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### CONNECTING AUSTRALIA TO LOW COST & RELIABLE ENERGY

Marinus Link is a proposed 1500 megawatt capacity undersea electricity connection to link Tasmania and Victoria, as part of Australia's future electricity grid.

The project, being undertaken by TasNetworks, is considering a new interconnector known as Marinus Link and its supporting transmission. Marinus Link will operate in addition to the existing privately-owned Basslink interconnector. The project has received \$20 Million in funding support from the Tasmanian Covernment through TasNetworks and the Commonwealth Covernment through the Australian Renewable Energy Agency (ARENA).

Initial findings supported the need to finalise the Business Case Assessment due December 2019. The Commonwealth Covernment has provided \$56 million to progress the project into the Design and Approvals phase.

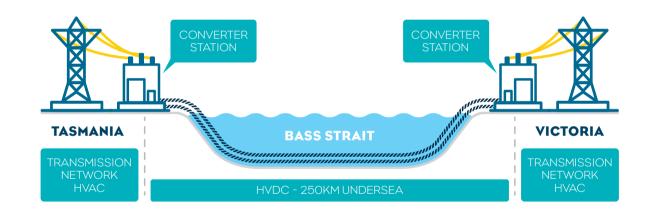
The National Electricity Market is transforming as new energy generation infrastructure replaces ageing infrastructure. Marinus Link can help smooth this transition by providing access to a low-cost and reliable energy supply for customers.



Marinus is Latin for marine. It also means 'of or connected to the sea'. In this way it captures the undersea nature of a Tasmania-Victoria interconnector.

#### WHAT IS MARINUS LINK?

- I500 MW of increased transmission capacity between Tasmania and Victoria delivered in two concurrent or staged 750 MW developments
- ♦ Infrastructure Australia high priority initiative
- Australian Energy Market Operator's (AEMO's) Insights paper (July 2019) calls for Marinus to be progressed through feasibility, business case and approvals phases as a matter of priority





An electricity interconnector is a connection between two different transmission networks that allows power to flow between multiple regions.

### WHAT IS AN INTERCONNECTOR?

An interconnector can run overland like the 'Heywood' interconnector between South Australia and Victoria or under large bodies of water like the 'Basslink' interconnector that runs across Bass Strait between Tasmania and Victoria. Undersea interconnection is common around the world.

Interconnection does and will increasingly play a major role to meet the needs of a future Australian power system. In Tasmania, increased transmission capacity from Marinus Link could unlock more low cost, reliable generation and storage.





The benefit of further interconnection is that it enables energy from a diverse range of generation sources to move efficiently to where it is most needed in a safe, secure and affordable way.

#### WHY DO WE NEED IT?

The National Electricity Market (NEM) is undergoing significant transition. Wind and solar development is increasing but is variable in nature which creates power system stability and reliability challenges. As more wind and solar comes into the market and replaces coal, it is critical that generation types (like hydroelectricity, pumped hydro storage and gas) are in place to support system stability and reliable supply to keep the lights on.





## WHAT ARE THE COSTS TO BUILD

Based on findings to date Marinus Link and supporting transmission upgrades are estimated to cost up to \$3.2 billion depending on route and configuration including

- ♦ Approx \$2.7 billion HVDC transmission
- ♦ Approx \$500 million of supporting HVAC transmission upgrades



### WHAT ARE THE MARKET BENEFITS?

- Unlocks renewable wind, solar and hydroelectric energy and storage
- ♦ Increases supply security and firms renewables
- ♦ Harnesses diversity of load and generation
- Utilises modern, robust and flexible converter technology
- Manages risks of relying on a single link across Bass Strait
- ♦ Complements other interconnection
- ♦ Stimulates economic growth

#### There are broader economic benefits including

- ♦ An estimated \$1.7 billion of direct economic stimulus to the Victorian economy and 1,800 jobs during peak construction
- ♦ An estimated \$1 billion of direct economic stimulus to the Tasmanian economy and 1,000 jobs during peak construction



The benefits of Marinus Link are clear





Business case assessment report due December 2019

#### NEXT STEPS?

- Finalising favoured route and securing route corridors
- ♦ Progressing the Regulated Test for Transmission (RIT-T) process
- ♦ Engaging with rule makers and regulators to explore new and fairer pricing frameworks across the NEM
- ♦ Continuing Design and Approvals phase including progressing environmental approvals and engineering concept designs
- ♦ Ongoing stakeholder engagement







#### **ABOUT US**

**TasNetworks** is the Tasmanian jurisdictional planner in the National Electricity Market (NEM) and provides transmission and distribution electricity and telecommunications network services that deliver power to more than 280,000 households, businesses and organisations in Tasmania.

### The Australian Renewable Energy Agency (ARENA)

works to accelerate Australia's shift to an affordable and reliable renewable energy future.







### STAYINC INFORMED

You can stay informed in a number of different ways. Email us to sign up for our customer engagement sessions, sign-up to our mailing list or provide feedback.

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