

NEM VAR DISPATCH SCHEDULE SYSTEM TRIAL PARTICIPANT GUIDEBOOK

PREPARED BY: AEMO
VERSION: 1.0
DATE: 7 December 2015
FINAL

(web site version)

Important Notice

AEMO has prepared this document to provide information to participants in relation to the VAr Dispatch Scheduling System Trial, including; a calendar, modes of operation, interfaces and coordination of the Trial.

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History

VERSION	DATE	BY	CHANGES
0.1	09/11/2015	Chris Stewart	First draft
0.2	26/11/2015	Chris Stewart	Further details added.
0.3	02/12/2015	Chris Stewart	Review and update following Q & A session on 01/12/2015
1.0	07/12/2015	Chris Stewart	Finalise for issue (website version).

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1 Introduction

This document provides more detailed information for VAr Dispatch Schedule System Trial Participants regarding activities leading up to, during, and post-Trial. Specifically, this document outlines:

- A daily calendar of key activities during December, January, February and March until market go-live on 04 April
- Trial Coordination
- Information on cutover to live operations

This document should be read in conjunction with the previously distributed VAr Dispatch Schedule System Trial Plan document.

2 Trial Calendar

The calendar below provides a list of the key activities leading up to the Trial and up to operational Go-Live.

Cells are colour coded according to the following key:

Table 1: Key for calendar cell shading

Preparation Phase	Open-loop Trial Phase	Closed-loop Trial Phase	Transition Phase
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Table 2: Trial Calendar

December 2015

December 2015						
MON	TUE	WED	THU	FRI	SAT	SUN
	1 VAr Q & A Session No. 9 (1pm market time)	2	3	4	5	6
7	8 AEMO deploy EMMS and EMS applications to the Production Environment VAr Trial Industry Reference Group Meeting (1pm market time) RPOs wishing to participate in the Trial should inform AEMO	9	10 Participants confirm access to VAr interfaces in Production Environment on or before this date	11	12	13

December 2015

MON	TUE	WED	THU	FRI	SAT	SUN
<p>14</p> <p>Open-loop VAr Trial Commences 9am market time (Open-loop in parallel with current manual process. Reactive Plant Operators ARE NOT TO ACT UPON THESE ELECTRONIC INSTRUCTIONS until further notice from AEMO. AEMO issuing VAr instructions by telephone)</p> <p>Trial teleconference (2pm market time)</p> <p>Participants confirm receiving VAr electronic instructions</p>	<p>15</p> <p>VAr Trial Industry Reference Group Meeting (1pm market time)</p>	<p>16</p> <p>Trial teleconference (2pm market time)</p>	<p>17</p>	<p>18</p> <p>Trial teleconference (2pm market time)</p>	<p>19</p>	<p>20</p>
<p>21</p> <p>Trial teleconference (2pm market time)</p>	<p>22</p> <p>VAr Trial Industry Reference Group Meeting (1pm market time)</p>	<p>23</p> <p>Trial teleconference (2pm market time)</p>	<p>24</p>	<p>25</p> <p>Public Holiday</p>	<p>26</p>	<p>27</p>
<p>28</p> <p>Public Holiday</p>	<p>29</p> <p>VAr Trial Industry Reference Group Meeting (1pm market time)</p>	<p>30</p> <p>Trial teleconference (2pm market time)</p>	<p>31</p>			

January 2016

January 2016						
MON	TUE	WED	THU	FRI	SAT	SUN
				1 Public Holiday	2	3
4 Trial teleconference (2pm market time)	5 VAr Trial Industry Reference Group Meeting (1pm market time)	6 Trial teleconference (2pm market time)	7	8 Trial teleconference (2pm market time)	9	10
11 Trial teleconference (2pm market time)	12 VAr Trial Industry Reference Group Meeting (1pm market time)	13 Trial teleconference (2pm market time)	14	15 Trial teleconference (2pm market time)	16	17
18 Trial teleconference (2pm market time)	19 VAr Trial Industry Reference Group Meeting (1pm market time)	20 Trial teleconference (2pm market time)	21	22 Trial teleconference (2pm market time)	23	24
25 Trial teleconference (2pm market time)	26 VAr Trial Industry Reference Group Meeting (1pm market time)	27 Closed-loop Trial decision communicated Trial teleconference (2pm market time)	28	29 Trial teleconference (2pm market time)	30	31 Open-loop VAr Trial ceases

February 2016

February 2016						
MON	TUE	WED	THU	FRI	SAT	SUN
<p>1</p> <p>Closed-loop VAr Trial Commences (Reactive Plant Operators ARE NOT TO ACT UPON THESE ELECTRONIC INSTRUCTIONS until further notice from AEMO.)</p> <p>Trial teleconference (2pm market time)</p>	<p>2</p> <p>VAr Trial Industry Reference Group Meeting (1pm market time)</p>	<p>3</p> <p>Trial teleconference (2pm market time)</p>	<p>4</p>	<p>5</p> <p>Trial teleconference (2pm market time)</p>	<p>6</p>	<p>7</p>
<p>8</p> <p>Trial teleconference (2pm market time)</p>	<p>9</p> <p>VAr Trial Industry Reference Group Meeting (1pm market time)</p>	<p>10</p> <p>Trial teleconference (2pm market time)</p>	<p>11</p>	<p>12</p> <p>Trial teleconference (2pm market time)</p>	<p>13</p>	<p>14</p>
<p>15</p> <p>Trial teleconference (2pm market time)</p>	<p>16</p> <p>VAr Trial Industry Reference Group Meeting (1pm market time)</p>	<p>17</p> <p>Trial teleconference (2pm market time)</p>	<p>18</p>	<p>19</p> <p>Trial teleconference (2pm market time)</p>	<p>20</p>	<p>21</p>
<p>22</p> <p>Trial teleconference (2pm market time)</p>	<p>23</p> <p>VAr Trial Industry Reference Group Meeting (1pm market time)</p>	<p>24</p> <p>Trial teleconference (2pm market time)</p>	<p>25</p>	<p>26</p> <p>Trial teleconference (2pm market time)</p>	<p>27</p>	<p>28</p>
<p>29</p> <p>Trial teleconference (2pm market time)</p>						

March 2016

March 2016						
MON	TUE	WED	THU	FRI	SAT	SUN
	1 VAr Trial Industry Reference Group Meeting (1pm market time)	2 Trial teleconference (2pm market time)	3	4 Trial teleconference (2pm market time)	5	6
7 Trial teleconference (2pm market time)	8 VAr Trial Industry Reference Group Meeting (1pm market time)	9 Trial teleconference (2pm market time)	10	11 Trial teleconference (2pm market time)	12	13
14 Trial teleconference (2pm market time)	15 VAr Trial Industry Reference Group Meeting (1pm market time)	16 Trial teleconference (2pm market time)	17 Go-Live decision communicated	18 Trial ends 5pm market time. AEMO initiates Transition phase activities. Trial teleconference (2pm market time)	19 Transition Phase	20 Transition Phase
21 Transition Phase Trial teleconference (2pm market time)	22 Transition Phase VAr Trial Industry Reference Group Meeting (1pm market time)	23 Transition Phase Trial teleconference (2pm market time)	24 Transition Phase	25 Transition Phase Trial teleconference (2pm market time)	26 Transition Phase	27 Transition Phase
28 Transition Phase Trial teleconference (2pm market time)	29 Transition Phase VAr Trial Industry Reference Group Meeting (1pm market time)	30 Transition Phase Trial teleconference (2pm market time)	31 Transition Phase			

April 2016

April 2016						
MON	TUE	WED	THU	FRI	SAT	SUN
				1 Transition Phase Trial teleconference (2pm market time)	2 Transition Phase	3 Transition Phase
4 VAr Go-Live 9 am market time Trial teleconference (2pm market time)	5 VAr Trial Industry Reference Group Meeting (1pm market time)	6 Trial teleconference (2pm market time)	7	8 Trial teleconference (2pm market time)	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

3 Trial Modes

3.1 Open-loop Trial

Open-loop Trial commences 09:00 market time Monday 14 December 2015.

Open-loop Trial means that VAr electronic instructions are issued in parallel with current manual process where AEMO issues VAr instructions by telephone.

Although VAr electronic instructions are issued, Reactive Plant Operators ARE **NOT** TO ACT UPON THESE ELECTRONIC INSTRUCTIONS until further notice from AEMO and should respond to AEMO's telephone instructions.

It is not intended for the VAr electronic instructions to replicate the telephone instructions. There are periods when the electronic instructions are; (a) different, (b) similar, and (d) identical to the telephone instructions.

The Open-loop Trial aims for AEMO and Reactive Plant Operators to build familiarity with the VAr Dispatch Scheduling System and the issuing of VAr electronic instructions.

A Closed-loop Trial will commence after it is determined that both AEMO and Reactive Plant Operators have appropriate levels of confidence in the VAr Dispatch Scheduling System and the issuing of VAr electronic instructions.

3.2 Closed-loop Trial

Closed-loop VAr Trial Commences (Closed-loop with RPOs actioning VAr electronic instructions). Reactive Plant Operators ARE **NOT** TO ACT UPON THESE ELECTRONIC INSTRUCTIONS until further notice from AEMO.

4 VAR Dispatch Schedule Interfaces Trialled

VAR Dispatch Schedule Interfaces Trialled

4.1 Web Portal VAR Dispatch Web Page

It is essential that Reactive Plant Operators using the VAR Dispatch web page as interface have access to the Production EMMS web portal to be able to view the VAR Dispatch web page.

4.2 Market Files

It is essential that Reactive Plant Operators using the market files as interface have access to MarketNet.

4.3 SCADA

It is essential that Reactive Plant Operators using SCADA as interface have the necessary arrangements in place.

Pre-Conditions

Below are the pre-conditions which will maximise the events value for participants:

1. Reactive Plant Operators have tested and confirmed their interface(s) to receive VAR electronic instructions.
2. RPOs to check and confirm the VAR electronic instructions are delivered to the people who will action them.
3. The operational and technical staff of Reactive Plant Operators are familiar and trained in the relevant areas of the VAR Dispatch Scheduling System.
4. The operational and technical staff of Reactive Plant Operators are familiar and trained in the relevant areas of the VAR Dispatch Scheduling System.

Triggers

A base-case voltage limit violation of more than 30 minutes will trigger a review of whether to continue the Closed-loop Trial.

A contingency-case voltage limit violation of more than 30 minutes will trigger a review of whether to continue the Closed-loop Trial.

5 Trial Coordination

The coordination and communication process is designed to assist in ensuring that all parties have the latest information upon which to act, and to help maximise the value gained from the Trial – both to individual participants and collectively across the industry.

5.1 AEMO Trial Contacts

Participants are advised to use the Support Hub as the first point of contact for all Trial related queries and issues. This will allow the call to be tracked as it is logged, passed onto the relevant contacts within AEMO, and resolved. Participants are requested to specify that their call relates to the VAr Dispatch Schedule Trial when placing a Support Hub request.

The Support Hub contact details are telephone 1300 236 600, or email supporthub@aemo.com.au.

The VAr Trial Team will lead the coordination of the Trial. Trial operational activities will be performed by AEMO business units on a business as usual basis. Contact details for the trial coordinators are as below.

Contact	Telephone	E-mail
Chris Stewart	Provided on request	VarProject@aemo.com.au
Alan Honecker	Provided on request	VarProject@aemo.com.au

Questions should be sent to VarProject@aemo.com.au.

5.2 Trial Teleconference

The purpose of the Trial teleconference is for AEMO to provide an optional forum for participants to review activities to date, and discuss any issues. They will run for a nominal time of 30 minutes at 3pm EDST/2pm EST. The first week of the trial they will be held on Monday, Wednesday and Friday. In subsequent weeks the teleconferences will be scheduled around the Christmas and New Year Public Holidays. Session dates and times will be subject to change as dictated by feedback and requirements of participants.

In attendance from AEMO will be representatives from Real Time Operations, EMMS IT, EMS IT System Capability and other members of the VAr Dispatch Scheduling System Project.

[Dial-in details provided on request.]

5.3 VAr Trial Industry Reference Group

The VAr project team will provide updates to the VAr Trial Industry Reference Group, as they are scheduled, regarding Trial preparation and progress.

The VAr Trial Industry Reference Group will consider any change requests that arise as per standard processes and timelines.

6 Cutover to Live Operations

If a transition phase is need, Trial activities will cease at 17.00 market time on 18 March 2016 to allow AEMO to focus on the transition from the Trial to live operation.

AEMO will clean out the trial data from the internal MMS database and delete any trial files generated and stored in file servers during the trial.

Participants may opt to clean out their MMS data on their side.

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7 Reference Documentation

Below is a list of VAr Dispatch Schedule System related documentation, which participants in the Trial should use as reference material to assist in their preparations for the Trial and VAr operation.

Document	URL
NEM VAr Dispatch Schedule System Trial Plan	http://aemo.com.au/Electricity/Market-Operations/VAr-Dispatch-Schedule-System-Implementation-Project
NEM VAr Dispatch Schedule System Trial Participant Guidebook – this document	http://aemo.com.au/Electricity/Market-Operations/VAr-Dispatch-Schedule-System-Implementation-Project
VAr Dispatch Specification for Participant Interfaces	Provided on request
VAr Project Q and A Notes	Provided on request
Reactive Devices Spreadsheet	Provided on request
Guide to VAr Dispatch Web Interface	Provided on request