

MEETING RECORD

MEETING:	WA Electricity Consultative Forum (WAECF)
DATE:	Wednesday, 14 April 2021
TIME:	1:00 PM (AWST)
LOCATION:	Microsoft Teams
CONTACT:	WAelectricityforum@aemo.com.au

ATTENDEES:

Dean Sharafi (Chair)AEMOLaura Tomkins (Secretariat)AEMOMark RileyAGLLiz AitkenAitken EnergyMichelle NguyenAlintaSam LeiAlintaOscar CarlbergAlintaLuisa ThorburnAPATim RosserBlairFoxPaul AriasBluewatersLinh NguyenChamber of Minerals & Energy of WACherie CooperChange EnergyGeoff GastonChange EnergyTom ParkinsonClean Tech EnergyOye Akindele ObeCollgarThormas Scott-MoreyCollgarSamuel ChiuCollgarSamuel ChiuCollgarSamuel ChiuCollgarSamuel ChiuEPWAAditi VarmaEPWAAditi VarmaEPWAAshwin RajEPWARachelle GillEPWABroke EddingtonEPWARachelle GillEPWARobert PullellaERARobert PullellaERANathaw MartinEPWARachelle GillEPWABroke EddingtonEPWARachelle GillEPARobert PullellaERARobert PullellaERAAdrian TheseiraERAJake FlynnERARaja SarawatERANatalie RobinsERASara O'ConnorERASara O'ConnorERASara O'ConnorERASara O'ConnorERASara O'ConnorERASara O'ConnorERAS	NAME	COMPANY
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Vlasta Barac	Metro Power Company
Penny Ling	Metro Power Company
Patrick Peake	Perth Energy
Erin Stone	Point Global
Victor Francisco	PSC Consulting
Sue Paul	RBP
Logan Page	RBP
Laura Koziol	RCP
Stephen Elliot	RCP
Jenny Laidlaw	RCP
Adnan Hayat	RCPWA
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Jason Froud	Synergy
Sangita Bista	Synergy
Barry Elliot	Waste Gas Resources
Peter Huxtable	Water Corporation
Ryan Dawson	Western Power
Dugald Bell	Western Power
Tinna Needham	Western Power
Shrey Kant Shroff	Western Power
Dean Frost	Western Power
Genevieve Simpson	Western Power
Stacey Fontein	Western Power
Megan Allan	Western Power
Noel Schubert	
Dara Memarpouri	
Jay Stein	AEMO
James Harris	AEMO
Teresa Smit	AEMO
Mark Katsikandarakis	AEMO
Jason Hart	AEMO
Neetika Kapani	AEMO
Campbell Kenny	AEMO
Daniel Guppy	AEMO
Greg Staib	AEMO



Disclaimer - This document provides an overview of the main points of discussion at an industry forum convened by AEMO on 14 April 2021 to provide information and invite perspectives and feedback on matters relating to WA Electricity Consultative Forum (WAECF). Readers please note that:

- This document is a summary only and is not a complete record of discussion at the forum.
- For presentation purposes, some points have been grouped together by theme and do not necessarily appear in the order they were discussed.
- The views expressed at the forum and reflected here are not necessarily those of AEMO.

1. Welcome and Previous meeting minutes

Dean Sharafi (AEMO) opened the meeting at 1:02 pm, welcomed attendees to WAECF No.30

The minutes from the previous WAECF (10 February 2021) were endorsed. AEMO to publish the minutes as final on the website (Action Item 1.1).

2. AEMO Operational Updates

2.1. Outcomes from Forecast Balancing Price Analysis Market Participant Forum – 31 March 2021

Mark Katsikandarakis (AEMO) provided participants with a summary of the forum held on 31 March 2021 to discuss Forecast Balancing Price Analysis, noting:

- Market Participants have raised concerns with AEMO and Western Power regarding the accuracy of the Forecast Balancing Price.
- At the WA ECF in November 2020 AEMO presented a case study analysis on a large forecast price swing to Market Participants and committed to undertake detailed analysis on the drivers of inaccuracy in the Forecast Balancing Price, including the GIA constraints.
- The forum on 31 March 2021 addressed this action. (presentation attached for information) The analysis at the forum was prepared based on non-confidential data in PowerBI. Attendees to the forum were provided access to the PowerBI dashboards until 30 April 2021.
- AEMO noted number of the changes being delivered through WEM reform will contribute to improved accuracy including stronger obligations on generators to provide accurate forecasts, requirement for the pre-dispatch process to take into account network constraints, transitioning away from GIA arrangements and moving to a nearreal time gate closure.
- To continue to improve forecast accuracy, the following recommendations were made:
 - AEMO: Continue to focus on implementing improvements to load forecasting to counter increasing load variability from DER both through business-as-usual activities and projects.
 - Non-scheduled generators: AEMO encourages Non-Scheduled Generators to consider whether improvements to forecasts in Balancing Submissions can be implemented.



- GIA: Western Power have confirmed a copy of the constraint equations and a list of the critical network elements monitored by GIA can be provided to Market Participants on request through Western Power, subject to appropriate confidentially arrangements. Western Power also have identified a suite of historical data from the GIA tool, at a macro level that could be published on a historic basis if requested.
- There are currently no further actions outstanding in relation to this agenda item and AEMO welcomes any feedback from participants to <u>wa.operations@aemo.com.au.</u>

Dugald Bell (Western Power) added, if market participants should wish to view the abovementioned information, they should contact their nominated account manager within Western Power or Rob Chandler.

2.2. Q1 2021 Quarterly Energy Dynamic (QED) Report

Campbell Kenny (AEMO) presented the key findings, trends, and outcomes from the Quarter 1 2021 QED report.

Stakeholder questions:

Noel Schubert: In the DER register, what makes up the 'other' category?

• The DER 'Other' category includes everything that is not solar or battery, i.e. diesel genset.

Linh Nguyen (CME): Will the DER Register be able to accommodate data from EV recharging and refuelling infrastructure down the track?

• EV is not something that has been included in the current DER Register, however there may be a requirement in the future for it to be included.

Sangita Bista (Synergy): Why were the drivers of declining supply from Karratha plant in the recent quarters?

 The <u>GBB WA</u> reports a number of metrics such as Medium Term Capacity, Capacity Outlook and Actual Flows. However this does not provide insight into the drivers for the reduction in domestic output by Karratha Gas Plant. Queries in relation to the behaviour of the Gas Production Facility should be directed to the relevant Gas Market Participant (contact details on the GBB WA <u>here</u>).

2.3. Power System Update

Teresa Smit (AEMO) provided an update on the operational challenges around minimum demand.

Stakeholder questions:

Oscar Carlberg (Alinta): Does AEMO anticipate that it will need to use the additional 10MW of LFAS approved by ERA to manage the increased frequency stability risk?

 As part of the annual Ancillary Services (AS) reports and plan, AEMO is reviewing the AS for next year. At this stage it is unlikely we would regularly use the extra 10MW for the rest of this financial year, however as part of the submission for the new requirements, that will be taken into account.

Liz Aitken (Aitken Energy): Are you going to pay flexible generating plant to be available to cover the ramp when the price signals are not there?



• Together with the new essential system services that are being introduced with reform, anything that is identified that is still needed, AEMO will need to look at an alternative way of engaging and ensuring those services are provided.

Aditi Varma (EPWA): Appreciate this analysis is still ongoing with WP and EPWA/ETIU, but in your initial feel, when do you reckon these problems are going to "bind" and are the actions planned to start as part of new market not sufficient?

• This is exactly the work AEMO is doing with Western Power and ETIU at the moment. It's a work in progress and AEMO is engaging closely with ETIU/EPWA and Western Power.

Sangita Bista (Synergy): Wondering if there are any plans on having "reactors" onboard or are there any already?

• A significant number of reactors have been brought on board already by Western Power and have been commissioned online. An excess of 300 MV have been commissioned with more expected by the end of 2021.

Paul Arias (Bluewaters) Does AEMO have a view to include PV in the cost share of SR, a causer pays mechanism?

 AEMO administers the rules as the way the market is designed and based on its framework. If there is a push from Market Participants to consider the appropriateness of the cost recovery framework, the Market Advisory Committee or a discussion with Energy Policy WA would be an appropriate forum for this discussion, as it is more of a market design issue then an operational issue.

2.4. Reserve Capacity Update

Neetika Kapani (AEMO) provided an update on Reserve Capacity (RC) activities including:

- AEMO has recently identified an issue with the Relevant Level Tool, which has unfortunately affected the Relevant Level values that were assigned for the 2016 RC cycle and future cycles. As a result, this has affected the Certified Reserve Capacity and the Capacity Credit values for these cycles. AEMO's preliminary analysis suggests that the overall financial impact on the WEM is minimal, in a range of negative to positive 0.005% of the annual total Capacity Credit payments for these years. This is assuming all Capacity Credits were settled by AEMO under the Reserve Capacity Prices.
- AEMO is working on resolving this matter as soon as possible and taking pro-active measures to ensure this issue doesn't occur again. Both the Rule Change Panel (RCP) and the Economic Regulation Authority (ERA) have been advised of this issue. The updated Relevant Level inputs have been provided to assist the RCP in the drafting of their RC_03_2019 draft rule change report. AEMO will be contacting affected Market Participants after completion of an end-to-end assessment of this issue. Any questions in the interim can be directed to <u>wa.capacity@aemo.com.au</u>
- AEMO is progressing towards the second release of the RC pricing project very quickly, which relates to the deployment of the RC Testing Tool. This incorporates changes to the DSP testing. Market Trail is scheduled for 27 April 2021 and going into PROD on 12 May 2021. Market Participants are encouraged to log in and familiarise themselves with the screens.



- In late January, the RC team released a survey seeking feedback from stakeholders on what they find important information to be included in the Electricity Statement of Opportunities (ESOO).
 - The results of the survey found stakeholders preferred the structure of the ESOO to remain unchanged, with the report being shorter and to have a detailed supplementary section.
 - Market Participants are interested in understanding the opportunities and challenges within the technologies, Constrained Access Network and WEM Reform.
 - In line with the feedback received, AEMO has held a WA-specific Forecasting Reference Group and will continue to run these workshops as relevant to Stakeholders.
 - In terms of the non-mandatory content not required by the WEM rules, based on the feedback received AEMO will continue to progress with the IRCR analysis, this will be published in the supplementary report following the publication of the ESOO. The minimum demand forecasts (5-year horizon) will continue to be published either within the main body of the ESOO or a supplementary piece.

Stakeholder Questions:

Oscar Carlberg (Alinta): was that 100-300k difference in payments for the market overall?
This is correct.

2.5. 2021 WEM Electricity Statement of Opportunities (ESOO) Draft Forecasts

Jay Stein (AEMO) provided an introduction and background of the WEM ESOO presentation and Daniel Guppy (AEMO) presented a detailed draft demand forecast.

Stakeholder questions:

Mark Riley (AGL): when will AEMO be able to undertake these forecasts at 5 minute granularity?

 Highly granular forecasts are useful in analysing short-term market characteristics like price volatility. The relevant mechanisms here would be the pre-dispatch schedules which would provide 5 minutes demand forecasts, dispatch schedules and prices. The purpose of the LT PASA is not so much to analyse or forecast short of medium-term dynamics but rather understand capacity requirements over the long term – volatility is unlikely to affect this requirement.

Performing 5-minute forecasts over the longer term will not only be data intensive, but likely inaccurate. This is because the accuracy of short-term forecasts are heavily reliant on the forecast widow, the closer you are to the window, the more accurate the forecast. For a long term 10-year horizon period, it is challenging to predict what will happen in any 5-minute interval with any accuracy.

If you are not interested in volatility you could divide the 30 minute forecast by 6.

Mark Riley (AGL): is there any forecast of cloud cover?

- Solcast estimates solar irradiance using data from weather satellites and applies this
 to produce historical and forecast PV generation. There is further information available
 on their website that outlines their data sources and methodology (see:
 https://solcast.com/historical-and-tmy/).
- AEMO receives this data from Solcast via an API.



Sangita Bista (Synergy): What factors are you looking under weather for PV forecast: any thoughts around factors such as the cloud, dew points, temperature and take multiple factors that could be fed to an ultra-short-term operational forecasting model for greater accuracy in the situations where we are having ~300 MW solar trip recently?

- The consultants did include the change in FiT for WA as a factor of uptake in their forecasts.
- AEMO are holding a session detailing the final consultant DER forecasts, at 2pm AEST on 28 April 2021, register to attend <u>here</u>

Patrick Peake (Perth Energy): Do you think that the recent change in renewable buy back rates will slow the installation of domestic PV?

• This will be contained in the consultants reports and presented at the Forecasting Reference Group (FRG) on 28 April 2021.

Aditi Varma (EPWA): Do these forecasts take into account any of the recent battery announcements?

• Anything that has been announced has been included.

Sangita Bista (Synergy): How are you incorporating the impact of DER orchestration and Synergy's VVP4S =10 large batteries?

• Virtual Power Plants are considered and modelled on the supply side.

Sue Paul and Logan Page (RBP) then presented on RBP's 2021 LT PASA Reliability assessment, providing participants with WEM Rules context, an approach overview, EUE assessment, availability class requirements and the draft results.

Stakeholder questions:

Aditi Varma (EPWA): Are the SCED constraints applied for 2022 the ones that WP and AEMO have been working on this year?

• What AEMO have used is based on data Western Power provided on partial and full constraints in 2019, because the SCED equations are under development.

Aditi Varma (EPWA): Is there a plan to update it then when the new constraints are finalised?

• There will not be sufficient time, as it is a rule requirement that the ESOO is published on 17 June.

Richard Cheng (ERA): When RBP simulates forced outages, are they done based on a generator's historical forced outage rate or at a fleet-wide perspective?

 It is based on the generators historical forced outage rates. For existing generators RBP look at their 36-month forced outage rate, this is aligned with the RC rules. For new facilities it is based on similar technology types and any other relevant information they have on the forced outage rates of those types of technologies.

3. AEMO Project Updates

3.1. AEMO Projects Status update

James Harris (AEMO) presented a status update on the following current AEMO projects:

- Reserve Capacity Mechanism Pricing
- WEM Reform (Foundation Reg Frameworks)
- Power System Operations
- DER Program



4. Other Business

Energy Price Limits

Mark Katsikandarakis (AEMO) provided participants with an updated on the 2021 Energy Price Limits Review:

- AEMO noted that under the <u>Wholesale Electricity Market Amendment (Governance)</u> <u>Rules 2021</u> published on 21 January 2021, from 1 July 2021 accountability for the review of the Energy Price Limits will transfer from AEMO to the ERA.
- Under the WEM Rules, AEMO has an obligation to annually review the appropriateness of the Energy Price Limits, however the Rules do not specify timeframes for when the "annually review" requirement applies. AEMO considers there is no express requirement to start and complete the review by 1 July 2021
- AEMO has discussed this matter with the ERA and agreed that it would be prudent from a cost and efficiency perspective if AEMO does not commence the review of the Energy Price Limits before 1 July 2021. This will allow the ERA to commence its review of the Energy Price Limits in accordance with its own timeframes and requirements.
- AEMO noted the ERA will provide Market Participants with more information on the timelines and processes for the 2021 Energy Price Limits closer to the 1 July 2021 transition.

5. Next Meeting

Dean Sharafi (AEMO) informed participants that the date for the next WAECF is scheduled for 23 June 2021. The meeting was closed at 2:48 pm.