Energy Transformation Implementation Unit

Transformation Design and Operation Working Group Meeting 32

Summary of Stakeholder Feedback and Next Steps

7 December 2020

Ground rules and virtual meeting protocols

- 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 TDOWG@energy.wa.gov.au after the meeting.
- The meeting will be recorded. However no minutes will be issued.
- Please state your name and organisation when you ask a question.
- If you are having connection/bandwidth issues, you may want to disable the incoming and/or outgoing video.

Agenda

- **ETIU activities in preparation for gazettal of Amending Rules**
- **Plan for commencement of specific Amending Rules**
- **Summary of Stakeholder Feedback**
  - Transitional Arrangements for Registration
  - Monitoring and Compliance
  - Operational Planning and PASA
  - Outage Management and Commissioning Tests
  - Market Settlement
  - Reserve Capacity Mechanism
- **Outlook for Jan-Feb 2021**
- **Wrap-up**

ETIU activities in preparation for gazettal

- Incorporating stakeholder feedback provided on Tranche-2, Tranche-3 and Transitional Registration extract
- Consolidating all Amending Rules into a single ‘companion version’ to enable gazettal
- The Taskforce will endorse Amending Rules on 11 December to be sent to the Minister for making
- After Minister’s approval, the Amending Rules will be notified as ‘made’ in the Government Gazette on 22 December
- A Ministerial Instrument will be published on the Rule Change Panel’s website on 22 December
- A ‘companion version’ of the rule book will be published on the Rule Change Panel’s website in January 2021
- Specific RCM transitional provisions requiring AEMO to develop and publish a timetable for the 2021 and 2022 Reserve Capacity Cycles will commence on 22 December.
- All other Amending Rules will commence at different dates by way of commencement notices in the Gazette

This version of the Market Rules reflects the latest version of the Market Rules published by the Rule Change Panel, and Amending Rules made by the Minister and the Rule Change Panel that have not yet commenced.

The amendments made by the Minister for Energy (under regulation 7(5) of the *Electricity Industry (Wholesale Electricity Market) Regulations 2004*) that give effect to the Wholesale Electricity Market Reforms are shown in colour to enable users to readily identify the amendments. The amendments shown in dark red are Amending Rules that have commenced, and the amendments shown in other colours in the table below are Amending Rules that are awaiting commencement. *As this is proposed to be a parallel rolling version of the WEM Rules, deletions are not shown*.

Amending Rules

Name of Instrument	Date Gazetted	Commencement Date	Colour
Wholesale Electricity Market Amendment (Reserve Capacity Pricing Reforms) Rules 2019	11 February 2020	1 October 2021	green
Wholesale Electricity Market Amendment (Constraints Framework and Governance) Rules 2020	16 June 2020	1 July 2020	dark red
Wholesale Electricity Market Amendment (Technical Rules Change Management) Rules 2020	26 June 2020	1 January 2021	pink
Wholesale Electricity Market Amendment (Distributed Energy Register and Roadmap Implementation – Costs) Rules 2020	30 June 2020	1 July 2020	dark red
Wholesale Electricity Market Amendment (Tranche 1 Amendments) Rules 2020		Sch A – 1 Jan 2021 Sch B – I Feb 2021 Sch C – 1 Oct 2021	dark red
Final Rule Change Report – RC_2019_05: Amending the Minimum STEM Price definition and determination	N/A	7 August 2020	black
Final Rule Change Report – RC_2017_02: Implementation of a 30-Minute Balancing Gate Closure	N/A	1 December 2020	black

Caution regarding markup: In some cases, the markup of changes in this document will not exactly match the form of the amendments in the relevant Ministerial Instruments published on the Economic Regulation Authority's website, but do exactly match the effect of the Amending Rules. This approach allows users to readily identify the amendments, particularly in clauses that contain large amounts of text but few amendments. Every effort has been made to ensure that the markup is accurate, but complete accuracy cannot be guaranteed. You should rely on the Ministerial Instruments.

Caution regarding Explanatory Notes: The Explanatory Notes do not refer to amendments that have been made for consistency with the drafting style of the Market Rules, correct any minor administrative or typographical errors, or are straightforward consequential changes. Further Explanatory Notes (particularly in relation to new definitions in the Chapter 11 glossary) will be added in subsequent consolidated versions of the Market Rules. The Energy Transformation Taskforce does not warrant that the markup in this document is complete or accurate. You should perform your own comparison.

Summary of Stakeholder Feedback

Transitional Arrangements for Registration

Registration

Registration Cycle and Taxonomy

- Specific RCM transitional provisions requiring AEMO to develop and publish a timetable for the 2021 and 2022 Reserve Capacity Cycles will commence on 22 December.
- The Expression of Interest (EOI) process will then commence.
- AEMO will assign an indicative Facility Class to an RCM Market Participant as per new clause 4.8A of the RCM Amending Rules.
- When the intending RCM Market Participant registers its facility, that indicative Facility Class will become Facility Class for that Registered facility.

Registration

Section 2.29

- New clauses in Section 2.29 that explain the requirement for Market Participants to register a Facility based on System Size.
- System Size less than 10 MW may request to be registered as a Non-Scheduled Facility, a Scheduled Facility or Semi-Scheduled Facility.
- AEMO must grant a System Size less than 10 MW to register as a Non-Scheduled Facility unless AEMO deems facility needs to be controllable.
- If controllable or if a person applies to register their facility as a Scheduled Facility, or a Semi-Scheduled Facility AEMO must register the relevant facility as either a Scheduled Facility or a Semi-Scheduled Facility.
- AEMO must not register a facility with a System Size greater than or equal to 10 MW as a Non-Scheduled Facility.

Registration

Revised Definition of System Size

System Size: Means, in respect of a facility being a quantity equaling the sum of:

(a) The minimum of:

i. the Declared Sent Out Capacity of the facility; and

ii. the sum over all energy producing equipment comprising the Energy Producing System at the facility (calculated for each individual piece of energy equipment), of each energy producing equipment's maximum MW output; and

(b) The minimum of:

i. the Contracted Maximum Demand in MW of the facility, where the Contracted Maximum Demand is a positive quantity; and

ii. negative one multiplied by the sum over all Electric Storage Resources comprising the Energy Producing System at the facility (calculated for each individual Electric Storage Resource), of each Electric Storage Resource's maximum MW offtake quantity (where that offtake quantity is negative).

Registration

Industry Feedback Changes

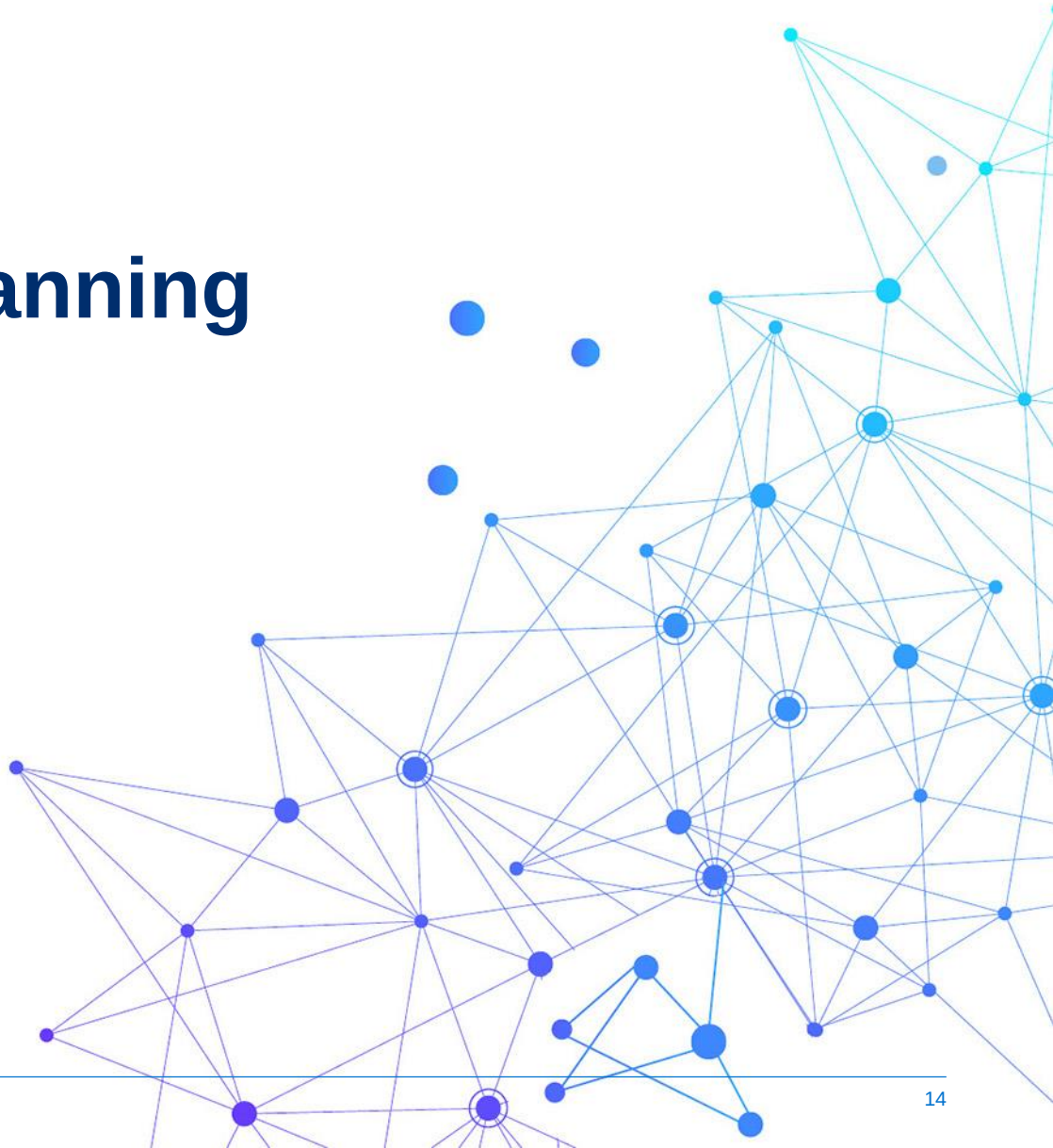
- No facility registered in one Facility Class can simultaneously be registered in another Facility Class
  - Addition to clause 2.29.2A AEMO may allow a Market Participant to register a Demand Side Programme and or Interruptible Load at a common set of network connection points provided that the Demand Side Programme and the Interruptible Load are to be registered to the same Market Participant.
- Non-Dispatchable Loads associated with Interruptible Loads

Monitoring and Compliance

Monitoring and Compliance

- Annual review of Tolerance Ranges and Facility Tolerance Ranges has been removed as it is redundant with the ability for AEMO and ERA to determine and/or re-assess ranges at any time
- Refunding monetary penalty amounts if the decision to impose the penalty was overturned by the ERB
  - WEM Regulations allow for Market Participant to either pay the penalty, or bring the dispute before ERB in which case the penalty is suspended until the matter is resolved
  - If the Market Participant does not pay, the ERA could also bring the matter to the ERB to seek an executive order
- ERA public register and 6-monthly compliance reports will contain **confirmed** breaches, as opposed to notifications of alleged breaches
- ERA's procedure expanded to include timeframes for suspending an investigation
- Section 2.16 – market power monitoring function of the ERA and the WEM effectiveness reviews – will be reviewed following finalisation of Amending Rules for sectoral governance

Operational Planning (PASA)



Operational Planning

Clause	Industry Feedback	Resolution
3.16.3	This information requirement is too broad and allows AEMO to specify any information it requires from Participant in its own WEM Procedure. This clause should not be subject to Civil Penalty while the information requirement is defined in a WEM Procedure.	This is aligned with the taskforce decision and the WEM Procedure clause 3.16.10(c) already specifies some of the requirements. There will be consultation through WRIG for the procedure development. Currently there are civil penalty provisions for data provision under PASA linked to timeframes in the procedure. We have amended the clause to include a level of “best endeavours” and changed the civil penalty to be based on the timeframes for provision of information instead of information requirement.

Commissioning Tests

Commissioning Tests

Clause	Industry Feedback	Resolution
3.21A.2	For submission of CTPs, suggest to specify a minimum period instead of the maximum period.	We have amended the clause to specify the minimum timeframe for submission and other timeframes specified in the WEM Procedure.
3.21A.17(c)	If AEMO stops, reschedules or cancels a Commissioning Test, this clause removes the requirement for AEMO and the MP to use best endeavours to agree an alternative time for the Commissioning Test.	We have amended the clause to include the level of “best endeavours to agree to an alternative time for the Commissioning Test or CTP.
3.21A.8	This allows AEMO broad discretion to dismiss CTPs where it considers that there was insufficient time to consider the CTP even if a MP submitted the plan with a reasonable notice period. AEMO should only be able to reject the CTP based on having inadequate assessment time.	No change required. The intent of the submission timeframes is categorized on various types of tests which includes having adequate time for AEMO to assess.

Outage Management

Outage Management

Slide 1 of 3

Clause	Industry Feedback	Resolution
3.18.4(d)(ii)	The impact of an outage of another participant may be significant, as such “the matters to be considered when determining whether an Impacted Market Participant has been unduly impacted by the Outage Plan of Impacting Participant” should be stated in the WEM Rules rather than the WEM Procedure.	Definition of Impacting Participants has been changed to Network Operator only and this will be covered in the WEM Procedure as the matters are many and varied. Participants will have the opportunity to review and provide feedback via WRIG.
3.18A.3	The description of the equipment list seems to be quite extensive – was major equipment intended or all equipment?	We have taken this into consideration and have added the existing wordings from the current rules “however defined by AEMO” in sub-clause (a) and (f) to clarify that it is not intended for all equipment.
3.18B.8	The draft rules specify the latest date by which Outage Plans must be submitted, however clause 3.18B.8(d) states the earliest timeframe will be specified in a WEM Procedure. The suggestion is for all timeframes to be specified in the WEM Rules and sub-clause 3.18B.8(d) is amended accordingly.	We have taken this into consideration and amended the sub-clause 3.18B.8(d) to specify 3 years as the earliest timeframe to submit an Outage Plan.
3.18C.2	1) To remove reference to an Impacting Participant and refer instead to the Network Operator. 2) A legal opinion about the application of the competitions laws should be sought. 3) Network Operator disagrees that its consultation with the Impacted Participants need to be carried out within six months of the Outage Commencement Interval.	1) Definition of Impacting Participant has been changed to Network Operator only and this will be covered in the WEM Procedure as the matters many are varied. 2) The amended definition also seeks to resolve the issues raised regarding collusion. 3) The intent for this clause is to ensure that consultation was undertaken *at least* 6 months prior to the Outage Commencement Interval. We have changed the clause to reflect this intent.

Outage Management

Slide 2 of 3

Clause	Industry Feedback	Resolution
3.18E.10	There does not appear to be a time-based order of Outage approval included in the Outage Planning Process in the rules	We have taken this into consideration and added in a clause to give priority to Outage Plans in the order of the Outage First Submission Date.
3.18G.1	The specific review of the Outage Planning Process may no longer be warranted. Suggest this would be an aspect of the WEM effectiveness review and/or market audit, and therefore a stand-alone review may not be warranted.	This will be reviewed as part of governance arrangements for the Coordinator of Energy and will be deferred for now.
3.19.1	The drafting of clause 3.19.1 needs further refinement to clarify the non-binding nature of the Outage Intention Plans. The purpose of the Outage Intention Plans is to encourage Market Participants and Western Power to provide AEMO with its forecasts of intended outages and does not seek to 'lock-in' Market Participants and Western Power to those forecasts.	We have taken this into consideration and amended the clause to reflect reasonable estimate of its expected Outages for the following calendar year. The clause already specified that these were non binding.
3.19.1	Suggest to amend this clause to make the Outage Intention Plans rolling and contain information for the following 12 months.	No further change. A rolling Outage Intention Plan has been considered, however at this stage the workload for reviewing and assessing OIP's is unknown, and we are conscious to introduce a burdensome and costly process on the market. Therefore the intent will be to trial the single stage OIP and potentially move to a rolling arrangement in the future.
3.19.6	Clause 3.19.6 (notifying participants) should include Outage Intention Plans revised or resubmitted under clause 3.19.8.	We have amended the clause to reflect this.

Outage Management

Slide 3 of 3

Clause	Industry Feedback	Resolution
3.21.1(ii)	This could extend the definition of a Forced Outage to also cover a non-compliance with a Registered Generator Performance Standard, even where the generator is still able to respond to dispatch instructions. This would expose generators to refunds even where they continue to meet their reserve capacity obligations.	No further change. We have reviewed and believe this is covered by the current drafting in that a Forced Outage as a result of a GPS non-compliance still has to be an Outage generally, i.e. must meet the definition under clause 3.18.3.
3.21.6/3.21.7/ 3.21.8	The formulas to be reviewed and amend to address the following: • Introduced a new defined term for Separately Certified Component • Reflect the formulas to only related to energy capability • Remove unused terms from definition lists • Define all variables and indices used • Clarify, the use and purposes of Indices i, x and y. • Use the subset term ‘ϵ’ rather than “in” for consistency with other formulas within WEM Rules. • Added formula’s for conversion to Trading Intveral	We have taken this into consideration and amended the outage quantity clauses accordingly to address the various feedback and make it consistent with Settlement Rules. See further slides
Glossary	Circular reference for the definition of term “Availability Declaration Exemption” referred to in clause 3.18.B.8(c)(i)	Adjustment to the definition of Availability Declaration Exemption has been made to reflect the correct clause.
General	Clarification on how Network Contract Service (NCS) facilities are intended to operate under the amended outages framework.	This will be covered as part of development of NCESS framework.
General	General tidy up of defined terms and usage throughout clauses	Improvements to clause wording to aid clarity

Outage Management

Outage Quantity Calculations

3.21.6

$$Q(c, DI, o) = RAC(c, DI, o-1) - RAC(c, DI, o)$$

Q(c,DI,o) is the Outage quantity for Outage *o* of Separately Certified Component *c* in Dispatch Interval *DI*

$Q(c, DI, 0) = MaxCap(c, DI)$

Outage *o - 1* refers to the Outage of Separately Certified Component *c* relating to Dispatch interval *DI* that was submitted most recently prior to the submission time of Outage *o*

MaxCap(c,DI) = maximum capacity for the energy Outage Capability of Separately Certified Component *c* in Dispatch Interval *DI* as specified in Standing Data

RAC(c,DI,o) = Remaining Available Capacity for energy for Separately Certified Component *c* in Dispatch Interval *DI* under Outage *o*

Primarily intended to convert remaining available capacity figures into outage quantity figures for use in later calculations

Outage Management

Outage Quantity Calculations

3.21.7

$$CAFO(c, DI) = max\left(0, \sum_{o \in \boldsymbol{FO}} Q(c, I, o) - \left(MaxCap(c, DI) - DefRCOQ(c, DI)\right)\right)$$

CAFO(c,DI) = Capacity Adjusted Forced Outage Quantity for Separately Certified Component *c* in Dispatch Interval DI

FO is the set of all Forced Outages for Separately Certified Component *c* that include Dispatch Interval *DI*

Q(c,DI,o) = outage quantity for Outage *o* of Separately Certified Component *c* in Dispatch Interval *DI* as calculated in clause 3.21.6

MaxCap(c,DI) = maximum capacity for the energy Outage Capability of Separately Certified Component *c* in Dispatch Interval *DI* as specified in Standing Data

DefRCOQ(c,DI) = the Reserve Capacity Obligation Quantity that would apply to Separately Certified Component *c* in Dispatch Interval *DI* if the Separately Certified Component was not subject to an Outage or an approved Commissioning Test Plan

Summates forced outage quantities for the Dispatch Interval, discounting by any available “headroom” not subject to Reserve Capacity obligations

Outage Management

Outage Quantity Calculations

3.21.8

$$CAPO(f, DI) = max\left(0, \sum_{o \in \boldsymbol{PO}} Q(c, DI, o) - max\left(0, MaxCap(c, DI) - DefRCOQ(c, DI) - \sum_{o \in \boldsymbol{FO}} Q(c, DI, o)\right)\right)$$

CAPO(c,DI) = Capacity Adjusted Planned Outage Quantity for Separately Certified Component *c* in Dispatch Interval DI

PO is the set of all Planned Outages for Separately Certified Component *c* that include Dispatch Interval *DI*

FO is the set of all Forced Outages for Separately Certified Component *c* that include Dispatch Interval *DI*

Q(c,DI,o) = outage quantity for Outage *o* of Separately Certified Component *c* in Dispatch Interval *DI* as calculated in clause 3.21.6

MaxCap(c,DI) = maximum capacity for the energy Outage Capability of Separately Certified Component *c* in Dispatch Interval *DI* as specified in Standing Data

DefRCOQ(c,DI) = the Reserve Capacity Obligation Quantity that would apply to Separately Certified Component *c* in Dispatch Interval *DI* if the Separately Certified Component was not subject to an Outage or an approved Commissioning Test Plan

Summates planned outage quantities for the Dispatch Interval, discounting by any available “headroom” not subject to Reserve Capacity obligations but allowing for the discount to be used up by any CAFO first

Outage Management

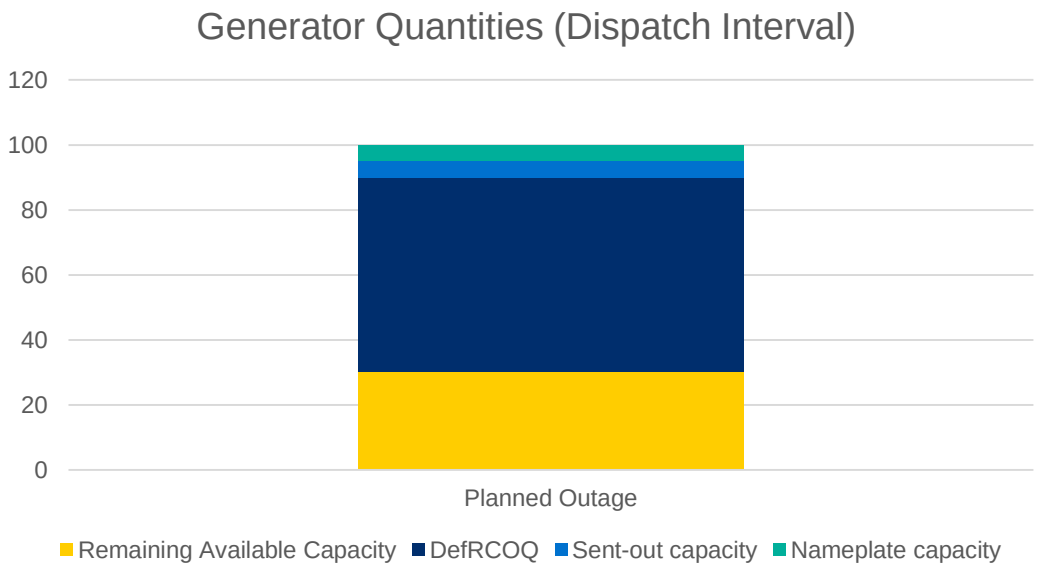
Outage Quantity Example 1 – Planned Outage

Nameplate = 100MW

Sent-out Capacity = 95MW

DefRCOQ = 90MW

RAC = 30MW



- Q for the Planned Outage = 65MW
- CAPO = 60MW (discounted for 5MW headroom above DefRCOQ)
- CAFO = 0MW

Outage Management

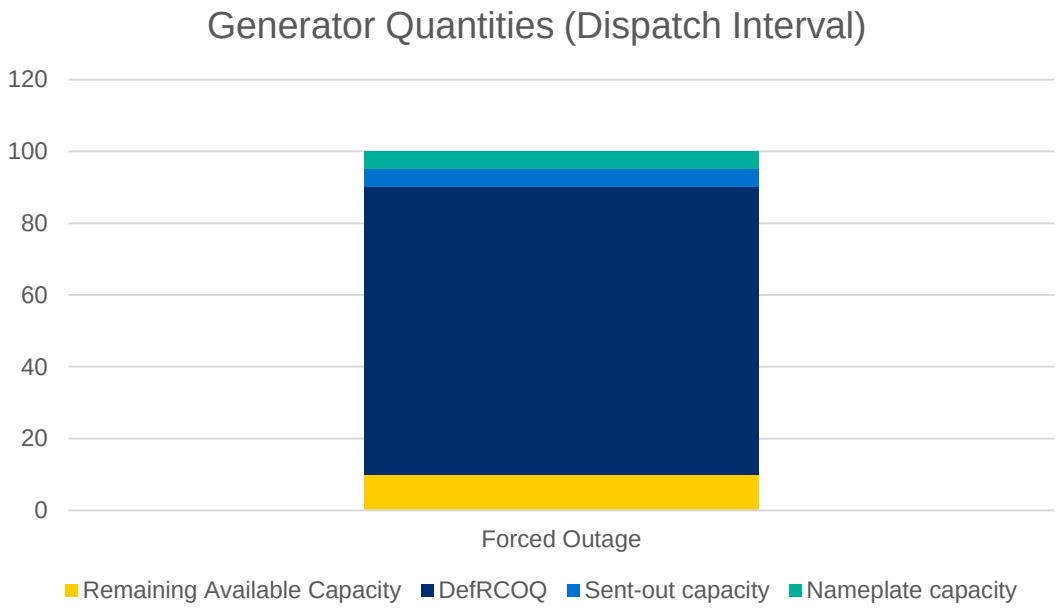
Outage Quantity Example 2 – Forced Outage

Nameplate = 100MW

Sent-out Capacity = 95MW

DefRCOQ = 90MW

RAC = 10MW



- Q for the Forced Outage = 85MW
- CAPO = 0MW
- CAFO = 80MW (discounted for 5MW headroom above DefRCOQ)

Outage Management

Outage Quantity Example 3 – Multiple Planned Outages

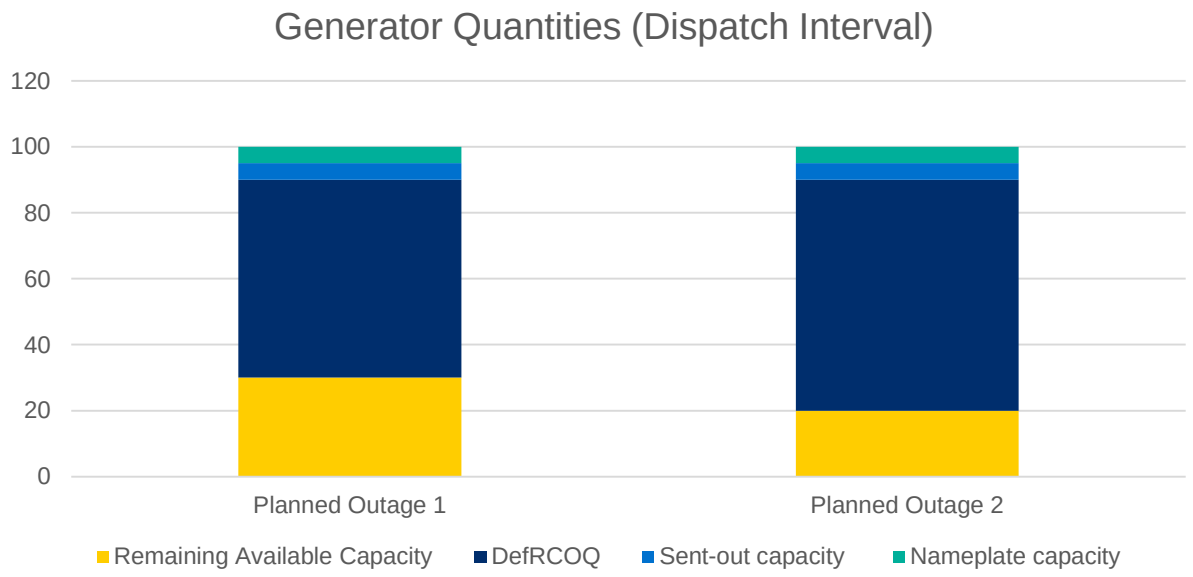
Nameplate = 100MW

Sent-out Capacity = 95MW

DefRCOQ = 90MW

RAC P1 = 30MW

RAC P2 = 20MW



- Q for Planned Outage 1 = 65MW ,Q for Planned Outage 2 = 10MW
- Total Q for the Dispatch Interval = 75MW
- CAPO = 70MW (discounted for 5MW headroom above DefRCOQ)
- CAFO = 0MW

Outage Management

Outage Quantity Example 4 – Planned + Forced Outage

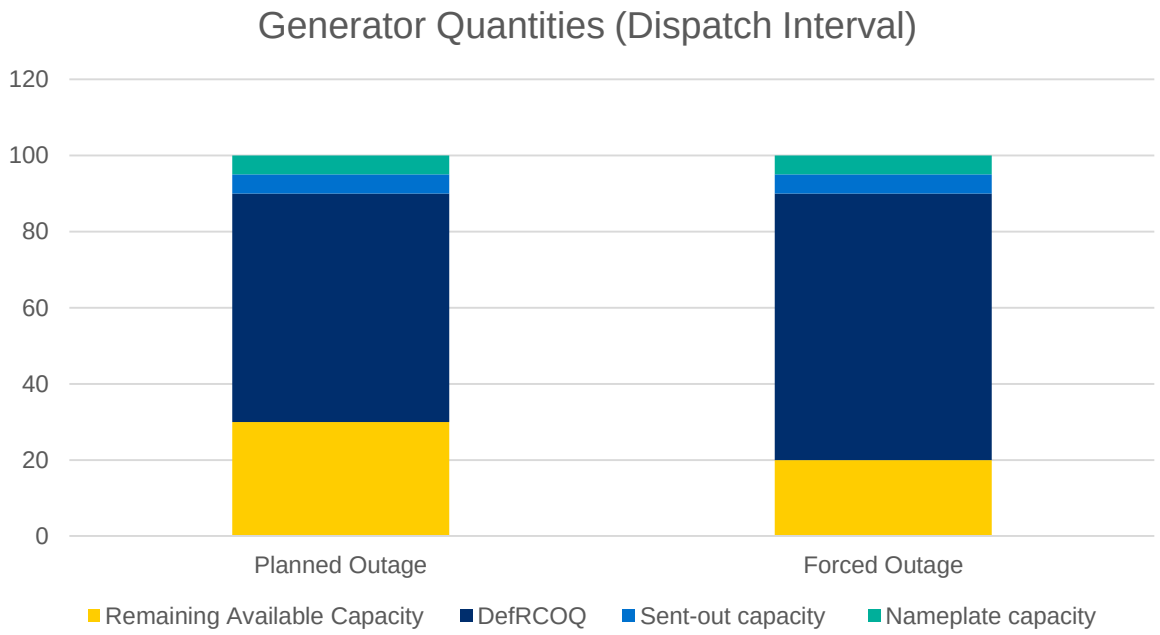
Nameplate = 100MW

Sent-out Capacity = 95MW

DefRCOQ = 90MW

RAC (Planned) = 30MW

RAC (Forced) = 20MW



- Q for the Planned Outage = 65MW
- Q for the Forced Outage = 10MW
- CAPO = 65MW
- CAFO = 5MW (discounted for 5MW headroom above DefRCOQ)

Outage Management

Outage Quantity Example 5 – Multiple Planned and Forced Outages

Nameplate = 100MW

Sent-out Capacity = 95MW

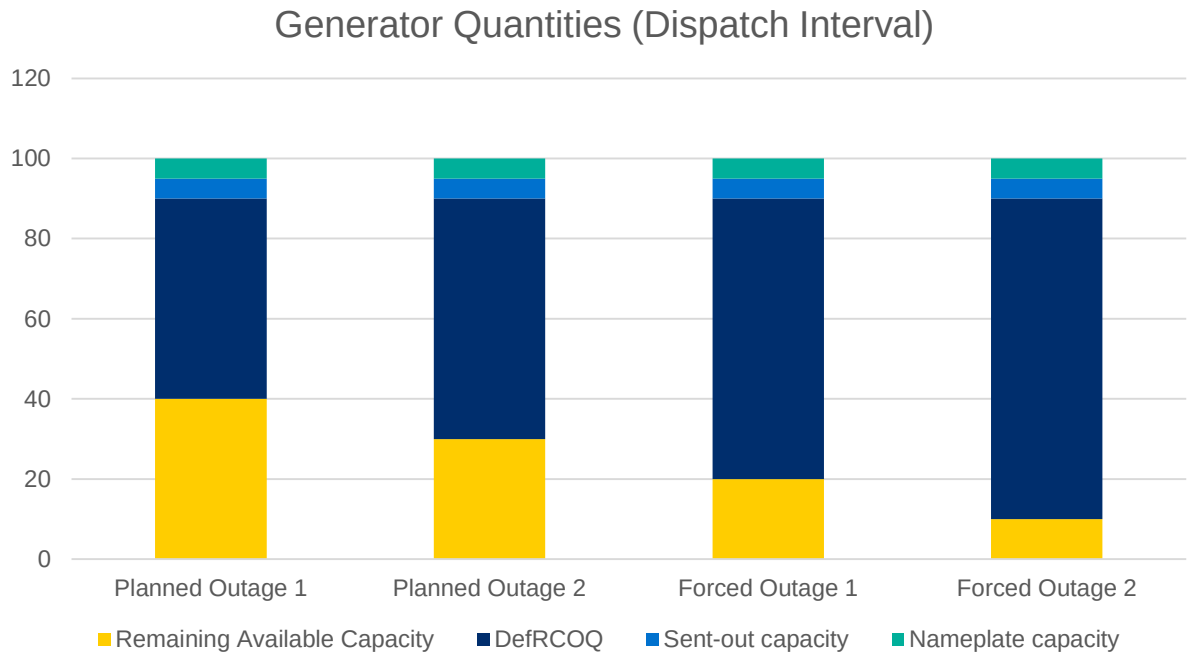
DefRCOQ = 90MW

RAC P1 = 40MW

RAC P2 = 30MW

RAC F1 = 20MW

RAC F2 = 10MW



- Q for Planned Outage 1 = 55MW, Planned Outage 2 = 10MW, Total Q(P) = 65MW
- Q for Forced Outage 1 = 10MW, Forced Outage 2 = 10MW, Total Q(F) = 20MW
- CAPO = 65MW
- CAFO = 15MW (discounted for 5MW headroom above DefRCOQ)

Market Settlement

Market Settlement

Equations (1)

- **Equation validation**
  - Further validation will be undertaken through system testing.
  - Examples will be provided through the WRIG – Stakeholders will be invited to identify equations for use in examples.
- **Defining variables** – variables are defined in sub-clauses – e.g. calculate the Per-Dispatch Interval Facility Availability Payments for Registered Facility **f** in respect of each Frequency Co-optimised Essential System Service in Dispatch Interval **DI** as follows:

$$\text{RR\_AvailabilityPayment}(\mathbf{f},\mathbf{DI}) = \sum_{a \in ARR} \text{AvailabilityPayment}(a,DI)$$

- **Underscores** – the general approach is no underscores in variable naming. Underscores have been used when the same variable applies to multiple services – e.g. AvailabilityPayment, CR_AvailabilityPayment, CL_AvailabilityPayment

Market Settlement

Equations (2)

- **Set notation** – The group of terms is defined, rather than the individual variables.

9.6.2. The net settlement amount for AEMO to Rule Participant p for Trading Week w is:

$$Net\_SA(p,w) = \sum_{d \in w} Net\_SA(p,d)$$

Where:

(a) Net_SA(p,d) is the net settlement amount calculated for AEMO to Rule Participant p in Trading Day d in accordance with clause 9.6.3; and

(b) $d \in w$ denotes all Trading Days d in Trading Week w.

- **Double use of variables** – this has been addressed through amendments to the following clauses:
  - 9.5.6 – Consumption Share calculation.
  - 9.9.12 – Metered Quantity estimate for Uplift Payments.

Market Settlement

Consumption Share calculation

$$\text{ConsumptionShare}(p,t) = \frac{ConsumptionContributingQuantity(p,t)}{\sum_{p \in P} ConsumptionContributingQuantity(p,t)}$$

$$\text{ConsumptionShare}(p,t) = \frac{\text{ConsumptionContributingQuantity}(p,t)}{\text{TotalConsumptionContributingQuantity}(t)}$$

$$\text{TotalConsumptionContributingQuantity}(t) = \sum_{p \in P} \text{ConsumptionContributingQuantity}(p,t)$$

Market Settlement

Metered Quantity estimate calculation

$$\widehat{\text{MeteredQuantity}}(f,DI) = \begin{cases} \dfrac{SCADAMWh(f,DI)}{\sum_{DI \in t} SCADAMWh(f,DI)} \times MeteredSchedule(f,t), \\ \qquad if \sum_{DI \in t} SCADAMWh(f,DI) \neq 0 \qquad DI \in t \\ \dfrac{MeteredSchedule(f,t)}{6}, \; if \sum_{DI \in t} SCADAMWh(f,DI) = 0 \end{cases}$$

$$\widehat{\text{MeteredQuantity}}(f,DI) = \begin{cases} \dfrac{\text{SCADAMWh}(f,DI)}{\text{TotalSCADAMWh}(f,t)} \times \text{MeteredSchedule}(f,t), \\ \qquad \text{if TotalSCADAMWh}(f,t) \neq 0 \\ \dfrac{\text{MeteredSchedule}(f,t)}{6}, \text{ if TotalSCADAMWh}(f,t) = 0 \end{cases}$$

$$\text{TotalSCADAMWh}(f,t) = \sum_{DI \in t} \text{SCADAMWh}(f,DI)$$

Market Settlement

Equations (3)

- **Sub-clauses** – Clauses in Chapter 9 with equations have sub-clauses to define variables – this is to aid cross-referencing. For example in 9.10.6 –

Where:

…..

(c) CR_EnablementQuantity(f,DI) is:

i. subject to clause **9.10.6(c)(ii)** the Essential System Service Enablement Quantity for registered Facility f providing Contingency Reserve Raise in Dispatch Interval DI as published under 7.13.1x3(b); or

ii. if Facility f is subject …..

Market Settlement

Market and Regulator Fee rates timing

- The release of Market Fees is dependent on the availability of consumption forecasts (determined during the preparation of the ESOO).
- Both the ESOO and the Market Fees are released in June, making is difficult to release the fees earlier without a significant shift in timelines –both for the ESOO and for RCM processes.
- The WA WEM Budget and Fees publication contains estimates for future Market Fees, which may assist Market Participants with their financial forecasting.

Table 1 **Summary of WEM fees**

Fee	Actual 2018-19	Budget 2019-20	Estimate 2020-21	Estimate 2021-22
AEMO WEM Market Operator fee ($/MWh)	0.350	0.362	0.387	0.414
AEMO WEM System Management fee ($/MWh)	0.484	0.499	0.519	0.540
Total AEMO WEM fee ($/MWh)	**0.833**	**0.861**	**0.906**	**0.954**
ERA WEM fee ($/MWh)	0.137	0.179	TBC	TBC

Market Settlement

Uplift Payments (1)

- A requirement to publish energy uplift payment information will be added, along the lines of:
  - AEMO must publish, for each Registered Facility and each Dispatch Interval, the value of any energy uplift payment paid to that Facility (price and quantity), the associated network constraint(s) that had a positive congestion rental and therefore triggered the uplift payment, and the value of that congestion rental(s).

- Uplift Quantity – use of Cleared Quantity
  - Inconsistent with the principle of providing an Uplift Payment (make a Market Participant 'whole') based on actual volumes generated.
  - Could encourage disorderly bidding – for example, an intermittent generator could increase quantities an interval where it expects to receive an Uplift Payment.

Market Settlement

Uplift Payments (2)

- The Uplift profiling mechanism uses a ratio of SCADA MWh readings for all cases except when TotalSCADAMWh is 0.000 MWh since that case is not implementable.
- In the rare case of TotalSCADAMWh = 0.000 MWh, a time-based profiling mechanism is used instead.
- Introducing a method that relies on absolute values to produce sensible profiling would require changes to AEMO's core set of metering/SCADA data, and has greater complexity overall.
- Given the rarity of the 0.000 MWh edge case, greater complexity/cost of implementation, and caution around using an absolute value method, the time-based mechanism has been chosen.

Market Settlement

Runway Share – Network Contribution

- The full runway method will continue to be used for allocation of the cost of Contingency Reserve Raise.
- The largest network contingency will be included in the runway cost allocation, with the cost allocated to the generators associated with the network contingency.
- Given that the network can be considered a **single facility**, including multiple network contingencies in the runway (i.e. options 1 and 2) means that the network contribution is counted multiple times despite being one facility. For this reason, only the largest network contingency will be included for cost recovery purposes.
- This matter will be monitored following Market Start and amendments to the cost allocation method will be made if and when required.

Market Settlement

Meter Data Submissions

- The NEM12 Specification reflects the requirements in Clause 8.6.
  - https://www.westernpower.com.au/media/4590/meter-data-file-format-specification-nem12-nem13-20201120.pdf
- There are some defects in the Western Power systems, including related to clauses 8.6.1(e)i.2. and 8.6.1(e)i.3.
  - These are logged on the Western Power website - https://www.westernpower.com.au/industry/manuals-guides-standards/build-pack/#defects
- The defects will be considered when settlement system work is undertaken to implement five-minute settlement.

Reserve Capacity Mechanism

RCM Implementation Timeline

- 2021 Reserve Capacity Cycle will allow for the registration and entry of storage resources (including hybrid facilities with a storage component).
- 2022 Reserve Capacity Cycle will implement the NAQ framework.
- Timetables for the 2021 and 2022 Cycles published by 1 March 2021.
- AEMO to explore as early as possible commencement for 2021 Cycle to minimise key activities for the 2021 and 2022 Cycles overlapping and minimise overlaps with implementation activities for new market in 2022.
- Target dates for the completion of the 2021 Cycle (30 June 2022) and the 2022 Cycle (31 December 2022), but provide for AEMO to amend the dates subject to a consultation process.
- Transitional provisions that provide for the deferral of the 2021 and 2022 Cycles will commence in December.
- The remaining Amending Rules (relating to RCM) will come into operation at the time specified by the Minister in a subsequent notice (or notices) in 2021.

Summary of feedback

Overview

- Majority of comments related to improving clarity of drafting and correcting references.
- Some comments related to clarification of policy positions that have been endorsed by the Taskforce.

What we are changing

- Setting of Initial NAQ for intermittent facilities
- Appendix 3 (GIA vs non-GIA facilities)
- Requirement for retiring facilities to providing notification
- New clause 4.8A (Indicative Facility Class and Facility Technology Types)

What we are considering as part of future work

- Treatment of new small generators
- Supplementary Reserve Capacity Mechanism

January – February 2021 Outlook

Next Steps

- Market Information framework – TDOWG mid-January
- System Restart workshop on 1 Feb 2021
- Pending work on:
  - Monitoring and compliance, incl. compliance amnesty period, CPP determination and associated WEM Reg changes
  - Registration and participation framework incl. facility aggregation, standing data etc.
  - Ensuring sectoral governance changes for reviews etc. are incorporated
  - Amending rules for System Restart, Demand Control
  - Transitional rules for ESS accreditation, including RoCoF ride-through capability
- Tranche-4 and 5 work packages:
  - Market Power Mitigation
  - Power System Security and Reliability Standards Framework
  - NCESS framework

Thank you