MEETING OUTCOMES – SYSTEM OPERATIONS

MEETING:	WAMRP System Operations Forum 2
DATE:	Tuesday, 13 December 2016
TIME:	9:00 am – 10:00 am AWST
LOCATION:	AEMO Boardroom – Level 17, 197 St Georges Terrace, Perth

ATTENDEES:

NAME	COMPANY
William Street	Alinta Energy
Siyang You	Blair Fox
Ignatius Chin	Bluewaters Power
Adam Stephen	Bluewaters Power
Zhang Fan	Collgar Wind Farm
Steve Gould	Community Electricity
Wendy Ng	ERM Power
Bruno Lancian	ERM Power
Craig Beasland	Hotmix
Akshita Srivatsavaya	Kleenheat
Patrick Peake	Perth Energy
John McLean	PSC
Jenny Laidlaw	Public Utilities Office
Andrew Everett	Synergy
Brad Huppatz	Synergy
Paul Gower	Vinalco Energy
Peter Huxtable	Water Corporation
Clayton James	AEMO
Joanne Murray	AEMO
Greg Ruthven	AEMO
Steve Disano	AEMO
Chris Stewart	AEMO
Matt Pember	AEMO
Daniel Lavis	AEMO
Kerri Ball	AEMO
Andrew Winter	AEMO
Michael Lyons	AEMO (teleconference)
Ross Gillett	AEMO (teleconference)
Catherine Chalmers	AEMO (teleconference)
Leanna Tedesco	AEMO (teleconference)
Christian Schaefer	AEMO (teleconference)

1. Welcome

AEMO noted while the Electricity Market Reform Bills have been delayed, it will still progress with aspects of the WAMRP not requiring legislative change.

2. Overview of current project activities

- There are changes to the System Operations schedule and scope due to delays in the legislation. AEMO will continue with works such as planning and design on the full scope whilst awaiting final Rule changes.
- System Operations forums planned bi-monthly in 2017.
- Stakeholders encouraged to email the mailbox WAMRPSystemOperations@aemo.com.au if there are any questions outside the forum.

3. In scope and Deferred Activities

- The workstream activities that AEMO will continue to implement include its control system e-terra, Automatic Generation Control (AGC), generator models, generator performance standards, demand forecasting, and continuing to support the Public Utilities Office in Rule development.
- The workstream activities that AEMO have deferred include the implementation of the Short Term Projected Assessment of System Adequacy (ST PASA), Medium Term Projected Assessment of System Adequacy (MT PASA), centralised wind and solar forecasting, network and Frequency Control Ancillary Services (FCAS) constraints, and new outage planning systems.
- AEMO is committed to continuing work on implementation of a new WA Office and Control Room with amalgamation of WA Market Operations and System Operations staff currently scheduled around September 2017. In the interim System Operations staff will continue to be located at Western Power's East Perth Control Centre.
- The integration of WA into the National Transmission Network Development Plan (NTNDP) is deferred, however planning of the network in WA will continue under the current regulations with Western Power playing the major role.
- The use of existing outage systems (MPI) will continue for use by stakeholders, with work on implementing new outage management systems (e.g. NOS) deferred.
- AEMO is not able to provide a timeline on all deferrals or implementations until after the State election.
- The implementation of an e-terra control system does not require specific market Rule modifications, therefore AEMO is proposing to continue to progress works and integrate with the existing WEM market systems. The intention is to progress in a staged manner (Stage 1A and 1B – current WEM, and Stage 2 - WEM3).
- The key difference between e-terra Stage 1A and 1B is the movement of frequency control from the Western Power EMS to e-terra.
- Question - How does the NEMDE fit in to Stage 1A?

  Answer - It currently is not part of the scope due to the deferred Electricity Market Review activities (NEMDE part of Wholesale stream deferred activities).
- Stage 1B will result in e-terra becoming fully active, however the rest of the market systems will still be on Western Power's side (e.g. dispatch engine, outage processing, PASA, etc). AEMO's intent is to tie e-terra into the existing market systems.

- Signalling commissioning activities will be required to ensure all the necessary SCADA controls and indications work correctly prior to enabling e-terra. AEMO will be engaging with stakeholders on this next year.
- Stage 2 is related to the implementation of the new market including the new dispatch engine (NEMDE). In this stage dispatch instructions will be generated via e-terra rather than from the Western Power Energy Management System (EMS). The key difference for participants is that the dispatch instruction will be sent out via the EMS to match the participants ramp rate in real-time rather than as a step change ahead of time (as is currently the case). The Western Power EMS will still remain in service providing telemetry and control data to participant facilities.
- At the last forum Stakeholders asked if there was a dispatch look ahead signal that could be accessed, AEMO confirmed that during Stage 1A and 1B the existing look-ahead signals will be retained and have done some research into available options for Stage 2. There are two possible solutions: 1: using some existing NEM functionality to drive a commitment signal to participants based on Fast Start Inflexibility Profile (FSIP), and 2: developing some new logic to use pre-dispatch data to drive look-ahead signals out e-terra. With the second option there could be a difference in data as the pre-dispatch functionality was not an exact replica of dispatch (e.g. does not take into account FSIPs).
- Question – Does the fast start inflexibility profiles take into account the start-up requirements of a second unit for aggregated facilities.

  Answer - There is currently no functionality to take a second unit into account via the FSIP.
- Question - With AGC sending signals to match the ramping of the facility, will this take into account ramp rates?

  Answer - The ramp rate used would be based on the participants bids.
- Question - How will current AGC Operating Agreements with System Management might be impacted going forward, and will they still be required in the future?

  Answer - AEMO believes this will be covered under the Rules (based on existing NEM arrangements) so the agreement should no longer be needed, but will confirm this going forward.
- Question - If AEMO does not implement NEMDE then how would it be able to cope with all the special protection schemes (e.g. runbacks).

  Answer – AEMO is able to manage the current state with the existing tools, however the addition of more special protection schemes would need to be evaluated.

4. Generation modelling and performance standards

- Implementation of constraint equations has been deferred however the planning and use of the model will continue in order to develop AEMO's internal model of the SWIS, and prepare for the development of constraint equations as much as possible.
- AEMO advised that although the implementation of constraint equations is deferred, it needs to continue to develop its model of the SWIS which includes gathering generator modelling data. AEMO provided some different options it is considering to gather this data from Western Power now that the likelihood of interim WEM Rule changes is low, (including the option of Technical Rule changes).

- AEMO asked if permitted, would market participants allow AEMO to request model data on their behalf from Western Power. No major issues were voiced by stakeholders, however one stakeholder queried whether it would be possible for AEMO to continue of only some participants agreed to this. AEMO confirmed that although it may be possible to proceed with generic data if some participants did not agree, it would not necessarily be accurate enough to show how the power system performs under various scenarios, which would hinder the development of constraint equations.

  ACTION: Stakeholders to provide advice regarding concerns with AEMO engaging with Western Power in collecting generator performance data.

5. Next meeting

- February 2017