

NEOEN



NEOEN RESPONSE

2022 Draft ISP

7 Feb 2022

Lodged via email: isp@aemo.com.au

Dear AEMO ISP Team,

Thank you for the opportunity to respond to the 2022 draft ISP. The ISP projects create excellent benefits in improved reliability and trade efficiency for the NEM. Despite AEMO's welcome efforts in determining least regret pathways we are concerned that timely funding remains a hurdle for ISP projects. Our submission focuses on this aspect as we are confident in AEMO's approach, and we agree with AEMO's definition of potential risks from late delivery being higher than the costs of early delivery.

About Neoen

Neoen is the leading French, and one of the world's leading independent producers of renewable energy. Neoen is a responsible company with a long-term vision that translates into a strategy seeking strong, sustainable growth. We have 5 GW of projects globally in operation and under construction, including in the NEM: Hornsdale Wind Farm (309 MW in SA); Parkes, Griffith, Dubbo, and Coleambally Solar Farms (combined 255 MW in NSW); Bulgana Green Power Hub (hybrid wind/battery system), Numurkah Solar Farm, and Victorian Big Battery (combined 614 MW in VIC); and the Degussa Hybrid Power System (10.6 MW in WA). Neoen is also the owner of Hornsdale Power Reserve (150 MW battery system) in SA, and Victorian Big Battery (300 MW).

CBA needs to evolve with the NEM

The net system cost approach as defined by the RIT-T methodology is non-functional when it comes to strategic infrastructure investments. All recent transmission projects have needed government support to proceed despite the clear consumer benefits. In addition, governments have engaged in out of market contracts to support the network because the legacy CBA methodology cannot adequately measure the economic benefits of transmission to society.

Example:

A coal power plant suddenly and catastrophically fails. It will take over a year to repair and it is not economical to do so. In the meantime, open cycle gas turbines are used to meet demand.

Under the system cost approach, the increase in cost is simply the volume of coal generation replaced by gas, multiplied by the difference in fuel costs. This might represent a 10% increase in operating costs for the region.

However, consumers pay the marginal wholesale price multiplied by total generation. A consumer price approach would calculate a new marginal price that might be 100% higher on average than the expected normal price, due to price being set more frequently by gas rather than coal.

The actual cost to consumers in this scenario is enormous, but it would be immaterial using a system cost approach. Put another way, windfall gains to generators are not calculated under the system cost approach.

In addition to the error between a cost based approach and a price based one, there is also the impact of extreme price events that occur in low reserve conditions. These extreme prices could be partly mitigated by better transmission which allows transfer of generation capacity from regions with high reserves to ones with low reserves.

The system cost approach greatly biases projects against early construction. The cost of early delivery is not properly balanced with the cost of late delivery.

Using a cost approach; early delivery will always mean a loss of NPV for the market if an adverse event does not occur. The change in generation cost will not be significant, but capital has been deployed with an associated ongoing cost.

Using a price based approach, early delivery may not significantly change NPV for society if an adverse event does not occur. Modest price benefits remain and can substantially compensate consumers for bringing forward capital expenditure.

Transmission asset lives are far longer than either a cost or price based model can be expected to remain accurate. We also recognise that a price based model has a higher degree of subjectivity and inaccuracy over the long term compared to cost based modelling. However, given all the ISP projects are necessary within a decade anyway, using a price based measure in the short term can better value whether consumers will benefit from early delivery of ISP projects.

Value of insurance

We are concerned that ISP projects are not being adequately valued as insurance against adverse events within the NEM. Historically, a large proportion of coal retirements have been a surprise based on major component failure. The accumulation of maintenance costs can also leave a station to be uneconomic and in disrepair without significant warning. Requiring generators to give prior notice does not necessarily solve this problem as a bankrupt entity does not particularly care about meeting regulatory requirements and may not have funds with which to pay a fine. Any penalty levied on a generator for failing to provide adequate notice would be miniscule compared to the cost to consumers for market disruption.

In the Transmission Investment Review, the AEMC has rejected the possibility of an evolved CBA methodology for transmission investment.

We urge AEMO to consider alternative paths that can assist earlier commitment to ISP projects as insurance against adverse events. This could be through engagement with the AEMC on changing economic model, or a request for strategic funding from the Commonwealth.

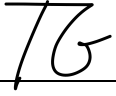
Staged approach

We appreciate the idea to have greater optionality to bring forward ISP projects. For the future ISP projects this could be highly valuable in case circumstances change.

However for near term critical projects such as Humelink, a staged approach reduces timeline certainty for the market without significant gains in timeline optionality. For actionable ISP projects (which Humelink should be classified as) it would be preferable to commit fully and reach early completion without trying to gain timeline optionality.

Neoen is available at your convenience to discuss these topics further.

Yours sincerely,

A handwritten signature in black ink, appearing to be 'TG', positioned above a horizontal line.

Tom Geiser,
Senior Market Manager,
Neoen Australia