

Forecasting Reference Group (FRG) DRAFT MINUTES

MEETING: FRG #9 2020
 DATE: Wednesday, 24 June 2020
 TIME: 2:00pm – 4:00pm AEST
 LOCATION: Teleconference

ATTENDEES:

Name	Company	Name	Company
Harriet Tienstra	Acil Allen	Patrick Gan	Energy Australia
Adrian Grantham	AEMO	Richard Paprzycki	Energy Australia
Ali Habibi Khalaj	AEMO	David Havyatt	Energy Consumers Australia
Andrew Turley	AEMO	Ben Skinner	Energy Council
Bella Pennington	AEMO	Carol Tran	Energy Council
Ben Tudman	AEMO	Craig Pollard	Energy Queensland
Daniel Collins	AEMO	Jillian Vanderstoep	Energy Queensland
Daniel Guppy	AEMO	Shane Brunker	Energy Queensland
Dean Soste	AEMO	David Hoch	Engie
Deborah Marsh	AEMO	Ron Logan	ERM Power
Greg Staib	AEMO	Brent Hudson	Essential Energy
Helen Wang	AEMO	Cam Potter	Hydro Tasmania
Hua Situ	AEMO	Robert Pane	Intergen
Kent Hahn	AEMO	David Headberry	Major Energy Users
Leslie Lay	AEMO	Bill Nixey	NSW DPIE
Levi Rosenbaum	AEMO	Joshua Weston	NSW DPIE
Luke Dowling	AEMO	Navin Subash	NSW DPIE
Magnus Hindsberger	AEMO	Sharon Young	NSW DPIE
Matt Marston	AEMO	Sarah-Jane Derby	Origin
Nick Culpitt	AEMO	Anna Livsey	PIAC
Nicola Falcon	AEMO	Dean Knight	Powerlink
Roberta Maher	AEMO	Enrique Montiel	Powerlink
Siobhan Attwood	AEMO	Jonathan Dennis	Powerlink
Vivian Mai	AEMO	Jennifer Brownie	QEUN
Adam Day	AER	Bret Harper	Reputex
Peter Young	AGL	Andrew Manson	SA Gov
Paul Grzinic	Aurora Energy	Cathryn McDonald	SA Power Networks
Ed White	Ausgrid	Elisia Reed	SA Power Networks
Marc Thiebaut	Ausgrid	Steve Fraser	SA Power Networks
Ricky Chen	Ausgrid	Noel John Sligar	Sligar & Associates
Jacqui Bridge	AusNet	Corrine Li	Snowy Hydro
Morteza Moallemi	AusNet	Shaun Bradburn	Snowy Hydro
Nick Cimdins	AusNet	Brendan Ash	Stanwell

Thakshila Gunaratna	Clean Energy Council	Jessica Smith	Stanwell
James Foster	CSIRO	Joe Hemingway	Stanwell
Anna Evans	DISER	Herath Samarakoon	Tas Networks
Benjamin Denehy	DNRME Queensland	Prateek Beri	Tas Networks
Abu Abdullah	ElectraNet	Arindam Sen	TransGrid
Franki Lee	Endeavor Energy	Sujeewa Vithana	UE
Florie Fong	Energy Australia	Kaleem Ansari	VIC DELWP
Khai Chang	Energy Australia	Norman Jip	VIC DELWP
		Peter Condon	Western Power

1. Welcome and Introductions

Daniel Collins (AEMO) welcomed everyone and covered the following:

- The FRG agenda forward plan for July to December 2020. It is now [online](#).
- Moved that minutes from the May 27th FRG meeting be accepted as final.
- Submissions since the last FRG meeting, included Forced Outage Rates feedback.
- Reminded attendees of the [consultation on the Reliability Standard Implementation Guidelines \(RSIG\), Medium Term Projected Assessment of System Adequacy \(MT PASA\) Process Description, Energy Adequacy Assessment Projection \(EAAP\) Guidelines and Spot Market Operations Timetable](#), submissions closed on 29th June 2020. **(Action 4.1.1)**
- Reminded attendees of the second stage of consultation on [Demand Side Participation forecast Methodology](#). Submissions closed on 6th July 2020. **(Action 4.2.1)**
- Submissions to Energy.forecasting@aemo.com.au are appreciated.

2. Presentation 1 Part I – COVID-19 impacts on Maximum and Minimum demand

Magnus Hindsberger (AEMO) presented the COVID-19 impacts on Maximum and Minimum Demand.

Key topics raised by stakeholders during this section included:

- The DER forecast reports from GEM¹ and CSIRO².
- Jennifer Brownie (QEUN): Why is Distributed Energy Resources (DER) investment expected to increase during a recession?
 - AEMO: The DER uptake is expected to increase due to government job-creating incentives and subsidies.
- Brent Hudson (Essential Energy): Have the COVID-19 adjustments been estimated below regional levels?
 - AEMO: Connection Point Forecasts (CPF) will be discussed in the July FRG meeting and is reconcilable with adjusted regional values.
 - Nick Cimdins (AusNet) offered to engage with AEMO regarding the heterogeneous impact of COVID-19 on connection points. **(Action 4.3.1)**
- AEMO: COVID-19 impacts are captured in the 2020 Integrated System Plan (ISP) as sensitivities.

3. Presentation 1 Part II – Maximum and Minimum Demand forecasts 2020

¹ https://aemo.com.au/-/media/files/electricity/nem/planning_and_forecasting/inputs-assumptions-methodologies/2020/green-energy-markets-der-forecast-report.pdf?la=en

² https://aemo.com.au/-/media/files/electricity/nem/planning_and_forecasting/inputs-assumptions-methodologies/2020/csiro-der-forecast-report.pdf?la=en

Daniel Guppy (AEMO) presented the draft maximum and minimum demand forecasts for NEM regions from the 2020 ESOO central scenario. He focused on the drivers of change since the 2019 Electricity Statement of Opportunities (ESOO), including:

- energy efficiency schemes tapering off after 2025 and no longer dampening maximum demand forecasts
- the significant impact on Minimum Demand of increased DER uptake.

He asked whether the FRG preferred to see minimum demand with market mechanisms, such as RERT, VPP and DSP, included, or raw minimum demand indicating required action.

Key topics raised by stakeholders during this section included:

- Some stakeholders preferred seeing the lower, raw forecasts. Others preferred the expected minimum.
 - David Headberry (MEU) suggested to present both.
- Joe Hemingway (Stanwell) and Steve Fraser (SA Power Networks): What assumptions drive the Electric Vehicle (EV) charging profile, particularly incentives for middle of the day charging?
 - AEMO: EV profiles are based on international data, without any incentives. The scenarios in the 2020 ESOO reflect different potential charging profiles. Currently, research is underway to improve charge profiles and data availability. Charging profiles will be made available to allow assumption adjustments. (Action 4.3.2)

4. Presentation 1 Part III – Maximum and Minimum Demand forecasts 2020 - NSW

Daniel Guppy (AEMO) presented separate draft maximum and minimum forecasts for each NEM region, beginning with New South Wales.

Key topics raised by stakeholders during this section included:

- David Headberry (Major Energy Users): The graphs should be zoomed in to show the relative megawatt(MW) differences between scenarios.
 - AEMO: An updated slide pack will include 'zoomed in' graphs. (Action 4.3.3)
- Arindam Sen (TransGrid): Will AEMO publish historical POE's?
 - AEMO: Graphs including historical POE's will be published in the Forecast Accuracy Report (FAR).
- Arindam Sen (TransGrid): Are spot loads, including data centre and mining loads included in maximum demand forecasts?
 - AEMO: Data centres are aggregated as part of maximum demand and aren't volatile enough to be modelled individually. AEMO is open to suggestions on the issue.
- Arindam Sen (TransGrid): Distribution Network Service Providers (DNSP) forecasts have unique methodologies which increases the difficulty of reconciling with other forecasts.
 - AEMO is assessing their incorporation into forecasts but no data is currently available for release.

5. Presentation 1 Part IV – Maximum and Minimum Demand forecasts 2020 - QLD

Key topics raised by stakeholders during this section included:

- Jennifer Brownie (QEUN): Current market conditions show Large Industrial Loads (LILs) demand decreasing. How are they forecast to increase?
 - AEMO: The Large Industrial Load (LIL) survey, conducted after COVID-19 began, shows a relatively small demand increase, primarily from existing LILs ramping up rather than through an expansion.
- Ron Logan (ERM): Are actual LIL loads compared to survey responses? Are any differences published?
 - AEMO reviews past LIL survey responses and investigates material differences. To maintain confidentiality of these submissions, these are not published, but may be considered in the FAR.

6. Presentation 1 Part V – Maximum and Minimum Demand forecasts 2020 - SA

Key topics raised by stakeholders during this section included:

- What drives the increase in maximum demand?

- AEMO: Growth in SA and VIC maximum demand forecasts were driven by assumptions of new connections and the impact of forecast lower future electricity prices driving increased consumer consumption.
- Steve Fraser (SA Power Networks): For reconciling purposes, are LILs in South Australia connected to transmission or distribution networks?
 - AEMO: The July FRG meeting will discussion Connection Point Forecasts and how they are reconciled to regional level.
- Steve Fraser (SA Power Networks): Minimum demand, a significant factor in SA, is significantly lower in SA compared to 2019. What drives this significant change?
 - AEMO: The 2020 ESOO central scenario minimum demand forecasts are significantly lower than 2019 due to the increase in forecast PV uptake over what was forecast in 2019. The change in the DER forecast was partly driven by improved focus on shorter term trends and partly updates to policy drivers.
- AEMO: Minimum demand forecasts are an important driver of system security issues and related expenditure to address it in SA and VIC. Therefore, a section in the 2020 ESOO is dedicated to the implications of these forecasts. More research is required in other areas, including the impact of differing EV charging profile assumptions.

7. Presentation 1 Part VI – Maximum and Minimum Demand forecasts 2020 - VIC

Key topics raised by stakeholders during this section included:

- Jacqui Bridge (AusNet): Were the hosting capacities of networks considered when forecasting a considerable increase in PV uptake in the central scenario?
 - AEMO: The minimum demand forecasts presented do not show possible market outcomes, they are unconstrained, assuming no intervening action is taken, emphasising the need for such intervention. The ESOO includes research on several market mechanisms such as Demand Side Participation.

8. Presentation 1 Part VII – Maximum and Minimum Demand forecasts 2020 - TAS

Key topics raised by stakeholders during this section included:

- Herath Samarakoon (Tas Networks): Rising green energy connection enquiries are expected to impact minimum demand.
- Herath Samarakoon (Tas Networks): Have the 2016 historic maximum been adjusted for the 6-month Bass link outage?
 - AEMO: The output shown was not adjusted.

9. Meeting close

Slido questions will be considered as submissions.

The next FRG meeting is scheduled for Wednesday 29th July 2020 and will discuss extreme weather and climate and transmission connection point minimum loads.

Appendix A Forecasting Reference Group (FRG) Actions Items

FRG Action Items – OPEN (as at 1st July 2020)

Item	Date Raised	Topic	Action required	Responsible	Due	Status
4.1.4	27/05/2020	Demand forecasts “as generated”	Demand forecasts to be discussed in terms of “operational as generated” to align with real time data.	AEMO	July 2020	OPEN (Slides will be updated when available)
4.1.1	05/06/2020	DSP methodology Consultation	Submissions for second stage consultation on DSP methodology .	FRG	6 July 2020	OPEN
4.2.2	10/06/2020	Improve FOR data collection	Improve data collection to include causes of outages	AEMO	Dec 2020	OPEN
4.3.1	24/06/2020	Connection Point Forecasts	AusNet to engage with AEMO to assist with the COVID-19 impact on different connection points.	AusNet	August 2020	OPEN
4.3.2	24/06/2020	EV charge profiles	Publish the assumptions behind EV charge profiles shown in the 2020 ESOO.	AEMO	ESOO (Aug 2020)	OPEN
4.3.3	24/06/2020	Zoomed in Graphs	Provide graphs for NSW which show the difference between scenario plots	AEMO	July 2020	OPEN

FRG Action Items – CLOSED (as at 1st July 2020)

Item	Date Raised	Topic	Action required	Responsible	Details	Status
4.1.1	25/05/2020	RSIG, MTPASA, EAAP Consultation	Submissions for first stage of the RSIG consultation	FRG	29 June 2020	CLOSED
4.2.3	10/06/2020	DSP portal upgrade	Ensure the DSP portal is easy to use and understand.	AEMO	Incorporated in DSPI Guidelines consultation	CLOSED
4.2.4	10/06/2020	HILP outages in ISP	Provide details on how HILP outages impact the ISP.	AEMO	Next release of ISP assumptions	CLOSED