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Coordination of Generation and Transmission Investment: Options Paper (EPR0052)

AGL Energy (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.

We welcome the opportunity to comment on the Australian Energy Market Commission's (**AEMC**) Options Paper on the Coordination of Generation and Transmission Investment (the **Review**), including the critical assessment of whether (and how) the Australian Energy Market Operator's (**AEMO**) Integrated System Plan (the **ISP**) should be embedded into the National Energy Market regulatory framework.

Actioning the ISP

As outlined in our previous submission to the Review, Australia's electricity system is undergoing significant transformation at all levels, with a renewed focus on encouraging generation that is both reliable and low emissions, to ensure ongoing security of supply at the transmission level. We note that the ISP was borne as a recommendation of the Finkel Review, with the aim of providing more strategic and efficient planning, development and connection of transmission infrastructure across the NEM. AGL recognises the value that the ISP provides as an industry guidance document, outlining possible but credible projects for further consideration by Transmission Service Providers (**TNSPs**) in their transmission assessment planning processes.

The first ISP was published by AEMO in July 2018, as a means to deliver against its National Transmission Network Development Plan (**NTNDP**) obligations in the NEM. Its primary value has been the consideration of possible projects, which may not have necessarily been considered by a TNSP (including interconnector and non-network solutions) and some of its recommendations centred on improvements to better coordinate inter and intra-regional transmission infrastructure including the concept of Renewable Energy Zones (**REZ**).

However, AGL points out that the objective, outputs and mandate of the ISP are still undergoing a period of refinement to ensure it delivers a robust and strategic assessment of the grid, backed up by rigorous and independently validated modelling data. To this point, AGL believes that while embedding aspects of the ISP into the National Electricity Rules (**NER**) could provide value in a more coordinated approach to transmission planning, the extent of this value, the scope of assessment (including how AEMO selects projects to model)



and the expertise that AEMO brings to this function remains untested. Further clarity is also necessary on any refinements AEMO would propose to the ISP development process, should the ISP permanently replace the NTNDP.

Embedding the ISP into the NEM is also likely to erode the incentive-based regime for efficient transmission investment currently implemented and enforced by the Australian Energy Regulator (AER), thereby changing the approach TNSPs implement when identifying and assessing credible projects and their associated risk profiles. Under the existing regulatory framework, a TNSP is unlikely to take risks by implementing speculative investments unless there is a clear benefits case. Indeed, the Regulatory Investment Test for Transmission investments (**RIT-T**) provides further protection to customers, who ultimately pay for new infrastructure or network augmentation works.

A need to change the regulatory framework at this time therefore remains unclear.

Should this Review require the ISP to be 'actioned', AGL believes that instead of selecting a preferred ISP option, a more prudent output would involve focussing on a select few options for COAG Energy Council's endorsement. An examination of these options should then focus on:

- the need for change¹ and the level of regulatory reform required to embed the ISP into the NEM;
- the ongoing role of various actors at each stage of the transmission decision making process, including the AER and consumer groups;
- the responsibilities and obligations of each actor backed by suitable governance arrangements;
- a clear and transparent mechanism to protect customers from unwarranted costs; and
- ongoing, robust consultation with all industry stakeholders.

Specifically, AGL recommends progressing a detailed assessment of Options 2-4, on the basis that these options are more likely to deliver a balanced approach across the above factors. We would encourage the AEMC (and the Energy Security Board) to consult widely with energy market stakeholders, and to consider how an 'actioned' ISP would interact with existing NEM framework mechanisms under each option, including the Transmission Annual Planning Report and the AER's regulatory processes.

An evolving RIT-T mechanism to protect customers

As outlined in the Review and above, the implementation of the ISP into the regulatory framework will result in changes to the way the existing RIT-T is currently conducted for transmission investments. AGL notes that while the degree of change to the RIT-T is largely dependent on the policy decision to embed the ISP into the NEM, this may take some time and as such the existing RIT-T continues to play an important role by ensuring network investments deliver overarching benefits to customers while balancing investment risks. In the absence of another suitable costs and benefits assessment test, the RIT-T remains the best tool for ensuring the efficient build of regulated infrastructure.

However, AGL agrees with the broader industry's view that refinements can be made to address some of the known issues associated with the RIT-T. For example, the current RIT-T process can be burdensome, costly and may not adequately account for commercial risk, or changes to government policy which can influence the environmental, planning and development allowances applicable to individual projects. In addition, non-network solutions cannot be assessed by this mechanism. AGL supports the AEMC's views on addressing

¹ Including the rationale for removing the NTNDP from the NEM and replacing it with the ISP.



some of these simpler issues over the interim. We also note that while the AER does not have regulatory jurisdiction over issues which are bound by other sectoral laws and regulations, closer engagement with responsible jurisdictional planning infrastructure and environmental authorities in NEM States and Territories may alleviate some of the delays and perceived risk. AGL encourages the AEMC to explore these relationships further.

Supporting the Uptake of Energy Storage

Energy storage has the potential to provide market participants and the NEM with considerable benefits, including capacity firming, network support and ancillary services. AGL therefore continues to support the growing role that it will play in an evolving transmission system, and the efforts of regulators to embed this technology into the NEM frameworks to maximise its efficiency and effectiveness.

While AGL believes that a separate registration category for energy storage could be beneficial, it is important to consider the types of energy storage currently in market and those that may be created in the future, as well as the technical requirements placed on the connection of these assets. In comparing the forms of energy storage, it may be necessary to introduce sub-categories of registration to remove unnecessary technical barriers to entry, whilst supporting a variety of technologies and their operational use (for example, battery storage vs. pumped hydro, scheduled vs. non-scheduled, hybrid assets classified as semi-scheduled). These additional registration categories may also simplify administrative functions undertaken by AEMO by reducing complexities in the application and review process.

However, in line with transmission market charging principles, AGL maintains that all generation and loads must be treated in the same manner. System charges should apply to all point-in-time system generation or load² each time the captured electrons touch the system. This principle must remain technology agnostic. Doing otherwise would likely create a competitive advantage to an exempted technology class and distort the market. This could result in other Market Customers (including end use customers) and new technology participants being unfairly penalised.

That said, AGL sees value in a further examination of TUOS charges, to ensure that the approach remains fit-for-purpose, while providing suitable incentives to energy storage providers and recognising the network support functions and system balancing services that the technology can provide to the market.

AGL welcomes detailed consideration of the current registration and TUOS charging arrangements as part of a broader review as recommended by the AEMC.

Renewable Energy Zones

AGL supports further consideration of REZs in the context of a transformed NEM. We expect that the ratio of renewable projects to existing baseload projects will generally increase in order to deliver the same or increasing levels of supply reliability, and that designated REZs may form an integral way of grouping and

² Including energy storage loads, where the same electrons are subsequently stored and re-dispatched back into the market later.



unlocking maximum value from these assets. AGL therefore remains supportive of the AEMC and its efforts to explore options to support REZ³ within the NEM framework, noting that decisions on how the ISP is actioned will have a direct impact on this work program.

The build and connection of new transmission infrastructure to connect a REZ to the NEM may be captured via regulated cost recovery. It is therefore appropriate, in the current regulatory environment that all proposed investments in transmission assets are comprehensively assessed and provide maximum value to customers⁴. This will ensure that long term costs are not locked into the regulatory asset base of transmission providers, to address issues that may be short term in nature or otherwise solved by more efficient market solutions.

As an alternative approach to existing cost recovery from customers, there may be value in exploring other investment mechanisms to secure transmission infrastructure such as the issuance of bonds, longer term PPAs, government contractual guarantees or other forms of market reform that encourage extended private sector investments. AGL welcomes the AEMC's broader assessment.

If you have any queries about the submission, please contact Dan Mascarenhas on (03) 8633 7874 or DMascare@agl.com.au.

Yours sincerely,

Elizabeth Molyneux
General Manager Energy Markets Regulation

³ Including ENGIE's proposed 'transmission bonds' approach, whereby generators could purchase bonds in a transmission infrastructure project in a REZ location.

⁴ Against other credible network or non-network alternatives such as local generation, storage or demand management, and other new emerging technologies against other credible network or non-network alternatives such as local generation, storage or demand management, and other new emerging technologies.