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1 Introduction

Tasmanian Networks Pty Ltd (TasNetworks) propose to develop the Remaining North West Transmission Developments (Remaining NWTD; the project), which consists of a new switching station at Hampshire (Hampshire Hills switching station) and new double-circuit 220 kilovolt (kV) overhead transmission lines (OHTLs) from Palmerston substation to Sheffield substation, from Sheffield substation to Burnie substation, and from Burnie substation to a new switching station at Hampshire Hills (via East Cam).

Two spurs will be constructed from the Sheffield to Burnie OHTL in the Stowport area to a new switching station at Heybridge. The new switching station at Heybridge is not part of the project. The project also includes minor works required to augment the network, including substation modifications, dismantling existing OHTLs and undergrounding short sections of overhead distribution lines.

The project forms one component of the broader North West Transmission Developments (NWTD), which will expand the existing 220 kV transmission network in North West Tasmania. In addition to the Remaining NWTD, the NWTD also includes a new switching station at Staverton, an OHTL between Staverton and Hampshire Hills, and upgrades of existing OHTLs between Sheffield and Staverton. These components are assessed separately to the project.

This document provides a summary of the environmental impact statement (EIS) prepared for the project. The main findings of the impact assessment are presented, focusing on the key project-related impacts and how TasNetworks proposes to manage these impacts. The impact assessment, as documented in the EIS, will inform a decision by the Tasmanian Planning Commission (TPC) on whether the project should proceed, and if so, under what conditions.

This executive summary includes the following:

- A description of the proponent and the proposed project.
- The environmental approvals and assessment process.
- Public consultation undertaken to inform interested parties about the project.
- · Key project activities and timing.
- Potential impacts identified in the environmental and socio-economic impact assessment and the key commitments to manage these impacts.
- Public exhibition of the EIS and making submissions.
- · Ongoing consultation processes.

The EIS provides more detailed information than presented in this executive summary. It is informed by technical specialists' assessment of their relevant environmental and socio-economic disciplines. The EIS should be read in conjunction with Part A, Report introduction, and Attachment 7, Planning criteria cross check.





1.1 Project proponent

TasNetworks is a Tasmanian State-owned corporation that owns, operates and maintains the electricity transmission and distribution network in Tasmania. TasNetworks delivers reliable electricity supply across 22,400 km of distribution lines and OHTLs to more than 295,000 residential, commercial and industrial customers throughout Tasmania. It also facilitates the transfer of electricity between Tasmania and Victoria via Basslink, the sub-sea electricity interconnector.

1.2 Description of the project

This section provides an overview of the key components of the project, including the switching station, double-circuit transmission line and supporting infrastructure.

1.2.1 Hampshire Hills switching station

A new 220 kV switching station will be constructed approximately 3.5 km west of Hampshire. To avoid confusion with the existing 110 kV Hampshire switching station (located approximately 1.5 km southeast of the new switching station), the new switching station will be named the Hampshire Hills switching station. The Hampshire Hills switching station will facilitate the transfer of power from one circuit to another and will be able to isolate a particular circuit for maintenance or shutdown transmission in the event of an unplanned event. The switching station will occupy a permanent area of approximately 160 m by 100 m to allow for high voltage switchgear, control buildings,

amenities, transmission system protection equipment, communication equipment, power supply equipment, fire control, and roadway and parking. The Hampshire Hills switching station will facilitate forecast North West and Far North West wind development and West Coast wind and pumped hydroelectric storage projects.

1.2.2 New double-circuit overhead transmission lines

Approximately 162 km of 220 kV double-circuit OHTL will be constructed between Palmerston substation and the proposed Hampshire Hills switching station, including two spurs between the Stowport area and Heybridge. The OHTLs will be located within an easement that is predominantly 50- to 60-m-wide, ranging up to 120-m-wide where required for electrical safety clearance. New easements will be required for some parts of the alignment, primarily between the Stowport area and Heybridge, and between East Cam and the Highclere area. The remainder of the alignment is generally located within, partially within, or adjacent to existing easements, with minor deviations as required.

The OHTLs will be supported by approximately 366 steel lattice towers between 33- and 60-m-tall and spaced approximately 400 m apart (lengths vary by span). Access tracks will be required outside the easement to access each tower location for construction, operation and maintenance, and decommissioning. Access tracks will be located in agreement with landholders and negotiations with landholders will determine whether a permanent or temporary access track is required to access the OHTL for maintenance. Where temporary, they will be removed, and the land reinstated and rehabilitated in agreement with the landholder. Track width is nominally 6 m, and length is variable depending on the location of existing roads and proposed infrastructure.

1.2.3 Supporting infrastructure and services

Supporting temporary facilities will likely include laydown areas, and site offices. Temporary infrastructure and workspace will be consolidated where practicable to reduce the area of disturbance.

Construction materials will be transported to site via road. Materials arriving from mainland Australia or overseas will arrive at Tasmania's major seaports of Burnie or Devonport.

Fuel and potable water will be sourced from local suppliers. Water for dust suppression could be sourced from dams subject to agreement with landholders, or from suitable watercourses in accordance with a permit under the *Water Management Act 1999* (Tas). Wastes will be disposed to waste transfer sites or landfills in proximity to the project area.

1.2.4 Works of minor environmental impact

Works of minor environmental impact are exempt from planning approval (i.e., they do not require a permit under the Land Use Planning and Approvals Act 1993 (Tas) (LUPAA) and are not development for the purposes of the Major Infrastructure Development Approvals Act 1999 (Tas) (MIDAA) project use and development). The EIS requirements request that details of any project activities that may impact on matters of national environmental significance (MNES), where that use or development is not subject to the LUPAA, are described and direct, indirect, cumulative, and facilitated impacts of the project and other activities are addressed.

Works of minor environmental impact required for the project are:

- Modifying existing substations: The 220 kV switching station at Palmerston substation will be augmented within the existing footprint to accommodate the new Palmerston–Sheffield 220 kV OHTL. The 220 kV switchyards at Sheffield and Burnie substations will be extended to accommodate the new OHTLs
- Dismantling of existing transmission lines:
 TasNetworks is planning to dismantle two existing single-circuit transmission lines, Palmerston–
 Sheffield 220 kV OHTL and Sheffield–Burnie 220 kV
 OHTI
- Modifying the 22 kV distribution lines: In the Burnie area where there is insufficient space to construction the proposed OHTLs, 22 kV overhead distribution lines will be undergrounded at four locations, between Burnie substation and Mooreville Road, Burnie substation and Three Mile Line Road, between Three Mile Line Road and Mount Street and between Mount Steet and Massy-Greene Drive. Where feasible, at 73 other locations where the proposed new 220 kV OHTLs cross existing 22 kV overhead distribution lines, the 22 kV lines will be undergrounded to enable safe construction of the new 220 kV OHTL. Where not feasible, alternative options for safety include the use of temporary conductor supports or hurdles.
- Modifying existing 110 kV OHTL: In two highly constrained areas between Sheffield and Burnie, the existing 110 kV OHTL will need to be relocated north to allow sufficient space for the new 220 kV OHTL to be constructed. This will involve removing 15 110 kV towers and constructing 14 new 110 kV poles, 11 of which will be relocated north of the existing 110 kV OHTL.



2 Project alternatives

Several alternatives were considered early in the development of the project to determine if they were constructable, operable, safe, viable technically and commercially, and could avoid or minimise environmental and socio-economic impacts. The transmission line route alternative analysis was key to avoiding and minimising environmental and socio-economic impacts. A sequential and detailed route selection process was used to identify the preferred transmission line route. A rigorous alternatives analysis was also conducted for the following:

- Overhead versus underground technologies.
- Transmission line design.
- Transmission line treatments.

A 'no-project' option was also considered.

The alternatives analysis was informed by stakeholder input, baseline environmental and social sensitivity surveys, technical surveys and risk assessments. Potential environmental and social impacts will be managed through a hierarchical application of avoidance, minimisation, and rehabilitation or restoration, and compensation. Avoiding and/or minimising environmental and social impacts has been central to evaluating alternatives.

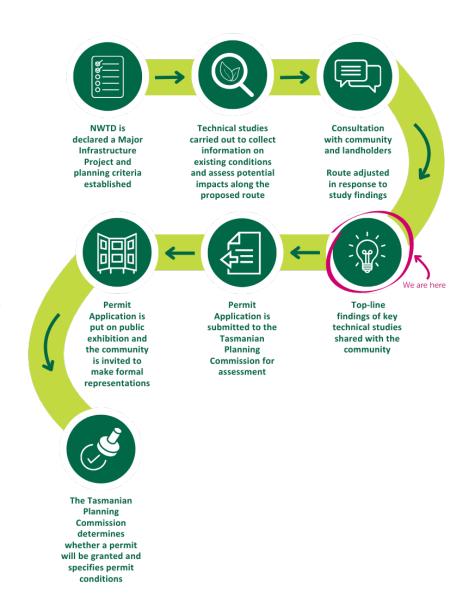


3 Approvals and assessment process

The principal legislation that regulates the development of the project are the MIDAA, the Land Use Planning and Approvals Act 1993 (Tas) and the *Environment Protection and Biodiversity Conservation Act 1999* (Cwth) (EPBC Act). This EIS informs the statutory approvals required by both the MIDAA and the EPBC Act. The NWTD has been declared a major infrastructure project under the MIDAA and will be assessed under the MIDAA by the TPC. The project is a component of the NWTD, and the project's use and development will be assessed under the MIDAA.

The project has been determined a 'controlled action' under the FPBC Act and must be assessed and approved in accordance with the EPBC Act. The relevant controlling provision is listed threatened species and communities (sections 18 and 18A of the EPBC Act). The Commonwealth Minister for the Environment and Water accredited the assessment under the MIDAA by the TPC. An approval decision, based on that assessment, is still required by the Commonwealth Minister for the Environment and Water under the EPBC Act.

The scope of the MIDAA assessment is defined in the *Planning Criteria* for the Major Infrastructure
Development (North West
Transmission Upgrades Project)
Order 2020 (planning criteria)
(Attachment 2). The project's application for a planning permit is required to address the relevant aspects of the planning criteria.



4 Public consultation

TasNetworks has engaged the public on over 50 occasions since June 2019 on matters relating to the project. Engagement has resulted in consultation with over 2,500 interested parties across North West Tasmania. The engagement included the following activities:

- Community drop-in sessions.
- Community pop up stalls.
- · Community workshops.
- Online and telephone surveys.
- · Community webinars.
- · Focus group meetings.
- An industry event.

Key themes raised in engagement concerning project related impacts and benefits included unemployment and jobs, the environment, tourism, economic impacts and costs versus benefits, quality of life, and public safety associated with vehicle movements and increased occurrence of anti-social behaviours. The feedback collected through the engagement process helped TasNetworks form an understanding of the important environmental and socio-economic values, ultimately informing the scope of the EIS studies. Community engagement enabled TasNetworks to prioritise impact mitigation opportunities, which focused on:

- Creation of employment and business opportunities.
- Protection of the natural environment.
- Minimisation of impacts to affordability and availability of goods, services, and housing.
- · Protection of the tourism industry.
- Maintaining community safety.
- Refining the design and location of the transmission line to avoiding and minimising environmental and socio-economic impacts.

In addition to public engagement, TasNetworks has been working to engage with directly affected landholders regarding tower and easement placement on their properties, access to complete surveys, and management of potential impacts the project may cause. Concerns raised by landholders generally relate to potential impacts on their land (including tower placement and use restrictions within the easement).

TasNetworks is respectful of landholders and the issues raised and is continuing to work with landholders to reach a mutually agreeable outcome and address and alleviate concerns.



5 Key project activities

This section describes the key activities across the construction, operation and maintenance, and decommissioning phases of the project.

5.1 Construction phase

Construction of the project will be conducted in a safe, efficient, and cost-effective manner. Potential impacts to environmental, socio-economic, and cultural values will be avoided where practicable. Where not practicable, impacts will be minimised using proven management measures.

During the construction period, a peak workforce of 333 people is expected to be required. Local workers from North West Tasmania are anticipated to make up approximately 45% of the construction workforce, with 10% coming from other intrastate resources within Tasmania. The workforce will seek accommodation for short periods in nearby major townships.

Key project construction activities include:

- Early works which includes the activities required to enable the main construction activities. Early works typically include land access and property surveys, contaminated land remediation, and targeted technical surveys such as geotechnical, environmental, and existing road and services surveys.
- **Site preparation** which includes the vegetation clearance, stripping and stockpiling of topsoil at locations where site grading is required, and establishment of access tracks. Vegetation will be cleared at all construction sites to meet safety, reliability and operational requirements. Each transmission line tower will require an access track as will other temporary and permanent facilities such as the switching station.
- Foundations and footings are necessary to support the load of surface permanent structures such as towers, heavy equipment or large buildings.
 Foundations are excavated or bored and reinforced with steel and concrete.
- Assembly and erection of permanent transmission line towers and the switching station will require temporary laydowns to store equipment and material. Equipment will be delivered via road and cranes or helicopters used for erection. The transmission line towers and switching station will be constructed in situ. The towers are erected

in sections with the lower section set on the foundations, followed by the lower body sections, and the superstructure and cross arms.

- of connecting the conductors (wires) to the constructed transmission towers. Stringing involves attaching pulleys to the towers and a helicopter drawing out a winch rope attached to the wire and dropping the rope into the pulleys. A winch pulls the rope and wire through the pulleys. The wire is then attached to the tower and adjusted to provide the required clearance from the ground.
- Reinstatement and rehabilitation mark the final stage of construction. Reinstatement and rehabilitation include the removal of waste from sites, remediation of contamination (if necessary), site contouring and reinstatement of drainage paths, reapplication of stockpiled topsoil, and where required, application of mulch to promote natural vegetation regeneration. Farmland will be reinstated and rehabilitated with consideration of landholder requirements.
- Dismantling existing overhead transmission lines.
 Removal of a transmission tower involves removing the existing conductor, felling the tower and dismantling. Once the tower is removed the area will be rehabilitated and revegetated.
- Transmission line modifications, involving relocated two short sections of the 110 kV OHTL and replacing the towers with poles. Dismantling the existing towers and constructing the new poles in their new locations will follow a similar process to construction of the new 220 kV OHTL and dismantling of the existing 220 kV OHTL.
- Substation modifications, involving minor earthworks, civil works, and installation of new electrical infrastructure.
- **Distribution line modifications**, involving relocated existing 22 kV distribution lines underground. Initial design indicates the trenches required for undergrounding sections of the 22 kV distribution lines will be up to 1,100 mm below ground surface. The nominal trench width will be 300- to 600-mm-wide. Once foundations, conduits and earthing are installed the trench will be backfilled.



5.2 Operation and maintenance phase

Operation and maintenance activities commence following construction activities. Onsite works during the operation and maintenance phase are limited to periodic inspections and vegetation management, typically occurring once or twice per year. Aerial inspections of the transmission line will also be conducted.

The OHTL requires very little maintenance other than bird nest removal and vegetation management along the easement. Bird nests present a fire hazard and will be removed where required. Vegetation management involves removal of over-height vegetation, hazard trees (i.e., trees at risk of striking the OHTL), invasive weeds, and vegetation control for fire risk. Vegetation within an area approximately 15 m from each tower leg will be permanently maintained as ground cover.

The Hampshire Hills switching station will be operated remotely with periodic inspections and maintenance of surrounding vegetation, fire suppression systems, security systems, and building and equipment maintenance.

Although not predictable, faults and unplanned events from extreme weather events or conditions could occur. The repair of faults may require the mobilisation of vehicles and heavy equipment to repair sites.

5.3 Decommissioning phase

Decommissioning of the OHTL and Hampshire Hills switching station will take place at the end of life for the infrastructure. The expected useful asset life of the project components is 60 years, however, TasNetworks will review the status of the OHTL at the end of its useful life (i.e., at the end of the safe operation of its component parts). Where the OHTL is still required as part of the transmission network, it will be dismantled and replaced, or retrofitted and restrengthened. Where no longer required, the OHTL will be removed. At the end of the project life, decommissioning will involve removal of project infrastructure and reinstatement and rehabilitation of the ground surface.

6 Potential impacts

The project area is characterised by mountain ranges, and undulating land and plateaus dissected by deeply incised rivers and creeks. Remnant patches of native vegetation are present in conservation areas and reserves. These remnant patches contain several threatened ecological communities, and flora and fauna species.

Throughout the region in which the project will be developed, common employment industries are health care, social assistance, retail trade and agriculture. There are several notable natural attractions, and the area is promoted for its natural features and values, with local government initiatives aimed at increasing visitation and local tourism-based businesses.

Where possible, potential impacts have been avoided through the design and siting of project facilities. Unavoidable impacts have been identified through rigorous environmental and socio-economic assessment. This section provides an overview of the unavoidable project impacts and outlines TasNetworks' commitments relating to management of these impacts.

6.1 Fauna, flora and vegetation communities

6.1.1 Key findings

- Key values are those threatened fauna and flora species, threatened vegetation communities and non-threatened biodiversity and natural values of significance that are known or likely to occur in the ecology survey area. Species that are threatened under both national and state legislation were assessed, including those listed as MNES.
- Vegetation (habitat) removal during construction is the primary activity that contributes to impacts on ecological values, with up to 144 ha of native vegetation to be cleared for the project. Key potential impacts to flora, fauna and vegetation communities from vegetation removal include loss, degradation or fragmentation of habitat, direct mortality of individuals and disturbance of breeding fauna.

- Additionally, fauna species may be impacted by noise disturbance, collisions with project machinery and vehicles, and collision with project infrastructure.
- Loss of suitable foraging and breeding habitat for several threatened species is expected to be minimal, with significant impacts on the Tasmanian azure kingfisher, white-throated needletail, swift parrot, Tasmanian masked owl, and eastern barred bandicoot unlikely.
- For some threatened species such as the Australian grayling and the green and gold frog, no clearance of habitat or potential habitat is required and significant impact on these species is unlikely.
- The threatened Tasmanian wedge-tailed eagle and white-bellied sea eagle are particularly sensitive to disturbance during their breeding seasons. Implementing management measures, including micro- siting project infrastructure and developing and implementing a nest management plan and raptor mortality plan will reduce or avoid impacts. With successful implementation of management measures, the project is unlikely to have a significant impact on the Tasmanian wedge-tailed eagle and the significance of impact on the white-bellied sea eagle will be low. Similarly, impacts on the threatened grey goshawk will be negligible with the designation of environment protection zones around active nests.
- The threatened Tasmanian devil, spotted-tail quoll, and eastern quoll may be impacted by the loss of suitable foraging and breeding habitat and increased road mortality due to construction-related traffic. Implementing measures to minimise the clearing of native vegetation, avoid important habitats and minimise night-time traffic will avoid or reduce impacts on the species. With the implementation of management measures, the project is unlikely to have a significant impact on these threatened species.

- The threatened giant freshwater crayfish and Burnie burrowing crayfish may be impacted by habitat degradation due to sedimentation from construction activities and clearance of riparian vegetation.
 Implementing management measures to minimise the clearing of native riparian vegetation, maintain crayfish passage in watercourses, and manage erosion and sedimentation will avoid or reduce impacts to the species. With the implementation of management measures, the project is unlikely to have a significant impact on these threatened species.
- Several threatened hydrobiid snail species (Cam River hydrobiid snail, Minnow River hydrobiid snail, and Claytons Rivulet freshwater snail) occur in the project area and are sensitive to habitat disturbance. Implementing management measures, such as minimising disturbance of riparian and instream habitats and implementing erosion and sedimentation controls will avoid or reduce impacts to this species. With successful implementation of these management measures, the significance of impact of the project on the threatened species will be low.
- The threatened, green-lined ground beetle, which relies on hollow logs and fallen branches, may experience habitat degradation due to vegetation clearance. Implementing measures to retain ground cover, fallen logs and branches, and other woody debris to the greatest extent practicable will reduce or avoid these impacts. With successful implementation of management measures, the significance of impact of the project on the threatened species will be low.
- The only threatened flora species known or likely
 to occur in the ecological survey area is fragrant
 hempbush. This species will not be impacted as
 vegetation clearance in the locations it occurs will
 be limited to tall trees (clearance to mid-storey), with
 ground cover able to be retained. No threatened
 flora species listed under the EPBC Act are known or
 likely to occur in the survey area.
- Two threatened vegetation communities occur in the project area Eucalyptus viminalis wet forest and Eucalyptus ovata forest and woodland. These communities will be designated as ecological protection zones during construction and will not be cleared. An additional threatened vegetation community that occurs in the project area, Melaleuca ericifolia swamp forest, will be designated as an ecologically sensitive zone, with clearance to be minimised (0.07 ha). Overall, significant impacts on nationally threatened vegetation communities will be unlikely, and impacts on state threatened communities will be low.

- The three listed migratory species known or likely to occur in the project area are the satin flycatcher, Latham's snipe, and fork-tailed swift. It is unlikely that the project will result in a significant impact on these species.
- Impacts to the non-threatened but significant platypus were assessed as low, as vegetation clearance will avoid riverine environments by spanning or overflying rivers and larger streams, and towers will be constructed away from riparian zones. Impacts on the non-threatened but significant Nothofagus – Atherosperma rainforest vegetation community were assessed as moderate, with 0.9 ha to be cleared.
- Project impacts on MNES have been avoided to the extent practicable during route selection.
- After successful implementation of management measures, it is unlikely that the project will result in a significant net impact on MNES.

6.1.2 Key commitments

- Site project infrastructure within areas of existing disturbance free of vegetation or habitat (such as existing tracks or clearings) as far as practicable.
- Minimise vegetation clearing to the greatest extent practicable.
- Establish Environmental Protection Zones to avoid accidental disturbance of threatened vegetation communities and sensitive environmental areas.
- Implement hygiene practices that prevent the introduction or spread of weeds and pathogens.
- Develop and implement a nest management plan and raptor mortality plan in accordance with relevant Tasmanian guidelines to reduce or avoid impacts to eagle and other raptor species.
- Implement a roadkill management plan and undertake traffic impact assessments of roads for which the project will increase nighttime traffic by 10% or greater that may impact the Tasmanian Devil.

6.2 Geomorphology and water

6.2.1Key findings

- Potential impacts on geomorphology and geology relate to vegetation clearance and ground disturbance causing unstable slopes and landforms and lost or degraded soils. The project will not impact any sites of geoconservation significance.
- Route selection has sought to avoid impacts on geodiversity values. Towers have been sited to avoid unfavourable geology, by avoiding areas susceptible to landslides and erosion, where practicable. The OHTL will span valleys to avoid placing towers within them, where possible. Specific engineering design measures or minor tower movements (micrositing) may be required at certain sites. This will be confirmed during detailed design.
- Groundwater values include groundwater security and quality, which support environmental and social uses such as drinking water, irrigation, industry, stock watering, and ecosystem protection. Sensitive groundwater-dependent ecosystems (GDEs) in the study area include baseflow-fed rivers and creeks, estuaries, groundwater-fed springs and wetlands, threatened vegetation communities, and burrowing crayfish habitat.
- The project has the potential to impact groundwater values through groundwater contamination from chemical spills and drilling fluids, changes in groundwater recharge and flow due to vegetation removal and soil compaction, and groundwater drawdown affecting GDEs and extractive users. Additionally, dewatering activities may cause temporary or permanent groundwater level changes, which could lead to acidification and negatively affect aquatic and terrestrial GDEs.
- Surface water values relevant to the project include flood behaviour, and protected environmental values, which are recreational water quality and aesthetics, raw water for drinking water supply, industrial water supply, water flowing through forestry areas, agricultural water uses, and aquatic ecosystems.
- Potential impacts to surface water values include increased sedimentation and erosion from vegetation clearance and land disturbance, contamination from hazardous materials, and disruptions to watercourse crossings. Additionally, construction activities may affect water availability by altering flow regimes or abstracting water for project use. These impacts can be managed through implementing management measures, with all residual risks low or very low.

 All flood risks to project infrastructure and adjacent properties are low or very low following implementation of management measures, including designing and constructing access tracks and watercourse crossings.

6.2.2 Key commitments

- Minimise ground disturbance and maintain soil integrity to the greatest extent practicable.
- Implement measures to control erosion and minimise sedimentation.
- Establish riparian vegetation buffers and machinery exclusion zones around watercourses.
- Complete site-specific hydrogeological assessments of any proposed towers located within dewatering exclusion zones to understand aquifer conditions and recharge processes that may be affected by tower foundations.
- Construct access tracks and watercourse crossings to minimise erosion and sedimentation of watercourses, and maintain passage within watercourses.
- Implement measures to prevent spills and manage impacts associated with contamination.

6.3 Air quality and noise

6.3.1 Key findings

- Air quality and noise values relate to the life, health and wellbeing of humans, other forms of life, and ecosystems. People's opportunity to sleep, relax and converse without interference from noise is an important value.
- Noise generating activities will be greatest during the construction phase, primarily due to vegetation removal, stringing of the conductors and the construction of access roads and the Hampshire Hills switching station. Noisy activities will be temporary and will not last long in any one location.
- Dust generated by construction activities is the primary contributor to reduced air quality and impacts to the heath of humans and ecosystems.
 Dust may also be deposited on people's property impacting amenity.
- Air quality and noise impacts have been avoided to the extent practicable during route selection and by siting project infrastructure as far as possible from sensitive receivers such as houses.
- Following implementation of management measures the project is expected to meet and comply with national and state legislation relevant to air quality and pollution control.

6.3.2 Key commitments

- Suppress dust using effective management measures such as water spraying.
- Minimise ground disturbance to the smallest practicable area to minimise dust.
- Service vehicles, plant and equipment to minimise emissions of noise and pollutants.
- Undertake construction activities during daylight working hours except in exceptional circumstances where unavoidable works are required outside daylight working hours.
- Undertake ongoing consultation with affected people and implement a grievance management system.

6.4 Greenhouse gases and climate change

6.4.1 Key findings

- Greenhouse gas (GHG) emissions include carbon dioxide (CO2), sulphur hexafluoride, methane and nitrous oxide emissions. These are reported in terms of carbon dioxide equivalents (CO2-e).
- An estimated 9,255 tonnes CO2-e emissions
 (excluding emissions associated with land clearing
 as these are not reported under the National
 Greenhouse and Energy Reporting Act (Cwlth)
 (2007)) are expected during the construction
 phase. Fuel emissions from vehicles and helicopters
 accounts for most construction emissions.
- Emissions during the operation phase are mostly related to the energy losses during electricity transmission. Transmission losses are expected to constitute 99.9% of operational emissions.
- Excluding emissions associated with land clearing, project emissions will contribute 0.05% to Australia's total annual GHG emissions, and 3.22% to Tasmania's annual emissions, however these ae conservative calculations and do not account for the reductions associated with dismantling the existing Palmerston to Sheffield and Sheffield to Burnie 220 kV OHTLs.
- The project, in conjunction with the Staverton to Hampshire Hills project and Marinus Link, will facilitate the transmission of Tasmanian renewable electricity to the National Electricity Market on mainland Australia. Assisting Australia's transition from reliance on higher GHG emitting energy generation sources, such as coal-fired generation, in favour of low GHG emitting renewable energy.

- At a national level, improved access to low GHG emitting renewable energy will contribute to the Australian Government's goal of reducing net GHG emissions below 2005 levels by 2030.
- The project will facilitate Tasmania's Climate Action 21 goal of reducing net GHG emissions to zero by 2050, and Tasmania's 200% renewable generation target by 2040.
- The project, in aggregation with the Staverton to Hampshire Hills project and Marinus Link will contribute to reducing GHG emissions at a national level.

6.4.2 Key commitments

- To facilitate the transmission of renewable energy generated in Tasmania to the National Electricity Market to reduce GHG emissions.
- Minimise GHG emissions as far as practicable by servicing vehicles, plant and equipment, using mains electricity or battery powered equipment preferentially to diesel- or petrol-powered equipment, identifying ways to reduce embedded emissions associated with concrete, and planning logistics optimisation and efficiency.



6.5 Infrastructure and off-site ancillary facilities

6.5.1 Key findings

- Values associated with roads and traffic include road operation, road condition, and road safety.
- The project will generate traffic above the existing levels that may impact road and traffic values. Traffic generated by the project will be the greatest during project construction when materials, equipment and personnel will be transported to and from construction sites.
- Road operation is not expected to reduce below the existing level of service as a result of project traffic.
- The likelihood of a crash occurring due to deteriorating road conditions is reduced to occasional or improbable for all roads as maintenance of the roads will result in minor deterioration and a lower likelihood of a crash occurring. With regular monitoring and repairs undertaken prior to and during construction, the risk of crashes due to poor road condition will be appropriately managed.
- The risk of road safety impacts can be lowered by reducing the likelihood of a crash occurring by improving the sight distance at intersections, installing advanced warning signage if sight distance can't be improved, or through traffic management. After the implementation of management measures, the residual risk of a crash occurring at intersections, roundabouts, driveways is medium.
- Ancillary facilities such as ports, quarries and waste management facilities will not be significantly impacted.

6.5.2 Key commitments

- For high risk roads, implement management measures in consultation with the applicable road authority, including traffic management and additional signage.
- For bridges, implement tailored travel conditions that will protect the integrity of each bridge, including reducing speed, using a pilot and escort vehicle, altering the travel position (i.e., using two lanes) and/ or restricting access to other heavy vehicles.
- Inspect and where relevant, report road conditions prior to construction and monthly during the construction phase. Work with relevant authorities or landholders to maintain and repair roads as required, and actively support repairs.

- Where required, improve road safety by improving sight distances at intersections and installing advanced warning signage or traffic management.
- Schedule heavy vehicle movements outside school bus commute times as far as practicable.

6.6 Socio-economics

6.6.1 Key findings

- Key socio-economic values include community identity, economy and livelihoods, infrastructure and services, and people's productive capacity.
- Socio-economic indicators of these values include amenity and character, accessibility and use of natural and recreational areas, employment, workforce availability, affordability and availability of housing, tourism and agriculture industries, community infrastructure and services, road access and connectivity, health and wellbeing, and skill development and training.
- The dominant land uses in the project area are grazing, forestry, and irrigated lands. The remaining areas are made up of conservation and natural environments, residential, intensive agriculture, infrastructure, water resources and other land uses, including commercial services, public services, recreation and cultural.
- Changes to amenity and landscape character may impact on community identity through the temporary changes to the noise environment, air quality, landscape views, and the reduced use of natural and recreational areas that are highly valued by the community. After implementation of management measures, impacts are of moderate significance.
- The demand for construction workers by the project may reduce the availability of these workers for other industries and result in increased lead times for other types of construction. After implementation of management measures, the impact is of moderate significance.
- The non-residential workforce will require shortterm and/or rental accommodation, increasing demand to an already highly constrained rental availability in the region. After implementation of a TasNetworks workforce accommodation strategy, the impact is considered to be of moderate significance.
- There is potential for the project to impact agriculture and forestry through disruption to the agricultural activities for landholders from restrictions on the use of farm machinery and access

- to properties, and the increased risk to biosecurity (particularly during construction), reducing productivity. After implementation of management measures, the impact to both the agriculture and forestry sectors is of low to moderate significance.
- The project's use of the regional road network is anticipated to result in delays to existing road users, reducing the efficiency of the road network in the study area during the construction period. After implementation of management measures, the impact is of moderate significance.
- The project's potential impacts to property, health, safety and environment are likely to result in feelings of stress, anxiety and frustration for residents and communities of the regional study area. After implementation of management measures, impacts are low.

6.6.2 Key commitments

- Engagement will be ongoing with affected people and a grievance management system will be implemented.
- Policies and procedures being implemented by TasNetworks to address the issues raised by landholders and support negotiation of voluntary access include:
 - TasNetworks' Strategic Infrastructure Adjustment policy, which allows the adjustment of infrastructure where certain criteria are met.
 - Alternative engineering solutions to address landowner concerns, including adjusting tower locations and increasing tower heights, if practicable.
 - Working with TasFarmers, TasNetworks'
 Shareholders and the Australian Energy Regulator to implement a Strategic Benefit Payment, based on feedback from landholders.
 - Ongoing landholder engagement and working with landholders to agree arrangements that address their concerns, TasNetworks' operational needs, safety requirements and protection of cultural and historic values.
 - The development of a new landholder compensation framework which includes the payment of additional fees to recognise the ongoing impacts of TasNetworks' assets and activities on their land and business activities.
- Neighbouring properties, landholders and nearby tourism operators will be informed of the project's forward works' program to enable adequate planning around timing of project activities and any associated amenity impacts.

- The project will maximise the use of local and regional labour, services and infrastructure with the development and implementation of an economic development action plan.
- To address the risk to biosecurity, employees and contractors will be inducted on weed identification, plant and animal pathogens, and specifically declared weeds. On-site vehicle hygiene training and a vehicle clean-down checklist will be implemented.
- Project heavy vehicle travel will be restricted to avoid school commute hours, and communities will be informed of potential delays in the road network if travel is required during these hours.
- To manage the project's potential impacts on health and emergency services, a contractor workplace health and safety plan and an emergency response plan will be developed.

6.7 Cumulative impacts

6.7.1 Key findings

- Review of other reasonably foreseeable developments in North West Tasmania identified projects that when combined with the project, have the potential to increase the magnitude of impacts on environmental values.
- Key values that were assessed to determine if cumulative impacts will increase the magnitude of impact upon them included threatened flora and fauna, noise values (wellbeing and amenity), health, groundwater security and quality, road safety, level of service and condition, a liveable community, an affordable lifestyle and the capacity for sustainable economic activity.
- The assessment identified that some of these values may experience adverse cumulative impacts. The project's contribution to potential cumulative impacts on these values will be managed through implementation of management measures identified in the project's impact assessment and broader collaboration between industry, government, and stakeholders.

6.7.2 Key commitments

 TasNetworks will collaborate with the proponents of other identified projects, the Tasmanian Government and interested parties to facilitate mitigation of cumulative impacts.

7 Public exhibition of the EIS and making submissions

The EIS will be publicly exhibited as part of the project's application for a planning permit. Exhibition of the permit application provides interested parties with the opportunity to read the EIS document, understand the potential environmental impacts associated with the project, and submit comments. Public comments will inform the TPC's decision to grant or refuse the permit.

The permit application, including this EIS, will be available on the TPC website (www.planning.tas.gov.au).

The exhibition and submission process for the EIS will be in accordance with relevant legislation. The EIS will be publicly available for a minimum of 28 calendar days and open for submissions. The provisional date for the exhibition period for this EIS is in May 2025.

Formal submissions may be lodged with the TPC during the exhibition period. Submissions can be made to the following addresses:

Postal: GPO Box 1691, Hobart, Tasmania 7001 Email: tpc@planning.tas.gov.au



8 Ongoing consultation

The Tasmanian environmental, land planning and cultural heritage assessment process includes a formal submission process. TasNetworks will provide information in relation to the assessment process and the opportunities for community engagement through that process, such as making a submission or attending a hearing, by holding community drop-in sessions, online webinars and stakeholder meetings prior to the exhibition period commencing.

TasNetworks will continue to conduct public consultation throughout the life of the project, to address community issues and to uphold an open and respectful relationship with the community. Ongoing public consultation as part of the EIS process and development of the project will include:

- Continuing to provide regular updates on the status of the project assessment and informing the community on next steps, including community drop-ins and attendance at community events in North West Tasmania.
- Discussions with directly affected landholders.
- Engaging with stakeholders to implement the economic development action plan.
- The collaborative development of a community benefit sharing program.



TasNetworks is committed to ongoing transparent public consultation throughout the EIS process and the life of the project.

TasNetworks will address community matters and uphold an open and respectful relationship with the community.

