

## Response to Marinus Link Regulatory Investment Test for Transmission Supplementary Analysis report.

18<sup>th</sup> December 2020

Bob Brown Foundation (BBF) has the protection of the Earth and maintaining functioning ecosystems as core values. Addressing global warming and the biodiversity crisis as interrelated emergencies is our mission.

BBF welcomes the accelerating energy revolution globally which is seeing new technologies for generation, transmission, energy efficiency, transport rollout quickly and coming down the cost curve faster than anyone could have foreseen. It is extremely difficult to predict exactly what will be viable in a decade, let alone longer. But the trend is towards smaller, more flexible, distributed solutions which pose a far lower risk in this rapidly changing environment than large, centralised, long-lived assets. Yet the latter is what is being proposed with Project Marinus and Battery of the Nation. The risk of being leapfrogged and left stranded is high. The question of whether there will be a market for the energy at a price that is commercially viable when the project comes online is moot.

The Foundation notes Hydro Tasmania and Tas Networks Project Marinus and Battery of the Nation comprises:

- a) Two interconnectors via Project Marinus; and
- b) Reconfiguration of the Tasmanian Hydro system via Battery of the Nation to primarily provide energy services to the National Electricity Market rather than to the Tasmanian community; and
- c) Upgrades of existing and construction of new transmission infrastructure in Tasmania; and
- d) Upgrades of existing and construction of new Hydro assets in Tasmania; and
- e) Facilitation via subsidies of new wind energy generation in Tasmania to meet Tasmanian demand even though Tasmanians have already paid for existing Hydro generation assets to meet that same demand.

Since the justification for Project Marinus is that it delivers the firming benefits of Battery of the Nation to the NEM, the Project must be seen as integrated and costings should incorporate the full cost of both Marinus and Battery of the Nation upfront regardless of staged timing.<sup>1</sup>

This is especially so as Hydro Tasmania and the Tasmanian Government are expending funds in anticipation of the full delivery of Battery of the Nation and Project Marinus regardless of the staging. It is sleight of hand to assume the full benefit up front but stage the costs.

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<sup>1</sup> BBF Submission uses The Project to refer to one integrated project with Project Marinus and Battery of the Nation as component parts.



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Furthermore, the costs of the Project in the RIT fail to capture the full extent and financial costs of c, d, and e and none of the ecological costs.

The ecological consequences of a publicly funded transmission infrastructure build and associated subsidised private sector generation projects, together with Hydro refurbishment and new builds are significant. The three renewable energy zones and associated infrastructure will cover large areas of high conservation value in Tasmania and impact many different ecosystems and species.

Before any of this project proceeds Tasmanians need to interrogate:

- i) Whether it is necessary for Tasmania's energy security; and
- ii) Whether it is necessary or the most effective method for the mainland to achieve 100% renewable energy; and
- iii) Whether it will reduce emissions; and
- iv) Whether it is economically viable or the least cost solution.

An analysis conducted for Bob Brown Foundation by the Victorian Energy Policy Centre found that it was a resounding 'no' in all cases.

The whole premise of the project is to provide deep energy storage to the NEM. But where is the evidence that the NEM will need storage of more than eight hours on a regular basis rather than a short period and even if it does that, will Tasmania's Battery of the Nation be the most cost-effective solution?

The VEPC analysis concludes that such storage will not be necessary and even if it is, it will be for short periods and will be more cost-effectively met by battery technology. BBF would argue demand management is likely to complement batteries and together make the TasNetworks/Tas Hydro Project several times more expensive by comparison.

A recent example is energy demand management in Victoria with \$76.8 m over four years from the Federal Government for Alcoa's Portland aluminium smelter to curtail demand under the RERT. Grid reliability and security by pre-contracting with large industrial energy users and energy aggregators to cut their power use at extreme peak times in summer is a much more cost-effective solution than building the \$7billion Project.

With the rollout of electric vehicles and new rules regarding remote control of pool pumps, hot water cylinders, air conditioners from 2023 for example, aggregation will make it possible to supply energy or reduce demand which together with batteries and industrial demand management may well eclipse any service Tasmania has to offer and deliver it far more cheaply.

TasNetworks Table 11 showing a comparison of battery costs with Battery of the Nation is misleading and demonstrates why the Project should refer to both components. Battery of the Nation firming benefits cannot be delivered to the NEM without Marinus Link, therefore the cost

comparator between batteries and Battery of the Nation should include the full cost of Marinus Link.

**Recommendation:**

**The modelling should be redone to incorporate the full cost of Marinus Link+Battery of the Nation compared with batteries.**

**Given the VEPC findings, evidence needs to be provided on the outputs of the modelling regarding how often the service Tasmania will provide ie periods of storage greater than eight hours, will be needed. This is essential to make judgements about the relative cost of batteries and demand response solutions.**

**Why did AEMO assume that TRET would result in 10,500GWh VRE being available to the NEM?**

AEMO's inclusion of the project in the 2020 ISP does not negate this analysis. AEMO does not make a judgement about the merits of a policy. It feeds into the model the information it is provided by its stakeholders. AEMO has accepted in ISP 2020 TasNetworks case for early inclusion of Marinus Link as stage one of an integrated project on the assumption that

- i) Tasmania will over-build renewable energy generation and that the otherwise spilt energy (10,500 GWh) will be fed into the grid at low cost; and
- ii) It is an investment Tasmania will have to build in the first place; and
- iii) It provides access to Hydro Tasmania's Battery of the Nation with no associated cost.

The assumption was predicated on and designated as 'actionable' on the Tasmanian Government's legislating the Tasmanian Renewable Energy Target (TRET) and on a cost-sharing agreement being negotiated.

But the TRET does not guarantee or direct or facilitate the build of 10,500GWh of excess renewable energy. So AEMO has fed 10,500GWh into the model on the basis of legislation which does not provide any mechanism for generation to be built. The fact of AEMO's inclusion of the 10,500GWh has then been used by the Tasmanian Government and TasNetworks to underpin the business case for The Project and justify the passage of the TRET legislation in the Tasmanian Parliament. This is revolving door subterfuge based on announcements and an artificial feedback loop.

As there is no business case/market for additional wind farms in Tasmania without the integrated project, the Tasmanian Government is subsidising wind farms. There is no reason for this other than to facilitate the overbuild of renewable energy so that 10,500GWh is available to the NEM as per AEMO's assumptions.

The figures provided by TasNetworks for the Regulatory Investment Test do not internalise the actual cost of facilitating the renewable energy overbuild and associated transmission and Hydro infrastructure upgrades. There is no arrangement for the wind farm generators to pay for new transmission associated with their generation assets. These are costs borne by the Tasmanian and Australian taxpayers. If they were internalised they would demonstrate that this is not 'least cost'.

The off-take agreements signed by Hydro Tasmania and Aurora Energy to create bankable projects like Granville Harbour Wind and Cattle Hill Wind are not commercial and are reflected in the annual reports of the Government Business Enterprises as 'onerous' contracts.

The Tasmanian overbuild of renewable energy is not low cost and will of necessity increase energy prices in Tasmania. In fact, if Marinus Link is made a regulated asset then Tasmanian energy consumers will pay twice, first to subsidise the uneconomic offtake agreements and secondly for the cable to transmit the energy to the NEM. The generators on the other hand will not pay at all. This is a classic case of 'privatising the profit and socialising the costs'. See <https://tasmanianinquirer.com.au/news/gutwein-directed-hydro-tasmania-to-enter-into-a-loss-making-deal-utility-says/>

The asset upgrades by Hydro Tasmania are the same. The fourth turbine at the Gordon Power Station has been needed for a long time to more efficiently manage the required environmental flows. The Tarraleah power station at the head of the Derwent has reached the end of its life and needed either to be decommissioned or rebuilt. By rebadging these as Battery of the Nation, the Australian taxpayers via the Federal Government have subsidised both these projects which should have been paid for by Hydro Tasmania's maintenance budget. Since they have been labelled Battery of the Nation all of the costs/subsidies for Hydro Tasmania's Battery of the Nation project should be reflected in the project costs.

### **Recommendation:**

**All financial costs, including taxpayer-funded subsidies, associated with The Project [Marinus Link and Battery of the Nation], be internalised in the RIT.**

**As none of the ecological or social costs are acknowledged beyond consultation with stakeholders, there should be a specific reference to these costs which the Tasmanian community will pay. The narrow interpretation of what constitutes a cost is a failing of the process.**

### **Cost Sharing Agreement**

The Achilles heel of the Project is the cost-sharing agreement required by AEMO for inclusion in Integrated System Plan.

A series of announcements is no substitute for an agreement. Premier Gutwein has said that the SPV created by the Commonwealth and Tasmania will help to make this a ‘bankable’ project. But TasNetworks does not raise capital on its own – it is all directly financed by Tas Treasury. Creating a ‘special purpose vehicle’ does not make this ‘bankable’. Any lender to the SPV will demand recourse to the government, there is absolutely no way that this will attract any non-recourse lending.

The Supplementary Analysis report assumes that there will be a change to the rules of cost sharing that will see the costs spread across all of the NEM rather than just Victoria and Tasmania as the current rules require.

The rule change is speculative. The Energy Subcommittee of Federal Cabinet was supposed to resolve this issue in 2020 but has made no progress in doing so. There is no timeframe for the matter to be resolved so the RIT should assume the existing rules apply.

Given that TasNetworks argues the benefits will be to the mainland rather than Tasmania, under the current rules, this assumes Victoria will pay the majority of the cost and as a regulated asset, those costs will be passed on to Victorian energy consumers. This begs the question as to why Victoria would impose this cost on its citizens when it can provide its own renewable energy, storage and demand management cheaper. As Bruce Mountain of VEPC says,

*‘mainland Australia does not need Marinus Link and Battery of the Nation to transition to 100% renewable energy: much cheaper options are available to achieve the transition. Victorian electricity consumers can’t reasonably be expected to contribute to the cost of Marinus Link. Though the main purpose of Marinus Link is to provide dispatchable capacity to Victoria, batteries would be much cheaper and would be provided in the contestable wholesale market and so would not impose mandated charges on consumers, as Marinus Link will. It is therefore inevitable that the development of Marinus Link will significantly raises electricity prices in Tasmania, mainly through the regulated recovery of the costs of Marinus Link, which will almost triple the value of TasNetworks’ regulatory asset base.’*

Since the 2020 ISP and the VEPC report was released, Victoria has made major energy announcements for Renewable Energy Zones and associated infrastructure.

NSW has also announced major investment in pumped hydro storage and new generation assets.

On the issue of benefits, the RIT claims the largest percentage of benefits from ‘deferred or avoided capital costs’. This needs to be detailed. Which capital costs or fuel costs are being deferred or avoided given that the Supplementary Analysis does not assume construction of new gas-fired power plants?

## **Recommendation**

- a) RIT should specify the proposed cost-sharing arrangement with Victoria under the current rules.**

- b) To achieve a clear picture and comparison of costs and benefits using the Step Change scenario new modelling should be done comparing**
- i) All the new proposals by NSW, Qld, SA and Victoria since ISP2020 without the Project [Marinus Link and Battery of the Nation] or anything from Tasmania over and above Basslink's capacity**
- with**
- ii) All the new mainland proposals (as above) + TRET + the Project, namely Marinus Link and Battery of the Nation.**
- c) The avoided and deferred capital costs and avoided fuel costs assumed in the Supplementary Analysis should be itemised.**

Regarding the assumed greenhouse gas emissions benefits the role of gas and coal in the NEM. Further interconnection weakens Tasmania's global renewable energy, 'clean and green' reputation. As with Basslink, any imported low-cost energy will be coal-fired as long as coal remains in the energy mix of the National Electricity Market. Basslink and the Project undermine a renewable energy future for Tasmania. As part of the NEM, as long as Tasmania imports and exports energy, Tasmania cannot claim to be any more renewable energy powered than any other component part of the National Electricity Market.

#### Reference

Mountain and Percy 2020, An analysis of the economics and greenhouse gas impact of Marinus Link and Battery of the Nation, A report prepared for the Bob Brown Foundation. Victoria Energy Policy Centre, Victoria University, Melbourne, Bruce Mountain and Steven Percy  
[https://www.bobbrown.org.au/gnews\\_180920](https://www.bobbrown.org.au/gnews_180920)

<https://tasmanianinquirer.com.au/news/gutwein-directed-hydro-tasmania-to-enter-into-a-loss-making-deal-utility-says/>