

## MEETING RECORD

MEETING: WA Gas Forecasting Reference Group (FRG)  
 DATE: Tuesday, 5 October 2021  
 TIME: 1.00 PM AWST  
 LOCATION: Microsoft Teams

### ATTENDEES:

Daniel Collins (Chair)	AEMO
Laura Tomkins (Secretariat)	AEMO
Judd Greenway	Adbri
Patrick Peake	AGL
Mark Riley	AGL
Jasper Sng	AGL
Sarah Silbert	AGL
Jayesh Halai	AGL
Nick Eaton	Alcoa
Nicholle Langer	Alinta
Oscar Carlberg	Alinta
Sam Lei	Alinta
Adam Stephen	Alinta
Rebecca Mason	APA
Naomi Donohue	APA
Dimitri Lorenzo	Bluewaters
Jia Wu	Citic Pacific Mining
Linh Nguyen	CME
Laura Koziol	EPWA
Steven Kruit	EPWA
Jay Williams	EPWA
Dora Guzeleva	EPWA
Julian Fairhall	ERA
Tyson Self	ERA
Erdem Oz	ERA
Rojan Pandey	HFM Asset Management
Noelle Leonard	JTSI
Peter Kolf	KPKSAS
Penny Ling	Metro Power
Erin Stone	Point Global
Richard Bowmaker	RBP Consulting
Wendy Ng	Shell
Jai Coppen	Shell
Joanna Wong	Shell
Simon Akero	Shell
Charles Loh	Shell
Lucy Wu	South32
Michael Brooks	South32
Andrew Walker	South32
David Low	South32
Sangita Bista	Synergy

Jenny O'Donoghue	Synergy
Jo-Anne Chan	Synergy
Hari Sridhar	TransAlta
Mark Keogh	UON
Luca Febbraio	UON
Shrey Kant Shroff	Western Power
Paul Johnson	
Sandy Ng	AEMO
Neetika Kapani	AEMO
Greg Staib	AEMO
Siobhan Attwood	AEMO
Christopher Meredith	AEMO
Deborah Marsh	AEMO
Cameron Parrotte	AEMO

Disclaimer - This document provides an overview of the main points of discussion at an industry forum convened by AEMO on 5 October 2021 to provide information and invite perspectives and feedback on matters relating to WA Gas Forecasting Reference Group (FRG). 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 Introduction

Daniel Collins (AEMO) opened the meeting and welcomed participants to the WA Gas FRG and provided some context for the meeting and discussed the agenda.

## 2. SWIS GPG Forecasts

Richard Bowmaker (RBP) presented the GPG forecasts for the SWIS, covering off on the methodology used for the forecasts, provided an overview of the input assumptions and draft results.

Stakeholder Comments and feedback:

Julian Fairhall (ERA): what was assumed as the minimum thermal generation quantity? Just to put on notice for later when AEMO presents I am keen to understand why an assumption for a system wide operational constraint on the system, that will be subject to a market within the forecast period, is considered confidential

- AEMO: AEMO has considered stakeholder feedback provided and has consulted internally on the rationale for keeping the figure confidential. The “constraint” is a dynamic operational figure, and it is important to treat it as such as such, which also reduces any confidentiality concerns from publishing a fixed constraint. For modelling purposes, AEMO has applied 600 MW as the threshold of operational stability constraint in the final forecast. This value was taken from the Renewable Energy Integration – SWIS Update, published on 28 September. The research and analysis carried out for the paper indicates that that the system enters a zone of ‘heightened power system security threat’, as dispatch options materially decrease below 600 MW. Running the model with a 600 MW constraint gives us the best estimate of the gas

required to keep the system at a level that AEMO has high confidence that secure dispatch options will be available. Noting the 600MW level is dynamic we have also done a sensitivity at a lower level.

Wendy Ng (Shell): How is battery storage dispatched in the model? And what price assumptions do you use for ancillary services?

- RBP: It's an optimization model, so it dispatches the generation, including battery storage, to minimise overall cost. So, a fixed profile or schedule to the battery isn't applied. It's trying to maximize its own revenue, so batteries will be charged when prices are low and discharged when prices are high. The batteries will also provide Ancillary Services at the same time. The model keeps continuous track of how much energy it has stored and what it's capable of providing in terms of energy output in Ancillary Services and when it needs to charge itself.
- The Model has co-optimisation of energy and Ancillary Services so RBP doesn't input any prices into the model. The prices that come out of the model for Ancillary Services are the opportunity cost of a generator providing Ancillary Services rather than energy.

Tyson Self (ERA): What are the drivers behind higher gas price projections this year?

- AEMO: The long-term gas price assumptions for the WA market are higher in the 2021 GSOO than the 2020 GSOO due to the higher prices of Brent (oil) and JKM (gas). These are key components of the gas price calculation undertaken by EnergyQuest.

Michael Brooks (South32): The higher gas price feels like it should have less impact given Synergy and Alinta largely have long term gas contracts which overwhelmingly dominate the market. Does the model apply a single AEMO gas price for all GPG? Should we not model closer to those companies' actual gas prices to get a more accurate dispatch model?

- RBP: AEMO supply RBP with a single price that is applied to all generators. The actual contractual arrangements that generators have are private and not known to RBP.

Hari Sridhar (TransAlta): Does the model assume all coal is mined in WA, or an import component is required, as this should impact pricing and demand in future years?

- RBP: The assumption is it is all domestic coal. RBP uses the domestic pricing, rolling that forward.

Mark Riley (AGL): Has there been any modelling for 5-minute settlement coming up? Can the model cope with 5-minute settlements?

- The modelling is done on an hourly basis. Work has been done in previous years to compare the results; different dispatch intervals were taken into consideration to see if it impacts the results significantly. The outcome of this was that there was no significant change, therefore, the assumption is that there will be no impact from different dispatch intervals.

Julian Fairhall (ERA): AEMO has previously flagged a rooftop solar contingency added to spinning reserve related to potential widespread loss of rooftop solar when generators trip. Was that part of the SR assumption?

- RBP: No this hasn't been taken into this modelling

Mark Riley (AGL): Were longer term fuel contracts considered?

- RBP: Currently the modelling takes the market price provided by AEMO

### **3. 2021 WA Gas Statement of Opportunities Draft gas consumption forecasts**

Deborah Marsh (AEMO) provided an overview of the forecasting approach and presented on the draft Gas Consumption Forecast Methodology AEMO is applying for WA, then sought feedback from stakeholders.

Stakeholder Comments and Feedback:

Michael Brooks (South32) Why is Waitisia exporting gas via NWS not yet included in the Base Case given it has been announced and there is clearly market demand? The East Coast Gas Outlook includes LNG exports

- AEMO: This is not used as market demand and therefore excluded. AEMO looks at domestic demand only.

Michael commented that it is worth looking at the East Coast because it's analogous to the West Coast and confusing why its treated differently on the two sides of the country.

Michael Brooks (South32): The forecast in the mining sector seems to focus only on new projects/expansion based on commodity prices. There should also be consideration of decarbonisation commitments and how that may impact fuel switching to or from natural gas. APA is building a pipeline to the Goldfields which would seem to indicate demand for up to 100TJ/d which does not seem to appear in the forecast.

- AEMO: The mining Sector forecasts focus on new projects and expansions based on commodity prices. Therefore, the forecasts are based on available FIR data and more about commodity.
- In terms of decarbonisation, if AMEO receives information regarding renewable projects coming online, that is taken into consideration.
- The pipeline that APA is building to the Goldfields region is forecast at a facility level, so it would depend on facilities advising that demand/ consumption is increasing

Mark Riley (AGL): how are hydrogen conversions considered in the GSOO, should there be some consideration of having the WA GSOO look like the NEM GSOO with the market participants?

- AEMO: AEMO has considered how hydrogen is incorporated in the GSOO, and is mindful the outlook is 2031, but the hydrogen potential is after that 10-year period. AEMO has also considered which transmission pipelines are right for conversion but haven't incorporated it into the forecasts at this point.

Mark commented that this is something that needs to start being recognized in the GSOO as it changes the dynamics of natural gas and at some point, maybe there will be a hydrogen GSOO.

Charles Loh (Shell): Are gas prices factored into the demand forecast models?

- AEMO: Yes, the gas price forecasts released by the government are considered. This only covers the mass market or Tariff V forecasts, which is reasonably flat.

#### **4. Other Business**

No other business was raised.

#### **5. Meeting Close**

Daniel Collins (AEMO) noted the upcoming WA Gas Consultative forum on 27 October 2021 and closed the meeting.