 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. This is shown below.



The screenshot shows the 'Outage Schedule' and 'Outage Details' sections. The 'Outage Schedule' section includes input fields for 'Start Date/Interval' and 'End Date/Interval', with a note that input fields are in Western Standard Time. The 'Outage Details' section includes a 'Switching Required' checkbox, 'Points of Isolation' and 'Points of Isolation Description' text areas, and three dropdown menus for 'Operational Impact Description', 'Risk of Outage Exceeding Time', and 'Contingency Plan'. At the bottom of the form, there are four buttons: 'Check Details', 'Request Approval' (highlighted with a red box), 'Reset Form', and 'Close Form'.

A message saying *Outage Successfully Submitted* will appear at the top of the page.

Once "Request Approval" has been selected, select the *Close Form* button at the bottom right hand corner.

### Create Outage

Note: \* indicates mandatory attribute; # indicates conditionally mandatory attribute.

**Main Details**

<p><b>Outage Type:</b> Opportunity Maintenance - On The Day</p> <p><b>Status Type:</b> [Dropdown]</p> <p><b>* Workgroup:</b> [Dropdown]</p>	<p><b>* Resource:</b> -- Please Select a Workgroup First --</p> <p><b>* Outage MW:</b> 0.0</p> <p><b>* Recovery Time (Hours):</b> 0</p>	<p><b>* Outage Description:</b> [Text Area]</p> <p><b>Related Outages:</b> (Select)</p>
---	---	---

**Outage Schedule**

Input fields are in Western Standard Time.

<p><b>* Start Date/Interval:</b> [Date Picker] [Time Picker]</p> <p><b>Start Date/Interval WDST:</b> [Dropdown]</p>	<p><b>* End Date/Interval:</b> [Date Picker] [Time Picker]</p> <p><b>End Date/Interval WDST:</b> [Dropdown]</p>
---	---

**Outage Details**

<p><b>Switching Required:</b> <input type="checkbox"/></p> <p><b># Points of Isolation:</b> (Select) [Dropdown]</p> <p><b># Points of Isolation Description:</b> [Text Area]</p>	<p><b>Operational Impact Description:</b> [Text Area]</p> <p><b>* Risk of Outage Exceeding Time:</b> [Text Area]</p> <p><b>* Contingency Plan:</b> [Text Area]</p>
--	--

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

Enter the details and click *Check Details*, then the *Create Outage* button.

The *Outage Successfully Submitted* screen should appear if there are no errors.

## 7. FORCED OUTAGES

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

*Forced Outages* can be submitted via the MPI a maximum of 15 days after the event.

### 7.1. Creating a Forced Outage

Select *Create Forced Outage* from the left-hand menu.

#### Forced Outage via CSV

**MPI Navigation** Home

Outages

- Outage Review
- Create POP
- Create Pre-Accepted Outage
- Create Day Ahead Opportunity Maintenance
- Create On-the-Day Opportunity Maintenance
- Create Forced Outage**
- Create Consequential Outage

The following screen should appear.

**Create Outage**

Note: \* indicates mandatory attribute; # indicates conditionally mandatory attribute.

**Main Details**

**Outage Type:** Forced Outage

**Status Type:** [Dropdown]

**\* Workgroup:** [Dropdown]

**\* Resource:** -- Please Select a Workgroup First --

**\* Outage MW:** 0.0

**Recovery Time (Hours):** N/A

**\* Outage Description:** [Text Area]

**Related Outages:** (Select) [Dropdown]

**Outage Schedule**

Input fields are in Western Standard Time.

**\* Start Date/Interval:** [Date/Time Picker]

**\* End Date/Interval:** [Date/Time Picker]

**Start Date/Interval WDST:** [Text Field]

**End Date/Interval WDST:** [Text Field]

**Outage Details**

**Switching Required:**

**# Points of Isolation:** (Select) [Dropdown]

**# Points of Isolation Description:** [Text Area]

**Operational Impact Description:** [Text Area]

**Risk of Outage Exceeding Time:** N/A [Dropdown]

**Contingency Plan:** N/A [Dropdown]

Check Details Create Outage Reset Form Close Form

Enter details in the appropriate fields (refer 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 and the outage number is the reference to be used in communication with System Management. This screen is shown below.

**Outage Successfully Submitted**

- Your Outage was successfully created.

Your Outage has been submitted. The details of the request are shown below.

**Identification**

**Outage Number:** 66391

**Version:** 0

## 7.2. Cancelling a Forced Outage

A Forced Outage may be cancelled up to 15 Trading Days after the outage has been submitted.

The outage may be cancelled from the outage review screen, by selecting the red cancel icon under the action column

Note that the 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 days).

The *Cancel Request Screen* will appear.

**Cancel Outage**

**Identification**  
 Outage Number: 66381  
 Version: 0

**Main Details**  
 Outage Type: Forced Outage  
 Status Type: Approved  
 Workgroup: KWINANA  
 Resource: KWINANA\_G1  
 Outage MW (Facility @ 15C): (Generation Information) 114.0  
 Recovery Time (Hours): N/A  
 Outage Description: test  
 Related Outages:

**Outage Schedule**  
 Input fields are in Western Standard Time.  
 Start Date/Interval: 15/04/2009 08:00  
 End Date/Interval: 20/04/2009 08:00  
 Start Date/Interval WDST: 15/04/2009 at 08:00  
 End Date/Interval WDST: 20/04/2009 at 08:00

**Outage Details**  
 Switching Required:   
 Points of Isolation:  
 Points of Isolation Description:  
 Operational Impact Description: test  
 Risk of Outage Exceeding Time: N/A  
 Contingency Plan: N/A

Check Details   **Cancellation Request**   Reset Form   Close Form

Select the Cancellation Request button.

The Outage Successfully Submitted screen should then appear.

### 8. LOADING FORCED OUTAGES VIA CSV

A list of forced outages can be submitted via a CSV upload if the file is in the correct format.

Select the *Load Forced Outages via CSV* from the left hand menu.

**Forced Outage via CSV**

**MPI Navigation** Home

- Outages
  - Outage Review
  - Create POP
  - Create Pre-Accepted Outage
  - Create Day Ahead Opportunity Maintenance
  - Create On-the-Day Opportunity Maintenance
  - Create Forced Outage
  - Create Consequential Outage
  - Create Provisional Outage
  - Load Forced Outages via CSV**

Load

Submit   Reset

Release: 0.1.24 / test

The information entered in to the CSV file should be in the format as seen in the below text string.

```
<<ACTION,OUTAGE_NUMBER,RESOURCE_ID,WORKGROUP,OUTAGE_MW,START_DATE,START_INTERVAL,END_DATE,END_INTERVAL,OPERATIONAL_IMPACT_DESC,OUTAGE_DESCRIPTION>>
```

Below is a screenshot of the created CSV file.

```
ACTION,OUTAGE_NUMBER,RESOURCE_ID,WORKGROUP,OUTAGE_MW,START_DATE,START_INTERVAL,END_DATE,END_INTERVAL,OPERATIONAL_IMPACT_DESC,OUTAGE_DESCRIPTION
Add,,resource id,workgroup id,145,12/11/2007,18:00,12/11/2007,19:30,demo of operational impact field, demo of outage description field
```

Once the CSV file has been created, save it to a designated area.

Select the *Browse* button and collect the CSV file to upload from the designated area.

**Forced Outage via CSV**

**Details**

CSV File:

No data available

Load the file the following screen should appear.

**Forced Outage via CSV**

**Details**

CSV File:

Action	Outage#	Resource Id	Workgroup	Outage MW	Start Date	Start Time	End Date	End Time	Impact Desc	Description
Add		resource id	Workgroup id	145	17/04/2009	18:00	17/04/2009	19:30	demo of operational impact field	demo of outage description field

Click on the *Submit* button once the file has loaded and the following confirmation will appear.

**Forced Outage Result**

- The file has been processed!

**Details**

CSV File :

Action	Outage#	Resource Id	Workgroup	Outage MW	Start Date	Start Time	End Date	End Time	Impact Desc	Description	Comment

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*, and the reason will be explained under the *Comment* field. An example is shown in the below screenshot.

**Forced Outage Result**

- The file has been processed!

**Details**

CSV File : ForcedOutage.csv

Action	Outage#	Resource Id	Workgroup	Outage MW	Start Date	Start Time	End Date	End Time	Impact Desc	Description	Comment
AddFail		71000		140	17/05/2009	13:00	17/05/2009	13:00	Operational impact description	outage description	Missing data!

Buttons: Save As, Reset

## 9. DISPATCH

### 9.1. Acknowledging Dispatch Instruction

Dispatch Instructions are made via telephone call between control rooms. An email will be sent to the market participant confirming the details (refer Market Rule 7.7.3).

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

**Dispatch Instruction Acknowledgement List**

MPI Navigation Home

- Outages
- Dispatch
  - Dispatch Instruction Acknowledgement
  - Fuel Declaration
  - Wind Farm Forecast
  - Dispatch Advisory Submission
- PASA

Buttons: Filter, Reset

Click the *Acknowledge* button.

An acknowledgement *Success* screen will appear.

## 10. CONTACTING SYSTEM MANAGEMENT

For queries regarding System Management's Market Participant Interface, please contact System Management Operations on 1300 989 797 (Option 2).