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Chapter 16 – Whole of the Environment

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Contents

Tables

16 Whole of Environment

16.1 Introduction

This SEIS presents the findings of the updated EIA undertaken for each of the 12 environmental factors under the *EP Act* (Terrestrial environmental quality, Terrestrial ecosystems, Hydrological processes, Inland water environmental quality, Aquatic ecosystems, Marine environmental quality, Marine ecosystems, Air quality, Atmospheric processes, Community and economy, Culture and heritage and Human health) and three matters under the *EPBC Act* (Listed threatened species, Listed migratory and marine species and Commonwealth Marine Area). The impact assessment considered direct, indirect and cumulative impacts, in addition to impacts on the whole of the environment that could occur because of connections and interactions between each factor. Where there are pathway effects to multiple environmental factors, they have been addressed in the chapter for the environmental receptor most impacted. For example, erosion of PFAS contaminated soil, run-off from PFAS contaminated soil and subsequent contamination of surface water from PFAS has been addressed in Chapter 6 Hydrology. Chapter 17 of this SEIS, as well as Chapter 17 of the Draft EIS provide the proposed approach to environmental and social impact management, including details of proposed management plans and sub-plans to be developed and implemented for all phases of the Project to mitigate impacts.

This chapter provides a summary of the SEIS impact assessment findings and discusses predicted outcomes in relation to the NT EPA's environmental objectives and the principles of environment protection and management (as set out in Part 2 of the *EP Act*).

16.2 Summary of Residual Risks and Environmental Objectives

Table 16-1 summarises the environmental objectives potentially impacted by the Project (identified in both the Draft EIS and SEIS) and the residual risk rankings to NT EPA Environmental Objectives after all impacts and mitigation are considered. A full summary of the impact assessment for the whole Project can be found in Appendix 16.1 and 16.2.

Table 16-1: Summary of Whole of Project Residual Risk to Environmental Objectives

Environmental Objective	Minor	Moderate	High
Community and Economy Enhance communities and the economy for the welfare, amenity and benefit of current and future generations of Territorians.	✓		
Terrestrial Environmental Quality Protect the quality and integrity of land and soils so that environmental values are supported and maintained.	✓		
Terrestrial Ecosystems Protect terrestrial habitats to maintain environmental values including biodiversity, ecological integrity and ecological functioning.		✓	
Hydrology 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.	✓		

Environmental Objective	Minor	Moderate	High
Aquatic Ecosystems Protect aquatic habitats to maintain environmental values including biodiversity, ecological integrity and ecological functioning.			
Marine Environmental Quality Protect the quality and productivity of water, sediment and biota so that environmental values are maintained.		✓	
Marine Ecosystems Protect marine habitats to maintain environmental values including biodiversity, ecological integrity and ecological functioning.	✓		
Air Quality Protect air quality and minimise emissions and their impact so that environmental values are maintained.	✓		
Atmospheric Processes Minimise greenhouse gas emissions so as to contribute to the NT Government's target of achieving net zero greenhouse gas emissions by 2050.	✓		
Culture and Heritage Protect sacred sites, culture and heritage.	✓		
Human Health Protect the health of the Northern Territory population	✓		
Matters of National Environmental Significance Matters protected under the *Environmental Protection Biodiversity and Conservation Act 1999*		✓	

16.3 Cumulative Impacts

The impact assessment undertaken for each environmental factor considered cumulative impacts to the factor associated with the residual impacts from the Project, existing impacts from other developments and land uses, and potential residual impacts associated with reasonably foreseeable developments, listed in Section 12.4.2 of the SEIS.

16.4 Objects of the Environment Protection Act 2019

Throughout the impact assessment process documented in this SEIS, the Proponent has demonstrated consideration of the principles of ecologically sustainable development, and application of the decision-making and waste management hierarchies as set out in Part 2 of the *EP Act*.

Table 16-2 sets out how the principles of ecologically sustainable development and management hierarchies have been considered through the SEIS and are proposed to be managed through the life of the Project.

Table 16-2: Summary of how the principles of ecologically sustainable development and management hierarchies were considered in SEIS

Principle or Management Hierarchy	Consideration in SEIS	Supporting Documentation
Section 18 - Decision-making principle 1) Decision-making processes should effectively integrate both long-term and short-term environmental and equiTable considerations. 2) Decision-making processes should provide for community involvement in relation to decisions and actions that affect the community.	1) The SEIS has identified all potential impacts from the Project. Appendix 4.1 provides one example of how the environmental considerations will be managed through the life of the Project, by applying avoidance and mitigation principles to optimize Project siting decisions. 2) Significant community engagement has been undertaken prior to lodging the EIS and SEIS to ensure key concerns for the community are included and addressed in the Project decision-making process.	Appendix 4.1 Constraints Planning Framework and Field Development Procedure Appendix 3.1 Stakeholder Consultation Report
Section 19 - Precautionary principle 1) If there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. 2) Decision-making should be guided by: a. A careful evaluation to avoid serious or irreversible damage to the environment wherever practicable; and b. An assessment of the risk-weighted consequences of various options.	The SEIS has identified all potential environmental and social impacts. Where there is a lack of scientific evidence to inform the impact assessment, conservative assumptions have been made (e.g., assuming wildlife habitat is present) and mitigation measures have been proposed supported by an adaptive management process to mitigate risk.	Appendix 16.1 and Appendix 16.2 Impact Assessment Tables Chapter 5 Chapter 9

Principle or Management Hierarchy	Consideration in SEIS	Supporting Documentation
Section 20 - Principle of evidence-based decision-making Decisions should be based on the best available evidence in the circumstances that is relevant and reliable.	The impact assessment in Chapters 4 to 15 has been informed by technical studies presented in the Draft EIS and SEIS Appendices 4.1 to 15.1. Where technical limitations prevented studies from being undertaken (e.g., land access), literature reviews and desktop surveys of biological data were undertaken and additional surveys, as relevant, will be undertaken prior to construction.	Technical studies undertaken to inform each chapter (Appendix 4.1 to Appendix 15.1).
Section 21 - Principle of intergenerational and intragenerational equity The present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of present and future generations.	As a carbon positive project, AAPowerLink aims to enhance the environment for future generations while minimising impacts on the current generation from the construction and operations phases. Section 16.2 summarises the impacts from the Project and demonstrates all environmental objectives will be achieved.	n/a
Section 22 - Principle of sustainable use Natural resources should be used in a manner that is sustainable, prudent, rational, wise and appropriate.	As a carbon positive project, AAPowerLink aims to enhance the environment for future generations while minimising impacts on the current generation from the construction and operations phases. Section 16.2 summarises the impacts from the Project and demonstrates all environmental objectives will be achieved.	n/a
Section 23 - Principle of conservation of biological diversity and ecological integrity Biological diversity and ecological integrity should be conserved and maintained.	Refer to Chapter 5 Terrestrial Ecology, Chapter 7 Aquatic Ecosystems, Chapter 9 Marine Ecosystems and Chapter 15 MNES for details on how the Project will conserve and maintain biological diversity and ecological integrity.	Chapter 5 Terrestrial Ecology, Chapter 7 Aquatic Ecosystems, Chapter 9 Marine Ecosystems and Chapter 15 MNES
Section 24 - Principle of improved valuation, pricing and incentive mechanisms	The Proponent has identified potential impacts (including pollution) and proposed strategies to prevent, mitigate and offset in accordance with	n/a

Principle or Management Hierarchy	Consideration in SEIS	Supporting Documentation
1) Environmental factors should be included in the valuation of assets and services 2) Persons who generate pollution and waste should bear the cost of containment, avoidance and abatement. 3) Users of goods and services should pay prices based on the full life cycle costs of providing the goods and services, including costs relating to the use of natural resources and the ultimate disposal of wastes. 4) Established environmental goals should be pursued in the most cost-effective way by establishing incentive structures, including market mechanisms, which enable persons best placed to maximise benefits or minimise costs to develop solutions and responses to environmental problems	the Environmental and Waste Management Hierarchies. The Proponent's ESMS is aligned with ISO14001 Environmental Management Systems and International Finance Corporation (IFC) Principles and Equator Principles (EP4). These principles address life of project and supply chain concerns around social and environmental impacts, including an analysis of impacts to ecosystem services.	
Section 26 - Environmental decision-making hierarchy 1) In making decisions in relation to actions that affect the environment, decision-makers, proponents and approval holders must apply the following hierarchy of approaches in order or priority. a. Ensure that actions are designed to avoid adverse impacts on the environment; b. Identify management options to mitigate adverse impacts on the environment to the greatest extent practicable; c. If appropriate, provide for environmental offsets in accordance with this Act for residual adverse impacts on the environment that cannot be avoided or mitigated. 2) In making decisions in relation to actions that affect the environment, decision-makers, proponents and approval holders must ensure that the potential for actions to enhance or restore environmental quality is identified and provided for to the extent practicable.	The impact assessment has considered the environmental decision-making hierarchy with all controls focused on avoiding and mitigating residual impacts (see Chapter 17). Ongoing project decisions will continue implementing this mitigation hierarchy, as exemplified through the use of the Constraints Planning Framework and Field Development Guide (Appendix 4.1). As detailed in the Draft EIS, the Proponent's ESMS is aligned with ISO14001 Environmental Management Systems.	Appendix 4.1 Constraints Planning Framework and Field Development Procedure
Section 27 - Waste management hierarchy	The impact assessment has considered the environmental decision-making hierarchy with all controls focused on avoiding and mitigating residual impacts (see Chapter 17). Ongoing	Appendix 4.1 Constraints Planning Framework and Field Development Procedure

Principle or Management Hierarchy	Consideration in SEIS	Supporting Documentation
1) In designing, implementing and managing an action, all reasonable and practicable measures should be taken to minimise the generation of waste and its discharge into the environment. 2) For subsection (1), waste should be managed in accordance with the following hierarchy of approaches in order or priority: a. Avoidance of the production of waste; b. Minimisation of the production of waste; c. Re-use of waste; d. Recycling of waste; e. Recovery of energy and other resources from waste; f. Treatment of waste to reduce potentially adverse impacts; g. Disposal of waste in an environmentally sound manner.	project decisions will continue implementing this mitigation hierarchy, as exemplified through the use of the Constraints Planning Framework and Field Development Guide (Appendix 4.1). Another example of the Proponent's approach to dealing with waste is set out in Section 2.3.4.4 which details the framework for managing solar panels at the end of their life. As detailed in the Draft EIS, the Proponent's ESMS is aligned with ISO14001 Environmental Management Systems.	

16.5 Conclusion

The outcomes of the EIA process documented in the Draft EIS and SEIS demonstrate the Project is minimizing residual risk and will not compromise the NT EPA's environmental objectives. The EIA is consistent with the principles of environment protection and management (as set out in Part 2 of the *EP Act*). The outcomes of the impact assessment process for MNES protected under the *EPBC Act* indicate that the Project is unlikely to have a significant impact on any protected matters. Where potential uncertainty may be encountered, the precautionary principle has been adopted and additional studies, mitigation measures and an adaptive management process are proposed to reduce uncertainty. The framework for environmental management has been outlined in the Draft EIS and this SEIS with further detail to be developed in the CEMP and OEMP and supporting sub-plans.

16.6 Submission Response

During the Draft EIS statutory exhibition period, submissions from various NTG agencies, the Commonwealth DCCEEW, public submissions, environmental groups and anonymous community members were made with respect to whole of environment matters. These comments relate to the key themes of statutory processes, management commitments, procurement, Project infrastructure needs and feasibility, as well as cumulative impacts.

Responses to these submissions are provided in the following sections.

16.6.1 DCCEEW Submission

16.6.1.1 Proponent Name and Legal Details

The Department notes that the proponent's ACN number and name have changed. This means that the legal identity of the person proposing to take the action has changed and has become a different person for the purposes of the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). Under section 156F of the EPBC Act, the Department advises the current proponent to notify the Minister for the Environment of these changes in writing. Further detailed information about changing the proponent under the EPBC Act can be found here.

16.6.1.2 Response

As explained within Section 1.4 of this SEIS, the Proponent's name remains the same. A letter will be provided to DCCEEW to this effect.

16.6.1.3 Management Plans

The Department notes that the list of sub-plans included in the CEMP can change based on the project approval conditions, detailed design and micro-siting activities. However, based on the project's proposed activities, the CEMP should include the following sub-plans:

- *Environmental Emergency and Spill Response Plan*
- *Air Quality Management Plan*
- *Hazardous Materials and Waste Management Plan*
- *Surface water and Groundwater Management Plan*
- *Weed Management Plan*
- *Flora and Fauna Management Plan*

- *Reinstatement Plan, considering reinstating biologically important foraging area for the Flatback Turtle (Natator depressus), Logger Turtle (Caretta caretta) and Olive Ridley (Lepidochelys olivacea)*
- *Marine Environment Management Plan*
- *Bushfire Management Plan*
- *Erosion Sediment Control Plans, including sediment control measures for construction of the Shore Crossing Site, which will be regularly underwater due to tidal movements*
- *ASS Management Plans, particularly in the Adelaide River, Burrell Creek, Edith River and Katherine River sections of the OHT Railway, and the section of high probability potential ASS just offshore of the beach.*

The Department requests that the CEMP and Operations Environmental Management Plans with their respective subplans be included in the Supplementary EIS to review their adequacy.

16.6.1.4 Response

Chapter 17 of the Draft EIS set out the Proponent's proposed environmental management structure for the Project. The Proponent continues to follow this proposed framework. Updated management commitments are summarised in Chapter 17 Environmental Management of this SEIS.

Given the complex nature of the Project and the ongoing engineering design process, preparing a full suite of CEMP and OEMP management plans and sub-management plans is considered premature, although the above list is recognized and framework plans are progressing. As the detailed design progresses for Project components, and additional detail regarding construction means, methods, sequencing and staging becomes available, the required management plans will be developed accordingly.

The necessary CEMP and OEMP documentation will be developed in consultation with NTG agencies and, where required, Commonwealth regulators, according to:

- Project stages
- Project's infrastructure locations
- The needs of various packages of contracted project work
- The needs of other regulators and stakeholders outside of the NT EPA under the *EP Act* and DCCEEW under the *EPBC Act*, including, but not limited to:
  - Rail authority/ies
  - CASA
  - Land Council-led consultations
  - NOPSEMA.

It is noted that Project activities are not anticipated to have significant impacts on MNES or other general matters subject to the *EPBC Act*. DCCEEW's jurisdictional oversight is therefore likely to be limited.

16.6.1.5 Management Commitments

The Department notes that some avoidance and mitigation measures are not expressed as clear commitments. For example, when stating "Avoiding clearing large hollow-bearing trees where possible", "The final route selection process for the Solar Precinct access roads will avoid crossing locations that hold water for extended periods, riparian vegetation and aquatic vegetation, where possible", etc. The Department strongly recommends avoiding ambiguous language such as "where possible" when proposing avoidance and mitigation measures in the Management Plans specially in relation to EPBC protected species and their habitats.

16.6.1.6 Response

The SEIS addresses uncertainty by outlining the Project's methodology for dealing with potential constraints in the Constraints Planning and Field Development Procedure in Appendix 4.1 and the Environmental Design Criteria in Appendix 2.1. Management plans specific to regions of the environment and Project infrastructure will be developed which will include site specific mitigation measures and adaptive management techniques. Where preferred mitigation techniques are not feasible, these will be discussed with government agencies. The Proponent is committed to mitigating environmental and social risk to ALARP levels.

16.6.1.7 EPBC Regulation Schedule 4

In Appendix C – Other Matters Required by Schedule 4 of the EPBC Regulations, the Department recommends reviewing and amending cross-referencing to ensure sections align with the relevant information required. For example, in section 1 'General information' of Appendix C (page 1), letter (b) indicates that the designated proponent's full information can be found in Chapter 1, Section 1.7. However, Chapter 1, section 1.7, provides information on stakeholder engagement instead of the designated proponent's full information.

16.6.1.8 Response

Editorial errors have been addressed and cross-references between sections have been reviewed in the SEIS material.

16.6.2 DEPWS Submission

16.6.2.1 Two Access Roads

It is unclear why there is a need for two different access routes if the bitumen access road is an all-weather road. The Flora and Fauna Division recommends removing one of the roads if feasible.

16.6.2.2 Response

Please refer to Sections 2.3.4.1 and 2.10.5.2 of Chapter 2 where a response is provided in full.

16.6.2.3 Pine Creek Orogen

Pine Creek Oregon (typo), should read Pine Creek Orogen. Please ensure Orogen is spelled correctly throughout the draft EIS.

16.6.2.4 Response

This has been rectified in the SEIS.

16.6.3 DIPL Submission

16.6.3.1 NT Planning Scheme

As the proponent is already aware, a number of applications will likely be required in the future under the Planning Act 1999. Application requirements under the Planning Act 1999 are as follows:

- *Any leasing or subleasing of land in excess of 12 years will require subdivision approval. It is recommended that the proponent contact DIPL for further information.*
- *Any subdivision of land will require planning approval. Please contact Development Assessment Services (DAS) of DIPL to discuss development application requirements.*
- *Any coastal reclamation or dredging of Darwin Harbour and surrounding area (including any associated works on land) will be subject to the requirements of the relevant overlay in the NT Planning Scheme 2020.*
- *Any excavation or fill on zoned land will be subject to the requirements of the NT Planning Scheme 2020.*
- *Any clearing of native vegetation in excess of one hectare on unzoned land outside of the railway corridor will be subject to the requirements of the NT Planning Scheme 2020.*
- *Any clearing of native vegetation in land Zoned Conservation or relevant overlay 3.2 (clearing of native vegetation) or 3.3 (restricted clearing of native vegetation) that is outside of the railway corridor will be subject to the requirements of the NT Planning Scheme 2020.*
- *Any development on zoned land may require planning approval (including overhead transmission lines). Please contact DAS to discuss if required.*
- *The Darwin Converter site and associated infrastructure on zoned land may require planning approval. Please contact DAS to discuss if required.*
- *The development of an electrode site may require planning approval. Please contact DAS to discuss development application requirements for any potential conflict in land use with the surrounding area. It is noted the EIS states a future electrode site would form part of a supplementary EIS.*
- *A future recycling industry may require planning approval. Please contact DAS to discuss development application requirements.*
- *It is noted 'mobile accommodation camps' and 'mobile fly camps' have been discussed throughout the EIS. Please note any accommodation on zoned land may also require planning approval.*

16.6.3.2 Response

Should environmental approval be gained for the Project, the Proponent will obtain secondary approvals, including planning permissions under the *NT Planning Act 2020*, prior to undertaking any work.

16.6.3.3 Sensitive Receptor Map

It is noted that Figure 2-5: Map of sensitive receptors proximate to the AAPowerLink identifies sensitive receptors proximate to the AAPowerLink at a large scale. Future applications for planning approval where sensitive receptors are within close proximity to the AAPowerLink, should include maps at a zoomed in scale that have been groundtruthed to inform assessment.

16.6.3.4 Response

Should environmental approval be gained for the Project, the Proponent will obtain secondary approvals, including planning permissions, prior to undertaking any work. Detailed mapping will be provided as required to support planning approval applications, as confirmed in consultation with the relevant consent authority.

16.6.3.5 NT Ports and Marine Legislation

Other NT Legislation and associated approvals to include:

- *Port Management Act 2015, specifically section 53, which requires approval to lay the High Voltage Direct Current (HVDC) cable from the Regional Harbour Master for Port of Darwin waters*
- *Marine Act 1981, specifically section 188 requires approval to lay the cable from the Director Marine Safety for Northern Territory waters.*

16.6.3.6 Response

Should environmental approval be gained for the Project, the Proponent will obtain secondary approvals, including planning permissions, prior to undertaking any work.

16.6.3.7 Cumulative Impacts for Marine Users

DIPL notes that cumulative impacts to marine users from the potential of future port development in the Gunn Point Mapping the Futures project have not been included.

16.6.3.8 Response

Refer to Chapter 12 Section 12.11.9 and Chapter 2 Section 2.5.2 for a more detailed response to this matter.

16.6.3.9 Utility Co-location

DIPL notes the developers' infrastructure may impact the type, and cost, of future utilities appropriate for colocation in the existing utilities corridor (e.g. safe distance requirements between HDVC and other infrastructure such as gas).

16.6.3.10 Response

The proposed locations of Project infrastructure have been determined based on consideration of various (sometimes competing) constraints.

The alignment of the OHTL Corridor is set out within Chapter 2 and Appendix 2.2. As explained in Section 2.4.4, the Draft EIS proposed approximately 788 km of OHTL from Powell Creek to Murrumujuk within the existing railway corridor. At Livingstone, the OHTL enters the existing NTG utilities corridor and extends for approximately 66 km to the DCS at Murrumujuk.

Three primary areas of constraint were identified in the Railway Corridor at Katherine, Pine Creek, and Adelaide River. The spatial constraints and/or physical obstructions within the railway corridor at each location are such that the OHTL Corridor is likely to have to exit the railway corridor, deviate proximate to each location, then re-enter the railway corridor and continue north. In this SEIS, an OHTL Corridor for the entire length of the OHTL is presented. A preferred route for the OHTL Corridor has been identified, subject to further detailed design and ongoing route refinement. An overview of the OHTL Corridor is shown in Figure 2-2. The preferred route at each constrained location is shown

in Figure 2-7(Katherine), Figure 2-8 (Pine Creek) and Figure 2-9 (Adelaide). The estimated overall length of the OHTL Corridor has reduced slightly to approximately 783 km.

As engineering and design progresses, further refinements of the OHTL Corridor may occur. Any refinement will consider Project stakeholders' requirements, environmental and social areas of sensitivity, geotechnical investigations and engineering design, including detailed flood modelling. A Constraints Planning and Field Development Procedure (Appendix 4.1), sacred site clearances and ongoing engagement with Project stakeholders will be completed with the aim of firstly avoiding placement of infrastructure in locations which may cause adverse impacts. Where the principle of avoidance is not possible, the Proponent will identify management options to mitigate potential adverse impacts. The parameters set out within Appendix 2.1 Environmental Design Criteria and Standards will also continue to be considered, where relevant.

As discussed in Section 2.4.5.1, the preferred route of the OHTL Corridor at Katherine is generally adjacent to the existing railway corridor (Figure 2-7). The preferred route begins at approximately KP 453 to facilitate crossing the Victoria Highway before navigating through several parcels of land and crossing the Katherine River. Once on the northern side of the Katherine River, the preferred route is generally aligned with the railway corridor to minimise any potential impacts. The OHTL Corridor re-enters the railway corridor at approximately KP 467.

A combination of spatial constraints in the railway corridor driven by the need to cross the Victoria Highway, the Katherine River, and the Stuart Highway are the key factors that necessitated a route re-alignment. The Katherine Regional Land Use Plan 2014 also identifies a potential heavy vehicle bypass that is generally consistent with the preferred route of the OHTL Corridor. Co-locating this infrastructure has the potential to reduce potential impacts on the wider community while simultaneously offering a legitimate route through Katherine.

The EPA direction also notes potential for PFAS in this area. This is addressed in Chapter 4: Terrestrial Environmental Quality and Chapter 6: Hydrology.

As explained in Section 2.4.5.2, the OHTL Corridor preferred route at Pine Creek prioritises a location proximate to the existing railway corridor to minimise impacts on surrounding land uses and landowners. In the absence of detailed strategic planning objectives for the Pine Creek region, the preferred route seeks to minimise impacts on future land uses by co-locating with existing linear infrastructure. While the OHTL Corridor is adjacent to the Stuart Highway for a portion of this section, a traffic engineering solution can be developed in consultation with NTG to ensure that the co-location of infrastructure does not undermine the potential future expansion of that highway.

As explained in Section 2.4.5.5, at Livingstone, the OHTL Corridor enters the future NTG utilities corridor for approximately 66 km until it terminates at the DCS in Murrumujuk. Ongoing discussions with NTG are considering options to optimise the alignment to mitigate potential impacts. One minor route modification is required at approximately KP 745 to avoid a population of *Typhonium taylori* which is listed as endangered under the *EPBC Act*. A proposed option to avoid impacts to the species is for the OHTL to exit the NTG utilities corridor and enter the adjacent NTG's proposed main roads corridor for a distance of approximately 1 km before re-entering the NTG utilities corridor and continuing to the DCS (refer to Chapter 5 for further details).

Overall, the Proponent considers that it has met the objectives of the *EP Act* and the *EPBC Act* in siting key components of the Project's infrastructure, such as the OHTL. Where relevant and practical to do so, future strategic land use planning objectives published by the NTG have also been factored into this decision-making framework.

16.6.3.11 Utility Conflicts

The proposed routing of the cable in the vicinity of the Cox Peninsula, Stuart Highway, future Strauss Water Treatment Plant and future Weddell Freeway will need careful consideration due to potential conflicts in that area. DIPL encourages the proponent to continue to engage in this regard.

16.6.3.12 Response

The Proponent will continue to engage with DIPL as the Project's design progresses with a view to avoiding potential future infrastructure conflicts.

16.6.3.13 OHTL Burial

The EIS states that: "a fibre optic cable will also be installed within the cleared footprint for the length of the OHTL. This may be buried in the OHTL corridor to a depth of up 1.2 m or strung with the powerline." (Table 2.1 and page 2.2) As undergrounding the fibre optic cable would cause ground disruption, was it considered that if the fibre optic cable is to be buried the OHTL could be underground also?

16.6.3.14 Response

Refer to Sections 2.4.7, 2.10.11.2 and 2.9 of Chapter 2 where this matter is responded to in full.

16.6.4 ECNT Submission

16.6.4.1 Copper Procurement

ECNT notes that the volume of copper required for the construction of the Project is likely to be significant. The increase in demand for copper will mean a greater demand placed on the extraction of this mineral. This is problematic insofar as the Northern Territory's mining laws are not currently fit-for-purpose, and internationally the extraction of copper is frequently associated with environmental and human rights impacts. Whilst an initial increase in demand for some minerals may be unavoidable, ECNT encourages Sun Cable to develop a plan for the sustainable sourcing of copper, including an investigation of the possibility of using recycled materials wherever possible. It is paramount that Sun Cable makes commitments to ensure ethically sourced materials at each stage of the supply chain for the materials of the project.

16.6.5 Response

The Proponent is currently investigating supply options for the Project including the copper required for the Subsea Cable System. The Proponent's ESMS is aligned with IFC and EP4 principles which will identify and manage supply chain and human rights risks along with broader environmental and social concerns across the Project life-cycle.

16.6.6 Anonymous Submission

How is the concept of an environmentally friendly project to produce and supply power feasible?

The power line capacity at peak generation is expected at 6.4GW and forecast to be 17GW. Presumably this means bolstering the infrastructure with more cables as the project grows. Operating capacity is expected between 525-600kV. This submission focusses on the community, air quality, eco system, and cultural heritage impacts.

I request that this project variation to the OHTL route is not deemed feasible by the NT Environmental Protection Agency.

16.6.7 Response

The potential social and environmental impacts of the Project have been identified in the Draft EIS and this SEIS. Mitigation measures have been proposed based on the environmental decision-making hierarchy of avoiding and mitigating residual impacts.

16.6.8 Anonymous Submission

Cultural Heritage Known Sites

In the OHTL corridor between Livingstone and Murrumujuk alone, there are 34 known archaeological sites, 11 isolated artefacts, 4 culturally significant landscape features, and 33 cultural Heritage Risk Areas. These include a range of sacred sites, WWII sites, and other important evidence of human historic habitation, which links all people with the history of their country and ancestors. The documentation admits that any attempt to divert the OHTL around these sites will likely result in disturbing others. Although not mentioned, I note this would be highly likely to require additional NT Planning permissions for rezoning and/or clearing, and private landowner permission.

16.6.8.1 Response

Should environmental approval be gained for the Project, the Proponent will obtain secondary approvals, including planning permissions, prior to undertaking any work. Chapter 14 of the Draft EIS, Chapter 13 of this SEIS, and Appendix 4.1: Constraints Planning and Field Development Procedure of this SEIS establish the framework by which cultural heritage items and places will be avoided where possible, whilst also considering the need to avoid other significant constraints. Where impacts on cultural heritage items and places cannot be avoided, further consultation will be undertaken with TOs and Custodians, and the relevant processes under NT legislation and NTG policy guidance will be followed. Chapter 13 – Culture and Heritage also contemplates the Proponent's approach to managing potential impacts on heritage sites and areas of cultural significance.

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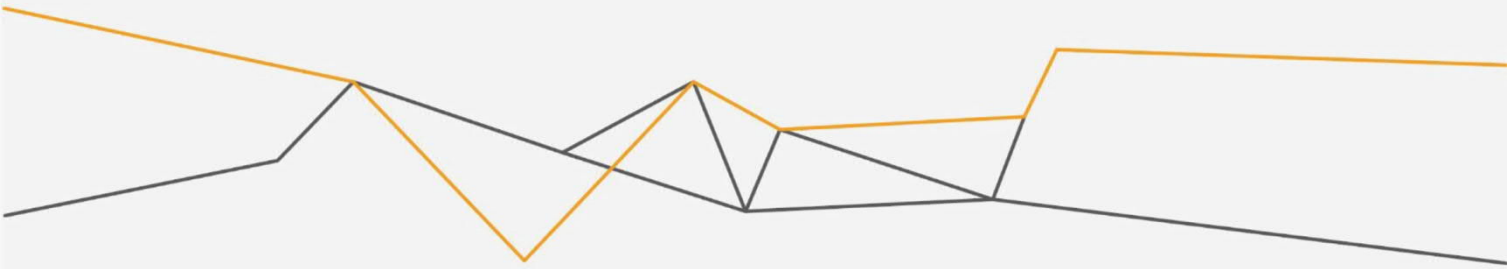

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