MEETING OUTCOMES – AEMO Workshop on Commissioning

MEETING:	AEMO Workshop on Commissioning
DATE:	Tuesday, 22 May 2018
TIME:	10.00am – 11.30am (AWST)
LOCATION:	AEMO Perth Ningaloo Room, Melbourne Orchid Room

ATTENDEES:

NAME	COMPANY
Matthew Fairclough	AEMO
Leon Kwek	AEMO
Marcus Arundale	AEMO
Leon Kwek	AEMO
Nargiza Rowney	AEMO
Laura Koziol	Rule Change Panel
Wendy Ng	ERM Power
Mark Riley (VC)	AGL
Marc Hettler	Perth Energy
Paul Arias	Bluewaters
Jacinda Papps	Alinta Energy
Chris McDonagh (VC)	Alinta Energy
Adam Stephen (VC)	Alinta Energy
Patrick Peake	Perth Energy

1. Welcome

Attendees agreed the overall objective of the workshop was to ensure the WEM Rules reflected the operational reality of commissioning.

2. Flexibility in approval

AEMO proposed guidelines for discussion which would allow flexibility in approval of Commissioning Test Plans. Essentially, movements between intervals would be categorised into three categories:

- Minor: <=+/- 30 MW, which can be approved for any interval;
- Moderate: >30 but < 100 MW, which can be approved over several windows (“plan B” approach);
- Significant: >= 100 MW, which can be approved only at set time for a “single shot”. Here, if the window is delayed beyond a small timeframe determined by the Controller on the day, the test must be rescheduled and reapproved.

In addition, for minor intervals, AEMO can accommodate a range of outputs to allow movements in real-time of +/- 30 MW or +/- 50 MVAR from the base level approved.

Participants were generally comfortable with the proposal. In particular, the proposal for minor and moderate intervals was accepted, though questioned the limitations for significant movements. The “Plan B” approach was discussed at length.

- Question – If the first attempt within a ‘moderate’ window gives an undesired result, can the second approved window be used?

  Answer – This should be able to be accommodated. The Participant would need to confirm with the Control Room which of the approved plans will be followed.

- Question – Given that in normal Balancing a Facility could easily move more than 100 MW over several intervals, is the ‘significant’ restriction necessary?

Answer –The SWIS is a small, isolated system. With enough movements over 100 MW, the SWIS will likely enter a High Risk State. Given a Facility undergoing commissioning has a higher likelihood/risk of failing compared to a Facility operating in normal Balancing, the risk is magnified.

- Question – Facilities that have a minimum generation greater than 100 MW will find this approach restrictive. What can be done?

  Answer – Due to the size of the SWIS, larger less-flexible Facilities are more difficult to accommodate. However, AEMO will investigate how to accommodate larger movements.

- Question – When would a modified Commissioning Test Plan be required?

  Answer – If the output a Participant wishes cannot be accommodated under any of the existing approved plans, a modified plan would be required. In general, the approval flexibility will reduce the need for a modified plan.

- Question – Would the timing requirements for submission change for low-impact plans?

  Answer – Upon submission of any Commissioning Test Plan, AEMO must determine whether there is sufficient time to assess. Plans with only minor movements will be easier to assess than plans with moderate or significant movements. Note that WEM Rule 3.21A.4 requires Participants to use best endeavours to submit plans at least 7 Trading Days prior to the start of the commissioning.

- Question – Can a 'Plan Z' be accommodated?

  Answer – AEMO must assess each plan for each Trading Day. Each alternative must be assessed on its own merits. The more alternatives a Participant submits the more difficult and longer the assessment. A plan with more than five alternates would most likely be questioned.

- Question – The most significant and common risk is the initial synchronisation. How would a delay here be handled?

  Answer – The proposed approach would allow several attempts to synchronise for a Facility with a minimum generation greater than 30 MW, and many opportunities for a Facility with a minimum generation less than 30 MW. Provided the delayed synchronisation conforms with the approved set of plans, it could be accommodated.

3. Scenarios

- Question – WEM Rule 3.21A.11(a) allows AEMO to cancel or delay a Commissioning Test if any of the activities would 'pose a threat to Power System Security or Power System Reliability'. If AEMO is risk-adverse, this will result in commissioning being impacted. Can the types and degree of threats be specified? Can the Procedure specify that this must only occur where risks cannot be managed? Can the Procedure require AEMO to have best endeavours to accommodate a Commissioning Test?

  Answer – AEMO will investigate whether this can be clarified in the Procedure. However, AEMO notes that the wording in clause 3.21A.11(a) of the WEM Rules is similar to that for a High Risk State in clause 3.4.1(l). In addition, the Rules provide AEMO with limited discretion, clauses 3.21A.7 and 3.21A.11(a) require AEMO to approve and permit a Commissioning Test Plan unless the Commissioning Test would pose a threat to system security.

- Question – Is an outage required to establish Significant Maintenance?

  Answer – No, as long as the maintenance can be justified as 'significant' using AEMO's guideline in the presentation. For example, varying the control system of a generator may not require an actual outage, but this is significant and will require commissioning.

- Question – Can AEMO's approach to Significant Maintenance be added to the Procedure?

  Answer – AEMO will investigate whether this fits within the head of power under the WEM Rules. In any case, this will be published externally.

- Question – When Commissioning Test Plans are cancelled on the Trading Day, a Net STEM Shortfall often results. How can this be resolved?

  Answer (taken on notice and now answered) – There are complex settlement interactions involving Resource Plans outages and commissioning. AEMO has identified that, similar to Consequential Outages, a Participant with an approved Commissioning Test Plan and a Net Contract Position will incur a Net STEM Shortfall and refunds when the Commissioning Test Plan is cancelled after STEM

has completed. The WEM Rules have an explicit exception for Planned Outages in this circumstance. Until the Rules are varied (possibly as a result of removing Resource Plans), Participants are advised to consider the implications of having a Net Contract Position in these situations. AEMO will raise this matter at the MAC.

- Question – Can other Facilities operated by the same Market Generator be used to minimise risk and/or allow greater flexibility/movement for a Facility undergoing commissioning?

  Answer – AEMO will investigate whether a Commissioning Test Plan and operation of this complexity can be accommodated, including whether AEMO is permitted to approve a Commissioning Test Plan with conditions that other Facilities operate in a particular manner. However, AEMO has no ability to control the output or ramp rate of Facilities not in the Balancing Portfolio or undergoing commissioning. In addition, AEMO may only delay or cancel a Commissioning Test Plan under specified circumstances, which do not include the operation of other Facilities. As such, this situation would likely be a matter of goodwill, which is insufficient to ensure Power System Security.

- Question – Is a Commissioning Test Plan with zero output for an interval valid?

  Answer – Yes. Commissioning is defined in the WEM Rules to include operation at different levels of output. AEMO's view is that this includes zero.

- Question – When does the Commissioning Test begin on each Trading Day?

  Answer – AEMO creates an Operating Instruction for the Trading Day using the information provided in the Template Commissioning Test Plan, available from the Market Website. The first and last Trading Intervals in the "Commissioning Test Schedule" with non-blank values are used for the start and end times of the Operating Instruction. A Commissioning Test includes operation at zero output.

- Question – Can AEMO assess a Commissioning Test Plan which overlaps with a Planned Outage where an outage may be ended early? This will allow adequate time for assessment which would not be available if the Participant had to wait until it was certain the outage could be ended early.

  Answer – AEMO will consider whether the Rules allow for this. It may be possible to assess and approve a commissioning Test Plan with a condition that the outage end prior to the commencement of the Commissioning Test Plan.

Other comments made by attendees:

- The Rules do not handle the transition from outage to commissioning well. The Rules definition of 'outage' may need to be revised.

4. General

- Question – Why the limitation to 10 MW?

  Answer – Only Facilities on the Equipment List must follow the outage planning Rules. In general, Facilities under 10 MW are not included on the list. Facilities not on the Equipment List will rarely need to undergo formal commissioning once in commercial service.

- Question – Do outages or commissioning relate to individual equipment or Facilities?

  Answer – Outage Plans and commissioning Test Plan are Facility based. Individual equipment, such as a single wind-turbine is not covered.

5. Other and actions

AEMO indicated to Participants that:

- From 1 July AEMO would no longer be able to approve a Commissioning Test Plan that overlaps with an approved outage.
- We will revert to Participants with guidelines on flexible approval
- This workshop will be the first of many.

6. Next meeting

Stakeholders will be advised of the date for the next workshop.