Lessons Learnt

Lessons Learnt Report: Initial Feasibility Report

**Project Name:** Tasmanian and Victorian Second Bass Strait Interconnector Feasibility Study (Project Marinus)

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<td>Technology Type:</td>
<td>HVDC Interconnection</td>
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**Key learning**

Developing a large and detailed set of analysis, across a range of inter-related technical streams, in a dynamic energy sector and with significant stakeholder and political interest, is very complex. Consolidating this into a credible report, supported by external quality assurance review, is therefore inherently challenging.

Timely two-way communication to all stakeholders is imperative to ensure that stakeholders are kept up to date and have input into the development of the report, and understand key messages, so that material factors are reflected consistently throughout the document. Engagement with other governments requires continued planning and clear governance frameworks.

High voltage direct current (HVDC) technology is evolving, with Voltage Source Conversion now the favoured international technology for interconnectors to connect power systems with increasing levels of inverter connected generation (such as wind and solar). There are a small number of undersea HVDC cable manufacturers, and strong demand for cable, which presents challenges in engaging with the manufacturers at an early project phase and obtaining reasonable estimates of costs.

Understanding public sensitivity about route options can affect public discussion on favourable routes. It is challenging to engage meaningfully with communities while managing commercial sensitivities associated with land purchases.

The economic market modelling to support analysis is detailed, time consuming and costly. It is important to understand the key drivers affecting market modelling outcomes, and iterate the modelling scenarios in the light of better understanding of these drivers.

The energy sector continues to have significant political, customer and media focus, and there are opportunities to engage with key stakeholders to achieve policy and regulatory frameworks that will contribute to the business case for Marinus Link. For example, the national transmission pricing rules as presently applied are not appropriate to allocate the costs of interconnector investments to the beneficiaries of those investments. Changes from current custom and practice in transmission revenue and pricing frameworks will be required to achieve a regulated Marinus Link, and community support for the project.
Implications for future projects

An agile approach is required to scoping studies, timelines and report structures, and supporting community and stakeholder engagement, to reflect the dynamism of the operating environment and emerging insights and conclusions from analysis.

Knowledge gap

There are a limited number of resources and consulting organisations that are able to undertake the studies required for this report, due to the unique nature of the project in the Australian context.

Background

Objectives or project requirements

The objectives of the Initial Feasibility Report were to undertake and report on an objective feasibility analysis of a second Bass Strait interconnector, encourage stakeholder support, seek to influence other projects and share knowledge about the project.

Process undertaken

TasNetworks set up a separate project – Project Marinus – to undertake the Activity which is jointly funded by ARENA. The initial Feasibility Report is the first Deliverable of the Activity.

Project Marinus consists of a number of workstreams:

- Technical and Economic
- Stakeholder & Community Engagement
- Planning, Environment, Land & Easements
- Financial and Commercial
- Legal and Group Engagement
- Program Management

Each workstream undertook relevant studies and engagement in order to produce the Initial Feasibility Report, which was internally reviewed by TasNetworks and externally reviewed by Dr John Tamblyn.

As part of the process, Project Marinus undertook a Regulatory Investment Test for Transmission (RIT-T) Project Specification Consultation Report (PSCR) and associated consultation process to inform the development of the Initial Feasibility Report.

The Tasmanian Government is reviewing the Initial Feasibility Report, and considering implications in the light of other strategic energy projects and assets in the state, with public release expected in February 2019.

Supporting information (optional)

Please refer to Appendix 2 Initial Feasibility Report