Sun Cable Pty Ltd

Australia – ASEAN Power Link Project

Statement of Reasons

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SUN CABLE

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Statement of Reasons - Australia-ASEAN Power Link

Prepared for
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Quality information

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Statement of Reasons

Sun Cable Pty Ltd – Australia-ASEAN Power Link Project

Proposal

Sun Cable Pty Ltd (Sun Cable), the proponent, is developing the Australia-ASEAN Power Link (AAPL; the proposal). The AAPL will establish a high-voltage direct current (HVDC) transmission network that connects Northern Territory (NT) and Singapore energy markets to a new, large-scale solar farm and energy storage facility that utilises the abundant high-quality solar resource in northern Australia.

The AAPL comprises five main components:

- A solar farm precinct that will occupy up to 12,000 ha of land for an approximately 10 gigawatt (GW) solar farm, battery and ancillary infrastructure. The solar farm will be located in the Barkly region of the NT approximately 40 km southwest of Elliott;
- A new +/- 525 to +/- 600 kilovolt (kV), 3.2 GW HVDC overhead power transmission line (OHTL) that will transfer power from the solar farm to two voltage source converters (VSCs) on Channel Island Road at Middle Arm peninsula in Darwin, approximately 750 km to the north. The OHTL is proposed to be located mainly within the existing Alice Springs to Darwin railway corridor;
- Up to two VSCs located at Middle Arm peninsula in Darwin to convert power from DC to AC for connection to the Darwin-Katherine Integrated System and a point to point HVDC link from Darwin to Singapore. The area occupied by the VSCs will be approximately 10 ha. It is proposed that the VSCs will be co-located with the Middle Arm Battery owned by Sun Cable adjacent to Weddell Power Station;
- A land-sea joint station at Middle Arm peninsula that will facilitate the transition of the HVDC cables from onshore to offshore; and
- A subsea +/- 525 to +/- 600 kV, 2.2 GW HVDC cable and fibre optic cable network that will extend approximately 3,750 km from Darwin to Singapore, via Indonesia. This statement of reasons is related to the portion of the subsea cable route located within the NT coastal waters (three nautical miles from the Territorial Baseline), which is a cable distance of approximately 106km from the Middle Arm land sea joint station.

Within Australia, the AAPL will be located within the NT and Commonwealth jurisdictions, with proposed infrastructure and activities within the NT and associated coastal waters and the Commonwealth marine area (from the Territorial Sea Baseline/low water mark to the boundary of Australia's exclusive economic zone (EEZ)).

Justification

Sun Cable has assessed the AAPL against the requirements of the *Environment Protection Act 2019* (NT) (EP Act) and identified the potential for the proposal to have a significant impact on the environment. This statement of reasons addresses the requirements of section 43 of the *Environment Protection Regulations 2020* to provide a statement of reasons why:

- An assessment by environmental impact statement is required for the proposed action; and
- The draft terms of reference are appropriate.

There is potential for the proposal to have a significant impact on the environment due to:

- The large scale of the proposal, which includes around 12,000 ha of land for the solar farm precinct, a transmission line corridor of around 750 km length that runs from the solar farm precinct to Middle Arm Peninsula in Darwin, and the subsea cable installation that runs from the Middle Arm Peninsula approximately 106 km to the edge of the NT coastal waters.
- Potential for disturbance to marine and terrestrial biodiversity.
- Potential impacts on threatened species and communities, and significant and sensitive habitats, from construction and operation activities (e.g., land clearing, trenching, ongoing maintenance, introduction and spread of weeds or pathogens). At this stage of the proposal the values, risks and mitigation measures have yet to be assessed or addressed in detail.
- Potential impacts to maritime heritage.
- The scale of potential social, cultural and economic impacts including potential impacts to a range of stakeholders such as Traditional Owners, land holders, industry/operators and local communities, due to land access and disruptions from construction, operation and maintenance activities.

The proposal has the potential to impact on the NT EPA's key environmental factors outlined in Table 1.

Table 1: Relevant key environmental factors

Factor	Environmental objective	Potential for significant impact?
LAND		
Landforms	Conserve the variety and integrity of distinctive physical landforms.	No. Landforms impacted are well represented in region and no significant impacts are anticipated.
Terrestrial environmental quality	Protect the quality and integrity of land and soils so that environmental values are supported and maintained.	Yes. Area of disturbance is significant.
Terrestrial ecosystems	Protect terrestrial habitats to maintain environmental values including biodiversity, ecological integrity and ecological functioning.	Yes. Potential for disturbance to habitat and biodiversity values.
WATER		
Hydrological processes	Protect the hydrological regimes of groundwater and surface water so that environmental values including ecological health, land uses and the welfare and amenity of people are maintained.	Uncertain. Groundwater impacts anticipated to be minimal. Surface water impacts likely to not be significant but due to area of disturbance for solar farm site and number of water crossings for transmission line, this should be demonstrated in EIS.
Inland water environmental quality	Protect the quality of groundwater and surface water so that environmental values including ecological health, land uses and the welfare and amenity of people are maintained.	
Aquatic ecosystems	Protect aquatic habitats to maintain environmental values including biodiversity, ecological integrity and ecological functioning.	
SEA		
Coastal processes	Protect the geophysical and hydrological processes that shape coastal morphology so that the environmental values of the coast are maintained.	No. Significant impact or disruption to coastal morphology is not anticipated. Any coastal habitat disturbance will be addressed in either terrestrial or marine ecosystems.
Marine environmental quality	Protect the quality and productivity of water, sediment and biota so that	Yes. The subsea cable route will involve disturbance to seabed and this

Factor	Environmental objective	Potential for significant impact?
	environmental values are maintained.	may marine environmental quality.
Marine ecosystems	Protect marine habitats to maintain environmental values including biodiversity, ecological integrity and ecological functioning.	Yes. The subsea cable installation may impact marine ecosystems.
AIR		
Air quality	Protect air quality and minimise emissions and their impact so that environmental values are maintained	Uncertain. There is potential for significant dust emissions for the solar farm precinct due to the area of disturbance. Mitigation and management options for dust generation and residual impact should be demonstrated in EIS.
Atmospheric processes	Minimise greenhouse gas emissions so as to contribute to the NT Government's aspirational target of achieving net zero greenhouse gas emissions by 2050.	Yes. A significant, net positive impact on the greenhouse gas emission targets are expected.
PEOPLE		
Communities and economy	Enhance communities and the economy and foster resilience to a changing climate, for the welfare, amenity and benefit of current and future generations of Territorians.	Yes. The AAPL is large scale and has potential positive and adverse impacts.
Culture and heritage	Protect sacred sites, culture and heritage.	Yes.
Human health	Protect the health of the Northern Territory population.	Uncertain. Significant adverse health impacts are not anticipated, however stakeholder concerns regarding potential health impacts are likely and should be addressed in EIS.

Sun Cable is determined to ensure that the AAPL will deliver a net benefit to the environment and social values influenced by the proposal. The company is focused on ensuring that the avoidance hierarchy is adopted and that wherever possible, impacts are proactively avoided through design, minimised through innovative construction and operation methods and mitigated through informed and ongoing adaptive management. Sun Cable aims to maximise opportunities for Indigenous and non- Indigenous Territorians throughout all project phases and is developing a range of engagement plans to support this approach.

The AAPL has been in feasibility planning since 2018 with consultation and engagement occurring with a wide range of Australian Commonwealth and NT government agencies and representatives, Indigenous representatives, landholders, pastoral leaseholders, environment groups, industry groups, business and international government representatives. Despite this, consultation is at an early stage for a project of this scale, and Sun Cable is in the process of developing a broader campaign of consultation and engagement with communities, individuals and interest groups potentially affected by the development.

There is a need for a robust and transparent engagement process so that all stakeholders including the community have the opportunity to access information on the proposal, understand potential impacts and have input into the environmental assessment process.

To address the objects of the EP Act, Sun Cable considers that an assessment by environmental impact statement (EIS) is appropriate for the AAPL. This process will allow Sun Cable to address the matters set out in section 42 and 43 of the EP Act, for the proposal to:

- Be assessed, planned and carried out taking into account:
  - The principles of ecologically sustainable development;
  - The environmental decision-making hierarchy;
  - The waste management hierarchy;
  - Ecosystem-based management; and
  - The impacts of a changing climate.
- Consider the potential for less environmentally damaging alternative approaches, methodologies or technologies for actions.
- Provide communities that may be affected by the project with information and opportunities for consultation to assist each community's understanding of the proposed action and its potential impacts and benefits.
- Provide the community with an opportunity to participate, and have its views considered, in decision on proposed actions.
- Address Aboriginal values and the rights and interests of Aboriginal communities in relation to areas that may be impacted by the project.
- Identify the potential for actions to enhance or restore environmental quality through restoration or rehabilitation and provided for these to the extent practicable.

Terms of reference

Draft terms of reference (TOR) have been prepared in accordance with the *Draft Preparing a proponent initiated EIS referral - Environmental impact assessment guidance for proponents* (NT EPA, June 2020). The draft TOR outline how the EIS will assess and address potential impacts of the project, targeting the key environmental factors identified in Table 1. The draft TOR have been developed based on the preliminary impact assessment provided in the referral, and are considered an appropriate framework to guide the preparation of the EIS for the AAPL, to provide sufficient information to inform assessment by the EPA and a decision by the NT Minister for Environment and Natural Resources.

Conclusion

Due to its scale and extent, the AAPL project has potential for significant impacts on the environment. An EIS assessment process is an appropriate approach to facilitate the detailed assessment of these potential impacts, and to develop appropriate avoidance, mitigation and management measures to reduce the extent or level of significance of impacts. Sun Cable is determined to ensure that the project will deliver a net benefit to the environment, heritage and social values influenced by the project. The draft TOR provide appropriate guidance for the EIS assessment process under the EP Act.

An EIS assessment process, in addition to facilitating a robust environmental impact assessment, will provide the opportunity for communities that may be affected by the project, including Aboriginal communities, to participate in the process and have their views considered as part of project design.