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Reliability Forecasting Methodology Issues Paper

AGL Energy (**AGL**) welcomes the opportunity to comment on the Australian Energy Market Operator (**AEMO**) Reliability Forecasting Methodology Issues Paper (**Issues Paper**), which sets out how AEMO plans to produce the reliability forecast under the Retailer Reliability Obligation (**RRO**).

AGL is one of Australia's leading integrated energy companies and the largest ASX listed owner, operator, and developer of renewable generation. Our diverse power generation portfolio includes base, peaking and intermediate generation plants, spread across traditional thermal generation as well as renewable sources. AGL is also a significant retailer of energy and provides energy solutions to over 3.6 million customers in New South Wales, Victoria, Queensland, Western Australia, and South Australia.

We thank AEMO for consulting on this Issues Paper to provide transparency around how it will prepare reliability forecasts ahead of a formal Guideline. We also appreciate AEMO's undertaking to provide additional information about its modelling outcomes (such as distribution of unserved energy events) throughout the process of developing reliability forecasts going forward. Greater information will help participants to close any identified reliability gaps in an effective manner.

However, AGL has several concerns with the broader process involving the reliability forecast, which are set out below.

Timelines

It is possible that the RRO could be triggered on the basis of forecasts published with the 2019 Electricity Statement of Opportunities (**ESOO**) (due for publication in August), before AEMO's interim reliability guidelines have been finalised and well before final AER guidelines have been confirmed. AGL is concerned that the RRO could therefore be triggered prior to participants and policy makers having a clear understanding of how the parameters of the Reliability Gap will be determined.

This creates significant uncertainty and concern for industry, which is amplified by that fact that, following the 2019 ESOO, the South Australian Minister may use their powers to call for a Reliability Instrument to be triggered with only 15 months' notice in that state.

The RRO is a complex mechanism that imposes substantial obligations on liable entities, with proposed outcomes from non-compliance with the scheme consisting of a cost recovery mechanism with liability for of

up to $100 million, as well as the possibility of additional civil penalties. Compliance with the obligations, which consists of entering into firm contracts, may also impose significant operational expense on liable entities.

The cost of compliance and potential liabilities associated with not meeting obligations are directly related to the size of the Reliability Gap that may be published by AEMO, as this figure will reflect the amount of firm contract cover required to be sourced by liable entities. We therefore consider that AEMO's task in developing a methodology as to how that figure should be calculated is particularly important, and that sufficient time should be allocated to assess how AEMO's methodology best serves to meet the intention of the scheme.

Assessment of the likely impact of forecasting methodologies in a real context is required to inform this decision-making process, and in particular, whether that process meets the objectives of the RRO and the National Electricity Objective. Such an exercise would also help participants understand what types of firming contracts might be required to meet different types of gaps and under different scenarios.

Concepts in the design of the RRO

AGL considers the proposed methodology in the Issues Paper highlights some shortcomings with the design of the RRO. The identification of unserved energy (**USE**) in the calculation of the reliability forecast reflects a probabilistic determination over an annual period and does not necessarily indicate whether there will be specific capacity shortfalls during any particular trading interval. USE reflects an overall probability of shortfalls taking into account a wide range of scenarios with different inputs and settings.

While increased available capacity would reduce USE in most potential scenarios (and therefore reducing overall forecast USE in the ESOO), the concept of USE is not directly equivalent to a 'Reliability Gap', as USE is a capacity over time measure that may be resolved in a number of ways. For example, significantly more capacity available during higher risk periods may have the same effect to reduce USE as somewhat less capacity over a wider period of time.

The size of the reliability gap will therefore be impacted by the number of intervals over which it is measured, and there has been no real policy direction or broader consultation on how this should occur.

To resolve this conflict, AEMO has proposed utilising a loss of load probability (**LOLP**) standard to define Reliability Gap trading intervals. In our view, the use of LOLP in determining a reliability gap is a significant departure from ESB's initial design that was premised more simply on resolving USE on an annual basis.

This new design was not foreshadowed in any discussions in RRO consultation, and AGL is concerned that the use of LOLP standards that have been defined by AEMO without any significant analysis may create a larger Reliability Gap (either in terms of capacity or intervals) than may otherwise be required to resolve a reliability shortfall in the most efficient way possible.

There is a risk that a small breach of the reliability standard may result in broad contracting obligations over a number of different trading intervals due to the methodology proposed by AEMO, which may add a significant amount of complexity and cost to the market. There may be very efficient ways of resolving small forecast breaches of the reliability standard that are less burdensome than imposing contracting obligations on all liable entities over a number of trading intervals.

A similar design concern is evident in the allocation of a Reliability Gap across multiple regions. NEM regions can benefit from interregional generation to reduce USE outcomes, and there is little in the draft methodology that examines in more detail as to the more efficient way of resolving USE outcomes taking into account

interregional power flows. One proposed methodology in our view is not sufficient to address the complex dynamics between NEM regions, and we consider AEMO should look at the outcomes and benefits from competing methodologies using worked examples.

In our view, it is not apparent from the draft design of the RRO that the benefits of utilising interregional generation should be excluded in meeting obligations under the RRO, although AEO's methodology appears to make this a natural outcome.

While to some extent this depends on the settings of the final Firmness Factor Guidelines, if the role that interconnection has in supporting reliability is not adequately considered in the Reliability Gap forecast, this may have significant implications for the viability of interconnector developments and the way liable entities are required to meet their obligations to source firm contracts. In our view, the methodology should promote meeting the RRO obligation (i.e. reducing USE outcomes to below the Reliability Standard) in the most efficient way across the NEM, considering the benefits of interregional generation.

Resolution of the reliability standard

We suggest that this consultation would benefit greatly from some worked examples to show different options on how USE may be resolved, and how the proposed methodology meets the objectives of establishing the minimum amount of capacity required during a reliability gap to reduce USE projections to 0.002%.

In any event, the combination of the size of the Reliability Gap and the number of trading intervals over which it occurs should be no more than the minimum required to reduce USE outcomes to less than 0.002% over an annual basis as outlined in the RRO design.

For example, AEMO could provide a range of ways USE could be resolved as a part of its forecasting process. This range could then be assessed by another party, such as the AER, and a preferred option identified that best aligned with the intended design of the scheme and the long-term interest of customers.

In making an assessment under this process, the AER (or ESB) would need to consider whether a trigger of the RRO was in the best interests of customers, or whether a more appropriate action could be taken to resolve USE that was more in the long-term interest of consumers.

Conclusion

While many of the concerns raised in this submission are related to matters that are outside the control of AEMO, we ask that AEMO keep these issues in mind when developing the reliability forecast and associated Guideline. The RRO is untested and a number of details under which it is supposed to operate are being worked through.

At the same time, obligations under the RRO impose very material risks and liabilities on liable entities and the design of the scheme must be robust in order to meet the best outcomes for customers over time. Issues in its design that arise through the forecasting process should therefore be highlighted and referred to policy makers for further discussion in order for the most efficient solution to be identified that preserves to intention of the scheme.

If you have any queries about this submission, please contact Aleks Smits, Manager Policy & Strategy on (03) 8633 7146 or ASmits@agl.com.au.

Yours sincerely,

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