



Minutes

WEM Reform Implementation Group – Meeting 2, 2021

Time: 9:30am – 12:00pm

Date: 25 February 2021

Venue: Teleconference

Attendees:

| Name | Organisation | Name | Organisation |
|-------------------|-------------------------|------------------|--------------------------|
| Adnan Hayat | ERA | Sumeet Kaur | Shell |
| Alan McDonald | | Lafras Lamont | South 32 |
| Alex Gillespie | AEMO | Laura Koziol | RCP |
| Aden Barker | ETIU | Leon Kwek | AEMO |
| Ben Brearley | AEMO | Lynda Venables | Synergy |
| Ben Connor | Synergy | Mariusz Kovler | 365 Solutions Consulting |
| Benjamin Hammer | Western Power | Mark McKinnon | Western Power |
| Brad Huppatz | Synergy | Mark Riley | AGL |
| Clayton James | AEMO | Mike Hales | AEMO |
| Oscar Carlberg | Alinta | Wendy Ng | ERM Power |
| Brooke Eddington | ETIU | Neetika Kapani | AEMO |
| Eliana Zurhaar | AEMO | Patrick Peake | Perth Energy |
| Elizabeth Walters | ERA | Paul Arias | Bluewaters |
| Emina Ramic | AEMO | Peter Huxtable | Water Corporation |
| Erin Stone | Point Global Consulting | Rajat Sarawat | ERA |
| Sarah Graham | ETIU | Rebecca Petchey | AEMO |
| Gavin White | ERA | Rhiannon Bedola | Synergy |
| Dora Guzeleva | ETIU | Rob Chandler | Western Power |
| Harry Street | Entego Advisory | Robert Pullela | ERA |
| Ignatius Chan | PSC | Robin Parsons | AEMO |
| Jenny Laidlaw | RCP | Simon Middleton | AEMO |
| Jo Pownall | AEMO | Stephen Eliot | RCP |
| Judy Hunter | Western Power | Stuart Featham | AEMO |
| Kae Choo | EY | Teresa Smit | AEMO |
| Katie Franklyn | Clear Energy | Tim Robinson | RBP |
| Kristy McGrath | AEMO | Tinna Needham | Western Power |
| Shrey Kant Shroff | DX Consulting | Aditi Varma | ETIU |
| Steve Kane | ETIU | Victor Francisco | PSC |

| Item No. | Issue |
|--|--|
| Joint Industry Plan: AEMO Implementation Update – Stuart Featham, Ben Brealey and Emina Ramic | |
| 2 | <ul style="list-style-type: none"> • Stuart Featham (SF) said AEMO is undertaking a review of the rules gazetted in December so form a more detailed view of the implementation activities that are required, both by AEMO and other Rule Participants. <ul style="list-style-type: none"> ○ This includes identifying how SCED implementation could be staged (i.e. a similar approach as is being used for RCM). This will assist SCED implementation occurring as soon as possible. ○ Cameron Parrotte from AEMO provided an update on this at the Strategic Consultative Group (SCG) last week. • Ben Brearley (BB) provided the following updates: <ul style="list-style-type: none"> ○ The Generator Performance Standards (GPS) Procedure commenced on 1 February 2021. ○ Target date for Bids and Offers interface details at a WRIG IT session in April/May 2021. ○ The investment request for funding for WEM implementation has been prepared and AEMO will soon commence procurement for the WEM Dispatch Engine (WEMDE) delivery. ○ Other work, including on GPS, constraints management and settlement enhancement is ongoing. ○ AEMO is developing an overall road map for technical platforms. ○ AEMO will continue to develop its Test and Trial Strategy, Operational Readiness Strategy and Market Readiness Strategy. |
| 3 | <ul style="list-style-type: none"> • Emina Ramic (ER) presented on the high-level approach to market testing and trials (which forms part of the overall approach to readiness and transition). • ER presented a slide providing a high-level overview of how AEMO undertakes system delivery. <ul style="list-style-type: none"> ○ It uses the agile method to capture user stories and identify the best way to verify that stakeholder requirements have been meet. ○ This includes two-weekly sprints, where a set of functionality is tested, followed by a report that summaries the test outcomes, including whether requirements have been met or whether further development is required. ○ This is followed by system integration testing, which involves two cycles: (1) reporting defects and (2) fixing defects. ○ This is followed by user acceptance testing, which includes Market Participant self-testing to identify whether the system is fit-for-purpose. Market Participants will have access to the systems during this stage and will be able to provide feedback on the interfaces and other functionality. The activity will not be structured by AEMO, but rather Market Participants will have the flexibility to undertake user acceptance testing as they see best meets their needs. ○ This process will happen for each of the projects and will occur prior to market trials. • Wendy Ng (WG) asked at what stage will Market Participants receive the system specifications? <ul style="list-style-type: none"> ○ SF said that the timing of the interface specification will be determined for each project, and AEMO will always endeavour to make sure these are available to Market Participants as soon as possible in the |

project lifecycle. For example, for the bids and offers project, AEMO will commence development at the end of March 2021 and provide Market Participants the specifications as soon as possible after that.

- For WEM Reform, AEMO is delineating between testing of systems and market trailing (the latter being the end-to-end process). This is a change in terminology compared to projects AEMO has previously run.
- ER provided an overview of the market test and trial strategy scope, which includes three parts (see slide):
 - Market technical certification and validation
 - Market functional verification and validation
 - Market operational capability verification and validation
- The objectives, principles and standards in the strategy will assist achieving the matters above.
- ER outlined the core components of the market test and trial strategy:
 - Test Artefacts, including test plans, test scripts, test data and defects. There will likely be multiple test plans/focus documents, for example settlement, bids and offers, and dispatch may have their own test plans. Test scopes will outline the steps that will be executed through market testing, including who is responsible and how results will be captured. Defect lifecycle management will be outlined, including how they will be managed and re-tested.
 - Testing tools including licensing, access and training/guidelines for Market Participants.
 - Test environments, including which parties will set them up, how Market Participants will connect, how access to these environments will be managed.
- SF said that AEMO is working to have the Strategy document complete and published by the end of March. AEMO plans to set up a WRIG IT session to discuss the Strategy with Market Participants. It is likely that there will be particular test plans for particular projects, and these will also be discussed with the WRIG IT group.
- WN asked if there is an indicative date for market trials commencing?
 - SF said the working date is 1 April 2022 to 1 October 2022. Each of the projects will be tested as per its own timeframes prior to this. Market Participants can test them as soon as possible so that AEMO and Market Participants have confidence in the technology when the end-to-end market trials commence. However, all items may not commence trial on 1 April – is it expected there will be a soft start to manage workload.
- WN asked when Market Participant interface testing will commence?
 - SF said that, aside from settlement enhancements, bids and offers is likely to be the first project for system testing – AEMO is looking to start its development cycle from the end of March and there is a five month development cycle. AEMO aims to commence testing when about 80 per cent is complete, so this means it would commence in about four months.
- AEMO will continue to populate the Joint Industry Plan (JIP) as more information becomes available.

| | |
|----------|--|
| <p>4</p> | <ul style="list-style-type: none"> • Dora Guzeleva (DG) provided an update on the rule drafting plan (see slide). <ul style="list-style-type: none"> ○ The amending rules already made are gradually commencing – Tranche 1 and parts of Tranche 3 (rules relating to the first stages of 2021 Capacity Cycle, ie. Expressions of interest and certification) commenced on 1 February 2021. Other sections of Chapter 4 (relating to 2021 Reserve Capacity Mechanism (RCM) cycle) will commence prior to those activities commencing – these have not yet commenced as there are procedures that the Australian Energy Market Operator (AEMO) must develop prior to these rules commencing. The Energy Transformation Implementation Unit (ETIU) is working with AEMO to address errors and deficiencies in the existing rules prior to these commencing. The Network Access Quantities (NAQ) amending rules (for the 2022 cycle) cannot commence until some of the processes in the 2021 capacity cycle have been completed. ○ Tranche 5 will be a substantial tranche including outstanding policy decisions the Taskforce will make between February and May 2021, including non-cooptimised ESS, market information framework, market power mitigation mechanisms, power system reliability and security framework, and registration and participation. The majority of these matters will be discussed at TDOWG prior to consideration by the Taskforce, and in the case of market power mitigation a consultation paper will be released for stakeholder comment. Rule drafting will commence following May 2021. |
| <p>5</p> | <ul style="list-style-type: none"> • Rebecca Petchey (RP) presented on the 2021 Reserve Capacity timetable. The WEM Rules for the 2021 cycle include the new registration taxonomy and all provisions related to electric storage resources. <ul style="list-style-type: none"> ○ This timetable was developed assuming that the Rule Change Panel approves the Relevant Level Methodology Rule Change Proposal (RC_2019_03) in June 2021. ○ The timetable will be published on Friday 26 February 2021. ○ AEMO is continuing with the usual publication timeline for the 2021 Electricity Statement of Opportunities (ESOO) (17 June 2021). ○ There are several procedures that need to be completed prior to the EOI process opening (1 July 2021). ○ There is additional time between the close of EOI submissions (16 August 2021) and AEMO publishing the summary of EOI results (30 September 2021) to allow time to meet additional reporting requirements that have been added and also because AEMO expects additional EOIs because they are now mandatory. ○ The Certified Reserve Capacity (CRC) application process commences on 1 December to allow additional time to assign an RCM facility class to facilities and process applications to reassess a facility's RCM facility class. ○ There are also changes being made to the RCM portal, which will account for the new registration framework. ○ CRC applications will close on 10 February which allows the normal two month window for Market Participants to submit applications. ○ CRC will be assigned on 11 April – this provides some additional time for AEMO to complete the new Relevant Level calculation. ○ The remainder of the timeline is largely as it is at present. • DG emphasised that the expression of interest process is now mandatory for new facilities and facility upgrades. • RP presented on the 2022 Reserve Capacity timetable, which includes the addition of the NAQ Framework. <ul style="list-style-type: none"> ○ This timetable commences in January 2022, meaning that there is some overlap with the 2021 timeline (which AEMO has tried to minimise). |

- There are normal timeframes for the EOI process (submissions close 24 February 2022).
- Information on EOIs, facility retirements and early CRC applications will be provided to Western Power to enable it to develop the Limit Advice required for the NAQ model. The window for certification applications opens on 8 April 2022.
- On 3 June AEMO will publish the information from Western Power and AEMO's preliminary constraint equations – this includes some extra time given it is the first time this will occur.
- The ESOO will be published on 17 June 2022 as usual.
- Applications for CRC close 8 July 2022, in line with the usual 2 month timeframe.
- On 6 September 2022, AEMO will advise assignment of CRC. This includes additional time for the application of the new Relevant Level calculation as it requires more input data and due diligence.
- The bilateral trade declaration process will run to the usual timelines, but there is some additional time between that process and confirmation of traded CRC to allow extra time for the NAQ process and for final constraint equations to be developed.
- Capacity Credits and NAQs will be published on 5 December 2022, including some additional time as it is the first time NAQs will be allocated.
- WN asked once the RCM and DSM requirements are calculated on 5 December 2022 and then Market Participants are allocated Capacity Credits on 4 January 2023, if there is a shortfall due to NAQ process is the corresponding “uplift” notified at this stage?
- RP said that the 4 January 2023 notification is only for components – it is not when Capacity Credits and NAQs are notified. These are assigned on 5 December 2022 so that is where a shortfall will be notified.
- WN asked if a Market Participant is allocated less NAQ than their current NAQ when is this determined?
- RP said that this is the uplift quantity and will be notified on 5 December 2022.
- SF said the JIP is the key planning artefact.
 - It is available on the WRIG page of the ETIU website. AEMO is also looking to set up its own portal of WEM reform implementation information.
 - It captures the key milestones for implementation across the program. It includes all Rule Participants with delivery responsibilities to enable SCED to go live in 2022.
 - Through the Market Readiness Strategy and its reporting, AEMO is keen to document key milestones that reflect activities that multiple parties are required to do. AEMO will have discussions with Market Participants on what reasonable expectations are, including for information provision.
 - SF outlined the milestones in each swim lane – see JIP.
 - AEMO will come back to Market Participants as soon as possible to advise when interface details will be available to them.
- Patrick Peake (PP) said the timing of information becoming available is critical – it is imperative that Market Participants receive scopes and dates very soon so that Market Participants can put in budget requests.
- Mark McKinnon (MM) provided an update on the Western Power Milestones.
 - The GPS procedures commenced on 1 February and are published on the Western Power website. All participants should have the GPS submissions templates – one submission has already been received. Next steps are getting systems in place to share information with AEMO.
 - Western Power is continuing to develop the Non-Thermal Limit Advice for AEMO.

| | |
|--|---|
| | <ul style="list-style-type: none">○ The Credible Contingency Framework commenced on 1 February 2022. Western Power is working with AEMO on implementation of this.○ Western Power is working through the internal projects for the Tranche 2 and 3 amending rules, in particular the outage management and planning project.○ The customer relations team is working with Market Participants on facility readiness. MM requested Market Participants to contact Western Power to discuss as necessary. <ul style="list-style-type: none">● Ben Connor (BC) said Synergy remains on track for all its milestones.<ul style="list-style-type: none">○ SF said that the JIP will become a more central part of WRIG discussions going forward and there needs to be a agreement on how milestones for Independent Power Providers (IPPs)/Retailers etc could best be reflected as they will need to reflect multiple organisations. |
|--|---|

WEM Procedures – Leon Kwek and Brooke Eddington

| | |
|----------|---|
| 6 | <ul style="list-style-type: none">• Leon Kwek (LK) presented on the stakeholder feedback on the Credible Contingency Events Procedure, which commenced on 1 February 2021. It is available on the AEMO website.<ul style="list-style-type: none">○ It is a framework for introducing the concept of credible contingencies into the WEM Rules (which previously existed in the Technical Rules).○ Stakeholders commented that it would be helpful if it were clearly stated that based on new information the classification may revert back to a Non-Credible Contingency Event. LK said that the reclassification process has been reworded to make it clear that any reclassification AEMO makes in real-time always has an end date (noting AEMO has the option to extend that end date if required).○ Stakeholders said there is an asymmetry in how the WEM Rule and Procedure have been designed in that AEMO can make the security envelope larger but it cannot make it smaller. LK said that the reason the Procedure is written that way is because it reflects the rules. The WEM Rules reflect the real world physical and economic probability – that is, an event occurs and AEMO needs to decrease its risk in real time, but the inverse does not occur i.e. AEMO would take an additional risk in real time. Discussions should occur prior to planned works rather than in real time. In summary, AEMO is satisfied the existing framework allows for correct classification of contingency events. However, a new paragraph has been added to allow for ongoing maintenance. |
| 7 | <ul style="list-style-type: none">• Brooke Eddington (BE) presented on the Dispute Resolution Mechanism for Existing Transmission Connected Generating Systems.<ul style="list-style-type: none">○ The dispute resolution mechanism is included in the WEM Rules for existing transmission connected generating systems to register their GPS and approved Monitoring Plans. These must be in place by August 2022, but this date can be extended by agreement.○ There are several ways to reach agreement without having to use the dispute resolution mechanism. This is to acknowledge that there are a range of existing generators that may not have the same capabilities as a new generator.○ The Coordinator of Energy will appoint the arbitrators and a technical panel of experts, and develop a WEM Procedure for the arbitration process – both by 1 April 2021. The Coordinator will also accept dispute applications from 1 February 2021 and determine whether to refer these to arbitration.○ The requirements for the WEM Procedure are outlined in clause 1.42.10 of the WEM Rules. See summary on slide. This procedure was released for consultation in December. Four submissions were received. ETIU has made amendments to address submissions, including clarifying language, specifying timeframes, treatment of confidential information and a referral process flow chart.○ On 11 February, templates for dispute resolution were released for comment. No submissions were received.• ETIU ran an EOI process to appoint arbitrators and experts. 14 applications for arbitrator and 8 for the panel of experts were received. ETIU will advise stakeholders in the next couple of weeks on the appointments. |
| 8 | <ul style="list-style-type: none">• SF outlined the topics planned for the next two WRIG meetings – see slide. Future WRIG meetings are on the last Thursday of the month – invites have already been sent.• SF said AEMO is developing a complete forward-looking plan of all the procedure-related work. This will be shared with Market Participants as soon as possible. |

Next steps – Dora Guzeleva

| | |
|----------|--|
| 9 | <ul style="list-style-type: none">• DG said that the JIP and the minutes will be published. AEMO will continue to provide updates on the readiness and transition scope, as well as the full procedure list.• ETIU is planning meetings with Market Participants to better understand their requirements.• DG invited stakeholder feedback on any topic. |
|----------|--|