

Inquiry into the feasibility of undergrounding the transmission infrastructure for renewable energy projects – Supplementary Questions

Australian Energy Regulator Response

1. What is the cost differential, the regulator would find acceptable in order to approve a more expensive option for a transmission project?

As outlined in our opening statement, businesses can apply to the Australian Energy Regulator (AER) for approval of the costs associated with major capital projects, such as transmission projects. In doing so, we consider the outcomes of the Regulatory Investment Test (RIT).

Under the national framework, transmission and distribution network service providers must apply a cost benefit test, the RIT, before building major electricity network infrastructure such as transmission lines or interconnectors.

The purpose of this test is to assess a range of credible options that could address a need in the electricity network, and then identify options to maximise the net economic benefits for the market.

The RIT is a net benefit test. This means that a lower cost project may not necessarily be the preferred option. A net benefits test is when a preferred option is determined on the size of the benefits compared to the size of the costs. For example, if the benefits of a higher cost project exceed the costs, and the benefits are higher than any cost differential compared with other projects, then it would be the preferred option. This is on the basis that it maximises the positive net economic benefits to participants in the National Electricity Market (NEM).

We also consider the long-term interests of consumers. This consideration is typically in line with what project/option provides the greatest net benefit to consumers.

2. In circumstances where the difference in price between overhead and underground transmission projects is approximately double, would this satisfy the regulator?

As outlined in the previous question, it is the estimated net economic benefit to the market associated with all credible options that drives the selection of the preferred option. The preferred option is not solely driven by the project having the lowest costs.

Therefore, a higher cost option, such as undergrounding may be a preferred option if the business is able to demonstrate there are significant benefits and it maximises the net economic benefit amongst the credible options.

3. What changes would be required to permit consideration of wider impacts, such as amenity, fire safety and less impact on landowners, when determining the cost / benefit ratios of project?

Under the current rules, either as part of their network reset or through a one off contingent project, businesses can propose costs for AER's consideration related to:

- network resilience (i.e. the impact of extreme weather-related events on electricity network performance, and their effect on communities)
- direct impact on landowners (i.e. compensation to acquire land)
- expenditure for a network to maintain the safety and reliability of the network (i.e. to meet their safety obligations including fire safety)

The AER then determines a prudent and efficient amount of expenditure for a network to maintain the safety and reliability of the network.

Under the National Electricity Rules, expenditure on transmission assets to address visual amenity (i.e. undergrounding, re-routing, or relocating sub-stations) can be included in the costs of the project option in the RIT-T, and the RIT-T can also include the benefits of avoiding or minimising project delay that may result if the project does not address visual amenity. However, the benefits of improving visual amenity itself cannot be included as a benefit in the RIT as this benefit is not a NEM related benefit (i.e. it is not a benefit to those who produce and consume as participants in the NEM). This would require changes to the rules via the Australian Energy Market Commission.

The NSW Government is also in the process of establishing a Strategic Benefit Payment Scheme for new major transmission projects in NSW. Under the Scheme, private landowners in NSW will receive annual payments for hosting new major high-voltage transmission projects for a period of 20 years. This payment is additional to existing compensation paid to landowners. It is expected that payments made to landowners by a network operator under the Scheme will be included as a cost in the network operator's five yearly revenue proposal submitted to the AER and therefore passed on to electricity consumers.

It may also be of interest to the committee that on 12 August 2022, Energy Ministers also agreed to fast track the introduction of an emissions reduction objective into the national energy objectives, consisting of the national electricity objective, national gas objective and national energy retail objective. As the independent regulator, the new national energy objective will guide our work to promote the long-term interests of consumers with respect to achieving emission reduction targets, alongside our existing considerations which includes price, quality, safety and reliability of energy supply. This provides the regulator greater scope to consider initiatives that are aimed at emission reduction as part of our considerations.