Forecasting Reference Group Minutes

Forum:	September FRG 2023 (#7)
Date & time:	Wednesday 27 September 2023, 2:00pm – 3:30pm AEST

Disclaimer

This document provides an overview of the main points of discussion on the September 2023 Forecasting Reference Group (FRG) meeting agenda. 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 Introductions

Levi Rosenbaum (AEMO) welcomed everyone and covered the following:

- Submissions to the Demand Side Participation (DSP) Information Guidelines and DSP Forecast methodology due to Energy.forecasting@aemo.com.au on 29 September 2023.
  - A consumer advocates verbal submission session was held on 28 September.
- The 2024 ISP engagement survey excepted submissions until October 2023.

2 Presentation 1 – DSP Forecasting Methodology and DSPI Guidelines consultation

Nick Cimdins and Magnus Hindsberger (AEMO) presented the consultation timeline, overview of proposed changes to the Demand Side Participation (DSP) forecasting methodology and DSP Information Guidelines and outlined the key consultation questions.

Key topics raised by stakeholders during this session included:

- Jennifer Brownie (QEUN): Does AEMO calculate demand response from the general public when directed through the media?
  - AEMO: This out-of-market response is not classified as DSP, but these impacts are estimated, where suitable data is available, to assess what demand would have been in the absence of such measures. The 2019 Forecast Accuracy Report (FAR) (pg. 37-38) shows how short-term forecast differed from actuals shortly after such an announcement.

3 Presentation 2 – Synthetic Demand Traces update

Magnus Hindsberger and Leo Ma (AEMO) presented an update to AEMO's synthetic demand trace work since the April 2023 FRG, including a method accounting for variability in large industrial loads and next steps in the project.

Key topics raised by stakeholders during this session included:

- Ron Logan (Shell): Why was the time shift limited to +/- 3 days? Previous experience has shown +/- 6 days significantly improves results.
  - AEMO: This covers the seven days of the week. Adding extra days increases the computational requirements with minor improvements to results.

- Jennifer Brownie (QEUN): Are batteries and pumped hydro classified as "large industrial loads" in the revised modelling?
  - AEMO: Utility-scale batteries and pumped storage are scheduled loads, excluded from AEMO's demand definition.
- Conner McLeod (Shell) and Ron Logan (Shell): How are "residuals" found? Does the dayshift example shown underestimate the weekday demand?
  - AEMO: Residuals are the differences between model outcomes and observed history. These are grouped into 5 temperature-based categories. Random samples matching the temperatures experienced on each day are chosen. This ensures residuals on extreme days are consistent with historical observations.
- Conner McLeod (Shell) and David Osmond (Windlab): Will all synthetic traces and individual components published rather than just a subset?
  - AEMO: No. Publishing 2 POEs for 12 reference years is already challenging due to the data size. AEMO doesn't intend to use all traces either in its supply modelling, but will use a larger subset than the existing 24. AEMO published some sub-component traces as part of the 2022 ISP. Future traces will provide similar granularity where possible.
- Ron Logan (Shell): How will AEMO ensure no modelling bias when expanding historical weather reference years?
  - AEMO: The intent is to use a longer, contiguous period through this process for the general use, to give the best view of the full range of outcomes. A year with high demand and/or low VRE generation may be selected to stress test the system as a sensitivity. If the outcomes are extreme, this will be explicitly noted.

4 Other Business

No issues raised.

5 Meeting close

The next FRG meeting will be held on 25 October 2023 with presentations on Consumer Energy Resources (CER) and Electric Vehicle (EV) forecasts. Visit the FRG webpage for the forward plan of agenda topics.

A1 Attendees:

Table 1 September FRG Attendees

Name	Organisation	Name	Organisation
Sundus Masood	ACCC	Tammara Scott	Energy Queensland
Abbas Mohammadi	AEMO	Yatra Forudi	Energy Queensland
Ali Habibi Khalaj	AEMO	Roby Camagong	Equis
Alice McLaren	AEMO	Jill Cainey	Erne Energy
Ana OrozcoPerez	AEMO	Brent Hudson	Essential Energy
Andrew Turley	AEMO	Cathy Johnston	Fortescue Energy
Anthony Gallo	AEMO	Christina Sutherland	GLNG
Anula Abeygunawardana	AEMO	Amin Nabipour	Horizon Power
Chang Liu	AEMO	David Edwards	Horizon Power
Eduard Munsayac	AEMO	Kate Farnsworth	Hydro Tasmania
Esther Adeyemi	AEMO	Anna Matala	Hydro Tasmania
Jess Buttigieg	AEMO	David Allen	Hydro Tasmania
Kristine Cruz	AEMO	Kateryna Kiemele	Hydro Tasmania
Leo Ma	AEMO	Jack Munro	Iberdrola
Leslie Lay	AEMO	Kevin Morrison	IEEFA
Levi Rosenbaum	AEMO	Catherine Marshall	Jemena
Maggie Du	AEMO	Bob King	King Associates
Magnus Hindsberger	AEMO	Nicolas Taylor	Lantau Group
Matthew Marston	AEMO	David Strang	Lighter Footprints
Nick Cimdins	AEMO	Richard Hickling	MottMac
Samaneh Jeddi	AEMO	Sarah-Jane Derby	Origin
Sayani Gupta	AEMO	Joe Hemingway	Powerlink
Seb Kilborn	AEMO	Jennifer Brownie	QEUN
Tim Abernethy	AEMO	Linda Yu	QLD EPW
YeeSiong Lee	AEMO	Metabha Wanninayaka	QTC
Peter Bucki	AGIG	Leo Xue	RM Hedge
Will Chivell	AGIG	Steven Maxwell	SAPN
Bill Nixey	Ausgrid	Connor McLeod	Shell
Craig Tupper	Ausgrid	Ron Logan	Shell
Jaysson Guerrero	Ausgrid	Noel Sligar	Sligar and associates
Navid Haghdadi	Ausgrid	Bradley Supple	Stanwell
Morteza Moallemi	Ausnet	Connie Ganser	Stanwell
Jacob Hyslop	CEC	Steve Meiklejohn	Stanwell
Swaantje Grunefeld	CleanCo Queensland	Michael Nelmes	Synergy
Ben Tudman	Cornwall	Rudy Khong	Synergy
Michael Statham	CS Energy	Herath Samarakoon	Tas Networks
Azadeh Keshavarzmohammadian	Deloitte	Dhor Ngor-Apuol	Tas Networks
Elizabeth Zupanic	DCCEEW	Arindam Sen	Transgrid
Jake Bugden	DCCEEW	Mohammad Abdullah	Transgrid
Jack Gill	DCCEEW	Arwin Kahlon	VIC DEECA
Jyotsna Vedi	DCCEEW	Riadi Tanzil	VIC DEECA
Lucienne Burnham	DCCEEW	Cara Smith	Western power
Harry Yu	ElectraNet	Iain Machanick	Western power
Lawrence Irlam	Energy Australia	David Osmond	Windlab
Marie Harrowell	ECA	Tom Willcock	Windlab

A2 Forecasting Reference Group (FRG) Actions Items

Table 2 FRG Action Items (at 18 October 2023)

Item	Date Raised	Topic	Action required	Closing comments	Status
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