



Economy and Infrastructure Committee

Inquiry: Inquiry into the Closure of the Hazelwood and Yallourn Power Stations

Hearing Date: 16 February 2022

Questions taken on notice

Directed to: Marinus Link

The Chair requests responses to the following questions:

1. Your submission mentions the benefits of the proposed Victoria to NSW interconnector (VNI West).

What role will that project play in spreading the benefits and costs across the National Electricity Market?

Response:

- The transitioning National Electricity Market (NEM) requires different sources of clean and reliable energy backed by a variety of storage options and transmission.
- The Australian Energy Market Operator's (AEMO) 2022 Draft Integrated System Plan (ISP) confirms the vital role of both Marinus Link and VNI West in the optimal path to net zero emissions for Australian consumers.
- AEMO recognises Marinus Link as a fully actionable project that should be 'in service as early as possible' to optimise benefits for consumers. It identifies VNI West (via Kerang) as an actionable project with staging and decision rules.
- Independent analysis undertaken by TasNetworks shows that, with Marinus Link and other actionable ISP projects in service better sharing of renewable and dispatchable resources (including long-duration energy storage from Battery of the Nation and Snowy 2.0) will occur between the three southern National Electricity Market (NEM) states.
- This interconnector investment supports the development of Renewable Energy Zones (REZs) across the NEM, assists in lowering wholesale electricity costs for consumers and improves energy supply and reliability.

2. If Marinus Link does proceed, how will it be funded?

Response:

- Marinus Link Pty Ltd, a wholly owned subsidiary of TasNetworks which is a Tasmanian Government owned enterprise, is currently progressing the Design and Approvals phase of the project with funding support from the Australian and Tasmanian Governments.



- With a strong business case, where benefits of Marinus Link to consumers and the broader economy and environment far outweigh the costs, raising capital to build the project is not the challenge.
- Cost recovery over the life of the asset is the area that requires focus. Allocating costs of Marinus Link fairly across the customer base is being considered by governments via the Energy National Cabinet Reform Committee (and is also being considered in other forums). Marinus Link is confident that resolution of this will be achieved in due course.

3. What can batteries achieve compared to Marinus Link?

Response:

- Both batteries and pumped hydro storage will be required as part of Australia's rapid energy transition. We will need a portfolio of varying duration storage technologies and interconnection to deliver a reliable, secure and affordable energy power system.
- A portfolio of up to 19,000 megawatts of varying storage technologies, including pumped hydro, will be needed by 2035 to manage grid reliability, stability and affordability as the energy market transitions rapidly.
- Marinus Link is not in competition with batteries – in fact, our modelling forecasts that over 75% of new storage deployed in the NEM will be battery technology, while the cost of batteries will reduce by up to 70% in the next 10 years. The case for Marinus Link remains clear under these scenarios (and inclusive of other sensitivities like hydrogen development, distributed energy resources and so on).
- Batteries are important as a short-term responder, facilitating 'day shifting' of energy (i.e. storing excess solar energy throughout the day for use at night time). The hydro storage unlocked by Marinus Link offers both day-shifting and longer-term seasonal-shifting of energy (i.e. storing excess energy for longer periods of wind and solar droughts), meaning stored energy can be dispatched when the wind isn't blowing or the sun isn't shining for days on end.
- It would cost at least twice as much for batteries to deliver the same storage benefits as the pumped hydro resources that will be unlocked in Tasmania by Marinus Link. This reflects that batteries have a shallower depth of charge and shorter technical life that will require battery replacement.
- The need for both Marinus Link and battery investment is shared by the market experts, with AEMO confirming that even in a situation where there is significant uptake of battery storage



– as much as 10,000 megawatts of batteries – Marinus Link is needed to support lowest cost outcomes for consumers.