Forecasting Reference Group (FRG) DRAFT MINUTES

MEETING: FRG #10 2021

DATE: Wednesday, 27 October 2021

TIME: 2:00pm – 4:50pm AEDT

LOCATION: Teleconference

ATTENDEES:

Name	Company	Name	Company
Adrian Grantham	AEMO	Eli Baker	Engie
Andrew Turley	AEMO	Kerina Heath	Ergon Energy
Ben Jones	AEMO	Brent Hudson	Essential Energy
Daniel Collins	AEMO	Monika Blankenburgs	Hydro Tasmania
Faranak Golestaneh	AEMO	Joe Kremzer	Hydrogen Council
Greg Staib	AEMO	Andrew Nance	ISP Consumer panel
Levi Rosenbaum	AEMO	Gavin Dufty	ISP Consumer panel
Magnus Hindsberger	AEMO	Mark Grenning	ISP Consumer panel
Oliver Derum	AEMO	Richard Owens	ISP Consumer panel
Ed White	Ausgrid	Stephanie Bashir	ISP Consumer panel
Morteza Moallemi	AusNet Services	Ben McGregor	Powerlink
Nick Cimdins	AusNet Services	Jennifer Brownie	QEUN
Jordan Ferrari	CEC	Marino Bolzon	SA DEM
Neil Gascoigne	CitiPower	Elisia Reed	SAPN
Paul Graham	CSIRO	Ron Logan	Shell Energy AUS
Ben Ganim	DISER	Noel John Sligar	Sligar and Associates
Geoffrey Brett	DISER	Joe Hemingway	Stanwell
Justin Plant	DISER	Herath Samarakoon	TasNetworks
Ben Skinner	AEC	Julie Morrison	TasNetworks
Blaine Wang	ECA	Prateek Beri	TasNetworks
Alex Driscoll	EDGE2020	Arindam Sen	TransGrid
Abu Abdullah	ElectraNet	David Headberry	Major Energy Users

1. Welcome and Introductions

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

- Draft FRG Minutes
  - 25 August 2021
- An update to the Forecasting Approach Register on 12 October 2021.
- Submissions to Energy.forecasting@aemo.com.au are appreciated.

2. Presentation 1 – Forecasting stakeholder engagement

Daniel Collins (AEMO) summarised the FRG terms of reference, noting the need for various updates. Stephanie Bashir (ISP Consumer Panel) presented the ISP Consumer Panel's recommendations on forecasting stakeholder engagement, noting the breadth of FRG topics beyond the ISP. Daniel Collins polled stakeholders on engagement matters.

Key topics raised by stakeholders during this session included:

- David Headberry (MEU): Critical analysis on forecasts is an important part of the FRG.

        - Richard Owens (ISP Consumer Panel): The FRG should promote sharing perspectives of non-forecasters too.
        - Ron Logan (Shell AUS): the FRG should allow non forecasters to be actively involved in AEMO's forecasts, providing confidence in their use.
    - Richard Owens (ISP Consumer Panel): Pre-reading the materials are very useful in determining whether to attend FRG meetings.
    - Stephanie Bashir and Andrew Nance (ISP Consumer Panel): The FRG needs to have a clear purpose and objective before its engagement can be measured.
        - David Headberry (MEU) and Ron Logan (Shell AUS): The suggested metrics are all useful in different situations.
    - Suggestions to improve AEMO's engagement included:
        - David Headberry (MEU): FRG presentations should outline where prior FRG feedback has been included.
        - Ben Skinner (AEC): AEMO should share how prior stakeholder feedback has been considered.
        - David Headberry (MEU): Presenter should have their cameras on.
        - Prateek Beri (TasNetworks): Chat messages and relevant emails should be published alongside the minutes.
        - Julie Morrison (TasNetworks): All acronyms should be spelled out.
        - Stephanie Bashir and Richard Owens (ISP Consumer Panel): Each FRG meeting should attract experts for the topics presented, including those who may not currently be aware of the FRG.

3. Presentation 2 – 2021 Forecast Accuracy Report (FAR) and Forecasting Improvement Plan (FIP)

Magnus Hindsberger (AEMO) presented an overview of the 2021 Forecast Accuracy Report (FAR) on the 2020 Electricity Statement of Opportunities (ESOO) forecasts. Throughout the presentation, Magnus Hindsberger highlighted areas of forecast improvement to be included in the 2021 Forecasting Improvement Plan.

Key topics raised by stakeholders during this session included:

- David Headberry (MEU): Accuracy should be measured by the proportion of the residual to total load, to show the importance of each inaccuracy.
    - AEMO: The magnitude of residuals will be published in the FAR.
- David Headberry (MEU): PV Non-Scheduled Generators (PVNSG) were over-forecast by 600 GWh. Perhaps de-rating PV systems should be re-investigated to determine whether installation issues or under-maintenance is to blame.
    - AEMO: Agree that a number of factors could be at play. The FAR will report on PV capacity and normalised generation forecast accuracy, reflecting derating impacts.
- Prateek Beri (TasNetworks): Do forecast accuracy assessments consider weather? Could a lower than normal solar irradiation year cause the PV over-forecast?
    - AEMO: Each year is forecast as a "typical" weather year; a La Nina year would usually see PV generation over-forecast while it typically would be under-forecast in an El Nino year.
- Ron Logan (Shell AUS): The review of the initial year for winter POE10 should be conducted without an intended solution. Weather outcomes may be the reason.
    - AEMO: AEMO has not concluded there is an issue yet, hence the suggested review. Only if the review points towards other factors than weather are at play, AEMO will consider how best to account for that.
        - The same issue occurred in multiple states, with cold weather only impacting New South Wales and South Australia.
    - Ron Logan: South Australia actual winter maximum demand has been high for three years now, so forecast look a bit low.
- David Headberry (MEU): Demand Side Participation (DSP) depends on the duration and certainty of high prices; behaviour during prolonged high prices is not indicative for other times.
    - AEMO: Agrees this could be the case. As result, will monitor DSP behaviour as prices return to normal in Queensland.

        - David Headberry: Perhaps DSP data in other states at times of high prices in Queensland will be insightful.
    - Ron Logan (Shell): Outages on the 10 hottest days of a mild year may be planned maintenance, leaving no material reliability impacts. Why not ask the generators for the reasons for outages?
        - AEMO: This trend continues from 2020, when Queensland had higher outages with relatively cold days.
        - In 2021 AEMO used PASA Availability for the supply accuracy assessment.
        - AEMO notes the suggestion to ask generators for the reason for outages.

Forecast Improvement Plan

- David Headberry (MEU): Chat messages should be included as submissions for the FIP consultation.
- Andrew Nance (ISP Consumer Panel): The materiality of initiatives is most important to lower uncertainty. Is the FIP identifying what improvements are most material and implementing them first?
    - AEMO: The FIP divides initiatives into four categories; research, monitor, review and improve. This prioritises the most pressing issues from a materiality point of view, while considering timeliness.
    - AEMO: Uncertainty is captured through scenarios and sensitivities.
- David Headberry (MEU): Rooftop PV output, including networks managing load, is important and may be the most material issue as distributed PV grows.
    - AEMO: Current indications show that the 2021 ESOO forecast tracks well with observed actuals. AEMO will monitor this, and make any required corrections ahead of the 2022 ESOO. AEMO in particular notes that models currently assume unconstrained PV generation, but plan to investigate the impacts of constrained generation options for the 2024 ISP.
- Ron Logan (Shell): Coincidence of Variable Renewable Energy (VRE) output between electrical sub regions should be researched before inclusion in ISP modelling.
    - AEMO: This will be included in the FIP's "Improve demand traces" initiative, to review the number of reference years.
- Jennifer Brownie (QEUN): A spreadsheet similar to "Generation information[1]" should be published for hydrogen projects.
    - David Headberry (MEU): Data from the few operational electrolysers within distribution networks could be used to forecast future hydrogen production.
    - AEMO will consider analysing such hydrogen electrolyser data.
    - CSIRO has a hydrogen facilities database[2].

4. Meeting close

The next FRG meeting. focusing on gas, will be held on Wednesday 24 November 2021, with presentations on gas consumption, gas prices and Gas Powered Generation (GPG) forecasts.

[1] Available at: https://aemo.com.au/en/energy-systems/electricity/national-electricity-market-nem/nem-forecasting-and-planning/forecasting-and-planning-data/generation-information
[2] Available at: https://research.csiro.au/hyresource/projects/facilities/

Appendix A Forecasting Reference Group (FRG) Actions Items

FRG Action Items – OPEN (at 20 November 2021)

Item	Date Raised	Topic	Action required	Responsible	Due	Status
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