

28 March 2019

Project Marinus Team
TasNetworks
Via email: projectmarinus@tasnetworks.com.au

Dear TasNetworks,

MarinusLink Initial Feasibility Report

Hydro Tasmania welcomes the opportunity to provide a response to TasNetworks' *Initial Feasibility Report* for Project Marinus.

We strongly support TasNetworks continuing to evaluate the prospects for increased interconnection with Victoria. Specifically Hydro Tasmania believes that exploring the benefits of a 1200MW link can provide effective, efficient and proactive power system planning as well as insurance for NEM energy consumers against future system risks. We strongly support the continuation of Project Marinus through to the Definition and Approvals phase.

Hydro Tasmania would like to make the following high-level comments:

- Current industry trends and the visible renewable energy development pipeline strongly suggest that **the Australian electricity sector will shift towards zero and low emissions generation at a faster rate than had previously been assumed**. This may cause the relative generation shares of technologies to change earlier than forecast and would increase the demand for, and value of, flexible dispatchable generation. Using updated assumptions where available is likely to result in a more positive cost-benefit analysis for the project.
- As AEMO's 2018 Integrated System Plan confirmed **the timing of coal-fired station retirements is one of the most significant influences on the power system development needs** over the next 20 years. There is a high degree of uncertainty regarding the timing of station closures and the long lead times associated with the implementation of large scale transmission investments. Hydro Tasmania strongly

supports the further work AEMO is doing to understand these issues. Scenarios where ageing emissions-intensive generation close only at the end of their design life (often assumed to be 50 years) are looking less credible as plant are closing for a range of economic reasons. Recent retirements of coal generators in Australia have an average life of 43 years (based on Hydro Tasmania analysis of Australian coal generators ceasing operation since 2012).

- **The 1200MW connection option will make a more substantial contribution to Victorian energy security and provides significantly greater opportunity for renewable energy development in Tasmania.** We note the 2018 Electricity Statement of Opportunities (ESOO) showed a tightening in Victoria’s future supply-demand balance against previous forecasts.
 - A challenge for system planning will be the ‘risk asymmetry’ for energy consumers between under and over supply. Ensuring that sufficient flexible generation is available when (or ahead of being) needed by the system is a critical issue. If long lead-time flexible generation arrives after capacity has been withdrawn the risks for consumers would be significant.
 - A 1200MW DC MarinusLink would provide additional system support benefits to the National Electricity Market. These additional benefits, include Frequency Control Ancillary Services and should be thoroughly assessed in the MarinusLink market benefits assessment. Hydro Tasmania can provide additional information and work with TasNetworks on this matter, if helpful.

- Given the high level of uncertainty over future generation closures it is important that TasNetworks continues to work towards an early connection date where possible and maintains the ability to meet this date in the current planning process. On this basis, **we strongly support the “*continuation of Project Marinus through to the Definition and Approvals phase*”**.
 - Maintaining the option for a 1200MW link to be commissioned in 2025 will offer the maximum flexibility to meet future NEM needs and mitigate the market risk of early plant retirement. While some options may have a more favourable cost-benefit analysis at this time, ensuring that the 1200MW at 2025 option is progressed will be important for future system planning particularly in light of the AEMO’s ongoing Integrated System Plan work (and upcoming insights report).

- In Hydro Tasmania’s submission to AEMO’s February 2019 *Planning and Forecasting Consultation Paper*, we noted that in Tasmania, the **build limits for renewable energy did not seem to reflect the full opportunity in the State**. For example, Hydro Tasmania believes there is significantly greater wind development potential than the 4000 MW

limit used in AEMO's model. While this is only likely to be material in later modelling years we recommended that arbitrary constraints on renewable energy development are removed in modelling exercises. It is our view that TasNetworks should not impose constraints on Tasmanian development except where there is clear evidence to do so.

- Selection of a **preferred route including the Victorian and Tasmanian landing sites will have a strong impact on the total cost of the solution as well as how and when renewable energy opportunities are developed**. The ongoing feasibility work must fully examine the constraint and MLF implications of different connection points. Hydro Tasmania encourages TasNetworks to undertake thorough consultation on this issue to ensure the costs and benefits of different routes are fully understood. Further, it is important that route selection does not inhibit future power system options (such as future interconnection).
- We note that **MarinusLink benefits will extended beyond Victoria and Tasmania**. On this basis, MarinusLink should continue to be considered as part of broader NEM planning issues including issues relating to the strategic funding of interconnection and broad cost-recovery mechanisms. We support the Tasmanian Government's position outlined in its *Current Situation Assessment* paper that *"Market and regulatory arrangements are required that facilitate the optimal combination of investments and allocating the cost of those investments to the beneficiaries"*.
- As outlined in the Report, the construction and commissioning of MarinusLink itself would provide significant economic stimulus both in Victoria (>\$1Bn) and Tasmania (at least \$600M). In addition to this, a 1200MW MarinusLink would act as the catalyst for Hydro Tasmania to develop on island pumped hydro that will generate significant investment and employment in Tasmania as well as creating opportunities for further Tasmanian wind farm and solar development by other parties.

Please contact Colin Wain (colin.wain@hydro.com.au) should you require any further information on this submission.

Yours sincerely



Stephen Davy
Chief Executive Officer