



Government of Western Australia
Energy Policy WA

TDOWG Meeting # 38

4 November 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 no 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 energymarkets@energy.wa.gov.au after the meeting.
- If you are having connection/bandwidth issues, you may want to disable the incoming and/or outgoing video.

Agenda

- **Non-Co-optimised ESS Framework – new sections 3.11A, 3.11B, 4.5B, Ch-5, and associated changes**
- **Intermittent Loads – modifications to section 2.30B**
- **Market Information – modifications to Chapter-10**

Non-Cooptimised ESS Framework

Recap of the NCESS Framework

Designed to replace the Network Control Service (NCS) and Dispatch Support Service (DSS) frameworks into a consistent and transparent process under the WEM Rules.

Enable procurement of services to resolve and wider security and reliability issues or other emerging issues, both in long-term planning timeframes and short-term operational timeframes

Supported by a requirement for WP to develop a Tx System Plan to identify network and non-network options to meet PSSR Standards, generation and demand growth etc. Focused on the Transmission system.

Transmission System Plan

New Section 4.5B

- **New Section 4.5B places an obligation on Western Power to publish a plan for the efficient development of the transmission system over a 10 year planning horizon**
- **The TSP will identify network or non-network solutions to meet power system security and reliability standards – in some circumstances identifying a trigger event for an NCESS procurement**
- **In developing the TSP, Western Power will be required to coordinate with AEMO and the Coordinator on the key assumptions and inputs to ensure that where possible, the different planning activities use the same analysis**
- **Western Power will also need to consider both the costs and benefits to the WEM and long-term costs to consumers when identifying investment options**

Transmission System Plan

New Section 4.5B

- **In developing the TSP Western Power must:**
 - Identify where significant costs to the WEM have arisen due to the state of the transmission network (e.g. binding network constraints) and identify investment options that would maximise net benefits
 - Consider PSSR standards and requirements under the WEM Rules and Technical Rules, Priority Projects identified in the WOSP, major network augmentations etc.
 - Consult with AEMO and the Coordinator on the key inputs – including forecasted demand growth or reductions scenarios, credible contingency events, modelling from the WOSP, information from Short Term, Medium Term and Long Term PASA studies etc.
- **Western Power will need to consult on a draft version of the TSP and take into account any feedback received into the final TSP they publish on their website**
- **New Section 4.5B is intended to commence with the rest of the NCESS Framework in early 2022**

NCESS Triggers

Clause 3.11A.2

The NCESS is designed to be triggered by AEMO or WP to address any of the following needs:

- **TSP identifies a non-network option may meet network adequacy needs better than a network option**
- **Where constrained-on dispatch is leading to significant energy uplift payments in the WEM**
- **Frequent manual intervention in dispatch algorithm to relieve network constraints**
- **Modifications to PSSR standards or assumptions/inputs of the TSP**
- **AEMO forecasts emerging issues unable to be managed using existing market mechanisms**

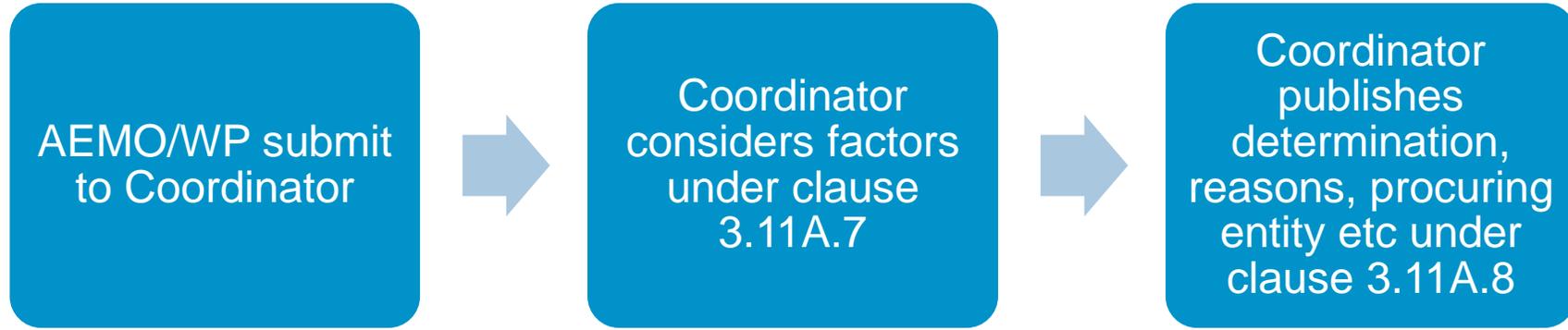
NCESS Triggers

Clause 3.11A.4

Coordinator may trigger at any time to address any of the following needs:

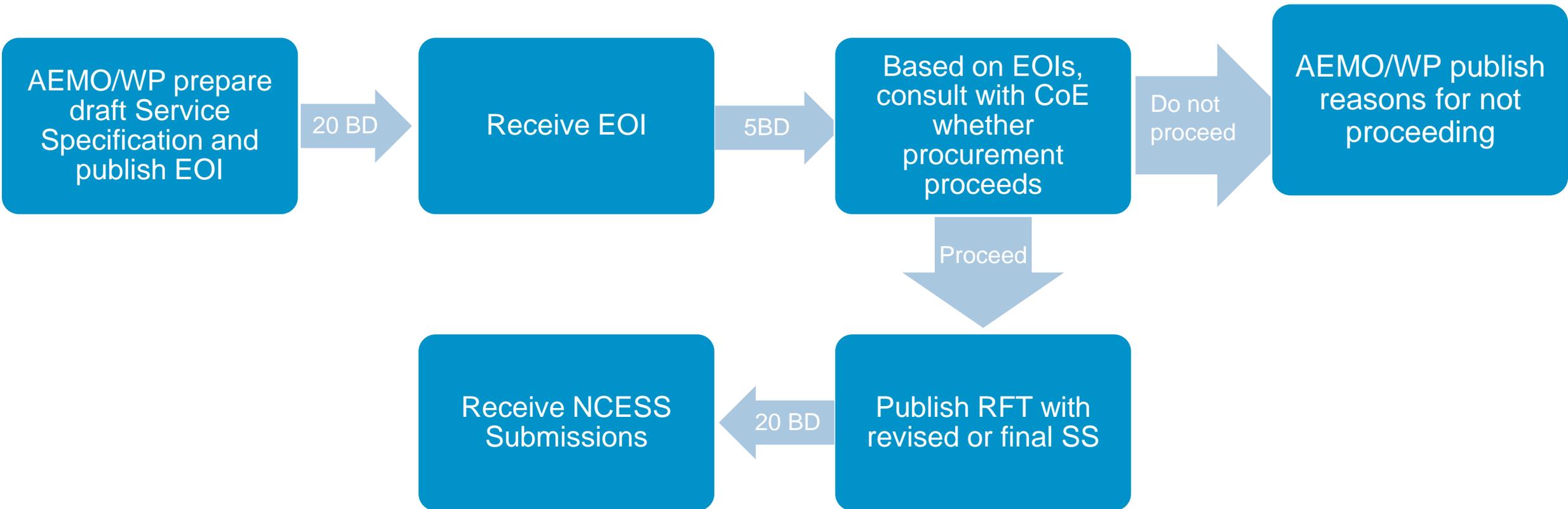
- **FCESS market clearing price reaches an unreasonable level**
- **WOSP outcomes**
- **Reviews or ministerial policy statements result in Rule changes that establish new services**

Trigger confirmation



NCESS Procurement Process

Section 3.11B



Participation in NCESS procurement

The facilities or equipment that may participate in an NCESS procurement are:

- (a) a Registered Facility; or
- (b) a new facility that is not registered under these WEM Rules; or
- (c) equipment owned, operated or controlled by an existing or intending Market Participant.

Selection analysis

Clause 3.11B.10 and 3.11B.11

AEMO/WP to conduct selection analysis that :

- (a) Complies with NCESS Submission requirements;
- (b) Meets the NCESS Service Specification;
- (c) Provides highest value for money;
- (d) Impact on the total costs on the market.

- **WP can use analysis conducted under NFIT process to demonstrate VFM**
- **AEMO/WP to publish certain details of the signed contract (clause 3.11B.12)**

Obligations for NCESS Contract holders

Chapter 5

Participation in RCM and recovery of fixed costs

- **Existing market participants will only be compensated for costs not already covered through participation in the existing mechanisms of the WEM.**
- **New participants may submit both their fixed and operating costs and will be required to declare in their submissions whether or not the facility has applied for or has been granted capacity credits in respect of the capacity that will provide the NCESS.**
 - Where a facility has already been granted or will receive capacity credits, the facility will only be compensated for any incremental fixed costs incurred in providing NCESS.
 - Facility will receive priority in NAQ model, and once CC has been established, the contract payment could be changed to ensure only balance of costs are compensated through NCESS contract
- **Only Facility Technology Types that would ordinarily be capable of receiving certified reserve capacity under chapter-4 are required to apply in the Reserve Capacity Cycle.**

NCESS Dispatch and Settlement

Chapter 5

- **NCESS Contract reflected through Constraint Equations in Dispatch Algorithm**
- **Where not possible to reflect as CE, AEMO to record certain details of instruction given to facility holding NCESS Contract**
- **To enable Settlement of WP-procured NCESS, AEMO to provide information regarding quantity dispatched (and other matters) to WP so WP can settle difference**
 - Energy Uplift Payments are stopped (clause 9.9.9)
- **For AEMO-procured NCESS, settlement will happen through market settlement processes with costs of NCESS contract recovered from all Market Participants with consumption share in relevant Trading Interval**

Transitional provisions

- **NCESS framework scheduled to commence early 2022**
- **NCESS and NCS will need to co-exist in the rules:**
 - In the case of Mungarra and West Kal contracts, until the expiry of the current contract term
 - In the case of GIA NCS contracts, until new market commencement when these contracts cease to exist.

Intermittent Loads

Purpose of the draft amendments

Grandfathering the arrangements for all existing Intermittent Loads

Clarify the application of the clauses for Spinning Reserve cost recovery

Allowing clauses to be applied to any future Intermittent Loads

General clauses

- **The Intermittent Load concept will continue to be available for new connections comprising load and co-located generation behind the same network connection point.**
- **The differential treatment of Intermittent Loads registered before and after New WEM Commencement Day is now captured in the individual rule sections.**
- **Currently, an Intermittent Load is all or part of a Non-Dispatchable Load (connection point level). In the new WEM, an Intermittent Load is always part of a Facility. It is a special type of the “Load” Facility Technology Type - an entity behind the connection point.**

Existing Intermittent Loads

Transitional provisions

- **Clause 1.48.2 preserves the treatment of the nominated NDV value for existing Intermittent Loads.**
- **Clause 1.48.3 enables any unregistered generating systems associated with existing Intermittent Loads to be deemed exempted from the requirement to register under 2.29.4A.**
- **Existing Intermittent Loads are still subject to other clauses, including the requirement to provide and update information under clause 2.30B.3, and the potential to no longer be an Intermittent Load if it stops meeting conditions (very unlikely).**

Amendments to section 2.30B

For any new combination of Non-Scheduled Load and Energy Producing System registering as Intermittent Load after NWCD

- **Clauses 2.30B.1 and 2.30B.2 outline the conditions that must be satisfied for a facility to be eligible to be an Intermittent Load:**
 - **An Energy Producing System must exist which self-supplies the Load, and output is netted off consumption, or the load and generator are electrically connected behind two or more shared network connection points**
 - **Net consumption of energy from the grid for no more than 4320 TI (3 months) in any Capacity Year**
 - **The Facility must be connected to the Tx network**
 - **Not expected to be associated with a DSP, but could be associated with an Interruptible Load**

Standing data requirements

Applicable to all existing and new Intermittent Loads

Transitional provisions will be drafted to enable existing Intermittent Loads to update their Standing Data before NWCD

- **Clauses 2.30B.3 outlines new Standing Data requirements**
 - (a) – (c) same as before
 - (d) single line diagram which includes details of the Loads and Energy Producing Systems contained within the Facility and any other information necessary to enable AEMO to determine whether the Load meets the conditions of clause 2.30B.2;
 - (e) the Nominated Excess Capacity;
 - (f) the Declared Sent Out Capacity and any other information necessary to enable AEMO to determine the System Size of the Facility;
 - (g) information about protection schemes at the Facility, including whether the Facility is configured to automatically adjust load or generation in an event that affects the Energy Producing System, and evidence to support that configuration;
 - (h) the instantaneous output or consumption of each separate electricity producing resource or device in the Energy Producing System;
 - (j) the maximum level of Intermittent Load for the Facility (standing data); and
 - (k) the Contract Maximum Demand associated with the Facility

Conditions under which grandfathering may no longer apply

Applicable to all existing Intermittent Loads when the clause commences

- The max level of Intermittent Load and the Contract Max Demand provided under clauses 2.30B.3(j) and 2.30B.3(k) are important determinants in the Intermittent Load IRCR calculations. If an Intermittent Load seeks to increase these values – unless to deliver an NCESS Contract – it would then fall under the new arrangements for Intermittent Loads, where IRCR is calculated based on actual net import, rather than separated into Intermittent Load component which is not subject to the markup applied to other loads.
- A participant will nominate an expected maximum export value for the Facility containing the Intermittent Load. Where this value is less than 10 MW, the facility is exempt from registering, regardless of whether the DSOC exceeds 10 MW, or whether there is more than 10 MW of Energy Producing System behind the fence. Where the actual export persistently exceeds the nominated value (by more than 1 MW in more than 120 Dispatch Intervals in any 12 months period), the participant must update the value, and if it is now greater than 10 MW, the facility must register or apply for an exemption.

Metered Schedules

Applicable to all existing and new Intermittent Loads when the clause commences

- **Clause 2.30B.9A is inserted to clarify the settlement treatment of Facilities containing Intermittent Loads, and reflects the approach already implicit in the Pre-Amending Rules. The quantity referenced in subclause (c) is the Metered Schedule for the non-registered part of the facility. Although it is called a Non-Dispatchable Load, it includes everything unregistered behind the connection point (other than the Intermittent Load component if present) which may include load, generation and storage.**
- **Clause 2.30B.11 is included to allow for different participants to be responsible for the injection and withdrawal of the Facility containing the Intermittent Load.**

Intermittent Load Refunds

- **Intermittent Loads registered before New WEM Commencement Day are subject to special IRCR calculations, and must provide data to be used in those calculations.**
- **Intermittent Loads registered before New WEM Commencement Day are subject to special refund calculations to reflect behind the fence outages and other unexpected reliance on grid supply.**
- **All future Intermittent Loads will use the same IRCR calculations as other Facilities. Because future Intermittent Loads are subject to the same IRCR calculations as other loads, special refund calculations are unnecessary.**

Runway share for Contingency Reserve Raise

Applicable to all existing and new Intermittent Loads when the clause commences

- **Facilities containing Intermittent Loads may be included as a Scheduled Facility (if registered), or individual components of the Energy Producing System serving the load. Even where the Facility is registered, it may still be included as individual components if an unplanned event affecting one or more behind the meter units would result in an increase in withdrawal from the transmission network**

IRCR for Intermittent Loads

- **Appendix 5 is amended to clarify the treatment of Intermittent Loads, and differentiate between Intermittent Loads registered before and after New WEM Commencement Day.**
- **The treatment of existing Intermittent Loads for the purposes of IRCR is unchanged.**

Other obligations

Applicable to all existing and new Intermittent Loads when the clause commences

- **Obligations related to generator performance standards apply to the generating systems associated with Intermittent Loads**
- **Outage obligations for generating systems associated with Intermittent Loads**
 - if > 10 MW, the generator is on the Equipment List and must follow outage rules
 - If <10 MW, the generator is a self-scheduling outage facility
- **Facilities containing Intermittent Loads are required to schedule their exports, but not their imports.**

Market Information

Changing the entity that sets confidentiality status

Chapter 10 – Market Information

- **The primary change to Chapter 10 is to remove from AEMO, and place on the Coordinator, the obligation to set the confidentiality status for each type of market information, as previously determined by the Taskforce**
- **There are also consequential changes to remove some obligations placed on AEMO to publish the WEM Rules and documents related to the rule change process on the WEM Website**
- **Further changes will be made in later tranches to implement other Taskforce decisions listed in the Taskforce Paper, including the decision to reduce the number of confidentiality classes to two – Public and Confidential**
- **These amendments are proposed to commence at new market start**

Feedback period

- **TDOWG on 10 November to cover:**
 - Registration and participation framework
 - RCM including RCOQ changes
 - Changes to AEMO Allowable Revenue provisions
- **Consultation until 22 November**
- **Provide feedback to energymarkets@energy.wa.gov.au**
- **EPWA available to meet as needed**
- **Tranche 5 expected to be gazetted mid December**

Meeting close

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