MANAGING CONSTRUCTION IMPACTS

MARINUS LINK

Contents

What is Marinus Link?

Marinus Link is a proposed undersea and underground electricity and telecommunications interconnector between Tasmania and Victoria.

It will further connect Tasmania to the National Electricity Market, comprising Queensland, New South Wales, ACT, Victoria, Tasmania and South Australia.

Marinus Link will comprise high voltage direct current (HVDC) cables, fibre-optic cables and converter stations in both Tasmania and Victoria.

Marinus Link will be about 345 kilometres long – 255 kilometres of undersea cables and 90 kilometres of underground cables.

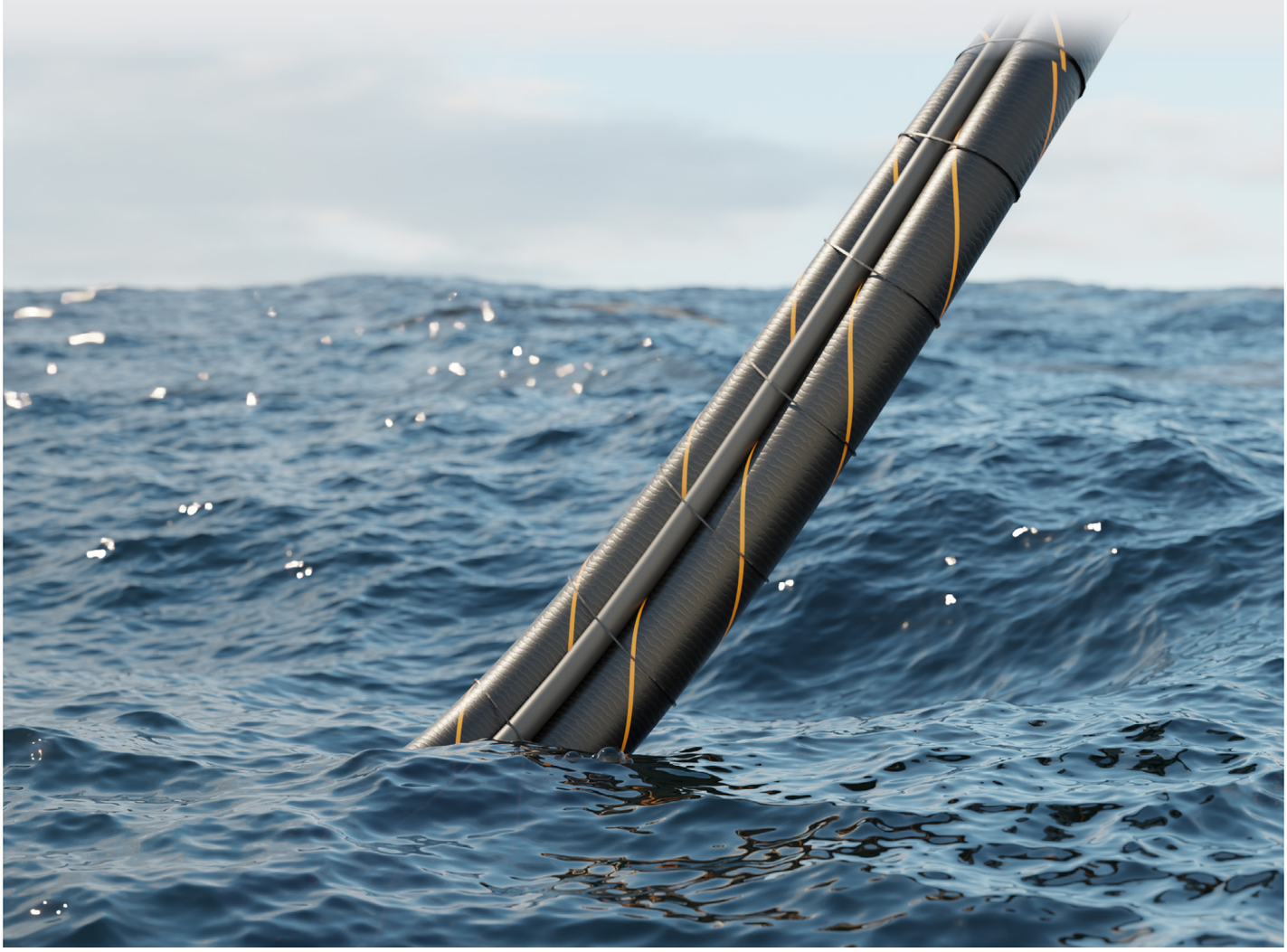
It will have a 1500 megawatt (MW) capacity, equal to the power supply for 1.5 million Australian homes.

Planning and approvals process

Marinus Link is a complex project which must go through environmental assessment and planning processes.

We're required to produce an Environmental Impact Statement (EIS) under Commonwealth legislation, an Environmental Effects Statement (EES) under Victorian legislation, and a Development Application under Tasmanian legislation.

Marinus Link has done studies to inform these documents and to understand potential project impacts and how they should be managed.



Managing traffic impacts

Overview

We've done traffic assessments to determine potential transport impacts during the construction, operation and decommissioning phases of the project.

The assessments were used to prepare a technical report which identified ways to manage and mitigate the impacts on local road users.

Identified impacts

Some traffic and road conditions may change throughout the project. For example:

- Turning lanes may be closed or added;
- Road closures will be avoided, but access may be limited to local traffic at peak construction times.
- Traffic delays may happen during the movement of large project materials;
- Some roads, bridges, crossings, and culverts may require upgrading, remediation or resurfacing throughout and following construction;
- Land and vegetation may be cleared to widen some access tracks;
- Increased truck and construction vehicle movements;
- Heavy vehicles will not travel on school bus routes during pick-up and drop-off times or impact any other forms of public transport. There will also be no impacts to walkers and cyclists using major off-road trails.

Management approaches

- Develop and implement Transport Management Plan/s (TMP);
- Design a road transport plan to ensure safety, allowing for different traffic levels and conditions, upgrading roads and crossings where required, and ensuring that pedestrian and vehicle access is reinstated in line with road design standards;
- Speed limits may be reduced.

These measures will ensure:

- Minimised disruption to road users, including other vehicles, pedestrians and cyclists;
- Roads operate within their capacity and can accommodate project vehicles;
- The road network is used safely throughout construction;
- Townships and communities are not unreasonably impacted by the project;
- Road networks will be reinstated to pre-project state following construction.

Managing contaminated land and acid sulphate soils

Overview

We've been doing field studies to look at the existing soil conditions along the project's proposed route. The studies tested for traces of contaminated land and the presence of acid sulphate soils.

Acid sulphate soils contain iron sulphites, which occur naturally in soil that has been waterlogged over extended periods of time, such as in estuaries or wetlands. When sulphate soils are disturbed by excavation, drainage or by reducing the water table, it can cause the iron sulphites to generate sulphuric acid, which can cause damage to the environment if not managed appropriately.

Key findings

To date, five potential hazards, all with a low to moderate risk of causing harm to the environment, have been identified within the project area. They include:

- Contaminated waste in the area of the proposed cable route;
- Excavated soils;
- Waste created from construction and operational activities;
- Unexpected areas of contamination;
- Areas likely to contain acid sulphate soils.

It's likely that naturally occurring acid sulphate soils will be present in the Waratah Bay Beach area and near Eel Hole Creek between Driffield and Hazelwood.

Studies done to date indicate there are no areas of contamination that would be dangerous to human health or the environment.

Management approaches

- Prepare an Environmental Management Plan for construction, which details how environmental risks will be mitigated and managed;
- Consider inspections prior to works and if required, remediate contaminated land that poses a risk to the environment;
- Create policies and procedures for dealing with unexpected contamination;
- Undertake additional testing in areas where acid sulphate soils are likely to be found.

Managing air quality during construction

Overview

We've done an assessment to determine how dust-causing activities may affect air quality during the construction of Marinus Link.

The air quality assessments look at how dust might affect health, plants and animals, as well as the operation and maintenance of buildings, machinery and equipment during construction.

Construction impacts

Earthworks and trenching for the cable, and trucks travelling along access tracks or haul roads may cause dust. It is expected dust will be worse during the drier months.

The majority of residents in the vicinity of the cable route are more than 300 m from the works area, so dust is not expected to present any risks to human health.

Construction activities will generate dust but measures will be implemented to reduce impacts to the environment and nearby properties.

Management approaches

- Prepare a Construction Dust Management Plan detailing how dust will be reduced and managed;
- Use water carts on unmade roads in drier months to reduce dust during construction activities;
- Monitor air quality to ensure the project is not exceeding air quality guidelines;
- Minimise exposure of any soil or other material likely to generate dust.

Managing groundwater

Overview

Groundwater is the water found underground in the cracks and spaces in soil, sand and rock. It is an important water source for both people and the surrounding environment.

Groundwater can be used for drinking, irrigation, stock watering, industrial and commercial purposes. It also supports valuable ecosystems and is important to Traditional Owners.

Construction impacts

During construction, we may need to remove groundwater (dewatering) to ensure construction can occur safely and to stop water from seeping into the site.

Some construction activities may also affect the levels or volume of groundwater and impact how groundwater supplies the nearby environment.

These activities include:

- Building haul roads;
- Horizontal directional drilling;
- Backfilling trenches;
- Construction of converter stations.

There is also a small risk of accidental spills from machinery chemicals or fuel from vehicles that could contaminate groundwater.

Management approaches

- Prepare a Groundwater Management Plan that details how dewatering, and accidental spills and potential contamination will be avoided and managed;
- Further groundwater assessments to inform construction activities to minimise impacts to and loss of groundwater;
- Measure and monitor impacts to groundwater;
- Choose appropriate construction methods and groundwater monitoring during construction activities.

Managing noise and vibration

Overview

We've done studies to determine noise and vibration and the potential impacts to people and places close to construction activities and the converter stations when in operation.

We recorded noise levels across the project's proposed locations to understand the existing baseline for noise.

Design and construction activities have been modelled to understand possible noise and vibration impacts to nearby residents and buildings along the cable route and in the proposed converter station locations.

Key findings

Construction noise

The majority of construction will take place during normal working hours. Some activities may need to take place 24/7 or overnight.

Out of hours works will be limited to unavoidable activities and those activities which cannot be stopped once they have started such as horizontal directional drilling or pouring concrete.

Construction vibration

Residents within 25 m of construction works are the most likely to feel vibration when works like vibratory rolling need to take place.

Converter station operational noise

Environment Protection Authority (EPA) protocols in each state have been used as the guideline to assess the expected operational noise from the converter station.

The predicted operational noise levels for all proposed converter station sites are below the regulatory noise limits.

The level of operational noise will depend on the equipment used in and the final design of the converter stations. Once the final designs are complete, a new noise model will be created to ensure compliance with local regulators.

Management approaches

- Develop a Construction Noise and Vibration Management Plan in consultation with the EPA and include details on how impacts from construction noise and vibration will be managed;
- Further considerations how to minimise and manage noise and vibration including:
- Using equipment which uses mufflers or produces the lowest amount of noise;
- Assessing ground conditions to determine whether the ground is stable enough to halt horizontal directional drilling works overnight;
- Noise monitoring during out of hours works;
- Notification to nearby residents prior to any planned out-of-hours works.

What we've heard from the community

Traffic

- Bridges and culverts within the Gippsland region are ageing;
- There is a risk of landslips on rural roads;
- Many of the dirt tracks in Gippsland are logging routes;
- Impacts of heavy vehicles on residential routes;
- Little to no public transport available in Gippsland, meaning traffic delays due to construction will impact residents' mobility in the area.

Contaminated and Acid Sulphate soils

- As agriculture is a primary industry, people want to ensure soil quality is not negatively impacted by the project;
- People wanted to know how impacts to soil, and potential contamination will be managed.

Air quality

- General concerns about impacts from construction;
- How much dust will be generated and the impact to daily activities like drying laundry, ability to leave windows open and general cleanliness etc.

Groundwater

- Concerns about impacts on waterways and river crossings;
- Concerns about possible water and soil contamination.

Noise and vibration

- Questions about construction noise and vibration, especially for those who will be close to the cable alignment;
- Concerns about ongoing operational noise from converter stations and how loud the converter stations will be;
- Expected days and hours for works.

MORE INFORMATION

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