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Dr Kerry Schott AO

Chair, Energy Security Board

Submitted by email: info@esb.org.au

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National Energy Guarantee Reliability Requirement Pre-Condition Options

Dear Dr Schott,

AGL Energy (**AGL**) welcomes the opportunity to make a submission in response to the Energy Security Board's (**ESB**) National Energy Guarantee Reliability Requirement Pre-Condition Options Paper (**Pre-Condition Options Paper**).

AGL is one of Australia's largest 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, providing energy solutions to around 3.5 million customers throughout eastern Australia.

In addition, AGL is continually innovating our suite of distributed energy services and solutions for customers of all sizes. These behind-the-meter energy solutions involve new and emerging technologies such as energy storage, electric vehicles, solar PV systems, digital meters, and home energy management services delivered through digital applications.

We note that concurrent to this consultation, the ESB has also released an exposure draft of proposed changes to the National Electricity Law that would implement the National Energy Guarantee (**Guarantee**), including further detail on the implementation of the reliability obligation. AGL will provide a separate response to issues raised in that paper. This response focuses on the alternative pre-conditions for activating the reliability obligation under the Guarantee that were only recently proposed.

Reliability pre-conditions

At the request of the COAG Energy Council, the ESB has developed alternative policy options for activating the reliability obligation. These options have been developed in response to concerns raised by Ministers at the Energy Council meeting held in August 2018 that a reliability gap could emerge at any time across a forecast period.

In the final design of the Guarantee proposed by the ESB, a pre-condition to the reliability obligation being triggered was that the AER would make a determination three years from a forecast shortfall (**T-3 trigger**) that a reliability gap identified by AEMO was material. This determination would then require liable entities to put in place qualifying contracts to cover their share of system peak demand in the forecast period.

The AER would then also make another determination one year from the shortfall (**T-1 determination**) that the forecast material gap remains, and then require that retailers submit their net contract positions to the AER for compliance purposes. What amounts to a material gap would be determined in the Rules; however, it is clear that the reliability obligation should only need to be triggered if there is a substantial risk that the market was unable to build enough capacity to address any shortfall. Otherwise, reliability mechanisms (such as demand response and AEMO's RERT) would be able to cover forecast shortfalls.



The intent of the T-3 trigger is therefore to give liable entities notice that the obligation will be activated if the material gap is not closed and to give adequate time to bring forward new capacity to the market. It also represents a central tenet of the NEG design, which is that the financing of new generation projects is enhanced with longer-term agreements with businesses who will subsequently contract with that generation. The purpose of the T-1 determination is largely for compliance purposes after a shortfall has occurred.

The new options paper proposed three alternate triggers for the reliability obligation. In reviewing these options, it is important to consider the policy basis upon which the T-3 trigger was developed. In doing so, we find that it becomes clear that alternate pre-conditions for the trigger would not be more helpful in driving long-term investment certainty and longer-term contracting between entities to finance new development projects. On the contrary, we consider that the alternates may provide more uncertain market outcomes leading to increases in risk premia for investors and wholesale forward prices.

As consulted upon with a broad range of stakeholders and eventually determined by the ESB, the T-3 trigger as currently drafted is on balance a fair setting to put the market on notice that a material shortfall exists and action needs to be taken. The time for this trigger should not be extended or removed.

Addition of a T-5 Determination

The Australian Energy Market Operator (**AEMO**) produces its Electricity Statement of Opportunities (**ESOO**) annually. We welcome the ESB's policy recommendation that regardless of the direction of the Guarantee, AEMO should provide additional descriptive information to give further context to ES00 forecasts, including an indication of the additional capacity required to close the gap, the pipeline of potential generation projects over the forecast period, along with progress of their development, and likely time of occurrence of the shortfall, such as month and time of day.

The addition of a T-5 trigger would put liable entities on notice that they would need to have arrangements in place to meet the obligations of the reliability requirement, whether that be qualifying contracts or necessary plant built, so that they could meet the reliability obligation in five years' time. In practice, it is highly unlikely that participants could enter into any financial instruments or contracts of that length to meet their obligations under the guarantee. The T-5 trigger would therefore provide no additional stimulus or risk reduction to develop new generation projects.

A significant capacity shortfall at T-5 is likely to see investment in generation development and transmission augmentation in response to traditional market signals. However, forecasts at T-5 are inherently unreliable. In our view, a T-5 trigger would therefore do nothing additional to stimulate a market reaction to developing capacity as the risk associated with developing plant that was inconsistent with other market signals would remain too extreme. A T-5 trigger would only be appropriate if there was a very significant shortfall and there was the option to 'cancel' the trigger at T-3 if the situation had been adequately resolved.

Removal of T-3 Determination

On the basis that the ES00 is published every year and participants will constantly be reacting to changing dynamics in the market, questioning why a T-3 trigger is required is not surprising, as three years does appear to be an arbitrary timeframe and participants do already respond to market signals. However, the T-3 trigger does have a very important purpose in terms of putting the market on notice that there will be an expectation that participants are closely monitoring their contract position to respond to a forecast shortfall, and to incentivise longer term contracting with large energy users. It pre-empts and allows participants to adequately prepare for compliance expectations at T-1.

The ESB's paper also clarifies that even with the removal of the T-3 Determination, the AER would still assess the market at T-3 and a Market Liquidity Obligation could be imposed upon large, vertically integrated



retailers. In addition, AEMO would have the ability to commence a voluntary book-build from that year. The removal of a T-3 trigger would therefore be of little real impact to liable entities apart from creating greater uncertainty as to whether compliance obligations were likely to bind at any time, which could again lead to greater costs for customers.

Perhaps the more significant question that should be addressed in the ESB's design is how the market should react to material changes in AEMO's forecast after the T-3 period has elapsed until the T-1 determination occurs, which appears to be one of the matters that this recommendation is considering.

In our view, these changes are best protected by adequate closure notification obligations on generators and clear signalling to the market on material differences that may impact the risk of unserved energy. The subsequent compliance obligations on participants that are subject to the reliability obligation could then be balanced to reflect the fact that liable entities have had less than the prescribed 3 years to prepare for a forecast shortfall. Other reliability mechanisms (such as the RERT) would still also exist to manage these low-probability but high-impact events that occur without sufficient warning.

Ministerial Powers to activate the Reliability Obligation

Under the third alternate proposal, Ministers for each NEM jurisdiction would be able to trigger a T-1 Determination with a minimum of three months' notice. No material reliability gap would need to be present for a Minister to make a determination, and the AER would not have a role in approving a Minister's decision to make the T-1 reliability instrument.

This recommendation has absolutely no regard to the design of the Guarantee and the objectives of the reliability obligation in particular. The purpose of the reliability requirement is to provide better information participants, encourage longer-term contracting between energy market participants, and reduce risks that drive up financing costs.

The risk of executive Ministerial powers that vary from one NEM region to another have the very real risk of driving distorted investment outcomes and making energy market participants subject to political cycles rather than orderly policy settings. Foreseeably, contract positions and trading books would need to be significantly adjusted to account for political events across jurisdictions, providing no long-term certainty for investors.

Investment risks would increase significantly as businesses would need to inefficiently allocate capital and increase the price of risks to address circumstances that may never materialise. Businesses would have a distorted incentive to invest in projects that suited the Government in power rather than those that provided the best outcomes for their customers and shareholders.

AGL's position on the Reliability Obligation

Although we consider that there is some merit in considering how reliability will be maintained in the context of increasing penetration of large-scale intermittent generation, we note that the reliability guarantee has very little work to do in the absence of a robust emissions reduction trajectory that the electricity generation sector can work towards in the long-term.

In respect of the reliability obligation, we note that the final design of the Guarantee was developed by a large and broad cohort of industry experts and found broad support across almost all energy market stakeholders. It is important that the principles of the Guarantee are adhered to rather than have certain elements of the proposal cherry-picked and amended without adequate consultation or input from affected parties.

While we are generally supportive of the ESB's consideration towards maintaining system reliability through a mechanism that ensures enough dispatchable firm generation remains in the market to meet overall system



adequacy settings, we note that under AEMO's forecasts, there are no projected system reliability issues in any NEM area for at least the next 5 years.

We also consider that there may be alternates to the proposed reliability guarantee which may allow reliability targets to be met at lower cost to customers and at lower risk of disruptive market intervention. Similarly, policy mechanisms that are aimed at driving liquidity and transparency in wholesale markets may be more appropriate to consider separately to the Guarantee.

In developing a further design for a reliability guarantee, due regard should therefore be given to the role of existing market settings that already drive investment for greater capacity in the market. Numerous market mechanisms, price signals, and operating paradigms already contribute towards the objective of increased reliability in the NEM, and the Guarantee will need to both enhance and efficiently interact with each of them.

While ongoing scrutiny and appropriate reform of these existing market settings (which is occurring through existing market reviews, rule and procedure changes) will provide better long-term outcomes for customers, in our view there may not be a compelling need to make significant structural changes to the existing operation of the NEM to drive better reliability outcomes as a part of the policy architecture of the Guarantee, particularly when forecast capacity shortfalls seem to be less of a problem than the risk of outages due to other reasons.

Keeping these principles as a focus will ensure that the primary focus of the Guarantee is met and subsequent market reform in the NEM is also addressed in an efficient manner.

Should you have any questions in relation to this submission, please contact Aleks Smits, Manager Policy & Research on 03 8633 7146, or myself on 02 9921 2516.

Yours sincerely,

A handwritten signature in grey ink, appearing to read 'Tim Nelson'.

Dr Tim Nelson

Chief Economist