Energy Transformation Implementation Unit

Transformation Design and Operation Working Group Meeting 18

Short Term Energy Market

Monday 10 August 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

- The meeting will be recorded. However no minutes will be issued.

- Please state your name and organisation when you ask a question to assist with meeting minutes.

- If there are multiple people dialling in through a single profile, please email TDOWG@energy.wa.gov.au with the names of the attendees to be recorded in the minutes

- If you are having connection/bandwidth issues, you may want to disable the incoming and/or outgoing video.
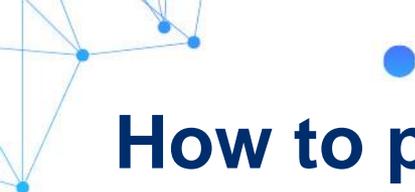
How to provide feedback

- By email, written submission or face-to-face

- Preference is to receive feedback on rule sections rather than the entire package

- Where feedback refers to specific clauses, please provide in table format

- Please provide alternative drafting suggestions where possible

- Consultation on Tranche-1 closes **cob 28 August**

Agenda
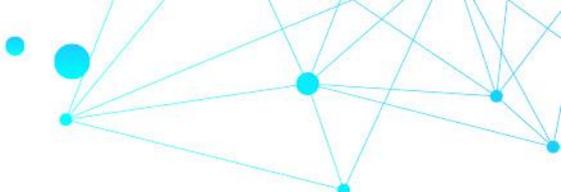
- Reserve Capacity Obligations and Net Offer Shortfall (4.12.1, 4.26.2)
- Bilateral Submissions (6.2 – 6.2A)
- Information to support Bilateral and STEM Submission process (6.3A)
- STEM Submissions (6.3B - 6.3C)
- Submission Formats (6.6 – 6.7)
- STEM Auction Timetable and Process (6.4, 6.9, Appendix 6)

RC Obligations and Net Offer Shortfall
Clauses 4.12.1, 4.26.2 – 2B

- 4.12.1 amended to reflect that
  - Capacity intended for ESS dispatch must be made available in STEM
  - Outage reporting (rules Tranche 2) use 'availability' not 'unavailability'
  - Real-Time availability requirement is now per Dispatch Interval not Trading Interval
- New Net Offer Shortfall requires offers in STEM and Real-Time Market
  - Participants must offer to cover the lower of RCOQ or capacity available after all lodged outages

  Shortfall= Min(RCOQ, post-outage capacity) – Min(CAPASTEM,CAPART)

  - CAPART is the total quantity made available in the real-time market (must include DSPs)
  - CAPASTEM is the total quantity made available in STEM (excl. DSPs) with an allowance for outages changing between STEM and settlement
  - Calculation is on Trading Interval basis, uses Dispatch Interval inputs
  - Comparisons made 'sent-out'. STEM quantities 'un-loss adjusted'.

Bilateral submissions
Clauses 6.2.1 – 6.2A.5

- Bilateral Submission Cutoff = 8.50am on Scheduling Day

- Participants can submit and cancel Bilateral Submission data any time up to Bilateral Submission Cutoff

- Participants can submit and cancel Standing Bilateral Submission data at any time, and include an 'effective date'

- AEMO will validate submission data as soon as practicable, and notify participant of acceptance or rejection

- AEMO will convert Standing Bilateral Submissions to Bilateral Submissions at Bilateral Submission Cutoff

- AEMO must make 'effective Bilateral Submissions' available to participants as they would be used in STEM, whether based on Bilateral Submissions or Standing Bilateral Submissions.

Information to support STEM
Clauses 6.3A.1 – 6.3A.4
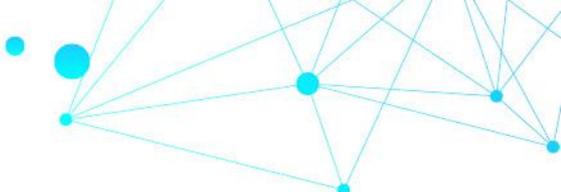
- AEMO must provide up-to-date data for each Trading Interval in the Week Ahead Schedule Horizon (next 7 days):
  - Total Bilateral Contract energy
  - To each participant:
    » Total Capacity Credits held
    » Remaining Available Capacity for each Facility
    » Total MW in its Portfolio Supply Curve
    » Maximum Consumption Capability
    » Total (Loss Factor Adjusted) quantity offered into Real-Time Market for each Facility
- AEMO must update data whenever the underlying information changes

STEM submissions
Clauses 6.3B.1 – 6.3C.9

- STEM Submission Cutoff = 10.50am on Scheduling Day

- Participants can submit and cancel STEM Submission data any time up to STEM Submission Cutoff

- Participants can submit and cancel Standing STEM Submission data at any time, and include an 'effective date'

- AEMO will validate submission data as soon as practicable, and notify participant of acceptance or rejection

- AEMO will convert Standing STEM Submissions to STEM Submissions at STEM Submission Cutoff

- AEMO must make 'effective STEM Submissions' available to participants as they would be used in STEM, whether based on STEM Submissions or Standing STEM Submissions:

  - AEMO will scale Standing STEM Submission data to reflect quantities offered in Real-Time Submissions for that period.

Submission formats
## Clauses 6.6.1 – 6.7.4
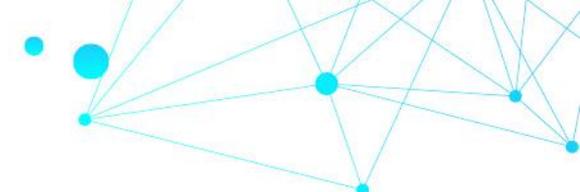
- STEM Submissions and Standing STEM Submissions
  - must include:
    - Fuel declaration
    - Portfolio Supply Curve (max MWh = total offered into Real Time Market)
    - Portfolio Demand Curve (max MWh = Maximum Consumption Capability)
  - may include:
    - Participant Interval Minimum STEM Price (default: min STEM price)
    - Participant Interval Maximum STEM Price (default: alt max STEM price)
  - Must be made in good faith
  - Must not include risk premium in price for energy quantities cleared in Pre-Dispatch Schedule
  - May include risk premium in price for energy quantities not cleared in Pre-Dispatch Schedule
- Only change to Bilateral Submission Quantities is to introduce an effective date

STEM Auction Timetable and Process
Clauses 6.4.1 – 6.4.7, 6.9.1 – 6.10.3, Appendix 6

- STEM Results Deadline = 11.30am on Scheduling Day

- AEMO must publish STEM Results by the STEM Results Deadline

- AEMO may delay STEM timetable if there is a problem, delay or error in publishing a Pre-Dispatch Schedule covering the whole Trading Day in time for Participants to use it to construct STEM Submissions.

- AEMO may only delay for up to 2 hours, and must maintain at least 110 minute window between availability of an error-free PDS and STEM Submission Cutoff

- Participant Interval Minimum and Maximum STEM Prices are used in Appendix 6 when constructing STEM Price Curves:

  - If minimum quantity in STEM Price Curve > Net Bilateral Position, difference will be priced at PIMinSP rather than Min STEM price

  - If max quantity in STEM Price Curve < Net Bilateral Position, difference will be priced at PIMaxSP rather than Alt Max STEM Price

  - Participant will pay Real-Time energy price for such quantities that don't clear in STEM

- No changes to auction process in 6.9 or suspension process in 6.10

STEM TIMELINES – BEFORE SCHEDULING DAY

0200 – first WAS including D0

0830 – first PDS including D0 0800-0830

0800, 0830, 0900h – PDS including D0 0730-0800

D-7	D-6	D-5	D-4	D-3	D-2	D-1	D0	D+1
0800	0800	0800	0800	0800	0800	0800	0800	0800

WAS

PDS

Make bilateral submissions for D0

Make STEM submissions for D0

Make submissions for D0 real-time markets
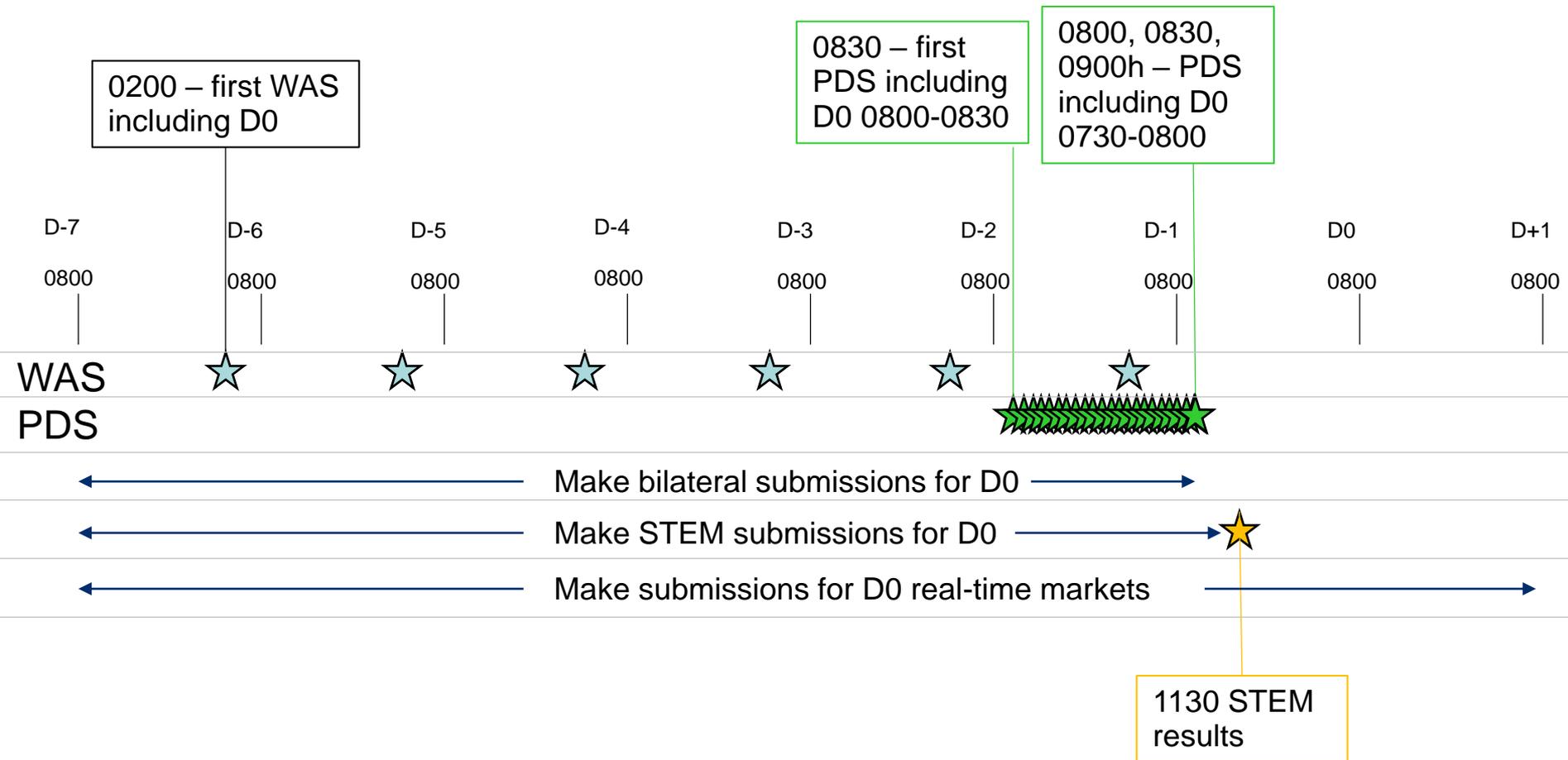
1130 STEM results

STEM TIMELINES – SCHEDULING DAY

Whenever underlying data changes, AEMO updates participant information: bilateral Qs, CCs, outages, current accepted PSC/PDC etc

1130 STEM results

D-1

| 0800 | 0830 | 0900 | 0930 | 1000 | 1030 | 1100 | 1130 | 1200 |

0800 PDS includes entire STEM horizon

0830 PDS includes entire STEM horizon

0900 PDS used to bound STEM offers

1050 STEM submissions close

0850 Bilateral submissions close

Meeting close

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

- Next TDOWG on 13 August on SCED