Queensland Government

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Submission to Queensland Government on Electricity supply options for the North-West Minerals Province Consultation Regulatory Impact Statement

The Australian Energy Council (AEC) welcomes the opportunity to make a submission to the Queensland Government on Electricity supply options for the North-West Minerals Province Consultation Regulatory Impact Statement (CRIS).

The AEC is the industry body representing 20 electricity and downstream natural gas businesses operating in the competitive wholesale and retail energy markets. These businesses collectively generate the majority of the electricity in Australia, sell gas and electricity to over ten million homes and businesses, and are major investors in renewable energy generation. The AEC would also like to note that APA is not a member of the AEC.

Discussion

The AEC notes that the CRIS seeks to assess three options for affordable, secure, reliable and sustainable electricity supply in the North-West Minerals Province (NWMP).[1] This appears to ignore the broader electricity consuming community of Queensland because it circumvents the National Electricity Objective (NEO) described in the National Electricity Law (NEL):[2]

"to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to:

- *price, quality, safety and reliability and security of supply of electricity*
- *the reliability, safety and security of the national electricity system."*

It is clear from the CRIS that the only option that would adhere to the above is Option 1 "Business as usual". The AEC considers the ongoing technological development of Variable Renewable Energy (VRE), energy storage and their integration into local networks would imply this approach is the logical pathway. In contrast Options of 2 and 3 involving the construction of a $2.5 billion 40-year life asset ignores the trajectory of the rapidly evolving Australian energy market. The market has moved on since this project concept was first proposed over a decade ago.[3]

VRE costs are on a downward trend whereas an "estimated" $2.5 billion transmission connection to deliver at best 395MW of supply (over the life of the project)[4] seems excessive representing neither a good allocation of scarce resources nor capital efficiency.

[1] CRIS, p5.
[2] https://www.legislation.sa.gov.au/__legislation/lz/c/a/national%20electricity%20(south%20australia)%20act%201996/current/1996.44.auth.pdf
[3] https://www.sarinaslegal.com.au/single-post/2014/05/11/copperstring-concern-grows-after-approval
[4] CRIS, p10.

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Option 1

The AEC is supportive of Option 1 because there is already a modern gas fired plant which is connected to APA's Carpentaria Gas Pipeline and Jemena's Northern Gas Pipeline. Furthermore, the AEC believes it may be able to be further improved with additional VRE and the commissioning of short duration storage. For example, 8hrs of battery storage is estimated to cost is $2,959 /kW for 8 hours of storage and these costs are trending down.[5]

The primary benefit of Option 1 is it has no cost impact on electricity customers in rest of Queensland (ROQ).

Options 2 and 3

A 1,100km transmission line to supply an average of 373MW under the base case and 395MW under the high case.[6] The cost is "estimated" to be $2.5 billion. In contrast Powerlink transports 48,204GWh annually (average load of 5,500MW) and has a regulatory asset base (RAB) of $7.2 billion.[7] Hence, a 34% increase Queensland's transmission RAB to deliver an increase of circa 7% of electricity transmitted.

The AEC has many concerns with either of these proposals and does not consider either of them to be worthy of further consideration:

- They are both inconsistent with the NEO.
- Option 2 will cost ROQ electricity customers between $1.1 to $1.7 billion. The estimated costs for Option 3 are $0.5 to $1.1 billion.
- The ultimate costs of large-scale transmission projects are notoriously difficult to forecast with many going significantly overbudget (eg, EnergyConnect). The CRIS provides no evidence as to the quality of the $2.5 billion cost estimate. Under Option 2, 70% of cost overruns will be added to the RAB and recovered through project revenues which the Queensland government guarantees.[8] It appears that ROQ electricity consumers are also exposed to this risk.[9]
- It is a 40-year asset which is contingent on ore bodies, commodity prices and the decisions of mining companies. The cost of electricity is a second order condition.
- There is no supporting evidence for the assumptions presented in the CRIS. One assumption is wholesale electricity costs of $50/MWh for the forecast period. This is a critical assumption for the economics of these options yet there is no detail as to how it was arrived at.[10]
- AEMO has recently released its draft Integrated System Plan (ISP) which has over $12 billion of "actionable" transmission projects. Furthermore, Victoria, NSW and Queensland are at various stages of progress with respect to developing Renewable Energy Zones which will require further transmission investment. With respect to NSW the level of VRE and storage is set out in legislation to be completed by 30 December 2029. Proceeding with CuString will only add further pressure on material and labour costs.

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[5] CSIRO Gen Cost 20221-22, December 2021, Consultation draft, p 69.
[6] Consultation paper, pp10-11.
[7] https://www.aer.gov.au/system/files/State%20of%20the%20energy%20market%202021%20-%20Full%20report_1.pdf, p128.
[8] CRIS, p18.
[9] CRIS, p19.
[10] CRIS, p15.

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- The CRIS notes the Customer Service Obligation (CSO) for Mt Isa is $24 million. The AEC notes that this is a trivial component of the CSO as in FY20 the total CSO was $484 million and $488 million in FY21.[11] The AEC believes there is potential for Options 2 and 3 to increase the NEM component of the CSO through increased TUOS charges.

- CopperString investors will earn a 5.03% return guaranteed for 23 years but the CRIS does not provide any significant detail as to how this is to be determined.[12] In contrast the CRIS notes a post-tax vanilla Weighted average cost of capital (WACC) of 4.65% in Powerlink's 2022-27 AER draft decision (September 2021).

Existing Cost-Benefit Approaches

The NEM has in place a robust and transparent approach to determine the cost-benefits of proposed large-scale transmission development: the Regulatory Investment Test for Transmission (RIT-T) overseen by the national regulator. Substantial reforms have accelerated the RIT-T process, but which have left its well-founded economics intact. The AEC supports the RIT-T both in terms of ensuring the network is developed efficiently and also in providing predictability for market investors with respect to how it is developed.

The AEC considers that any large transmission development which is going to be supported by Queensland customers be first subject to a standard independent RIT-T overseen by the Australian Energy Regulator not what is proposed under Option 3.[13]

Conclusion

The AEC supports Option 1 and does not support Options 2 and 3. The AEC always considers government policies are best funded directly and not through electricity prices. Hence, if reducing electricity costs in the NWMP is a policy then direct government subsidy is the most appropriate way to implement this. This would eliminate the risk of a 40 year-life stranded asset if electricity demand decreases in the NWMP and also the distortionary effects on Queensland's economy created by artificially higher electricity prices for consumers and businesses.

Any questions about our submission should be addressed to Peter Brook, by email to peter.brook@energycouncil.com.au or by telephone on (03) 9205 3103.

Yours sincerely,

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[11] https://www.energyq.com.au/__data/assets/pdf_file/0012/939495/Ergon-Energy-Queensland-Pty-Ltd-Annual-Financial-Statements-2020-21.pdf
[12] CRIS, p26.
[13] CRIS, p20.