



EnergyAustralia

LIGHT THE WAY

22 February 2019

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To Mr Reiter,

Expanding NSW-QLD transmission transfer capacity, Project Specification Consultation Report

We welcome the opportunity to comment on the joint Project Specification Consultation Report (PSCR) being conducted by TransGrid and Powerlink, the first step in the Regulatory Investment Test for Transmission (RIT-T). We also commend TransGrid and Powerlink for providing additional information in their Inputs and Methodology Consultation paper¹. This is a positive step in ensuring that an open and transparent consultation is run which is of particularly importance due to the major upgrades of the network proposed in this PSCR.

EnergyAustralia is one of Australia's largest energy companies with around 2.6 million electricity and gas accounts in NSW, Victoria, Queensland, South Australia, and the Australian Capital Territory. We also own, operate and contract an energy generation portfolio across Australia, including coal, gas, battery storage, demand response, solar and wind assets with control of over 4,500MW of generation in the National Electricity Market (NEM).

The NEM generation mix is rapidly changing. Older traditional generation is being retired and replaced more commonly by variable renewable generation. AEMO's 2018 Integration System Plan (ISP) identified that a minor upgrade (identified in the ISP as a group 1 project) to the NSW to Queensland (QLD) Interconnector would likely deliver positive net market benefits as soon as it could be delivered, through more efficient sharing of generation resources between states². The 2018 ISP also forecast that a medium upgrade (identified in the ISP as a group 2 project) to further increase transfer capacity will likely provide additional longer-term benefits. This PSCR also consider a range of significantly larger upgrades ranging in cost from \$560m to over \$2b.

Customers pay for any network investment and bear the investment risk therefore it is important that any long-term network investment and its projected benefits is sufficiently scrutinised to ensure customers benefit from their investment. EnergyAustralia expects that transparent and clear modelling, results, sensitivities and

¹ <https://www.transgrid.com.au/what-we-do/projects/current-projects/ExpandingNSWQLDTransmissionTransferCapacity/Documents/Inputs%20and%20Methodology%20Consultation%20Paper%20-%20Expanding%20NSW-QLD%20Transmission%20Transfer%20Capacity%20-%20December%202018.pdf>

² AEMO 2018 ISP, page 7, https://www.aemo.com.au/-/media/Files/Electricity/NEM/Planning_and_Forecasting/ISP/2018/Integrated-System-Plan-2018_final.pdf

scenarios will be presented in the Project Specification Draft Report (PADR) to allow stakeholders to be satisfied that the preferred option is in the best interest of customers.

Assumptions

The PSCR proposes that the assumptions underpinning the 2018 ISP will be used in the PADR modelling to determine the preferred option. AEMO is also currently running a 2019 planning and forecasting consultation which will be used to inform its ongoing publications, including the 2019 NEM Electricity Statement of Opportunities (ESOO) and the next ISP³. Given that the assumptions and scenarios from this process are aiming to be finalised by late April 2019, it is our view that this new set of updated information should be used in the modelling for the PADR as far as the timeframe allows. This will allow the modelling to incorporate key stakeholder views from the AEMO consultation while also ensuring that consistent assumptions are being used across varying modelling projects.

We note that TransGrid and Powerlink intend to test the retirement of coal power stations by assuming varying fixed closure dates across the various scenarios. For example, it is proposed that in the fast change scenario half of coal power stations capacity is retired 5 years earlier than end-of-technical-lives. It is EnergyAustralia view that the modelling should consider the economic viability of all existing power stations and should not simply fix closure dates as an assumption and/or run varying scenarios with alternative fixed closure dates. We encourage TransGrid and Powerlink to consider this in their PADR modelling.

The PSCR and associated Input and Methodology Assumptions Workbook indicate that TransGrid and Powerlink intend to use a discount rate (weighted average cost of capital (WACC)) of 4.6% for transmission network capital cost⁴. This discount rate may be appropriate for cost recovery of a regulated asset base but as customers are being asked to bear any risk that the forecast benefits of the project do not eventuate we would suggest that this discount rate should be significantly higher. The PADR should also test the market benefits associated with the credible options using even higher discount factors to reflect the uncertainty of any forecast market benefits and the additional risk customers are being asked to take.

It is proposed in the PSCR that most of the significant network expansions currently under consideration are built and the timing only will be tested as a sensitivity, for example it is assumed that the preferred option of VIC-NSW interconnector is built. Given the likely significant impacts that major network upgrades could have on the reported market benefits we would encourage TransGrid and Powerlink to not only test the timing of any new network investment but also the size and if it is in fact constructed.

It is intended that the PADR modelling will consider both the Victorian Renewable Energy Target (VRET) of 50% renewable energy by 2030 and the Queensland Renewable Energy Target (QRET) of 50% by 2030. In the near future there is potential that NSW will have

³ <https://www.aemo.com.au/Stakeholder-Consultation/Consultations/2019-Planning-and-Forecasting-Consultation?Convenor=AEMO%20NEM>

⁴ <https://www.transgrid.com.au/what-we-do/projects/current-projects/ExpandingNSWQLDTransmissionTransferCapacity/Documents/Inputs%20and%20Methodology%20Assumptions%20Workbook%20-%20Expanding%20NSW-QLD%20Transmission%20Transfer%20Capacity%20-%20December%202018.xlsx>

major changes to state based renewable energy targets and policies. For example, both the NSW Liberal and Labour parties have recently announced major funding for residential solar and battery systems as well as the Labour party announcing its intention (if elected) to invest in over 7GW of renewable energy⁵. Given the likely policy changes around renewable energy EnergyAustralia would encourage the PADR to consider this sensitivity in their analysis of market benefits. For example, depending on election outcomes and timing, NSW policy changes could be included in the base case. Increased renewable generation in NSW is likely to materially impact the modelling results.

Modelling information in PADR

We would encourage TransGrid and Powerlink to provide as much information as possible to support the PADR. For example, it is important that the Plexos model outputs (or similar) are available to participants. This ensures that stakeholders can complete a critical review of the modelling outcomes and understand how the benefits are realised. The PADR also needs to be explicit about whether the results are driven by outcomes from modelling itself or whether any outcomes were fixed input assumptions. For example, in generator expansion modelling does the model choose what replacement technology/plant is built or is the model guided to build to a certain end state by input assumptions. It is important for stakeholders to be able to understand the drivers behind the model results.

Identified market benefits

Powerlink indicates that they expect that there will likely be significant intra-regional congestion in the central Queensland network due to an unprecedented level of renewable energy investment activity⁶. As highlighted in the PSCR Intra-regional congestion may prevent some of the potential market benefits from increased interconnector capacity being realised. We would encourage TransGrid and Powerlink to robustly model the impacts of congestion and present the results and sensitivities to stakeholders in a transparent manner that allows stakeholders to be satisfied that any intra-regional congestion has been sufficiently considered when reporting forecast market benefits.

The PSCR identifies that key sources of market benefits will be reduced investment costs by reducing the need for new gas fired generation in NSW and allowing of more efficient generation sharing between NSW and QLD. While additional interconnection will likely provide access to low priced generation from adjacent regions what it does not do is provide additional firm capacity into a region. Local generators are the natural sellers of hedging contracts (such as caps and swaps) in a region. Market participants, to some extent, are willing to rely on inter regional hedging products (for example SRA's) but there are challenges around the firmness, volume and price of these products. The RIT-T does not require the proponent to explicitly consider potential impacts on the availability of hedging contracts in the NEM. We would like TransGrid and Powerlink to consider this in the PADR, especially given the larger network options that are also being investigated which could impact local generation investment and/or retirement decisions.

⁵ <https://www.smh.com.au/politics/nsw/nsw-labor-plans-to-create-state-owned-power-company-20190218-p50yhu.html>

⁶ PSCR, Page 22,23 <https://www.transgrid.com.au/what-we-do/projects/regulatory-investment-tests/Documents/QNI%20PSCR%20November%202018.pdf>

We also encourage consideration to be given to the market impacts of transmission outages that are required to complete the network upgrades, to ensure that any market costs are considered in assessing the preferred option.

Conclusion

EnergyAustralia looks forward to reviewing the modelling and results to be presented by TransGrid and Powerlink in the next stage of the RIT-T process. The ISP recommended that a minor and a medium sized upgrade of the NSW-QLD interconnector could likely deliver market benefits in the near term. The PSCR is also considering several significantly larger options that may deliver market benefits to customers.

We encourage TransGrid and Powerlink to use the updated assumptions from the AEMO forecasting and planning consultation. This will allow the PADR modelling to incorporate stakeholder views from the AEMO consultation process which will help improve the transparency of the modelling process.

It is imperative that modelling results are transparently presented in the PADR and associated supporting material to ensure that stakeholders can complete a critical review of the modelling outcomes and understand how benefits are realised.

Customers pay for and bear the risk that long-term network assets do not deliver the promised benefits and the PADR needs to satisfy stakeholders that the preferred option is in the best interest of customers.

If you would like to discuss this submission, please contact **Andrew Godfrey on 03 8628 1630** or **Andrew.Godfrey@energyaustralia.com.au**.

Regards

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