‘It Pays to do Proper Analysis Before Making a Final Investment Decision on Marinus Link’, *Mercury*, Talking Point, 34,47.

Graeme Wells

Mr Albanese’s recent announced loan finance for Tasmanian renewable energy projects are, no doubt, a tribute to the persistence of various Tasmanian negotiators. For those of us not directly involved, however, it is extremely difficult to judge the merits of the various projects under consideration.

Four components, all inextricably linked, are involved.

Marinus Link, constructing two 750 MW transmission lines under Bass Strait, has attracted most scrutiny. Present plans are for the first cable to be operational by 2028 or 2029, and the second cable two years later. The estimated cost is currently 3.8 billion dollars.

The second component, Battery of the Nation, comprises an upgrade to the Tarraleah power station and a new pumped hydro scheme based on Lake Cethana. The purpose of these schemes is, apart from providing a small increase in base load capacity, to provide dispatchable storage in periods when other generators, such as wind farms, are unproductive.

The third component is the construction and upgrade of the Tasmanian transmission network to cope with the expected increase and pattern of load. This component is known as the North West Transmission Developments.

Much, if not most, of the energy flows across Marinus from Tasmania are to be provided by private sector developments such as wind farms. These developments comprise the fourth component of the overall scheme.

The proposed increase Tasmanian capacity, whether from public or private sources, would not be viable without Marinus. Conversely Marinus would not be viable without increased Tasmanian capacity.

All four components stand or fall together. If a final investment decision on Marinus is to be made in late 2024, it is essential that all four components be analysed in detail. To do otherwise is folly. It would be like basing the purchase of a car based solely on its transmission, leaving the purchase of an engine until later.

What do we know about each of the four components? The profitability of Marinus as a standalone project has been contested by experts, but heavily subsidised federal finance has come to the rescue. The terms of this loan finance, including the repayment schedule, are not publicly available. But it appears that the subsidy cuts the annual cost of Marinus for electricity customers by up to half. That’s quite a sweetener. As with all subsidies, the relevant question is whether those resources might have been better directed elsewhere.

What about Battery of the Nation? The cost of Tarraleah and Cethana pumped hydro is estimated to be 2.2 billion dollars. One billion dollars of federal subsidised finance will be available for these projects. It is important to note that pumped hydro makes no direct contribution to Tasmania’s 200% renewable energy target. It takes more energy to pump water uphill than is generated on the way down. Instead, its function is to cover shortfalls in supply.

A further 800 million dollars is required to complete the North West Transmission Developments. Subsidised federal finance will also be available for this project, although the amount has yet to be specified.

Adding up results so far, these three components are likely to cost at least 6.8 billion dollars, supported by federal subsidies.

This spending does not, of itself, result in more than a marginal increase in Tasmanian electricity generation by Hydro Tasmania. When completed in the next decade, it improves reliability of supply. But it doesn’t get much further towards the 200% renewable energy target.

More wind farms will be required to justify the 6.8-billion-dollar outlay. These farms don’t come cheap. Unlike the other three components of the system, their owners require a commercial rate of return. Long term Power Purchase Agreements with Hydro Tasmania are required. Past performance of these contracts is not encouraging. For example, John Lawrence has estimated Hydro’s Power Purchase Agreement with Woolnorth Wind Farms resulted in a subsidy of $34m in 2021. Ultimately, that’s a burden on Tasmanian taxpayers.

The environmental impact of some of the proposed farms and transmission lines, Robbins Island for example, is significant. Proposals have not yet obtained regulatory approval. Other farms have yet to make it to first base.

The final cost of the four components is unclear. But it is likely that, after allowing for the contribution of subsidised finance, Tasmanian taxpayers will be asked to make an equity injection of around two billion dollars for a project which will not be complete until early in the next decade.

The costs and returns to combined wind, solar and battery systems are well understood. Private investors on the mainland appear to have no hesitation building them. Marinus Link may become redundant.

The same certainty cannot be claimed for the four components of Tasmania’s energy projects. Marinus Link, especially the second cable, may become redundant. Put aside the hype. Proceed with caution.