

14 April 2020

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Dear Mr Clark

RIT-T PROJECT ASSESSMENT DRAFT REPORT

I am writing to provide a submission on TasNetworks' RIT-T Project Assessment Draft Report for Project Marinus.

This submission is written in a personal capacity and draws on my extensive experience in market and regulatory analysis, infrastructure funding and energy project development, as well as my current roles in Peloton Corporate (a corporate finance, transactions and economics advisory firm) and Climate Capital (a renewable energy developer).

At a high level, Marinus is a tremendous economic opportunity for Tasmania and, as the PADR demonstrates, has significant net benefits for other regions of the National Electricity Market. I congratulate TasNetworks and particularly the Project Marinus team for the progress that has been made to date and the momentum that is building behind the project.

Such a significant capital project — and the associated renewable energy projects that it could enable — would demonstrate the State's role as a major participant in the inevitable decarbonisation of the Australian economy if the allocation of regulatory pricing to align with the project's net market benefits can be resolved.

Private sector participation in funding the project, particularly equity, would highlight Tasmania's success in global capital markets and its potential as a place to invest in the future.

I note that the central capex estimate for the project is \$2.76 billion in \$2019 for both 750 MW stages. Recent greenfield infrastructure transactions, and the experience of Peloton's team in arranging investor consortia for bids on existing assets, suggests that there would be little difficulty in securing the private sector capital required to build Marinus Link.

A default position of equity funding by the State — ultimately debt funded via Tascorp — along with the Commonwealth would not achieve the same strategic benefits as private funding, while also risking long-term underperformance arising from the lack of rigour and transparency imposed by live capital markets including equity holders and scheduled refinancing of project finance facilities.

In making this observation, I note that the funding model — and the timing of any external equity injection — is outside the scope of the PADR, but in my view it is of such significance that it should be highlighted and further considered over the course of this year.

Regardless of the funding model, economic and capital market conditions will affect the appropriate discount rate to apply in the RIT-T Project Assessment Final Report (PAFR). This is particularly challenging based on Peloton's current experience in valuing a major infrastructure investment during the current COVID-19 pandemic environment, particularly as the equity parameters are unobservable in the absence of robust earnings data across the market. While there is still access to liquidity for major investments, with

support from central banks, it is unclear whether key cost of capital parameters will be affected in the medium term and a likelihood that parameters will move in offsetting directions. As the PADR demonstrates, these can have a material impact on the project's feasibility.

Further, the current investment climate for major energy projects is not a level playing field.

While the RIT-T requires a robust assessment based on commercial discount rates, with the AER's regulated WACC as a lower bound, other projects may not be bound by the same conditions. For instance:

- ▲ Snowy 2.0 will have a material impact on the optimal timing of Marinus, but it is neither a regulated project nor is the final investment decision likely to be solely based on a fully commercial and risk-weighted WACC given its political support; and
- ▲ the Victorian Government's policy that is intended to allow the Minister to override the established processes (including the RIT-T) for strategic transmission investments introduces a risk to the optimal sequencing of transmission projects, which may detrimentally affect the net market benefits attributable to Marinus Link.

Tasmania's projects could be stranded by this re-ranking, particularly if Victoria and other states resist contributing through the price re-allocations in favour of their own preferred projects. However, bringing forward transmission and generation investment outside the traditional frameworks also increases the risk that coal-fired generators will close ahead of the currently expected timeframes, which is a binary risk for Project Marinus.

A further challenge in progressing the project is an increasingly uncertain wholesale market:

- ▲ prices fell markedly between the second half of 2019 and early 2020, which is particularly evident in both the Victorian and Tasmanian markets, reflecting expectations that cheaper gas would be available in the domestic market;
- ▲ these declines have continued as the COVID-19 response has affected electricity demand and load profiles, and the ongoing economic downturn is likely to be prolonged; and
- ▲ in the medium- to long-term, pricing is going to be affected by several important factors, including:
 - ▲ the pace of economic recovery post-COVID-19;
 - ▲ the absence of a clear, transparent and market-based framework to support new generation investment and phase out the coal-fired generators on economic terms;
 - ▲ slowing investment in large-scale renewables resulting from connection challenges, curtailment and marginal loss factors — which has been demonstrated by the Clean Energy Council — and now falling wholesale prices and a lower Australian dollar;
 - ▲ uncertainty over gas prices (including effect of global LNG markets via coal seam gas in Queensland).

It is likely that a boom-bust cycle will continue in the wholesale market. The current low prices discourage new investment, particularly grid-connected and behind-the-meter projects supported by the price-sensitive corporate market, while the risk of technical failures in the legacy coal fleet intensifies.

However, the timing of this cycle is impossible to forecast accurately, which means that Project Marinus is exposed to a greater degree of uncertainty than is desirable, while the merchant projects reliant on the new link (including Battery of the Nation and proposed large-scale wind and solar farms) also face the same issues without the regulatory cover.

Other specific issues that may affect the net market benefits include:

- ▲ inflow sequences: for instance, the PADR's market benefits include \$50m for the ability to operate the hydro system at lower prudent storage levels (PSLs). However, this seems to be predicated on storages starting at the PSL and a median inflow sequence (as well as the acknowledged policy change). There are many scenarios where the inflows and start storages may counter this benefit and actually reduce the

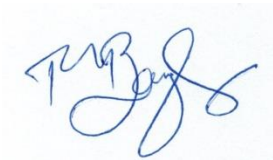
market benefits, e.g. if storages are above PSLs and a high inflow sequence occurs in both Tasmania and Victoria there will be less new peaking capacity required, which could materially reduce the NPV of market benefits. On the other hand, other permutations would likely indicate a larger benefit although these would be constrained by realistic operating scenarios; and

- ▲ Energy storage: the PADR includes two scenarios for storage — a battery life doubling scenario, which reduces net benefits by roughly 10%, and a doubling of the learning rate, which has a smaller impact. These are based on AEMO's 2019 assumptions. Fluence has provided a [submission](#) to AEMO in response to the draft ISP that highlights several concerns with the modelling, including:
 - ▲ pricing assumptions that are well above the current market,
 - ▲ a need to assume more aggressive price declines in coming years, and
 - ▲ an apparent focus on price arbitrage, rather than the full value stack, which slows the pace of storage.

These risks should be addressed in the PAFR, and could be quantified in a wider range of multi-factor scenarios.

Once again, I congratulate TasNetworks on the progress with Project Marinus and hope that the significant uncertainties that it is currently facing do not affect its development timelines. Please contact me on 0418 967 377 if I can provide any further clarification or advice.

Yours sincerely



Phil Bayley
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