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Submission to Reliability Frameworks Review (EPR0060) Directions Paper

AGL Energy (**AGL**) welcomes the opportunity to comment on the Australian Energy Market Commission's (**AEMC**) Reliability Frameworks Review Directions Paper (**Directions Paper**).

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 3.5 million customers in New South Wales, Victoria, Queensland, Western Australia, and South Australia.

Existing reliability framework

AGL reiterates its view given in response to the AEMC's Interim Report, that existing price signals and markets for reliability have worked well in the National Electricity Market (**NEM**). The Directions Paper asks whether existing arrangements remain fit for purpose considering changing market conditions, particularly variability in the supply of and demand for electricity. AGL considers that the current reliability framework remains appropriate and that significant changes are not warranted despite the challenges posed by energy market transformation.

Introducing regulation only where necessary ensures that market participants can make long-term decisions based on forward price signals that reduce investment risk and lead to greater efficiencies in markets and better outcomes for customers.

Guiding principles

AGL's views on the key streams of work considered in the Directions Paper are guided by the following principles:

- where feasible, using existing **competitive markets** to deliver and value energy services to provide reliability through flexible and dispatchable generation;
- establishing policy, regulatory and market frameworks that are **technology neutral**;
- utilising **price signals** to encourage efficient investment and operational decisions;
- **allocating risks** to parties that are best able to manage them;
- introducing **regulation only where necessary** to address a market failure, including to ensure system safety, security, and reliability.



- ensuring an **equal playing field** where providers of competitive products and services, in markets, must compete openly on their merits.

1. Forecasting and information provision

AGL broadly supports the provision of information as a step change to current regulatory arrangements, with a view to improving reliability outcomes. However, any new information provision requirements should be targeted, and clearly linked to serving an end purpose, such as improving reliability.

The accuracy of wind farm and solar plant forecasts impacts the forecast of reliability in the NEM across both operational and longer-term investment horizons. AGL considers that innovation in wind- and solar-forecasting technology should be embraced by the Australian Energy Market Operator (**AEMO**), and participants permitted to provide alternative forecasts to Australian Solar Energy Forecasting Systems (**ASEFS**) and the Australian Wind Energy Forecasting Systems (**AWEFS**).

As the Directions Paper notes, AEMO and the Australian Renewable Energy Agency (**ARENA**) recently commenced a voluntary self-forecasting trial for utility-scale wind and solar. Despite the voluntary nature of the trial, the information participants provide from November 2018 onwards will be used by AEMO and therefore could impact the market price. Given the lack of regulatory framework relating to participant provided information under the trial, AGL is concerned about the potential risks from this information being used for determining market outcomes. On this, AGL refers to the Declared Wholesale Gas Market rules as an example of good faith obligations being placed on participant forecasting. Overall, more thought must be given to the potential impacts of voluntary self-forecasting on the wholesale market.

The Directions Paper also asks whether retailers should self-forecast their own load to deal with greater volumes of distributed energy resources (**DER**). AGL appreciates that the impact of DER on the NEM will likely increase over time, but regardless AGL does not support introducing a self-reporting mechanism. AGL does not consider that the sum of self-forecasting data provided by multiple participants would be any more accurate than AEMO's forecast.

Before additional reporting requirements are placed on participants, AGL considers the efficacy of existing obligations must be measured. For example, this is the first year that participants have provided demand side participation information to AEMO. AGL remains sceptical of the benefits this scheme will provide for AEMO forecasting, as the more the market operator tries to anticipate how participants will use demand response, the more likely the triggers for drawing on that demand response will change.

2. Day ahead markets

The introduction of a day ahead market would involve fundamental changes to the NEM, suggesting that there are considerable problems with the current market design that require an acute remedy. AGL does not consider that the NEM needs dismantling and rebuilding, nor does the Directions Paper outline sufficient justification from any party for introducing a day ahead market. AGL ventures that overall, this reform proposal is seeking to solve a non-existent market problem.

The sizeable effort and cost required to implement a day ahead market far outweighs the identified concern of improving information provision. Participants are subject to several obligations to provide information about their intentions to the market through MTPASA, STPASA, unit de-commitment, and rebidding. When these obligations are added together, they represent much of the information that would be available in a day ahead market. Compliance with each of these information requirements is subject to enforcement. If



there is significant concern around the information participants are providing, a more appropriate and targeted option to address this would be to revisit existing rules.

In lieu of examining specific deficiencies in the market, the AEMC has considered three objectives for a day ahead market. Objectives 1 and 2 focus on improving the information available to market participants and AEMO. AGL has examined some of the potential benefits outlined in the Directions Paper on these objectives.

The Directions Paper states that an ahead market could incentive participants to provide better information to the market earlier, with deviations from the schedule managed in the real time balancing market. AGL does not support a move away from the flexibility currently afforded to participants in the NEM and considers that the rebidding rules and potential penalties for breach are a sufficient check on participant behaviour when it comes to signalling intention.

With or without an ahead market, market participants are required to consider what the market may do and respond to what it is doing. It is a balance of looking to the future while responding in the present. A day ahead market appears to tilt this balance too far in favour of the future and indicates a lack of trust in how market participants manage their portfolio. Participants are incentivised to make efficient decisions to manage their risks appropriately and to act within regulatory confines. This efficiency results in the lowest end prices for retail customers.

A further potential benefit identified in the Directions Paper is that an ahead market could result in a more accurate demand forecast. AGL does not consider that an ahead market is necessary to make such improvements. As discussed in the preceding section, AGL considers there are targeted regulatory measures that can be applied, which will result in better forecasting information to improve reliability outcomes.

The third objective considered by the AEMC is an ahead market schedule devised to make unit commitment decisions, with the purpose of achieving higher levels of dispatch efficiency. AGL does not at all support an ahead market with such a structure, for several reasons.

Firstly, participants are clearly best placed to make unit commitment decisions, as only they hold all the relevant information underlying these decisions. For example, information about fuel constraints is a critical input, particularly for coal and gas, where supply, transportation, and high internationally linked prices are all factors.

Secondly, centrally controlled scheduling removes market participants' financial incentives to bid their generation efficiently. The market operator would benefit by having increased control, but with no financial incentive to drive its decision making, the market operator is liable to 'overcompensate' under the guise of system security. Additionally, participants would bear the asymmetrical financial risks of the unit commitment decisions, particularly the market price cap.

Importantly, this objective is inconsistent with the current market design principles in cl. 3.1.4 of the NER. Subsection (a)(1) provides for 'minimisation of AEMO decision-making to allow Market Participants the greatest amount of commercial freedom to decide how they will operate in the market'. AGL strongly advocates for the retention of this principle, and its continued embodiment in the regulatory framework.

The Directions Paper itself best sums up why an ahead market is not an appropriate reform option:

'... discussion of the objectives of an ahead market relies on providing market participants or the system operator with increased certainty, or the appearance of greater certainty.'



However, there will always be some form of inherent uncertainty in electricity markets that cannot be addressed by market design.'

The NEM largely deals with uncertainty well. AGL agrees that there is some scope for improvement around improved forecasting and increased provision of information. However, a market redesign to introduce an ahead market is an overreaction that seeks to impose full control where such a thing is not possible. On this final point, AGL examined the system events that occurred in South Australia and New South Wales in February 2017 through the lens of a day ahead market. AGL was unable to determine how having a day ahead market in place would have either prevented the events or assisted in mitigating the impacts.

3. Wholesale demand response

AGL considers that wholesale demand response and changes in consumer demand side behaviour can help to maintain a reliable system and may be a more cost-effective option than investing in new peaking generation. However, AGL does not support providing additional incentives for retailers to offer demand response products. AGL strongly believes that regulatory and market frameworks should be technology neutral. This view is consistent with the NER market design principles, which are also referred to above.

AEMC suggests allowing a specialist demand response aggregator and a retailer to engage a single consumer behind a connection point without that being contingent on the original financially responsible market participant. There are two possible mechanisms:

- Transferring the value of the wholesale demand response from the existing FRMP to the aggregator
- Transferring spot market responsibility for demand responsive load from the existing FRMP to an aggregator.

AGL is concerned that these options have not been appropriately measured considering the National Energy Guarantee (**NEG**). Specifically, more thought needs to be given to how these demand response options would link to reliability and emissions guarantees that retailers would be subject to under the NEG, and how this would impact such guarantees if demand response were carved out.

Additionally, given the uncertainty around which regulatory obligations would link to which retail or demand aggregation activities, it is difficult to support these options. For example, would aggregators be subject to the same, or similar, contracting and reporting requirements as retailers? A market based on a level playing field dictates that aggregators should not be able to obtain the benefit of demand response activities, without taking on the responsibilities faced by retailers.

Ultimately, AGL considers that retailers are best placed to draw on demand response. Where a customer offers potential demand response, the retailer's risk is lowered, allowing it to offer a better price to that customer and maximising overall efficiency. When a third party demand response aggregator directly contracts with the customer, the retailer loses visibility of that demand response potential and loses the risk management benefits. Accordingly, the customer pays a higher price to the retailer, instead receiving a financial benefit from the aggregator. This scenario produces an asymmetric result where the aggregator reaps all the benefit, while the retailer faces increased risk.



4. Strategic reserves

AGL considers that any reserve mechanism, whether that is the RERT or a new strategic reserve, should only be used as a last resort mechanism, and must be carefully designed and limited to ensure the mechanism does not create distortions or unintended consequences in the energy market. To the extent possible, signals for investment in new generation or demand response projects should be preserved.

As stated in our response to the Interim Report, AGL considers the following principles are important in the development of any reserve mechanism:

- **No distortion to the energy market:** The operation of any reserve mechanism should be separate from and not distort the energy market. If a generator or load is participating in the energy market, there are incentives to increase generation or decrease load in response to extreme market prices. Allowing those projects to also participate in a reserve mechanism may distort incentives to respond efficiently to pricing signals.
- **Technology neutral:** A reserve mechanism should not include any limitations on the types of technologies that can achieve the desired outcome to provide the lowest cost reserves for consumers. Advances in technology will provide new and forms of Demand Response products, and DER product development may also provide incentives for customers to participate in demand response programs to realise the benefits of their investments.
- **Competitive tender process:** The mechanism should be open to all market participants able to meet the requirements of the market operator, to drive a least cost outcome for customers.

AGL will expand on its views on strategic reserves in the two AEMO rule change requests currently before the AEMC.

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Yours sincerely,

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