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Chapter 17 – Environmental Management

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17.1 Introduction

This chapter provides a collated list of all new avoidance, mitigation and monitoring measures identified during the preparation of this SEIS for key construction and operation activities by environmental factor. These measures complement, and are in addition to, those summarized in Chapter 17 of the Draft EIS. Mitigation measures that relate to stakeholder engagement or other social matters, are summarized in Appendix 3.2 SIMP and are not repeated here.

17.2 Environmental Management, Mitigation, and Monitoring Measures

17.2.1 Terrestrial Environmental Quality

Mitigation and management measures that will be implemented in addition to those already committed to within the Draft EIS for TEQ are listed in Table 17-1.

Table 17-1: Terrestrial Environmental Quality – Additional Mitigation Measures and Monitoring

Project Component / Footprint	Avoidance	Mitigation	Monitoring
OHTL Corridor – Preferred Route at Katherine	No sediment will be removed from Tindal Creek or Katherine River The OHTL will span the Tindal Creek and Katherine River, avoiding works within these watercourses. The OHTL Access Track will not be constructed through Tindal Creek or Katherine River – those watercourses will be accessed from either side, via existing tracks where available. No trenching will occur along the OHTL Corridor, including within the PFAS Management Area.	The OHTL Corridor will be as narrow as possible within the PFAS Management Area, to minimize the disturbance footprint. Temporary mobile camps will not be located within the PFAS Management Area. Soil hygiene stations will be established at the boundary of the PFAS Management Area. All machinery and equipment will be cleaned at these hygiene stations to avoid spreading PFAS contaminated soil along the OHTL Corridor. Site specific measures to address PFAS will be included in the Erosion and Sediment Control Plan (see CEMP framework in Draft EIS Chapter 17).	Visual monitoring / inspections of the construction footprint within the PFAS Management Area, to ensure vegetation clearing is minimal. Visual inspections of machinery and equipment at soil hygiene stations, to ensure all soil is removed prior to leaving the PFAS Management Area.
Electrode	Increase surface area and bury Electrode in a coke bed to reduce current density and minimize potential for soil drying from electro-osmosis (based on soil resistivity data). DCS Electrode will be located over shallow groundwater table to prevent soil drying due to increased soil moisture conditions.	If monitoring identifies soil drying during periods of electrode operations soil wetting / irrigation will occur to mitigate this impact. Electrode operations will be restricted to ≤ 48 hours during a single event.	Soil probe monitoring around Electrode Site to track soil moisture conditions during operations. Readings will be compared to baseline data (collected when electrode is not in use ~95% of the time).

17.2.2 Terrestrial Ecosystems

The mitigation and monitoring measures that will be implemented, in addition to those already committed to within the Draft EIS for Terrestrial Ecosystems, are listed in Table 17-2.

Table 17-2: Terrestrial Ecosystem - Additional Mitigation Measures and Monitoring

Project Component / Footprint	Avoidance	Mitigation	Monitoring
Site-wide: Loss of / deterioration of vegetation and habitat	Significant vegetation and threatened species habitat will be assigned an appropriate constraint rating and managed in accordance with the Constraints Planning and Field Development Procedure (Appendix 4.1). Micro-siting of project infrastructure to avoid significant vegetation where possible. Preferential use of existing cleared areas where possible for temporary construction requirements such as access tracks.	The area to be cleared for the Solar Precinct is clearly flagged and marked on-ground. Clearance only within the boundaries of approved license obtained to clear native vegetation as per the *Planning Act 1999* (NT) and/or the *Pastoral Land Act 1992* (NT). Re-instatement of all temporary construction footprints Implement weed control post-construction. Develop and implement Greater Bilby procedure in consultation with DCCEEW and DEPWS as part of the already committed to Flora and Fauna Management Plan. This will state mitigation measures if Greater Bilby is found within Project footprint including, but not limited to: • Conducting land management operations (i.e., fire management and pest control) in adjacent areas to Project footprints to enhance habitat quality (in negotiation with landowners)	Visual inspections during clearing to ensure clearing is within approved boundaries. Results of cleared areas will be recorded, including photographs. Visual rehabilitation inspections following first wet season post-construction or until vegetation is established and sites are stable.

Project Component / Footprint	Avoidance	Mitigation	Monitoring
Site-wide: spread of weed species	Avoid introducing new weeds into Project footprint by implementing weed hygiene, as per the Weed Management Plan (Appendix 5.3)	Implement Weed Management Plan (Appendix 5.3) developed in accordance with the *Weeds Management Act* and relevant statutory weed management plans.	As per the Weed Management Plan (Appendix 5.3).
Site-wide: fire regime	Observe fire bans.	Develop and implement a Bushfire Management Plan, including first response capability	Visual monitoring for fires. Monitoring NAFI website for proximate fires which may impact proposal. Monitoring conditions for fire risk.
Site-wide: loss / fragmentation of threatened species habitat / significant vegetation	Avoid removing large hollow-bearing trees where possible	Site inductions will ensure that all personnel are aware of potential/confirmed areas of fauna habitat, are aware of their obligations and know the correct procedures for fauna encounters. Clearing will be conducted in a progressive, single direction, allowing any fauna to move out of way of clearing activities. If fauna is spotted in immediate clearing area and are in danger, clearing will be stopped until safe to continue. Vehicle speed restrictions apply when travelling near uncleared areas or in higher risk conditions. Develop specific avian mitigation measures as part of the Project's Flora and Fauna Management Plan Develop and implement Greater Bilby procedure in consultation with DCCEEW and DEPWS as part of the Project's Flora and Fauna Management Plan. This will state mitigation measures if Greater Bilby is found within Project	Record any fauna encounters, injuries, or death as result of Project works / activities. Information on fauna encounters, injuries or death will be used to monitor the effectiveness of avoidance and mitigation measures, and to inform potential refinements or additional measures to be applied to minimize / eliminate the risk of future incidents.

Project Component / Footprint	Avoidance	Mitigation	Monitoring
		footprint including but not limited to: • Clearing in the surrounding area to be delayed until burrows are verified as not in use • Any active burrows within the clearing footprint are avoided with a 20 m buffer until no longer occupied.	
OHTL Corridor: loss of vegetation / habitat fragmentation	Where rights are obtained and as much as possible, the OHTL Corridor will be located in the existing railway corridor to minimize habitat fragmentation	Reinstatement of all temporary construction footprints Implement weed control post-construction. Manage vegetation in accordance with the OHTL Vegetation Management Procedure (Appendix 5.4)	Consistent with Draft EIS.
Site-wide: Changes to fauna behaviors due to noise, light, and waste management	Project activities are to be undertaken in accordance with the National Light Pollution Guidelines (DoEE, 2020) where possible.	Project activities are to be undertaken in accordance with the National Light Pollution Guidelines (DoEE, 2020) where possible.	Consistent with Draft EIS.
Site-wide: Loss of threatened species habitat (restricted range)	All threatened species known records and habitat area will be assigned a constraint rating and managed in accordance with the Constraints Planning and Field Development Procedure (Appendix 4.1). This will include avoidance (micro-siting) requirements.	Clearance only within the boundaries approved in licenses obtained to clear native vegetation as per the *Planning Act 1999* (NT) and/or the *Pastoral Land Act 1992* (NT). Reinstatement of all temporary construction footprints. Pre-clearance surveys and use of a fauna spotter-catcher measures per Appendix 4.1 based on threatened species constraint rating. Areas known to support threatened flora species are clearly flagged and signposted as ‘No-Go	Visual inspections during clearing to ensure clearing is within approved boundaries. Results of clearing activities will be recorded, including photographic record. Rehabilitation inspections following the first wet season post-construction or until vegetation is established and sites are stable.

Project Component / Footprint	Avoidance	Mitigation	Monitoring
		Zones' as per Appendix 4.1. <u>Ghost Bat (Macroderma gigas)</u> If any suitable roosting habitat is located, construction of the OHTL Corridor will be restricted within 1 km of that habitat to outside of breeding season (i.e., no construction between July to September). <u>Darwin Cycad (Cycas armstrongii)</u> Where clearing of Darwin Cycad cannot be avoided, impacted species will be salvaged and translocated for re-planting into the re-instated area where possible.	

17.2.3 Hydrology

The mitigation and monitoring measures that will be implemented in addition to those already committed to within the Draft EIS for Hydrology are listed in Table 17-3.

Table 17-3: Hydrology – Additional Mitigation Measures and Monitoring

Project Component / Footprint	Avoidance	Mitigation	Monitoring
Powell Creek / DCS Electrode Sites, Solar Precinct, AI	Powell and DCS Electrode sites will avoid major watercourses.	Additional earthworks and re-grading across the Solar Precinct site to remove elements of the design blocking flow paths, potentially reducing flood depths and allowing freeboard requirements to be met.	Consistent with Draft EIS.
Powell Creek / DCS Electrode Sites, Solar Precinct, AI	Groundwater will not be extracted from the fractured Proterozoic basement aquifer.	Consistent with Draft EIS.	Consistent with Draft EIS.
Powell Creek / DCS Electrode Sites, Solar Precinct, AI	Consistent with Draft EIS.	Implement Groundwater Management Plan to reduce changes to groundwater levels associated with	Consistent with Draft EIS.

Project Component / Footprint	Avoidance	Mitigation	Monitoring
		extraction from the Montejinni Limestone aquifer.	
Solar Precinct - Proterozoic Aquifer	Avoid extraction of groundwater from this aquifer.	Consistent with Draft EIS.	Consistent with Draft EIS.
Solar Precinct - Montejinni Limestone Aquifer	Consistent with Draft EIS.	Implement Groundwater Management Plan.	A bore audit will be carried out to ground truth the location of existing bores around the Solar Precinct and to collect baseline groundwater data. An investigation drilling program to confirm the availability of groundwater in this aquifer will be carried out. Develop a Groundwater Management Plan as a follow-up monitoring measure to evaluate impacts from the proposed Solar Precinct production bore on neighbouring bores and the broader aquifer system.
Solar Precinct, AI	Consistent with Draft EIS.	Waterline will be installed along the access road during the dry season when no flow is present.	Carry out routine visual inspections of the waterline to ensure no leaks or damage to the infrastructure.
AI	During Operations, use solar power as a power source to avoid need for handling and storage of bulk fuel to minimize risk of accidents / spills of hazardous substances. Landfill will comply with the Guidelines for Siting, Design and Management of Solid Waste Disposal Sites in the NT (NT EPA 2003). No waste will be stored within 200 m of a watercourse.	Adhere to Environmental Design Criteria and Standards (Appendix 2.1).	Carry out routine visual inspections around landfill, storage locations and work areas.

Project Component / Footprint	Avoidance	Mitigation	Monitoring
OHTL Corridor – Preferred Route at Katherine	OHTL conductor wires will span the Tindal Creek and Katherine River, avoiding works within the watercourses. The OHTL Access Track will not be constructed through Tindal Creek or Katherine River – those watercourses will be accessed from either side, via existing tracks where available.	Consistent with Draft EIS.	Consistent with Draft EIS.
OHTL Corridor – Preferred Route at Katherine - PFAS Management Areas	No sediment will be removed from Tindal Creek or Katherine River. No trenching will occur along the OHTL Corridor, including within the PFAS Management Area. The OHTL construction corridor will be as narrow as possible within the PFAS Management Area, to minimize the disturbance footprint. Temporary construction infrastructure will not be located within the PFAS Management Area. Soil hygiene stations will be established at the boundary of the PFAS Management Area. All machinery and equipment will be cleaned at these hygiene stations to avoid spreading contaminated soil along the OHTL Corridor. No groundwater will be extracted from bores located within the Katherine PFAS Management Area. No surface water will be extracted from Tindal Creek or Katherine River.	The OHTL Corridor will be as narrow as possible within the PFAS Management Area, to minimize the disturbance footprint. An ESCP will be developed consistent with best practice and International Erosion Control Association (IECA, 2008) guidelines, to minimize risk of erosion of soils within PFAS Management Area. Soil/Sediment within the PFAS Management Area will not be stockpiled and the PFAS NEMP guidelines for stockpiling of soils contaminated with PFAS will be adhered to.	Visual monitoring of the construction footprint within the PFAS Management Area, to ensure clearing is minimal. Visual inspections of machinery and equipment at soil hygiene stations, to ensure all soil is removed prior to leaving the PFAS Management Area.
Site wide	Consistent with Draft EIS.	Address emerging erosion issues after each wet season.	Consistent with Draft EIS.

17.2.4 Aquatic Ecosystems

The mitigation and monitoring measures that will be implemented in addition to those already committed within the Draft EIS for Aquatic Ecosystems and Inland WQ are listed in Table 17-4.

Table 17-4: Aquatic Ecosystems - Additional Mitigation Measures and Monitoring

Project Component / Footprint	Avoidance	Mitigation	Monitoring
Site wide	Avoid extracting groundwater to an extent that there are adverse impacts to aquatic habitats During operations, solar power will be used as a power source, hence no requirement for bulk fuel storages.	Consistent with Draft EIS.	Consistent with Draft EIS.
Solar Precinct and DCS	Consistent with Draft EIS.	Design criteria for engineered stormwater management systems installed at the Solar Precinct and DCS is to discharge water to similar locations and at similar volumes to pre-development conditions.	Consistent with Draft EIS.
OHTL	Consistent with Draft EIS.	Consistent with Draft EIS.	Consistent with Draft EIS.

17.2.5 Marine Environmental Quality

The mitigation and monitoring measures that will be implemented in addition to those already committed within the Draft EIS for Marine Environmental Quality are listed in Table 17-5.

Table 17-5: Marine Environmental Quality – Additional Mitigation Measures and Monitoring

Project Component / Footprint	Avoidance	Mitigation	Monitoring
Subsea Cable System – Route B	Route B selected to avoid areas of significant marine habitat as much as possible. Placement of materials/equipment in sensitive areas will be avoided. Avoid dredging in areas where contaminated sediments present. Avoid disposal of contaminated sediments Disposal of spoil will avoid stormy periods when the water column has higher energy and mixing will occur (so to decrease turbidity and dispersion of sediment).	All dredging and disposal will be conducted in accordance with the legislative framework outlined in Appendix 8.3, including the NAGD and *Environment Protection (Sea Dumping) Act 1981* (CWTH), and will draw on WAMSI to implement best management practices. Cable burial methods will be selected to suit the local seabed conditions and limit the amount of material that requires dredging. Design, install and operate Subsea Cable System in consideration of the Guidelines on Best Environmental Practices in Cable Installation, and Operation (OSPAR, 2012). Minimise disturbance footprint by undertaking targeted repair as required. Implement MEMP, including adaptive management process.	Turbidity monitoring in impact zone and at baseline/reference sites during cable installation in high-risk area (shallow waters <20m depth). During dredging and disposal, a fauna spotter will be utilised to minimize any harm to fauna and to conduct visual inspections of the works.

17.2.6 Marine Ecosystems

The mitigation and monitoring measures that will be implemented in addition to those already committed within the Draft EIS for Marine Ecosystems are listed in Table 17-6.

Table 17-6: Marine Ecosystems - Additional Mitigation Measures and Monitoring

Project Component / Footprint	Avoidance	Mitigation	Monitoring
Subsea Cable System -Route B and Potential Spoil Disposal Grounds	The location of Route B and the selection of potential spoil disposal grounds have avoided, where possible, topographical areas on the sea floor which are associated with areas of higher habitat value. Placement of materials/equipment in sensitive areas will be avoided. Disposal of spoil will avoid stormy periods when the water column has higher energy and mixing will occur (so to decrease turbidity and dispersion of sediment).	Design, install and operate Subsea Cable System with consideration to the Guidelines on Best Environmental Practices in Cable Installation, and Operation (OSPAR, 2012). Cable burial methods will be selected to suit the local seabed conditions and limit the amount of material that requires dredging Adhere to National Strategy for Reducing Vessel Strike on Cetaceans and other Marine Megafauna (CWTH of Australia 2017) The Subsea Cable System will be buried 0.5 – 3 m below the seabed, decreasing the effects of EMF and maintaining a maximum surface temperature of 25ºC. All dredging and disposal will be conducted in accordance with the legislative framework outlined in Appendix 8.3, including the National Assessment Guidelines for Dredging 2009 and *Sea Dumping Act*, and will draw on WAMSI to implement BMPs. Minimise disturbance footprint by undertaking targeted repair as required. North Marine Parks Network Management Plan and National Light Pollution Guidelines for Wildlife will be adhered to during construction of the Subsea Cable System. Sandwaves proposed to be dredged and potential spoil disposal grounds will be of similar grainsize where possible	Turbidity monitoring in impact zone and baseline/reference site during cable installation in high-risk area (shallow, <10 m depth). Visual observations for signs of changes in behaviour of marine fauna activity in accordance with the MEMP. Adaptive management process will be applied (Figure 9-1; Chapter 9). During dredging and deposition, a fauna spotter will be utilised to minimize any harm to fauna and to conduct visual inspections of the works.

Project Component / Footprint	Avoidance	Mitigation	Monitoring
		Lighting will be energy efficient and designed to minimize hard contrasts, without compromising navigation safety and security. Minimised use of lights at night as feasible to reduce light trespass and to maintain dark skies. Where possible, lights will be shielded with exterior cut-off fixtures to limit light emissions at a vertical angle of no more than 90 degrees from straight down. If a listed species is injured or killed, the proponent must ensure that: • All use of the equipment that injured or killed the listed species ceases immediately • The activity does not resume without the written permission of the Director. Where there is a repair option with less disturbance, the option with less disturbance will always be attempted first. Cable laying activities will progress up to 600 m per hour which will limit the duration of noise emissions in any given area.	

17.2.7 Amenity

The mitigation and monitoring measures that will be implemented in addition to those already committed within the Draft EIS for Amenity are listed in Table 17-7.

Table 17-7: Amenity - Additional Mitigation Measures and Monitoring

Project Component / Footprint	Avoidance	Mitigation	Monitoring
Site wide	Avoid siting Project infrastructure in sensitive areas. Establish appropriate separation distance from existing properties to Project infrastructure. Maintain separation distances to sensitive receptors, including residences where possible. Road and rail crossings to avoid 90-degree crossings and designed to transect the road at an appropriate angle.	Consultation with Project stakeholders and consideration of vegetation planting to achieve a level of visual screening for Project infrastructure. Siting of Project within cleared areas as far as practical to minimize additional clearing of native vegetation. Siting of infrastructure on land where existing or planned linear infrastructure will be located (e.g., the existing railway corridor and NTG utilities corridor). Develop a TARP prior to construction that demonstrates monitoring and adaptive management techniques that will be applied should monitoring criteria be met. Examples of adaptive management techniques include: • Dust suppression using water • Vehicle speed restrictions • All trucks containing road base or other high dust generating materials will be covered • Stockpiles will be covered or wetted down where practical • Dust screens (vegetation or cloth) • Reducing or ceasing high risk dust generation work • Progressively rehabilitate construction areas as soon as no longer required. Where not possible to maintain separation distances (especially for construction noise which has a larger screening distance) additional noise measures may be implemented including day operating hours only, assessment of noise impacts including consideration of topography and natural screening barriers or other noise abatement methods. Refer to Constraints Planning Framework and Field Development Procedure (Appendix 4.1).	Visible dust monitoring for adaptive management techniques. Track climatic conditions (hot, dry, and windy conditions) that could lead to a higher risk TSP or PM_{10} monitoring for high-risk areas (adjacent to communities where separation distances to receptors may not be met and / or as a result of public complaints). If noise complaints are unable to be resolved following adaptive management and adoption of additional mitigation measures, noise monitoring may be undertaken to demonstrate achievement of the NT EPA Noise Management Framework Guideline 2018.

Project Component / Footprint	Avoidance	Mitigation	Monitoring
		Vegetation planting to visually integrate the Project or filter views of the Project at specific locations.	
OHTL Corridor	Location of preferred OHTL route at Adelaide River involved a significant relocation from the original route in the Draft EIS to increase separation distances to sensitive receptors and avoid environmental risk. Siting of linear infrastructure to avoid strong natural linear features such as valley bottoms and ridgelines.	Micro siting of OHTL in areas with lower visual impact such as within existing clearings, alongside existing linear infrastructure, and natural linear boundaries. Consideration of style of OHTL structures (monopoles or lattice towers) to consider the visual impact of each, as well as construction materials to reduce reflective surfaces.	Consistent with Draft EIS.
Subsea Cable System	Subsea Cable System avoids busy marine areas such as Darwin Harbour.	Marine vessels selected will have similar noise emissions to other commercial vessels used in the area. Cable laying activities average speed is 500 m per hour (12 km per day) to limit duration of noise emissions in a given area.	Consistent with Draft EIS.
Electrode	Consistent with Draft EIS.	Distance from infrastructure used to identify initial constraints mapping. Where distance cannot be achieved, the following will be used: • Use cathodic protection/plastic shielding for telecommunications equipment. • Insulating joints for piping • Sectionalise fences • Create electrical isolation gaps in railway tracks • Passive or active cathodic protection systems. • Limited electrode operation	Consistent with Draft EIS.

17.2.8 Atmospheric Processes

The avoidance, mitigation, monitoring, and reporting commitments in the Draft EIS extend to, and are appropriate for, the refined footprint of the Powell Creek AI, OHTL Corridor, Electrodes, and Cable Transition Facilities. Therefore, no changes to the mitigation measures previously committed to within the Draft EIS are required for this factor.

17.2.9 Land Use and Transport

The mitigation and monitoring measures that will be implemented in addition to those already committed within the Draft EIS for Land Use and Transport are listed in Table 17-8.

Table 17-8: Land Use and Transport - Additional Mitigation Measures and Monitoring

Project Component / Footprint	Avoidance	Mitigation	Monitoring
Subsea Cable System - Future Land Use	Subsea Cable System will be vertically separated from the proposed ferry route. The Subsea Cable System will be approximately 1 km from ferry terminal and dredging in this area will be avoided.	Consultation with stakeholders on timing of marine construction activities.	If requested, noise and dust monitoring will be conducted, following complaints, to verify appropriate limits are being achieved.
Site-wide - Roadways	Use of air and rail for personnel and freight transport where possible	Consultation with stakeholders on timing of activities Prepare and implement Traffic Management Plan(s) in consultation with the DIPL. Obtain permits for all overweight or over-mass vehicle movements required under the *Motor Vehicles Act 1949* (NT) in accordance with NT requirements. Use buses for movements between personnel accommodation and work sites. Traffic movements to be timed to avoid peak hour traffic in built-up areas where practicable. Ongoing engagement with DIPL.	Monitoring to be implemented per the Construction Environmental Management Plan and Traffic Management Plan(s).
Subsea Cable system - Marine Transportation	Consistent with Draft EIS.	Communication with AFANT and the fishing community, as well as Harbour Master's Notices. As per Safety Plans for cable-laying vessels, including visibility at night.	As per developed Traffic Management Plans and Environmental Emergency and Spill Response Plans.
Electrode	Where possible, include buffers to existing activities (e.g., 10 km buffer between electrodes and existing land uses) to avoid impacts.	Consult with NTG to identify potential impacts to new developments within the 10 km buffer zone of electrodes. Cathodic protection to be considered for future electrical infrastructure within the buffer zone as per AS/NZS.	Monitor and maintain internal records of electrode operations in line with CIGRE guidelines.

Project Component / Footprint	Avoidance	Mitigation	Monitoring
Site-wide / AI – Aviation	Aviation or flight movements should be timed to avoid periods of known flight path activity where practicable.	Communication with pastoralists on timing of flights at the new Aerodrome.	Monitoring as per developed Traffic Management Plan(s).

17.2.10 Culture and Heritage

The mitigation and monitoring measures that will be implemented in addition to those already committed within the Draft EIS for Culture and Heritage are listed in Table 17-9.

Table 17-9: Culture and Heritage - Additional Mitigation Measures and Monitoring

Project Component / Footprint	Avoidance	Mitigation	Monitoring
Site wide	No activities will occur within sacred and heritage sites identified as a no-go zone in the AAPA certificate (Appendix 4.1).	The CHMP will be prepared in consultation with TOs and the NT Heritage Branch in alignment with the framework described in Section 13.5.1 of Chapter 13. Prepare an Unexpected Archaeological Heritage Finds Procedure and A Discovery of Human Remains Procedure in alignment with the process outlined in Section 13.5.2 and Section 13.5.3 of Chapter 13.	Consistent with Draft EIS.

17.2.11 Human Health

The mitigation and monitoring measures that will be implemented in addition to those already committed within the Draft EIS for Human Health are listed in Table 17-10.

Table 17-10: Human Health - Additional Mitigation Measures and Monitoring

Project Component / Footprint	Avoidance	Mitigation	Monitoring
Site wide (air)	Where possible maintain separation distances to sensitive receptors.	Develop a TARP prior to construction that demonstrates monitoring and adaptive management techniques that will be applied should monitoring criteria be triggered. Examples of adaptive management techniques include: • Dust suppression using water • Vehicle speed restrictions • All trucks containing road base or other high dust generating materials will be covered • Stockpiles will be covered or wetted down where practical • Dust screens (vegetation or cloth) • Reducing or ceasing high risk dust generation work	Visible dust monitoring to support TARP adaptive management response. Track climatic conditions (hot, dry, and windy conditions) that could lead to a higher risk TSP or PM_{10} monitoring for high-risk areas (adjacent to communities where separation distances to receptors may not be met and / or as a result of public complaints.
OHTL Corridor (EMF)	Height of OHTL to provide separation distance to reduce EMF at ground level. Lead sheathing and armoured cores of subsea cables to minimize EMF.	Modelling to ensure design will achieve recommended limits. ICNIRP guidelines for limiting exposure to time-varying EMF are ICNIRPLFgdl.pdf. ARPANSA references ICNIRP guidelines.	Monitoring to demonstrate recommended limits have been achieved.
Site-wide (Emergency Services)	Fully staffed medical centre to be provided at the Solar Precinct to prevent reliance on local emergency services.	MOU to be developed with local emergency services regarding medical evacuation.	Consistent with Draft EIS.
OHTL Corridor (Physical barriers, bushfires, public safety)	OHTL towers are below 100 m definition of a “tall structure”. Design to AS/NZS.	Additional lighting and visibility requirements for towers within the approach landing surface for airports in accordance with CASA requirements. Consultation with CASA, airbases, emergency services and adjacent landowners (especially those	WHS Requirements CASA requirements for reporting of tall structures (within approach surface for airports).

Project Component / Footprint	Avoidance	Mitigation	Monitoring
		engaged in agricultural pursuits) to highlight location of OHTL and discuss interface issues. Bushfires NT have informed the Proponent that locations of OHTL structures will also be noted on a phone application available to all pilots in line with other tall structure requirements. Fault management procedures.	
Site wide (noise)	Design to AS/NZS. Constraints Planning and Field Development Procedure (Appendix 4.1) highlights approach of selecting site with lowest impacts.	Modelling of noise and vibration impacts to identify high risk areas where additional mitigation required. Additional control strategies that could be applied at high-risk sites are documented in the Constraints Planning and Field Development Procedure (Appendix 4.1) and include restricting high noise activities to day hours.	If requested, noise monitoring will be conducted, following complaints, to verify appropriate limits are being achieved.
Site-wide (electrical current)	Design to IEC Standards and all applicable guidelines.	Modelling of voltages and surface potential to ensure the design complies with IEC standards.	

17.2.12 Matters of National Environmental Significance

Impact mitigation was undertaken in accordance with the environmental decision-making hierarchy consistent with Section 26 of the *EP Act*. The decision-making hierarchy sets the following priorities when addressing impacts which have been considered in developing the avoidance, mitigation, monitoring, and reporting commitments set out within Chapter 5 – Terrestrial Ecosystems (Table 17-2), Chapter 8 – Marine Environmental Quality (Table 17-5)- and Chapter 9 – Marine Ecosystems (Table 17-6) of this SEIS as they relate to MNES.

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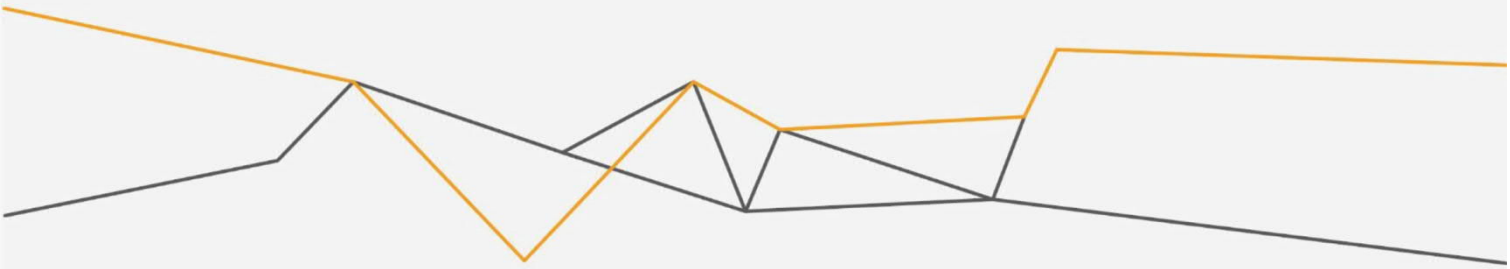

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