

Transformation Design and Operation Working Group Meeting 37

22 June 2021

Working together for a brighter energy future.

Ground rules

- Please place your microphone on mute, unless you are asking a question or making a comment.
- Please keep questions relevant to the agenda item being discussed.
- If there is not a break in discussion and you would like to say something, you can 'raise your hand' by typing 'question' or 'comment' in the meeting chat. Questions and comments can also be emailed to energy.wa.gov.au after the meeting.
- The meeting will be recorded for minute-taking purposes. Please do not make your own recording of the meeting.
- Please state your name and organisation when you ask a question to assist with meeting minutes.
- If you are having connection/bandwidth issues, you may want to disable the incoming and/or outgoing video.

Agenda

Tranche 4B:

- Section 3.6: Under Frequency Load Shedding
- Change management for specified WEM Technical Standards
- Transitional rules for AGC dispatch
- Amendments to Appendix 12: Generation Performance Standards
- Aligning the availability declarations process with the Reserve Capacity Mechanism (RCM) obligations
- Aligning the storage constraints opt-in process for storage facilities with the RCM
- Amendments to Chapter 4 RCM
- Treatment of voluntary reduction of Capacity Credits by Demand Side Programme
- Other minor amendments

EPWA Update

Under Frequency Load Shedding

Section 3.6: UFLS

- AEMO is required to prepare and publish an UFLS Requirements document to set out the aggregate UFLS requirements for the SWIS taking into account the SWIS Frequency Operating Standards.
- Network Operators are required to design and develop UFLS specifications to adhere to the requirements set out by AEMO.
- Requirement for AEMO and Network Operators to consult with each other when amendments to UFLS Requirements are necessary and to monitor ongoing performance against these documents.
- Replacement section 3.6 is tentatively proposed to commence on 1 December 2021.

Change Management for specified WEM Technical Standards

- The proposed Amending Rules enable the Coordinator to seek technical or engineering advice or information from Western Power and AEMO when a Rule Change Proposal relates to a WEM Technical Standard.
- Specified WEM Technical Standards include:
 - Frequency Operating Standards;
 - SWIS Operating Standards for frequency and voltage;
 - the Technical Envelope (limits of secure operation);
 - Power System Security and Reliability Principles;
 - Generator Performance Standards;
 - Under frequency load shedding requirements; and
 - System Restart provisions.
- Commencement on 1 Aug 2021, but some of these clauses do not commence until the new WEM commencement, and so commencement of some items will be deferred.

Transitional AGC Dispatch

Transitional clauses: 1.49

- Market Participants can voluntarily participate in trialing central ramping dispatch of their facilities to facilitate new market readiness.
- The transitional rules enable AEMO to take operational control of a Market Participant's facility for this purpose, while ensuring compliance with dispatch instructions as issued under the current Balancing and LFAS Markets.
- To the extent AEMO ensures its operational control of the facility remains consistent with the applicable dispatch instruction, the participant is required to maintain its dispatch compliance under existing section 7.10
- These transitional rules do not affect any existing aspects of market operation or compensation.
 They are purely intended for the purposes of testing a facility's physical ability to ramp linearly in response to a dispatch instruction in the new WEM and to help participants prepare for cutover.
- Commence on 1 August 2021.

Amendments to GPS Appendix 12

- Modifications to definitions of Credible Contingency Event and Settling Time
- Voltage and Reactive Power Control Inclusion of clarifying wording in the footnotes and tables to provide consistency of interpretation
- Active Power Control- Inclusion of clarifying clause to ensure consistency of understanding and application of A12.5
 and A12.6 requirements in relation to active power ramping under different conditions
- Inertia and Frequency Control
 - Movement of repeated requirements in both Ideal and Minimum Standards to the Common Requirements section for ease of application
 - Clarity that tripping schemes will not be normally accepted to meet this standard going forward
 - Improved definition of droop response
 - Improved clarity on require frequency response under the Ideal Standard
 - Introduction of a clear Minimum Standard, allowing for different technology types
- Disturbance Ride Through- Clarifying that where an agreed tripping scheme does exist, it will not breach this standard

Calculation of Not-in-service Capacity

- Clause 7.13.1I outlines the calculation of NISC, where a Facility holding CC has not updated
 its offers to reflect capacity as "in-service" when the facility is showing as cleared in predispatch schedules. This is required because of the obligation to present capacity at least
 up to the RCOQ in the RTM.
- Amendments outline equations for calculating the NISC
- The NISC for a Facility holding CC will be published at the end of the relevant Dispatch Interval
- NISC Refund amount is calculated in 4.26.1D. It is:
 - the lower of the NISC and the difference between the RCOQ and CAFO i.e., takes into account any shortfall due to forced outages.
 - Multiplied by the Trading Interval refund rate.

Refund quantity for ESR capacity shortfall

- A storage facility must pay a refund if it is unable to present its capacity at least up to its RCOQ in its relevant RCOQ obligation intervals, as indicated by its real-time charge status after taking into account any equipment limits.
- Clause 4.26.1E outlines the ESRChargeShortfall calculation and the associated refund.

Consequential amendments

- Generation Reserve Capacity Deficit Refund to be updated to include NISC and ESRChargeShortfall
- CAFO value to be aggregated to Facility level in 3.21.7
- Include additions to Real-Time Market Submissions (7.4.40) and the Glossary definition of Available Capacity to include the minimum synchronisation time for the "Available" energy in the submission.
- Associated changes to the inputs used in determining the Dispatch Schedule, Pre-Dispatch Schedule, or Week-ahead Schedule in order to consider "Available" only where it has adequate time to synchronise for the dispatch interval.

RCM amendments

Bilateral Trade declaration

- Clause 4.14.1 requires participants to provide to AEMO the total amount of Reserve Capacity they intend to trade bilaterally from each facility
- The purpose of proposed amendment to clause 4.14.1 is to accommodate the participation of facilities containing more than one technology type by requiring that the information is provided for each facility component

Publishing CC information

- Currently under clause 4.20.5A AEMO must publish capacity credits associated with facility components at the same time as it publishes capacity credits. However, this is not practical as participants have 30 days to notify AEMO as to how capacity credits will be split between components
- It is proposed to remove references to components in 4.20.5A. However, AEMO will still be required to publish this information under clause 4.1.22

Capacity Credits for ESR components

- Clause 4.20.17 sets out how AEMO is to set the number of Capacity Credits associated with the Electric Storage
 Resource component of a Facility
- Amendments are proposed to 4.20.17 to allow association of Capacity Credits with all relevant components, including Electric Storage Resources

Voluntary reduction of Capacity Credits by Demand Side Programme

- Clause 4.25.4E has been deleted to provide a consistent treatment of all facilities, including Demand Side Programmes, in relation to voluntary reduction of Capacity Credits
- Clause 4.26.6(b) is amended to accommodate the removal of Capacity Refunds for DSM seeking a voluntary reduction of Capacity Credits. (clause 4.25.4E)

Other minor amendments

- 4.4A.1 Facilities ceasing operation the clause should refer to a Non-scheduled Facility or a DSP
- Incorrect references in 4.11.1(b), 4.11.3, definition of Benchmark Reserve Capacity Price
- Other minor typographical and manifest errors in Chapter 4
- Changes to the entity calculating Margin Values in 2022 will be changed from AEMO to ERA
- Updates to PSSR clauses:
 - Clause 3.4.4. to allow for reasonable consultation between AEMO and WP when network elements are directed to be operated in specific ways
 - Clause 3.5.5B to require AEMO to publish details of any AEMO Directions

Feedback period

- Consultation period closes 30 June cob
- Provide feedback to <u>energymarkets@energy.wa.gov.au</u>
- EPWA available to meet as needed
- Tranche 4B submitted to Minister for making by mid-July
- Clauses commence as stated in the Exposure Draft

WEM Implementation Update

Continues, led by Energy Policy WA

Implementation of Taskforce work program

- Detailed design and drafting 2021-22 - Interim measures 2021-22 (Joint Agreement Framework)	Ion-cooptimised ESS
	Detailed design and draft rules 2021 Implementation – early 2022

Rule Drafting Timeline

Work package	April	May	June	July	August	Sept	Oct	Nov
TRANCHE 4A (Gazetted) Transitional Arrangements (e.g. ESS accreditation) Changes and Rules commencement to facilitate 2021 RCM, etc.								
TRANCHE 4B (July/August) • UFLS & System Restart								
Remaining changes to facilitate 2021 and 2022 RCM								
Changes and Rules commencement to facilitate 2022 RCM								
TRANCHE 5 (December) Non-Cooptimised ESS Framework								
Market Information Framework								
Reliability Standards Framework								
Participation and Registration framework								
Intermittent Loads								
Drafting instructions and rule drafting	Stakeholder consultation				Ministerial approval, publication of the Amending Rules and Gazettal			

WRIG and TDOWG still the two key stakeholder forums for WEM reform

Meeting close

Questions or feedback can be emailed to energymarkets@energy.wa.gov.au

Next meetings: TBD