

# North West Transmission Developments Stage 1 CPA 1 Early Works

Contingent Project Application for Stage 1  
Early Works

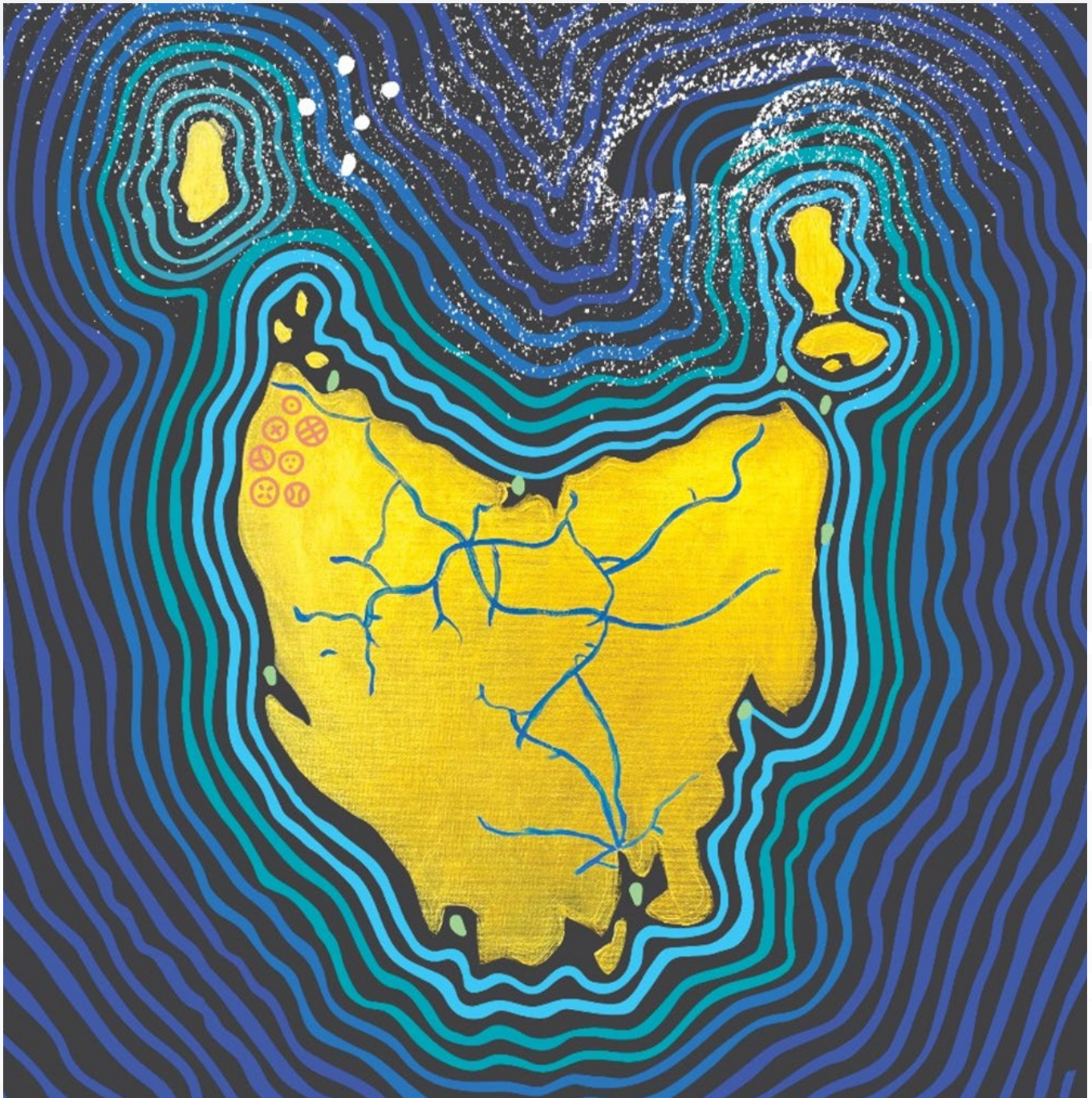
10 October 2024

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Version	Date	Author initials
V 1.0	10/10/2024	TasNetworks



TasNetworks acknowledges the palawa (Tasmanian Aboriginal community) as the original owners and custodians of lutruwita (Tasmania). TasNetworks, acknowledges the palawa have maintained their spiritual and cultural connection to the land and water. We pay respect to Elders past and present and all Aboriginal and Torres Strait Islander peoples.

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# A message from our CEO

It is with great pleasure that I share TasNetworks' Stage 1 Contingent Project Application for the delivery of the North West Transmission Developments (NWTD) early works (CPA 1).

The NWTD includes 240 km of new and upgraded transmission lines and other energy infrastructure that will strengthen the network in North West Tasmania. The NWTD will facilitate the efficient connection and operation of Marinus Link, which includes two new 750 MW high voltage direct current cables linking Tasmania and Victoria. Marinus Link will initially focus on the delivery of Cable 1. As such, the NWTD will also be delivered in two separate stages to support each of the Marinus Link cables, Cable 1 and Cable 2:

- Stage 1 – Cable 1 and the associated NWTD works, being upgrades to the Palmerston–Sheffield and Sheffield–Burnie 220 kV transmission lines, and construction of the Heybridge Spur East 220 kV transmission line
- Stage 2 – Cable 2 and the associated NWTD works, being construction of Hampshire Hills and Staverton switching stations, and the Staverton–Hampshire Hills, Burnie–Hampshire Hills, and Heybridge Spur West 220 kV transmission lines.

These developments will increase the capacity and reliability of Tasmania's electricity network and support Australia's transition to a clean energy future, whilst ensuring Tasmanians will only pay their fair share for this nationally significant energy infrastructure.

The National Electricity Market (NEM) is in the midst of the biggest energy transformation since it was formed 25 years ago. With the Australian Government setting the target for a net zero economy by 2050, the move away from fossil-fuelled energy generation to low emission renewable energy has begun.

About 90 per cent of the NEM's fleet of coal-fired generators is forecast to retire before 2035 and, with demand for energy increasing, we must evolve our transmission infrastructure to enable the connection of a diverse renewable energy system.

The Australian Energy Market Operator's (AEMO) Integrated System Plan (ISP) outlines Project Marinus as an actionable network project in the optimal development path (ODP), with the NWTD a critical grid investment that is needed urgently. AEMO's Final 2024 ISP (2024 ISP) confirms that the timing of Cable 1 is by June 2030 and the timing of Cable 2 is by June 2032.

The NWTD also plays a crucial role in Tasmania's energy future. This project will unlock the potential for North West Tasmania to deliver low-cost, reliable and clean energy to Tasmania, as well as the NEM. The progression of Project Marinus also underpins the Tasmanian Government's Renewable Energy Action Plan priority of transforming Tasmania into a global renewable energy powerhouse.

Projects of this scale are not without impacts, risks and challenges. Ensuring the NWTD is designed and delivered sensitively to the varying environments that it impacts is at the forefront of our decision making. It is important that we deliver this project in the best interests of landholders, the community, customers and the environment.

We are committed to collaborating with all our affected landholders and work to minimise impacts of the NWTD project. We believe that by working together, providing clear and timely information and understanding landholders specific requirements, it is possible to reach agreements that are mutually acceptable.

We are further committed to achieving positive social licence within communities and are a proud Energy Charter signatory. We have been involved in a range of initiatives including contributing to the

development of the Energy Charter's 2023 Better Practice Social Licence Guideline to develop a deeper understanding of the impacts of transmission infrastructure.

We understand that large scale projects have financial implications for our customers. With the current cost of living, prudent project spending has never been more important.

That is why we have undertaken a highly interactive and competitive procurement process to determine the cost of delivering Stage 1 of the NWTG and ensure that it will be the lowest sustainable cost to consumers that will meet AEMO's June 2030 delivery date.

The procurement process has been conducted to the highest standard of probity, fairness and equal opportunity and will achieve prudent, efficient and reasonable outcomes for consumers, including value for money. Undertaking early works is critical to inform the decision of whether to proceed with the delivery of the NWTG.


In particular, undertaking early works will enable TasNetworks to:

- determine the project delivery cost with a high degree of accuracy. In this way, customers know with more certainty the expected cost of investing in the NWTG
- progress activities on the critical path to deliver Stage 1 to meet AEMO's June 2030 delivery date
- undertake work to reduce uncertainty and identify, manage and reduce construction, cost and delivery risks to keep the NWTG on track and its cost as low as possible.

Contained within this document is a detailed explanation of our early works capital expenditure forecasting methodology for the NWTG Stage 1. A second contingent project application (CPA) will detail the construction and delivery costs of the NWTG (CPA 2) and is expected to be submitted in late 2025.

To ensure that we can proceed with the early works of the NWTG, we request approval from the Australian Energy Regulator (AER) for incremental revenue commensurate with the capital and operating costs we have proposed in this Application.

TasNetworks is ready to deliver this critical piece of infrastructure in support of Australia's transition to renewable energy.



Dr Seán Mc Goldrick  
Chief Executive Officer



# Executive Summary

## This Application

TasNetworks Pty Ltd (TasNetworks) is pleased to submit this Contingent Project Application (Application) for the North West Transmission Developments (NWTD or the Project) component of Project Marinus, which is a joint TasNetworks and Marinus Link Pty Ltd (MLPL) project. This Application sets out TasNetworks' proposed expenditure, the associated incremental revenue requirement and the indicative customer bill impacts for the early works of Stage 1 of the Project.

This Application seeks the AER's approval of early works costs for Stage 1 of the Project. Undertaking early works activities now will enable a high degree of cost certainty before TasNetworks commences construction and provide confidence to customers that they will pay no more than the efficient cost of delivering NWTD Stage 1.

TasNetworks is submitting this Application now to meet AEMO's 2024 ISP June 2030 delivery date for Stage 1 of Project Marinus.

## The Project

Project Marinus is a key component of the energy market transition and AEMO's 2024 ISP reconfirms the actionable status of Project Marinus without decision rules<sup>1</sup> and the timing of Stage 1 by June 2030 and Stage 2 by June 2032.<sup>2</sup>

Project Marinus will provide significant value to the NEM by enabling the flow of electricity in both directions between Tasmania and Victoria, delivering low-cost, reliable and clean energy for customers as coal plants are retired and replaced by intermittent wind and solar generation. It will also provide much needed firming capacity to support the growth in renewable generation that is essential for Australia to meet its emission reduction targets.

Project Marinus comprises two components:

- Marinus Link, which comprises two new 750 MW high voltage direct current (HVDC) cables (undersea and underground) connecting Victoria and Tasmania with converter stations at each end (otherwise known as Cable 1 and Cable 2)
- NWTD, which involves significant upgrades to the existing Tasmanian high voltage alternating current (HVAC) 220 kV transmission network to facilitate the efficient connection and operation of the Marinus Link HVDC cables. The NWTD will be undertaken in two separate stages to support each of Cable 1 and Cable 2.

MLPL is responsible for Marinus Link and TasNetworks is responsible for the NWTD component.

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<sup>1</sup> ISP identified conditions that need to be satisfied to for a project to proceed or pause

<sup>2</sup> AEMO, [2024 ISP](#), p.62 (in service timing)

In September 2023, the Tasmanian Minister for Energy and Renewables announced that Project Marinus would focus on Cable 1 and that Cable 2 would be considered following the final investment decision (FID) for Cable 1 (Government's decision to stage the project<sup>3</sup> or project staging).

This Application relates to early works for NWTDD Stage 1 only, which involves upgrading the Palmerston–Sheffield and Sheffield–Burnie 220 kV transmission lines, and construction of the Heybridge Spur East 220 kV transmission line<sup>4</sup>, referred to as the 'coastal' route. This will support Cable 1, which MLPL will deliver.

## Scope of Stage 1 early works activities

Chapter 10 of The National Electricity Rules (NER or Rules) defines early works as:

*activities to be undertaken by a Transmission Network Service Provider in respect of an actionable ISP project:*

*(a) prior to the construction of the preferred option; and*

*(b) which:*

*(1) improve the accuracy of costs estimates for that project; or*

*(2) facilitate that project being delivered within the timelines specified by the most recent Integrated System Plan.*

Early works are therefore critical to inform the decision of whether to proceed with the delivery of the Project. Undertaking the early works described in this Application will enable TasNetworks to:

- determine the Project delivery cost with a high degree of accuracy. In this way, customers know whether they will be over or under investing in the Project
- progress activities on the critical path to deliver Stage 1 to meet AEMO's June 2030 delivery date
- undertake work to reduce uncertainty and identify and manage risks to ensure the construction and delivery cost is as low as possible.

Early works activities will ensure that the construction and delivery cost for Stage 1 of the NWTDD (Stage 1 construction capital expenditure) is prudent and efficient, noting that TasNetworks is committed to delivering the Project at the lowest sustainable whole of lifecycle cost to maximise benefits to customers.

There are seven key categories of early works activities, including:

- commercial and procurement – commercial activities including finance and budget management and reporting, procurement of specialist service providers and ensuring manufacturing capacity of suppliers so that the project is delivered at the lowest sustainable cost and in accordance with AEMO's June 2030 delivery date
- project development – engineering activities to ensure the constructability and safe delivery of the Project, which are critical to reduce uncertainty, manage risk and ensure the project is delivered at the lowest sustainable cost. These activities include early contractor involvement (ECI) activities including

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<sup>3</sup> DCCEEW (Department of Climate Change, Energy, the Environment and Water) (3 Sep 2023) '[Joint media release: Investing in the future of Tasmanian energy with Marinus Link](#)', accessed 29 July 2024

<sup>4</sup> Heybridge Spur West 220 kV transmission line is part of Stage 2.

pre-construction development activities and securing long lead equipment (LLE) to resolve risk and pricing uncertainty, and drive cost effective design

- project management – establishing sound governance, risk and project management processes including project control and management systems, scheduling, risk and cost estimation and forecasting to ensure the timely and efficient delivery of the project to meet AEMO’s June 2030 delivery date
- land and property – establishing land access and easement acquisition to enable construction to commence at the lowest sustainable cost
- planning and environment – completing State and Commonwealth environment, land use planning and heritage, and social impact assessments, noting that these must be completed before construction can commence
- community and stakeholder engagement – engagement with the community, landholders and other stakeholders to build knowledge and support for the Project to build and maintain social licence. This is critical to minimise the risk and costs of project delays
- regulatory approvals and other support – regulatory approvals from the AER and AEMO are needed to make a positive FID and proceed with the Project.

## Capital expenditure

Table 1 shows that TasNetworks’ actual and forecast NWTDD Stage 1 early work capital expenditure (capex) will be \$167.31 million, comprising:

- \$53.37 million for actual costs in the period 1 July 2021 to 30 June 2024. These costs are based on transactions recorded in TasNetworks’ enterprise resource planning (ERP) system
- \$113.94 million in forecast costs for the period 1 July 2024 to 28 February 2026. These costs have been determined using methods that reflect the specific nature of the costs including externally tendered (competitive) contracts, manufacture and supply contracts, pricing from suppliers, and independent specialist advice.

Project development capex of \$92.71 million is the single largest category of capex, comprising more than 55 per cent of the total capex. This is driven by ECI costs of \$79.22 million, comprising:

- \$40.12 million pre-construction development activities including work to progress the cost maturity to an AACE<sup>5</sup> class 2 cost estimate by mid-2025 so that customers know the cost of delivering Stage 1 with a high degree of accuracy before a FID on the Project and construction commences
- \$39.10 million to secure LLE relating to primary and secondary systems substation equipment and transmission line equipment so as not to delay construction.

The total capex reduces to a net capex amount of \$151.92 million after application of \$15.39 million of Australian Government grant funding allocated to the Project. This capex is incremental to the capex approved by the AER in its 2024-29 Revenue Determination for TasNetworks because it relates to activities

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<sup>5</sup> Association for the Advancement of Cost Engineering (AACE) International – [cost estimation classification system](#).

that are additional to normal business activities and would not be incurred other than for undertaking early works for the Project.

**Table 1 Early works capex by category from 1 July 2021 to 30 June 2026 (\$ million, real 2023-24)**

Capex category	2021-22	2022-23	2023-24	2024-25	2025-26	Total	% of total
Project development	4.65	3.48	1.58	44.05	38.96	92.71	55.41%
Project management	3.78	4.89	4.14	6.24	3.98	23.03	13.77%
Land and property	2.37	2.38	2.35	5.90	3.64	16.65	9.95%
Commercial and procurement	1.41	2.89	2.99	3.70	0.96	11.95	7.14%
Planning and environment	4.25	5.27	2.19	2.87	0.73	15.31	9.15%
Community and stakeholder engagement	2.04	1.43	0.96	1.39	0.90	6.72	4.02%
Regulatory approvals and other support	0.00	0.00	0.30	0.59	0.04	0.93	0.56%
<b>Total capex (gross)</b>	<b>18.50</b>	<b>20.35</b>	<b>14.52</b>	<b>64.74</b>	<b>49.20</b>	<b>167.31</b>	100%
Less Grant funding	(4.51)	(1.19)	(9.69)	-	-	(15.39)	
<b>Total capex (net)</b>	<b>13.99</b>	<b>19.17</b>	<b>4.83</b>	<b>64.74</b>	<b>49.20</b>	<b>151.92</b>	

## Incremental revenue requirement and customer bill impact

On the basis of the Stage 1 early works capex forecast, TasNetworks is seeking the AER's approval to increase its maximum allowed revenue (MAR) for the 2024-29 regulatory period. The forecast incremental smoothed revenue for Stage 1 early works is \$31.83 million (\$ nominal) over the 2024-29 regulatory period, as shown in Table 2.

TasNetworks is progressing a concessional finance arrangement in relation to the capex costs for the NWTD, including the Stage 1 early works component. The revenue outcome in this Application has been forecast without reference to concessional finance. When a concessional finance arrangement is agreed, TasNetworks will request the AER amend our revenue lower in accordance with the concessional finance agreement, which will in turn result in lower impacts on customer charges.

Based on the forecast revenue adjustment, the Stage 1 early works results in an increase for both typical residential and small business network charges of approximately 0.4 per cent per year for the final four years of the 2024-29 regulatory period.

**Table 2 Incremental MAR (smoothed) (\$ million, nominal)**

Revenue (smoothed)	2024-25	2025-26	2026-27	2027-28	2028-29	Total
2024-29 AER Determination	163.38	170.07	177.03	184.27	191.82	886.56
Impact of Stage 1 (early works)	-	2.89	6.06	9.54	13.35	31.83
Revised smoothed revenue requirement	163.38	172.95	183.09	193.81	205.17	918.40

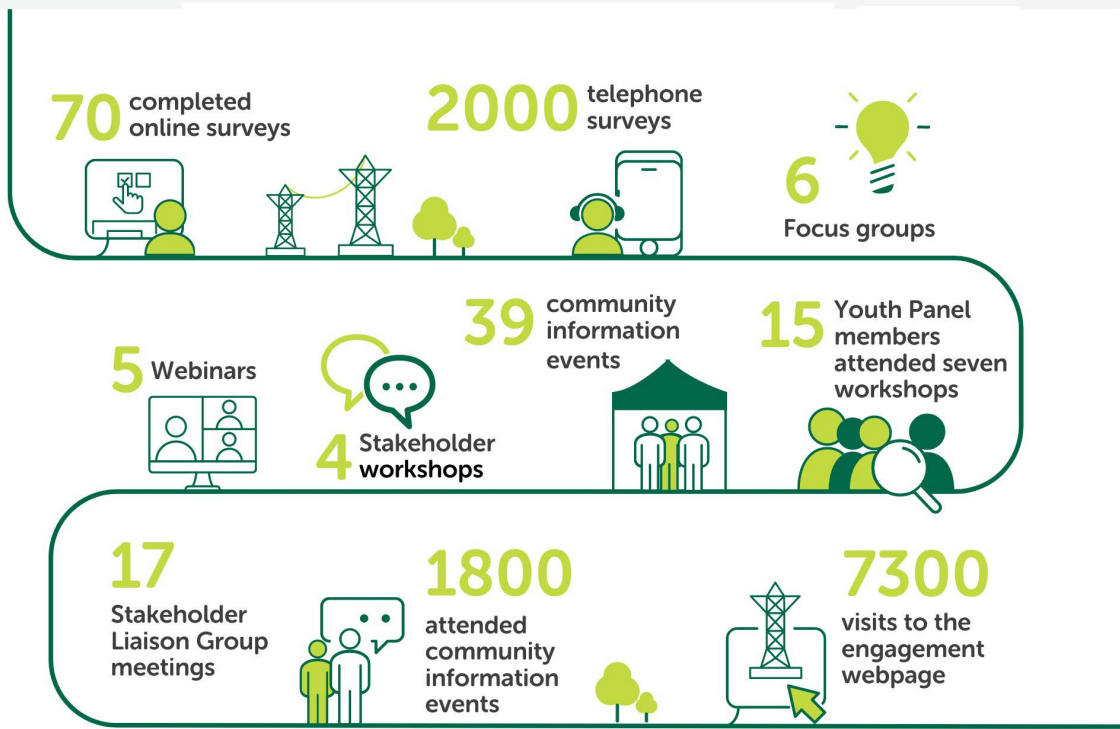
While the actual increase in network charges for customers associated with NWTD will be less because of the concessional finance arrangement, any increases in network charges are expected to be more than offset by savings in wholesale electricity costs associated with Project Marinus in the future.

## Community and stakeholder engagement

Since 2019, TasNetworks has undertaken extensive and ongoing engagement on the NWTD with a broad range of stakeholders, community members and landholders. TasNetworks' approach to engagement has been guided by its NWTD Engagement Strategy and its NWTD Communications Strategy. The feedback received from the engagement is critical to understand how to achieve the best outcomes for the environment, landholders, businesses and the wider community as planning for the Project continues.

Engagement has been progressed through a variety of engagement channels to be as flexible as possible to accommodate stakeholder preferences. Engagement channels used include individual meetings, community drop-in sessions and workshops, webinars, focus groups and surveys. Figure 1 summarises TasNetworks' NWTD engagement activities to date.

Figure 1 How TasNetworks has engaged with the community



Based on feedback received through engagement with landholders and communities, TasNetworks has made the following changes to its NWT D plans:

- relocated transmission towers
- adjusted tower heights
- amended the route
- adopted alternative construction practices.

These changes will minimise, to the greatest extent possible, impacts on landholders, the environment, and consumers. These changes have delivered improvements for landholders such as limiting disruptions to farm operations, farm buildings and high value agricultural land. They have also driven benefits including increased positive community sentiment and social licence and have the potential to reduce the time taken to achieve project approvals.

# 1 This Project and this Application

## 1.1 The Project

Project Marinus is a key component of the energy market transition and AEMO's 2024 ISP<sup>6</sup> reconfirms the actionable status of Project Marinus without decision rules.

Project Marinus will provide significant value to the NEM by enabling the flow of electricity in both directions between Tasmania and Victoria, delivering low-cost, reliable and clean energy for customers as coal plants are retired and replaced by intermittent wind and solar generation. It will provide much needed firming capacity to support the growth in renewable generation that is essential for Australia to meet its emission reduction targets.

In July 2021, Project Marinus was formally split into two distinct components, Marinus Link and the NWTd. Each component will be developed and owned by different entities being MLPL and TasNetworks. MLPL was formerly a subsidiary of TasNetworks, however from March 2024, MLPL became a stand-alone entity subject to new ownership arrangements comprising the Federal Government (49 per cent), the Victorian Government (33.3 per cent) and the Tasmanian Government (17.7 per cent).

MLPL is responsible for Marinus Link, which comprises two new 750 MW HVDC cables (undersea and underground) connecting Victoria and Tasmania with converter stations at each end. The converter stations will convert the electricity from HVDC to HVAC for use in the Tasmanian and Victorian transmission networks. This component of Project Marinus is referred to as Cable 1 and Cable 2.

TasNetworks is responsible for the NWTd component. This involves significant upgrades to the existing Tasmanian HVAC 220 kV transmission network to facilitate the efficient connection and operation of the Marinus Link HVDC interconnector. The NWTd will be undertaken in two separate stages to support each of Cable 1 and Cable 2:

- Stage 1 – Cable 1 and the associated NWTd works, including but not limited to, upgrades to the Palmerston–Sheffield and Sheffield–Burnie 220 kV transmission lines, and construction of the Heybridge Spur East 220 kV transmission line, referred to as the 'coastal' route
- Stage 2 – Cable 2 and the associated NWTd works, including but not limited to, construction of the Hampshire Hills and Staverton switching stations, and the Staverton–Hampshire Hills, Burnie–Hampshire Hills, and Heybridge Spur West 220 kV transmission lines, referred to as the 'inland' route.

AEMO's 2024 ISP confirms that the timing of Stage 1 is by June 2030 and the timing of Stage 2 is by June 2032.<sup>7</sup>

Appendix B – Project scope provides further detail regarding the technical scope of Stage 1 and 2 of the Project, while also showing how the scope aligns with the RIT-T and the 2024 ISP, thereby ensuring that the Project supports the optimum development path.

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<sup>6</sup> AEMO, [Final 2024 Integrated system Plan \(2024 ISP\)](#), June 2024 p.14

<sup>7</sup> AEMO, [2024 ISP](#), June 2024 p.14

## 1.2 This Application

This Application seeks the AER's approval to amend the capex allowance in TasNetworks' 2024-29 Revenue Determination and its revenue requirements and MAR for the 2024-29 regulatory period, so that it can recover the efficient costs of early works activities for NWTDD Stage 1.<sup>8</sup>

TasNetworks' early works activities include:

- undertaking the tender process to appoint a Principal Contractor<sup>9</sup>
- refining the Project scope through an ECI process to drive an innovative and cost effective design
- seeking the environmental approvals necessary for construction to commence
- undertaking technical surveys, studies and activities
- engaging with the community and landholders to negotiate access licences and options agreements for easements.

Undertaking early works activities will provide confidence to customers that they will pay no more than the efficient cost of delivering NWTDD Stage 1, and that the construction cost is known with a high degree of certainty before TasNetworks commences construction. TasNetworks' early works activities comprise Direct costs, Labour, and Indirect activities that are necessary to enable it to mitigate cost, technical, social licence and permitting risks, and to establish the capability necessary to deliver the project.

TasNetworks intends to make a FID on the Project in mid-2025, with early works activities critical to informing this decision. A positive FID in mid-2025 will enable TasNetworks to commence construction in 2026 and meet AEMO's June 2030 delivery date, subject to the AER's approval of the Stage 1 Application for construction.

This Application focuses solely on the NWTDD Stage 1 component of Project Marinus noting that MLPL is responsible for the Marinus Link component and is separately submitting its costs to the AER for approval, in accordance with the NER.<sup>10</sup>

## 1.3 Compliance with the NER

This Application and the supporting documents and models establish the matters in clause 6A.8.2(f) of the NER, being:

- that the relevant trigger events to be eligible to submit a CPA for NWTDD Stage 1 have been met;
- the forecast of the total capex for the Project meets the threshold as referred to in clause 6A.8.1(b)(2)(iii);

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<sup>8</sup> In accordance with clause 6A.8.2 of the NER

<sup>9</sup> Subject to positive FID and regulatory approvals.

<sup>10</sup> MLPL is subject to the intending TNSP provisions, under Part D, Rule 6A.9 of the NER, for cost recovery. In August 2023, MLPL submitted its Part A (Early Works) [Revenue Proposal \(early works Revenue Proposal\)](#) to the AER who published its [Final Decision](#) on early works in December 2023. MLPL will submit its Stage 1 Part B (Construction) Revenue Proposal to the AER in October 2024.



- the amounts of forecast capex and incremental operational expenditure (opex) reasonably reflect the capex criteria and the opex criteria, taking into account the capex factors and the opex factors respectively, in the context of the contingent project;
- the estimates of incremental revenue are reasonable; and
- the dates are reasonable.

This document has been developed in accordance with:

- the actionable ISP framework under the Rules
- the AER's Guidance Note for Regulation of actionable ISP projects
- TasNetworks approved Cost Allocation Methodology.

Unless otherwise stated, all actual and forecast capex values in this document are presented in real 2023-24 dollars and include real input cost escalation.

## 1.4 Structure of this document

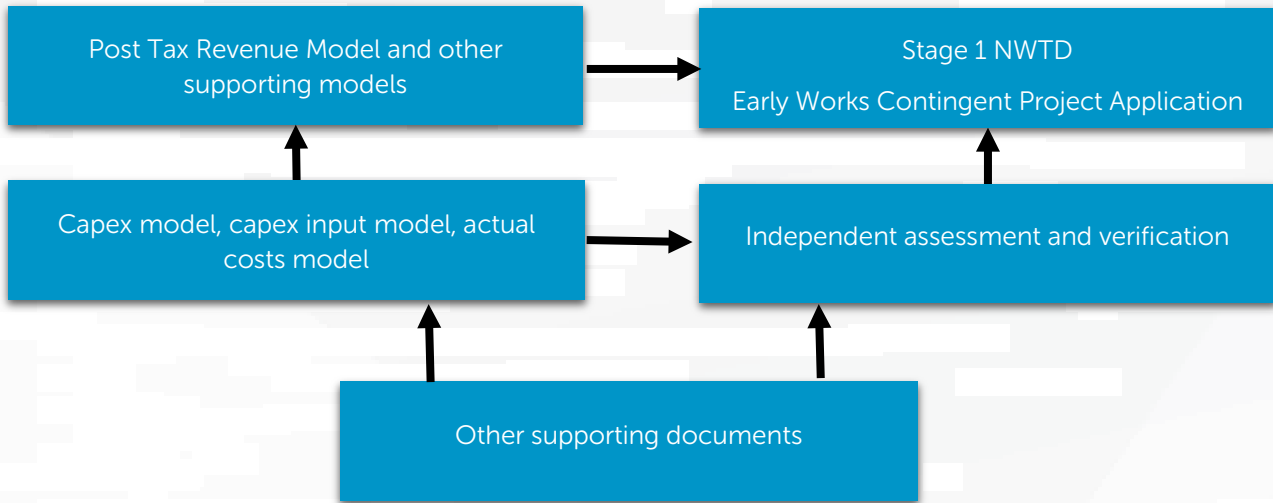
This Application is structured as follows:

- Part A – About the Project covers:
  - the evolution of the Project from an actionable ISP project to a staged actionable ISP project (Stage 1 and Stage 2 aligned to Cable 1 and Cable 2) and the implications of this for early works
  - the nature and scope of early works activities
  - engagement with customers and other stakeholders and how this has shaped the Project
  - how TasNetworks has met these requirements for this Application.
- Part B – Procurement for design and construction (D&C) of the Project explains the competitive procurement approach for the design and construction including the ECI phase and LLE.
- Part C – Capex explains and justifies TasNetworks' capex associated with Stage 1 early works activities by capex category and overviews the outcomes of the independent engineering assessment and verification.
- Part D – Forecast revenue, customer bill impacts and compliance sets out the incremental revenue forecast for Stage 1 early works capex, the updated MAR and the indicative impact on the transmission component of customers' bills as well how TasNetworks has complied with the NER requirements in this Application.
- Appendix A – Revenue application sets out the incremental revenue forecast for the early works costs for NWTDD Stage 1.
- Appendix B – Project scope overviews the scope of Stage 1 and Stage 2 of the project.
- Appendix C – Glossary outlines the abbreviation and acronyms used in this Application.

# 1.5 Structure of the Application for early works

Our Stage 1 Application for early works is structured as illustrated in Figure 2 to be as clear and accessible as possible to the AER, customers and other stakeholders.

Figure 2 Document structure for NWTDT Stage 1 Application for early works



This document should be read in conjunction with GHD’s independent assessment and verification of the capex for early works and other supporting documents. The attachments and models are summarised in Table 3.

Table 3 Documents and models comprising this Application (excluding other supporting documents)

Name	Content/purpose
North West Transmission Developments Stage 1 CPA 1 Early Works	This Application: <ul style="list-style-type: none"> <li>• explains and justifies our NWTDT Stage 1 early works capex including:               <ul style="list-style-type: none"> <li>– explaining the procurement process for the design and construction of the NWTDT Stage 1</li> <li>– explaining the nature and scope of early works activities</li> <li>– the methodologies, processes and systems used to determine capex</li> <li>– the independent assessment and validation of forecast capex</li> </ul> </li> <li>• seeks the AER’s approval to amend the forecast capex allowance, revenue requirements and MAR in the AER’s 2024-29 Revenue Determination for TasNetworks based on the capex in this Application</li> <li>• overviews the scope of our Stage 1 activities.</li> </ul>
GHD Advisory North West Transmission Development Early Works Independent Verification and Assessment 30 Sep 2024	An independent assessment of the scope, procurement process and forecast capex for Stage 1 early works.

Name	Content/purpose
NWTD CPA 1 – Actual cost model	Provides details on actual capex expenditure (2021-22 to 2023-24)
NWTD CPA 1 – Forecast cost model	Provides details on forecast capex expenditure (2024-25 and 2025-26) and references to supporting documentation
CPA 1 Annual Inputs	Forecasts capex by year and asset class for input to the post tax revenue model (PTRM) and roll forward model (RFM)
NWTD Stage 1 (early works) – 2019-24 - PTRM	Determines the adjustment required to revenue in 2024-29 period for the 2019-24 regulatory period
NWTD Stage 1 (early works) – 2024-29 - PTRM	Amends the existing 2024-29 PTRM to account for incremental revenue based on Stage 1 (early works) costs
NWTD Stage 1 (early works) – 2024-29 - RFM	Amends the existing 2024-29 RFM to roll forward regulatory asset base (RAB) and tax asset base (TAB) across the 2019-24 regulatory period based on Stage 1 (early works) costs

In addition, we have provided the AER with other supporting documents that are referenced within the documents listed in Table 3.

# PART A – About the Project

# 2 Overview of Stage 1 early works activities and capex

This section overviews the nature and scope of the Stage 1 early works activities, the expected benefits for consumers and why TasNetworks costs are prudent and efficient.

## 2.1 Stage 1 early works activities and capex

Early works capex for Stage 1 of the NWT D project comprises:

- Labour costs – for internal full time equivalent (FTE) costs associated with a broad range of activities including project management, project development and corporate support for procurement, technical design and feasibility studies, land and environmental activities, stakeholder engagement and regulatory approvals. Labour and labour-related capex includes on-costs, support costs, training, recruitment and IT hardware costs.
- Indirect capex – for a wide range of professional and consulting services, legal services as well as tender payments and associated facilities costs (e.g., data room).
- Direct capex – for the preconstruction development activities that will be undertaken by the Engineering, Procurement and Construction (EPC) contractor as well as the costs of securing LLE.

Table 4 summarises the Stage 1 actual and forecast early works capex for the period 1 July 2021 to 28 February 2026 by capex category.

Notwithstanding that early works capex commenced in 2019-20 to meet the 2020 and 2022 ISP's delivery date, this Application only includes early works capex from 1 July 2021 (i.e. the 2021-22 regulatory year). This is because capex in the 2019-20 and 2020-21 regulatory years was incurred as part of Project Marinus and forms a component considered in the sale of MLPL, which occurred in March 2024. Capex incurred in 2019-20 and 2020-21 is therefore not included in this Application or TasNetworks' RAB.

As discussed in section 3, early works capex over the period 1 July 2021 to September 2023 assumed that Project Marinus would progress with both Cable 1 and Cable 2. Significant additional early work activities were required following the introduction of staging for Project Marinus.

Table 4 Summary of actual and forecast capex for NWTD Stage 1 early works (\$ million, real 2023-24)

Capex category	Summary of early works activities	Actual <sup>11</sup> capex	Forecast <sup>12</sup> capex	Total capex	% of total
Commercial and procurement	Finance and budget management and reporting as well as establishing new and updating existing contract with specialist services providers, developing the procurement strategy and overseeing the competitive procurement process to identify the preferred Principal Contractor to deliver the Project. Overseeing the ECI phase with the EPC contractor including pre-construction activities and securing LLE.	7.30	4.65	11.95	7.14%
Project development	<p>Engineering activities that are critical to the design, safe construction and operation of the Project to meet TasNetworks' reliability, security and other technical standards and obligations. These activities include studies, surveys and assessments to support the engineering design and technical and functional asset requirements. These activities also include assessing and endorsing the designs developed during the ECI period prior to issued for construction (IFC) release.</p> <p>This category also includes direct costs for the ECI phase being pre-construction activities and LLE.</p>	9.71	83.01	92.71	55.41%
Project management	The Project Management Office function (PMO) is responsible for establishing governance, managing the project plan and schedule, cost estimating and forecasting, implementing project control and management systems, scheduling, risk, quality and information management.	12.82	10.21	23.03	13.77%

<sup>11</sup> Actual costs are from 1 July 2021 until 30 June 2024

<sup>12</sup> Forecast costs are from 1 July 2024 to February 2026

Capex category	Summary of early works activities	Actual <sup>11</sup> capex	Forecast <sup>12</sup> capex	Total capex	% of total
Land and property	Engaging with landholders, establishing land access agreements, ensuring landholders have access to funds for professional advice and negotiating construction access and easement option agreements for transmission line easements.	7.11	9.54	16.65	9.95%
Planning and environment	Leading the environmental, land use planning and heritage (Aboriginal and Historic) and social impact assessments and approvals across the State and Commonwealth levels that are needed to proceed to construction.	11.71	3.60	15.31	9.15%
Community and stakeholder engagement	Developing and implementing stakeholder and community engagement programs to build knowledge and support for the Project, inform route alignment, build and maintain a social licence, understand social and economic impacts arising from the Project, develop a community benefit sharing program and undertake First Nations engagement activities.	4.43	2.29	6.72	4.02%
Regulatory approvals and other support	Seeking the necessary regulatory approvals from the AER and AEMO.	0.30	0.63	0.93	0.56%
<b>Total capex</b>		<b>53.37</b>	<b>113.94</b>	<b>167.31</b>	<b>100%</b>

Table 5 shows that TasNetworks' actual and forecast NWT D Stage 1 early work capex is \$167.31 million. This capex is incremental to the capex approved by the AER in its 2024-29 Revenue Determination for TasNetworks because it relates to activities that are additional to normal business activities and would not be incurred other than for undertaking early works for the Project.

**Table 5 Early works capex by category from 1 July 2021 to 30 June 2026 (\$ million, real 2023-24)**

Capex category	2021-22	2022-23	2023-24	2024-25	2025-26	Total
Project development	4.65	3.48	1.58	44.05	38.96	92.71
Project management	3.78	4.89	4.14	6.24	3.98	23.03
Land and property	2.37	2.38	2.35	5.90	3.64	16.65
Commercial and procurement	1.41	2.89	2.99	3.70	0.96	11.95
Planning and environment	4.25	5.27	2.19	2.87	0.73	15.31
Community and stakeholder engagement	2.04	1.43	0.96	1.39	0.90	6.72
Regulatory approvals and other support	0.00	0.00	0.30	0.59	0.04	0.93
<b>Total capex</b>	<b>18.50</b>	<b>20.35</b>	<b>14.52</b>	<b>64.74</b>	<b>49.20</b>	<b>167.31</b>

## 2.2 Customer outcomes from early works capex

Undertaking early works is critical to inform the decision of whether to proceed with the delivery of the Project. In particular, undertaking early works will enable TasNetworks to:

- determine the Project delivery cost with a high degree of accuracy. In this way, customers avoid over or under investing in the Project
- progress activities on the critical path to deliver Stage 1 to meet AEMO's June 2030 delivery date
- undertake work to reduce uncertainty and identify and manage risks to ensure the construction and delivery cost is as low as possible.

Early works activities will ensure that the construction and delivery costs for Stage 1 of the NWT D (Stage 1 construction capex) is prudent and efficient, noting that TasNetworks is committed to delivering the Project at the lowest sustainable whole of lifecycle cost to maximise benefits to customers. Table 6 outlines the customer outcomes from early works activities by capex category.

In particular, over the period October 2024 to June 2025 the EPC contractor identified through the competitive procurement process will determine a Stage 1 construction capex estimate in line with the



AACE<sup>13</sup> class 2 cost estimate. This will provide the necessary cost certainty that consumers will not be over-or-under investing in the Project prior to a FID in mid-2025.

TasNetworks has also engaged [REDACTED] to undertake an independent cost estimate of the delivery cost that will be used to verify and validate the class 2 cost estimate determined through the ECI process. [REDACTED] will determine its own delivery cost based on its engineering expertise and knowledge from its role as an independent estimator in other similar ECI processes.

**Table 6 Outcomes for customers of early works activities by capex category (\$ million, real 2023-24)**

Capex category	Customer outcomes	Total
Project development	<p>Engineering activities to ensure the constructability and safe delivery of the Project are critical to reduce pricing uncertainty, manage risk and ensure the Project is delivered at the lowest sustainable cost.</p> <p>The ECI pre-construction activities, which will be undertaken by the EPC contractor, will further develop the Project’s design through innovation and efficiencies to develop a more mature (accurate) cost. This will minimise construction costs and risks and enable construction to commence as soon as possible following approval of the Stage 1 Application for construction to achieve AEMO’s June 2030 delivery date.</p> <p>LLE is estimated to take 19 months following placement of orders. The EPC contractor is responsible for securing and supplying LLE and has identified three categories of LLE: primary substation equipment; secondary systems substation equipment; and transmission line equipment.</p> <p>The EPC contractor requires milestone payments for vendor drawings, purchase of raw materials, manufacture, freight-on-board and delivery to allow it to:</p> <ul style="list-style-type: none"> <li>• secure supply-chain availability</li> <li>• lock in lower prices</li> <li>• protect against foreign exchange risk and future inflationary pressures</li> <li>• secure the best commercial terms.</li> </ul> <p>This will maximise benefits to customers by driving down the costs and ensure the delivery of the Project in line with AEMO’s June 2030 delivery date.</p>	92.71

<sup>13</sup> Association for the Advancement of Cost Engineering (AACE) International – [cost estimation classification system](#).

Capex category	Customer outcomes	Total
Project management	Establishing sound governance, risk management and project management and control process and procedures is critical to the timely and efficient delivery of the Project to achieve AEMO's June 2030 delivery date.	23.03
Land and property	<p>Establishing land access and easement acquisition is critical to enable construction to commence at the lowest sustainable cost by enabling:</p> <ul style="list-style-type: none"> <li>• access to undertake on-ground surveys to inform the Development Approval (DA) and Environmental Impact Statement (EIS). These documents outline potential planning and environmental impacts of the Project as well as various management, mitigation or compensation measures for adverse impacts and risks</li> <li>• agreement to be reached on the compensation to be paid to each landholder</li> <li>• construction access and easement option agreements in order to be able to access properties and acquire easements in Stage 1.</li> </ul> <p>These activities need to be completed before TasNetworks can commence construction.</p>	16.65
Commercial and procurement	The development of tender strategy, execution of procurement strategy and ensuring the manufacturing capacity of suppliers are critical to reduce uncertainty, manage risk and ensure the Project is delivered at the lowest sustainable cost and in accordance with AEMO's June 2030 delivery date.	11.95
Planning and environment	Environmental, land use planning and heritage (Aboriginal and Historic) approval from State regulators and the Commonwealth Government. These approvals need to be completed before TasNetworks can commence construction and are being undertaken now to minimise the risk of Project delays.	15.31

Capex category	Customer outcomes	Total
Community and stakeholder engagement	<p>Community and stakeholder engagement is critical to gain and maintain social licence needed to progress the Project, as well as support the Planning and Environment function to secure the necessary approvals including environmental and social impact assessments and approvals. Stakeholder and community engagement provides critical support to the overall Project, including by:</p> <ul style="list-style-type: none"> <li>• addressing in a timely manner the risks and issues raised by stakeholders and community members</li> <li>• minimising the risk of project delays by building and maintaining social licence for the Project</li> <li>• sharing the benefits of the Project to achieve the best possible outcomes for the region.</li> </ul>	6.72
Regulatory approvals and other support	Regulatory approvals, including the AER's approval of TasNetworks' contingent project applications for Stage 1 activities, need to be completed before TasNetworks can commence construction.	0.93
<b>Total</b>		<b>167.31</b>

## 2.3 Stage 1 early works capex is prudent and efficient

TasNetworks engaged GHD to undertake an independent engineering verification and assessment of the capex included in our NWTDT Stage 1 early works CPA. GHD's assessment:

- verified that Stage 1 activities are aligned with the definition of early works and are required to progress the Project in a prudent and efficient manner
- found that the overall Project timeline is reasonable to meet AEMO's June 2030 delivery date
- confirmed that the procurement costs are reasonable and reflect specialist advice
- found that indirect and external labour costs are reasonable and are supported by tender outcomes, quotations and benchmarking
- found that actual and forecast internal labour costs are reasonable, noting that actual labour costs are from TasNetworks' ERP system and forecast labour costs benchmark is in line with other ISP projects.

Overall, GHD concluded that TasNetworks' early works capex for Stage 1 is within a reasonable margin of its comparative estimates. GHD's independent review therefore supports the consistency of TasNetworks' early work capex with that which would be incurred by a prudent and efficient business. GHD's report is provided as an attachment to this Application.

# 3 An actionable project with two stages

This section explains the evolution of the Project from an actionable ISP project to a staged actionable ISP project and the implications of staging on the early works activities.

## 3.1 The evolution to a staged actionable ISP project

Project Marinus was first identified as an actionable project in AEMO's 2020 ISP, published in July 2020.<sup>14</sup> AEMO's 2020 ISP assessed that both Cable 1 and Cable 2 should proceed and that early works for both cables should be completed by 2023-24:

*two new high voltage direct current (HVDC) cables connecting Victoria and Tasmania, each with 750 MW of transfer capacity and associated AC transmission, should be progressed such that the first cable can be completed as early as 2028-29...*

*This requires delivery of early works for both cables to be completed prior to a final investment decision in 2023-24...*

*Marinus Link's second cable should be able to be completed as early as 2031-32...*

In June 2021, MLPL and TasNetworks published the Regulatory Investment Test for Transmission (RIT-T) Project Assessment Conclusions Report (PACR).<sup>15</sup> The PACR identified Project Marinus (Option D), comprising both Cable 1 and Cable 2, as the preferred option and explained that the actual timing of each stage will be determined by AEMO's 2022 (and subsequent) ISPs.

In December 2021, AEMO published its Draft 2022 ISP, which included Project Marinus as a single actionable ISP project under the ODP, comprising both Cable 1 and Cable 2. The indicative dates were Cable 1 by July 2027 and Cable 2 by July 2029.<sup>16</sup>

In October 2022, the State and Federal Governments provided access to concessional financing<sup>17</sup> under the Rewiring the Nation plan to progress Project Marinus and reduce the annual costs of the Project to electricity customers by up to half.<sup>18</sup>

In June 2022, AEMO published its Final 2022 ISP, which reconfirmed Project Marinus as a single actionable project under the ODP with both Cable 1 and Cable 2 proceeding such that Cable 1 would be operational in 2029, and Cable 2 would be operational in 2031.<sup>19</sup>

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<sup>14</sup> AEMO, [2020 ISP](#), July 2020 p.15. AEMO's references to Marinus Link are references to Project Marinus.

<sup>15</sup> TasNetworks, [Regulatory Investment Test for Transmission \(RIT-T\) Project Assessment Conclusions Report \(PACR\)](#), June 2021. AEMO

<sup>16</sup> AEMO, [Draft 2022 ISP](#), December 2021, p. 61. AEMO's references to Marinus Link are references to Project Marinus.

<sup>17</sup> Concessional financing is subject to negotiation and agreement with the Clean Energy Finance Corporation.

<sup>18</sup> Media Release, [Rewiring the nation plugs in marinus link and Tasmanian jobs](#), October 2022.

<sup>19</sup> AEMO, [2022 ISP](#), June 2022, p. 13

In September 2023, the former Tasmanian Minister for Energy and Renewables announced that Project Marinus would focus on Cable 1 and that Cable 2 would be considered following FID for Cable 1<sup>20</sup> (Government's decision to stage the project or project staging).

AEMO's Draft 2024 ISP,<sup>21</sup> published in December 2023, supported the former Tasmanian Minister for Energy and Renewables' announcement by reconfirming that the Project remains a single actionable ISP project with two stages:

- Stage 1 – Cable 1 and the associated NWTB work by June 2030.
- Stage 2 – Cable 2 and the associated NWTB work by June 2032, subject to ongoing negotiations and confirmation in subsequent ISPs.

In April 2024, MLPL published a RIT-T update to assess whether, given the following, the preferred option is unchanged from the PACR:

- the significant market developments since 2021, arising from the urgent energy transition
- the increase in the forecast total costs of delivering Project Marinus.<sup>22</sup>

The RIT-T update confirmed that notwithstanding these changes, the preferred option, which is to proceed with the Cable 1 as soon as practicable and to keep the timing of the Cable 2 under review, remains unchanged from the PACR.

In June 2024, AEMO published its Final 2024 ISP, which reconfirmed the actionable status of Project Marinus with no decision rules and the timing of Stage 1 by June 2030 and Stage 2 by June 2032.<sup>23</sup>

## 3.2 Implications of project staging for early works

Consistent with AEMO's direction in its 2020 and 2022 ISPs, over the period June 2021 to September 2023, TasNetworks progressed its early works activities on the basis that both cables would proceed in line with the delivery dates in the ISP. This included undertaking:

- transmission line route conceptualisation
- landowner and community engagement programs
- land and easement acquisition
- environmental impact assessments and development approvals
- technical designs and functional specifications
- procurement strategy and execution based on a competitive Request for Proposal (RFP)
- program and project management
- corporate costs and support.

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<sup>20</sup> FID for Cable 1 is now expected mid 2025

<sup>21</sup> AEMO, [Draft 2024 ISP](#), December 2023, Table 1, p. 12

<sup>22</sup> MLPL, [Project Marinus RIT-T update](#), 16 April 2024

<sup>23</sup> AEMO, [2024 ISP](#), June 2024, p.62 (in service timing)

Following the introduction of staging, TasNetworks carefully reviewed the Project timing and staging to ensure efficient and safe delivery of Cable 1, while maintaining flexibility to deliver Cable 2 when required.<sup>24</sup>

The Palmerston–Sheffield 220 kV transmission line was not impacted by the introduction of project staging. However, the introduction of staging did result in significant changes to the Project and early works activities for the following 220 kV transmission lines:

- Sheffield–Burnie (existing)
- Heybridge Spur East (new)
- Heybridge Spur West (new).

The changes to these transmission lines arise because without the inland route it would not be possible to demolish the existing single-circuit 220 kV transmission line between Sheffield and Burnie prior to the construction of the new 220 kV double-circuit on the centre line of the existing easement.

To proceed with the coastal route without the inland route having first been completed would require prolonged outages of the existing 220 kV backbone transmission system between Sheffield and Burnie substations. The prolonged outage is required to enable the construction of the new double-circuit transmission line within the existing easement by first demolishing the existing 220 kV transmission line. Such outages would compromise TasNetworks' obligations under the *Electricity Supply Industry (Network Planning Requirements) Regulation 2018* (ESI regulations) in relation to network capability, power system security, quality and/or reliability, and inter-regional power transfer capability.

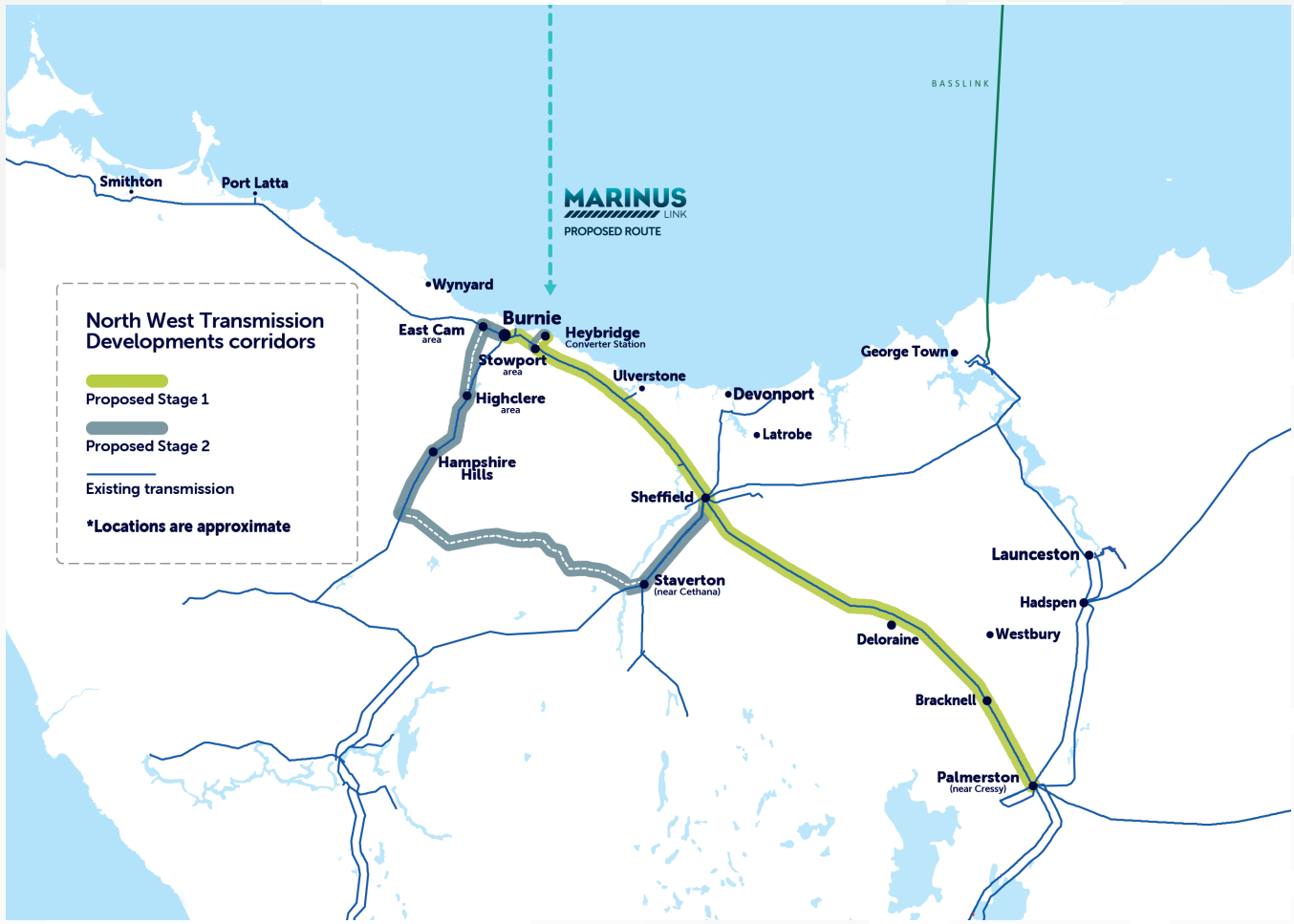
The new 220 kV double-circuit transmission line must, therefore, be constructed adjacent to the existing single-circuit 220 kV transmission line to maintain normal network operations during construction activities, with only shorter duration outages permitted where necessary.

Figure 3 on the following page shows Stage 1 (the coastal route), and Stage 2 (the inland route) of the NWTD.

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<sup>24</sup> Timing for Cable 2 would be considered in mid 2025 following FID for Cable 1.

Figure 3 NWTD Stage 1 (Cable 1) and Stage 2 (Cable 2)



To facilitate construction of the new Sheffield to Burnie section alongside the existing easement, TasNetworks was required to revise the placement of towers having regard for safety, network security and reliability, constructability and landholder preferences.

To meet the objective of building the majority of the new double-circuit 220 kV transmission line prior to decommissioning the existing single-circuit 220 kV transmission line, there are limited opportunities to use the original construction method. This is because building the new double-circuit 220 kV transmission line on the centre line of the existing single-circuit Sheffield–Burnie 220 kV transmission line (original construction method) would require an outage regime causing TasNetworks to breach its security of supply requirements under the ESI regulations.

To comply with its obligations, three new construction methods were identified by TasNetworks. The original construction method will only be used in instances where the three new construction methods are not practicable due to site constraints (approximately 17 per cent of the route).

The three new construction methods are:

- Method 1 – construction 30 metres to the south-west of the existing alignment. This method is feasible (i.e., will not compromise network safety or security) for approximately 43 per cent of the route
- Method 2 – construction between the existing 220 kV and 110 kV transmission lines where practically possible and safe (approximately 30 per cent of the route)
- Method 3 – the same as construction Method 2, however it involves relocating some existing 110 kV transmission line assets, to enable safe construction of the new 220 kV towers (approximately 10 per cent of the route).

Method 1 is preferred but not always feasible or practicable. Where Method 1 is not possible then TasNetworks will adopt Method 2, and where this is also not feasible, largely due to the physical proximity of the conductors, then Method 3 will be adopted

The introduction of project staging resulted in the following changes to the construction scope, reflected in the revised RFP:

- Sheffield to Burnie alignment – revised concept design
- Stage 2 – removal of scope associated with Stage 2
- Burnie Substation – reduce scope of Stage 1
- Heybridge Spur East and West – only Heybridge Spur East 220 kV transmission line is required for Stage 1
- Sheffield Substation – extend the western boundary of the substation to accommodate the new double breaker arrangements, which require additional land
- Heybridge Switching Station – included in the revised RFP scope (NWTD scope item, delivery responsibility transferred from MLPL to TasNetworks).

TasNetworks will work closely with its Principal Contractor to agree on the appropriate construction methodology (including alternative structure types and emergency return to service plans) to ensure the construction phase is de-risked and network security of the north west region is not compromised.

The change in construction method for the Sheffield–Burnie 220 kV transmission line has impacted all aspects of early works and required significant rework to be undertaken.

Table 7 summarises the implications for early works activities by capex category arising from the introduction of staging and Part C (sections 7 to 13) of this document provide further details.

**Table 7 Overview of impact of project staging on early works by capex category**

Capex category	Additional early works activities arising from project staging
Project management	<ul style="list-style-type: none"> <li>• Project timeframes were extended approximately 12 months to undertake the additional early works activities</li> <li>• Re-evaluation of the current Delivery Strategy</li> </ul>
Project development	<ul style="list-style-type: none"> <li>• Engineering for the Sheffield–Burnie 220 kV transmission line was amended to reflect changes in the line design and construction methods</li> <li>• Determine revised tower locations in collaboration with landholders as well as access tracks to align with the required alignment offsets</li> <li>• Update the Principal Project Requirements (PPRs) for inclusion in the updated RFP</li> </ul>
Land and property	<ul style="list-style-type: none"> <li>• Significant further engagement was required with impacted landholders to explain the changes and re-negotiate positioning of infrastructure for the Sheffield–Burnie 220 kV transmission line</li> <li>• Renewed access agreements with a number of landholders due to the delays from project staging, to allow surveys to facilitate access for contractor design works</li> </ul>



## Capex category

## Additional early works activities arising from project staging

- Revised land valuations were required for 86 properties by [REDACTED] in consultation with landholders

### Procurement

- The RFP was updated and re-issued to tenderers in March 2024, reflecting the change of route, revised technical solution and construction method. This required tenderers to submit new pricing schedules as part of their revised submission.
- An ECI phase was introduced to the procurement process

### Planning and environment

- Amendments to the Notified Corridor Declaration
- Updates to technical surveys and assessments underpinning the DA and the EIS. This has delayed the DA and EIS lodgement and approval timeframes
- Additional background reports and calculations
- Updates to all geographic information system mapping layers and figures

### Community and stakeholder

- Significant additional community and stakeholder engagement was needed to inform stakeholders about the change and seek their views and feedback. This includes revised communications materials to support landholder and key stakeholder interactions.

# 4 Regulatory requirements

The regulatory requirements for actionable ISP projects are contained in:

- clause 6A.8.2 of the NER
- the AER's Process guideline for contingent project applications
- the AER's Guidance Note for Regulation of actionable ISP projects.

The key requirements are outlined below. Section 15 of this Application shows how TasNetworks has met these requirements.

## 4.1 Regulatory requirements

Clause 6A.8.2 of the NER sets out the requirements for making an application to amend a revenue determination to include a contingent project that is an actionable ISP project. This Application is made in accordance with the requirements of clause 6A.8.2(a), (a1) and (b) of the NER, being:

- during the 2024 to 2029 regulatory period
- to amend the revenue determination that applies to TasNetworks in respect of a contingent project included in AEMO's ISP as an actionable ISP project
- within the specified time limits.

This Application includes the information specified in clause 6A.8.2(b) of the NER:

- (1) an explanation that substantiates the occurrence of the trigger event*
- (2) a forecast of the total capital expenditure for the contingent project*
- (3) a forecast of the capital and incremental operating expenditure, for each remaining regulatory year which the Transmission Network Service Provider considers is reasonably required for the purpose of undertaking the contingent project*
- (4) how the forecast of the total capital expenditure for the contingent project meets the threshold as referred to in clause 6A.8.A1(b)(2)*
- (5) the intended date for commencing the contingent project (which must be during the regulatory control period)*
- (6) the anticipated date for completing the contingent project (which may be after the end of the regulatory control period), and*
- (7) an estimate of the incremental revenue which the Transmission Network Service Provider considers is likely to be required to be earned in each remaining regulatory year of the regulatory control period as a result of the contingent project being undertaken as described in subparagraph (3), which must be calculated:*
  - (i) in accordance with the requirements of the post-tax revenue model referred to in clause 6A.5.2*
  - (ii) in accordance with the requirements of the roll forward model referred to in clause 6A.6.1(b)*

- (iii) *using the allowed rate of return for that Transmission Network Service Provider for the regulatory control period as determined in accordance with clause 6A.6.2*
- (iv) *in accordance with the requirements for depreciation referred to in clause 6A.6.3, and*
- (v) *on the basis of the capital expenditure and incremental operating expenditure referred to in subparagraph (b)(3).*

Clause 6A.8.2(f)(2) of the NER requires the AER to accept the relevant amounts in this Application if it is satisfied that:

*the amounts of forecast capital expenditure and incremental operating expenditure reasonably reflect the capital expenditure criteria and operating expenditure criteria, taking into account the capital expenditure factors and operating expenditure factors, in the context of the contingent project.*

In addressing these requirements, TasNetworks has had regard for the AER's:

- Guidance Note for Regulation of actionable ISP projects.
- Process Guideline for Contingent Project Applications.<sup>25</sup>

TasNetworks has also met regularly with the AER in developing this Application and those discussions have informed the preparation of this Application.

## 4.2 Trigger events

To be eligible to submit a CPA for the NWTD, TasNetworks must meet the trigger events outlined in clause 5.16A.5 of the NER.<sup>26</sup> For early works the only trigger event that must be satisfied under the NER is that the CPA is an early works CPA, with early works defined as

*Activities undertaken by a Transmission Network Service Provider in respect of an actionable ISP project:*

*(a) prior to the construction of the preferred option; and*

*(b) which:*

- (1) improve the accuracy of cost estimates for that project; or*
- (2) facilitate that project being delivered within the timeframes specific by the most recent Integrated System Plan.*

This Application for the early works of Stage 1 of the Project satisfies the trigger event.

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<sup>25</sup> AER, *Process Guideline for Contingent Project Applications under the National Electricity Rules*, September 2007 available at: <https://www.aer.gov.au/system/files/ac06907-Final%20guideline.pdf>.

<sup>26</sup> Rule 5.16A.5 actionable ISP project trigger event.

## 4.3 Project timing

For the purposes of this Application, the applicable dates for the commencement and completion for Stage 1 early works activities are:

- date for commencement – 1 July 2021 (commencement of costs included in this Application)
- anticipated date for completion – February 2026.

Some of the Stage 1 early works activities have already started. These activities have needed to pre-date this Application in order to meet the 2030 target completion date. The proposed timing for the remaining, more substantive, early works activities in this Application reflects a realistic assessment of the required dates for the early works activities to enable construction to commence as soon as possible following the approval of our Stage 1 construction CPA,<sup>27</sup> in order to meet Project Marinus timings linked to NWTD.

Notwithstanding that early works capex commenced in 2019-20 to meet the delivery timeframes in earlier ISPs, this Application only includes early works capex from 1 July 2021 (i.e., the 2021-22 regulatory year). This is because capex in the 2019-20 and 2020-21 regulatory years was incurred as part of Project Marinus and forms a component considered in the sale of MLPL, which occurred in March 2024. Capex incurred in 2019-20 and 2020-21 is, therefore, not included in this Application or TasNetworks' RAB.

The majority of capex for Stage 1 early works will occur during the 2024-29 regulatory period, with the remainder already incurred in 2019-24 regulatory period.

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<sup>27</sup> Subject to our Board making a positive Final Investment Decision (FID).

## 4.4 Capex threshold

NER clause 6A.8.A1(b)(2) requires where the application is for early works the threshold is either \$30 million, or 5 per cent of the MAR for the first year of the regulatory control period, whichever is the smaller amount.

Table 9 shows that the forecast capex of \$151.92 million exceeds the threshold. This means that the capex is covered by the contingent project requirements of the NER.

Table 8 Contingent project thresholds (\$ million, nominal)

2024-25 MAR	5% of MAR	Contingent Project Capex	Pass/Fail
163.38	8.17	151.92	Pass (Capex > 8.17)

## 4.5 Application of the Capital Expenditure Sharing Scheme (CESS)

In its Final Determination on TasNetworks' 2024-29 regulatory proposal, the AER stated that it would consider the application of the CESS to NWT D as part of the CPA process. This is consistent with the AER's final decision on the CESS Guideline that suggested, for a contingent project, the AER may apply the CESS, not apply the CESS, or apply a CESS with a lower sharing factor. In determining whether or not to exclude, or vary, the application of the CESS the AER will take into account:

- TasNetworks' CESS and capital expenditure proposals
- benefits to consumers from the exemption
- the size of the project
- the degree of capital expenditure forecasting risk
- stakeholder views.

TasNetworks considers that applying the CESS to the NWT D is inconsistent with the objective of the scheme, which is to incentivise TasNetworks to undertake efficient capital expenditure during a regulatory control period for the following reasons.

### Size of the Project

The NWT D represent one of the largest investments in the Tasmanian transmission system since its inception. Stage 1 of the NWT D is expected to cost twice as much as TasNetworks' total 2024-29 transmission capex forecast. Therefore, a small percentage under / overspend on NWT D will significantly impact TasNetworks' 2024-29 incentive scheme outcomes, weakening incentives to find efficiencies in the underlying program of work. This is not consistent with the objective of the scheme and can be resolved by excluding NWT D capex from the CESS.

## Capex forecasting risk

Although TasNetworks has sought to minimise forecasting risk to the extent it is practical to do so, the global transition to net zero means there are ongoing uncertainties regarding the costs of building new transmission infrastructure. The scale of the new investment required will inevitably result in an increase in the cost of delivering transmission network projects as the cost of materials and labour rises. This increases the likelihood of TasNetworks overspending on the NWT D compared to underspending. Although non-ISP capex is also impacted by this uncertainty, cost overruns are generally easier to manage across a broad range of projects. This means the CESS continues to provide an incentive for finding efficiencies in delivering non-ISP capex but distorts incentives for ISP capex.

## Benefits to consumers from not applying the CESS to NWT D

TasNetworks supports the exclusion of NWT D capex from the CESS where its inclusion would materially impact incentive scheme outcomes to the detriment of customers. As explained above, applying the CESS to the NWT D weakens incentives for TasNetworks to find efficiencies in its underlying program of work. This results in lower benefits to customers in comparison to not applying the CESS to NWT D.

## 4.6 Government support

Project Marinus and the NWT D have received significant Government support since the feasibility phase of the Project commenced in 2017. Following grant funding to progress these early phases of the Project, in December 2020, the Commonwealth and Tasmanian Governments established a Memorandum of Understanding (MOU) which included commitments to establish a separate business to progress the delivery of the design and approvals (D&A) phase of the Project to FID, which, at the time was anticipated to be prior to the end of 2023-24.

On 5 April 2022, the Australian Government announced grant funding of \$75 million to support the D&A phase for Project Marinus. This support for the Project was reiterated in October 2022 through an agreement between the Australian, Tasmanian and Victorian Governments to progress Marinus Link. This agreement includes:

- access to a concessional loan from Rewiring the Nation, through the Clean Energy Finance Corporation (CEFC) for approximately 80 per cent of the project costs of Marinus Link, with the additional 20 per cent to be an equity investment shared equally between the Commonwealth, Victoria and Tasmania
- up to \$1 billion of low-cost debt from Rewiring the Nation for Tasmania's Battery of the Nation projects, including the Tarraleah Power Station redevelopment and Lake Cethana Pumped Hydro
- access for TasNetworks to low-cost debt for the NWT D through the CEFC.

The Australian Government funding allocated to the NWT D, as shown in Table 10, is taken into account in establishing our capex forecast for the Stage 1 early works costs. The funding is applied to our gross capex of \$167.31 million, detailed in Part C of this Application, to derive a net capex forecast of \$151.92 million, which is used to determine our incremental revenue allowance detailed in Appendix A this Application.

Table 9 Stage 1 early works grant funding and net capex (\$ million, real 2023-24)

	2021-22	2022-23	2023-24	2024-25	2025-26	Total
Total capex (gross)	18.50	20.35	14.52	64.74	49.20	167.31
Less Grant funding	(4.51)	(1.19)	(9.69)	-	-	(15.39)
<b>Total capex (net)</b>	<b>13.99</b>	<b>19.17</b>	<b>4.83</b>	<b>64.74</b>	<b>49.20</b>	<b>151.92</b>

TasNetworks is currently progressing a concessional financing arrangement with the CEFC. The concessional finance arrangement is expected to include the costs associated with the Stage 1 early works which are the basis of this Application. Concessional finance will significantly reduce the impacts on customers from the Project.

The revenue and price impacts provided in this Application have not been adjusted for a reduction related to concessional finance as the application of a concessional finance adjustment to a revenue determination requires a concessional finance agreement. When a concessional finance agreement is established, TasNetworks will advise the AER of the details of that agreement and the AER will amend TasNetworks' revenue in accordance with the agreement. The amendment will ensure the benefit of the concessional finance is passed through to customers via a lower revenue allowance for TasNetworks and therefore lower price impacts on customers.

## 4.7 Tasmanian Renewable Energy Target

In November 2020, the Tasmanian Government legislated a new Tasmanian Renewable Energy Target (TRET) to increase the State's renewable energy output to 200 per cent by 2040. The base is 2022's renewable energy output of 10,500 GWh, with an interim target of 15,750 GWh by 2030, and the full target of 21,000 GWh by 2040. The TRET demonstrates the Tasmanian Government's intention to further expand on-island renewable generation and drive increased investment and economic activity in the renewables sector.

In December 2020, the Tasmanian Government published the Tasmanian Renewable Energy Action Plan (TREAP)<sup>28</sup> that outlines three key priority areas:

1. Transforming Tasmania into a global renewable energy powerhouse
2. Making energy work for the Tasmanian community
3. Growing the economy and providing jobs.

A number of actions underpin each of the three priority areas, with the TRET and the progression of Project Marinus and other major renewable energy projects identified as vitally important to delivering the first priority area.

As the jurisdictional planner in Tasmania, our network planning strategies need to consider and support the objectives of the TREAP and enable Tasmania to achieve the legislated TRET.

<sup>28</sup> Renewables, Climate and Future Industries Tasmania, [Tasmanian Renewable Energy Action Plan](#), December 2020

# 5 Community and stakeholder engagement

Since 2019, TasNetworks has undertaken extensive and ongoing engagement in relation to the NWTD with a broad range of stakeholders, community members and landholders. TasNetworks' approach to engagement has been guided by its NWTD Engagement Strategy and its NWTD Communications Strategy.

As planning for the Project has progressed the feedback received from engagement has been critical to understanding how to achieve the best outcomes for the environment, landholders, businesses and the wider community.

TasNetworks overarching engagement objectives for the NWTD are to:

1. Raise awareness of the Project amongst key stakeholders, industry and the community and understanding of its role in Australia's clean energy transition and the broader Project benefits
2. Build relationships with stakeholders and the community to generate support for the Project
3. Understand areas of interest or concern for stakeholders and the community
4. Provide opportunities for stakeholders and the community to gain further information and provide feedback, with clear expectations about where they can influence the Project
5. Develop a community benefit sharing program (CBSP) that has shared ownership and value, prior to construction commencing
6. Listen and respond to community and stakeholder feedback about early works activities and identify mitigation measures to reduce impacts

Engagement has been progressed through a variety of engagement channels to be as flexible as possible and accommodate stakeholder preferences. Engagement channels used include individual meetings, community drop-in sessions and workshops, webinars, focus groups and surveys.

Figure 4 shows the NWTD engagement framework.

Figure 4 NWTD engagement framework





# 5.1 Approach to engagement

TasNetworks' engagement approach involves:

- Actively seeking out and hearing from a broad cross-section of the community by making it as easy as possible to find information and provide feedback
- Hearing and responding to community perspectives to understand the impacts, including cumulative impacts, of the Project and mitigating potential Project risks
- Sharing balanced, credible information and capturing informed community views
- Proactively addressing challenging issues and having difficult conversations early, openly and transparently
- Being open and transparent about what stakeholders and the community can and cannot influence
- Providing genuine opportunities to be involved during the various Project phases and in the development of social licence initiatives
- Establishing a foundation of community trust in the engagement process to support future Project stages.

The key engagement forums for the Project include the Stakeholder Liaison Group (SLG) and Youth Panel which have been important engagement forums and source for feedback and input into the Project.

Figure 5 summarises how TasNetworks has engaged with the community.

Figure 5 How TasNetworks has engaged with the community



## Stakeholder Liaison Group

The SLG was established in 2021 and includes broad representation from across key industry groups, peak bodies, education, skills and training sectors and State Government organisations. It provides a forum for:

- TasNetworks to share information on the early works activities
- Stakeholders to raise concerns and discussion points on behalf of the organisations or communities they represent
- Stakeholders to provide input into initiatives to maximise the benefits of the Project.

The SLG meets bi-monthly, in face-to-face meetings in Burnie, and has met 16 times since 2022. The SLG is independently chaired to facilitate discussion and participation and has discussed a broad range of topics including:

- project progress updates and key milestones
- engagement and communication approaches
- the development of the Project
- project staging and implications
- community benefits sharing program
- social licence initiatives
- landholder benefit payments
- project costs and procurements
- refinements to engagement.

All agendas, presentations and minutes are made publicly available on [TasNetworks' website](#).

## Youth Panel

The Youth Panel was established in 2022 to provide input on community benefits sharing. It comprises 15 young people ranging from 18 to 25-year-olds from across North West Tasmania. The Youth Panel met seven times over the period March to November 2022 and focused on ensuring the expectations of young people, who will be most impacted through 'living' with the Project for the longest period of time, are properly captured. It is this cohort considered most often missing in engagement on major intergenerational infrastructure projects.

## Other key engagement forums

Other engagement forums and activities that TasNetworks has undertaken for the Project include:

- community information sessions (19)
- co-design economic development workshops (three)
- focus groups (six)
- stakeholder workshops (four)
- industry and business events (three)
- telephone surveys (three)
- online surveys (three)

- combined advisory group meetings (three)
- community workshops (two)
- webinars (four)
- community BBQ events (two).

## 5.2 Key areas of early works engagement

Over the period 2021 to mid-2024, engagement has covered a variety of topics that are important to the community and interested stakeholders including:

- route selection and design
- economic development opportunities
- community investment
- community benefits sharing framework
- landholder engagement.

Engagement during this period also focused on building community awareness, knowledge and support for the Project.

TasNetworks publishes six-monthly engagement update reports on its [website](#) outlining the engagement activities undertaken and the feedback received. Feedback collected has helped the Project team refine the design of the transmission route, understand stakeholder and community concerns, what is important to them, identify the topics they want to know more about, and develop social licence initiatives.

Over the period from mid-2024 to early 2026, engagement will continue to involve a broad range of stakeholders, community members and landholders. The key engagement areas will be:

- economic development
- governance arrangements for the CBSP
- DA/EIS public exhibition documents
- community use of easements
- pre-construction activities and areas of interest.

TasNetworks will also continue to talk to stakeholders to build knowledge and support for the Project and to enable them to participate in the approvals process.

This engagement is discussed below and should be read in conjunction with TasNetworks' Early Works and Community and Engagement Plan. The cost of engagement is discussed in section 12.

### Route selection and design

From November 2020 to December 2021, engagement focused on the Palmerston–Sheffield, Sheffield–Burnie, Heybridge Spur East, and Heybridge Spur West 220 kV transmission line routes. This engagement included information sessions, workshops, meetings and an online survey. Key discussion topics included the location and design of transmission infrastructure including tower siting, heights, landscape and visual impacts. Other topics included environmental impacts and economic development opportunities.

TasNetworks initially proposed to keep the existing Palmerston–Sheffield 220 kV transmission line in service, increasing the existing easement and building a new double-circuit 220 kV transmission line next

to it. Following the engagement processes, TasNetworks received requests for changes to the route from directly affected landholders, neighbours, and community groups.

TasNetworks met with interested parties to better understand their concerns and suggestions for realignment and, at their request, undertook further detailed investigations into variations to the proposed route, which aimed to address landholder concerns and suggestions. This resulted in TasNetworks agreeing to decommission the existing 220 kV transmission line, once the new double-circuit 220 kV line had been built, and to return 20 metres of easement.

In mid-2021, the remaining proposed routes for NWT D were released via a range of engagement activities between June and December 2021, to gather feedback on the proposed routes, understand what was important to community and what they sought to know more about. This included 11 community information events, four online focus groups and one webinar.

## Economic Development Action Plan

Between 2021 and 2022, TasNetworks co-designed with stakeholders an Economic Development Action Plan which identifies initiatives to maximise the economic benefits from the Project. Stakeholders involved in the co-design process included industry groups, education, skills and training organisations, local councils, and State Government agencies.

A key initiative identified in the Economic Development Action Plan was the development of a NWT D Procurement Strategy. This was a key topic of discussion, with feedback used to develop the evaluation criteria and communications approach included in the NWT D Procurement Strategy.

Since the development of the Economic Development Action Plan, TasNetworks has continued to engage and collaborate with key stakeholders relevant to each action.

Between June 2024 and June 2025, TasNetworks intends to consult with stakeholders on the progression of the Economic Development Action Plan through the SLG meetings, workshops and one-on-one discussions.

## Community Investment Fund Program

The Community Investment Fund Program includes shared value partnerships, a scholarship fund and sponsorship/events supporting initiatives that result in both a high level of business and social value and that are targeted at communities within the Project's footprints. Its activities are guided by three key economic development focus areas aligned with NWT D's objectives as outlined in the Economic Development Action Plan:

- workforce development, skills and training - skills for the future
- procurement and opportunities for local businesses
- local and regional community (social) benefits.

## Community Benefits Sharing Program

TasNetworks recognises that while major projects deliver broad benefits to communities across a region, state or nationally, project impacts are usually felt by the local communities surrounding the project. Benefits sharing programs provide additional value to local communities to ensure there is a more equitable distribution of benefits.

During 2022, TasNetworks co-designed the CBSP with the Youth Panel and stakeholders to ensure it reflects community aspirations and expectations and will deliver outcomes the community values most. In March 2023, the CBSP was approved by the TasNetworks Board.

The CBSP focuses on ensuring a sustainable positive legacy from the Project for communities in North West Tasmania. It recognises that the distribution of project benefits across communities is not uniform, acknowledging that some communities are more negatively impacted by the Project than others.

The CBSP provides for a total of \$10 million in funding for initiatives providing benefits to communities in the six local government areas affected by the NWT D throughout the Project's construction period. The CBSP is expected to operate between 2026 and 2030, alongside the construction of the NWT D, and will provide four tiers under which applicants can apply for funding for local community initiatives.

From May to December 2025, TasNetworks intends to develop governance arrangement to ensure the program is efficiently administered and is accessible to a wide range of organisations and community groups. As part of this, TasNetworks proposes to:

- develop a terms of reference
- appoint an independent chair
- establish a community assessment panel.

Through one-on-one discussions and meetings TasNetworks will engage with stakeholders on the proposed approach and ensure that governance is put in place to meet the Project's construction start date.

## Landholder engagement

Early engagement with landholders and the community has been critical to support safe and efficient access to, and the acquisition of, land and easements needed for the Project. Engagement with landholders has involved:

- notifying landholders whose property may be impacted by the Project
- providing information about the Project to landholders who may be impacted, including information on the proposed Project route ahead of wider public consultations
- understanding landholders' property operations to inform the initial route, noting that properties affected by the proposed easements have a variety of uses including:
  - broad hectare cropping and grazing
  - irrigated cropping and grazing
  - horticulture
  - recreation
  - rural lifestyle
- understanding ways to reduce the overall impact on landholders and communities when assessing route options within the preferred corridor
- establishing and maintaining a positive social licence for the Project and understanding how the community can influence the Project's outcomes.

Ongoing engagement with landholders is critical to minimising on-farm impacts and preparing for construction.

## Public exhibition of the DA/EIS

In 2025, TasNetworks will commence consultation on the DA and EIS (DA/EIS),<sup>29</sup> ahead of formal exhibition by the Tasmanian Planning Commission. This will be facilitated through six face-to-face community information sessions and one on-line session. These meetings will be attended by environmental specialists who are able to talk to the documents and answer questions. Section 11 provides further information on the exhibition of the DA/EIS.

## Community use of easements

Between June 2024 and June 2025, TasNetworks will assess the useability of public space easements, especially in socio-economic disadvantaged areas. TasNetworks intends to work with the community to assess future use of easements in a way that supports the local communities impacted by the Project. In some cases, the initiatives arising from this assessment may be funded by the CBSP, however it also may attract other sources of funding.

This engagement will be facilitated through SLG meetings, community events, workshops and one-on-one discussions.

## Pre-construction activities and areas of interest

TasNetworks will work with the preferred Principal Contractor to consult on a number of areas of interest with key stakeholders and the community. These include but are not limited to:

- workforce accommodation planning
- workforce skills and training opportunities
- local procurement opportunities
- what to expect during construction.

This will be facilitated to suit stakeholder needs and preferences and include meetings and workshops.

## 5.3 How engagement has shaped the Project

Through the engagement conducted to date, landholders and community members have directly influenced the development of the Project. Based on feedback received, TasNetworks has made the following changes to its plans for the Project:

- relocated transmission towers
- adjusted tower heights
- amended the route
- adopted alternative construction practices.

These changes are intended to minimise, to the greatest extent possible, impacts on landholders, the environment, and consumers. These changes have delivered improvements for landholders such as limiting disruptions to farm operations, farm buildings and high value agricultural land. The changes have

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<sup>29</sup> The EIS is contained in the DA.

also driven benefits including reduced compensation payments, increased positive community sentiment and social licence, and have the potential to reduce the time needed to achieve project approvals.

Feedback has also shaped how TasNetworks presents and delivers communications and engagement activities to ensure information is fit for purpose and provided in the forms and frequency preferred by stakeholders.

# Part B – Procurement for design and construction of the Project



# 6 Procurement for Stage 1

## 6.1 Overview of the procurement process

To ensure that the Project is delivered at the lowest sustainable cost to consumers and to meet AEMO's June 2030 delivery date, a highly interactive and competitive procurement process has been undertaken to determine the cost of delivering the Project. The formal tender process involved four phases:

- Phase 1 – market sounding from July 2022 to March 2023, including
  - Registration of interest (ROI) from July to August 2022
  - Expressions of interest (EOI) from November 2022 to March 2023.
- Phase 2 – initial Request for Proposal (initial RFP) from June 2023 to November 2023.
- Phase 3 – revised Request for Proposal (revised RFP) March to May 2024.
- Phase 4 – evaluation and negotiation May to October 2024.

The procurement process has been conducted to the highest standard of probity, fairness and equal opportunity and will achieve prudent, efficient and reasonable outcomes for consumers, including value for money. [REDACTED] was appointed as the probity advisor to ensure probity is maintained through the procurement process. The probity principles include:

- an open competitive process
- fairness, consistency, and transparency of process
- identification and resolution of conflicts of interest
- accountability in relation to decision-making
- monitoring and evaluating performance.

The preferred Principal Contractor identified through the procurement process will be appointed in October 2024. Each of the four procurement phases is discussed below.

## 6.2 Phase 1 – market sounding including ROI and EOI (July 2022 to March 2023)

The competitive procurement process commenced with extensive market sounding over the period July 2022 to March 2023. The scope of the Project at that time included both cables, and therefore included the coastal route and the inland route. The portion of the inland route between Staverton and Hampshire Hills switching stations was subject to a separate ECI process and was not included in this competitive procurement process.

The [REDACTED] was appointed to lead the market sounding process in conjunction with TasNetworks. The market sounding was designed to ascertain contractor capacity, given other competing transmission projects nationally. It was also designed to ensure a market-fit procurement strategy to attract quality bids from tenderers with sufficient capability and experience to progress to the RFP phase and ultimately deliver the Project if successful at the RFP stage.

Market sounding involved the ROI and EOI processes:

- July to August 2022: ROI – this attracted significant and diverse interest from more than 30 entities. TasNetworks assessed these entities and shortlisted eight entities with the experience and capability to design and construct large transmission projects to proceed to the next stage of the process
- November 2022 to March 2023: EOI – TasNetworks assessed the eight shortlisted entities’ experience and capability to deliver the Project on a range of grounds including financial, risk, engineering design and delivery. During this phase, three of the participants withdrew from the procurement process and five entities provided submissions to the EOI phase. Based on the evaluation criteria set out in Table 11, TasNetworks identified three entities to proceed to the final RFP stage of the process.

**Table 10 EOI evaluation criteria**

Criterion	Description	Weighting (%)
Overall suitability	<p>The Applicant’s overall suitability to achieve the Project objectives including:</p> <ul style="list-style-type: none"> <li>• bid team structure</li> <li>• key personnel</li> <li>• financial capacity</li> <li>• resourcing and commitment.</li> </ul>	25
Design and construction capability	<p>The Applicant’s demonstrated capability and experience in design and construction of projects comparable to the Project including:</p> <ul style="list-style-type: none"> <li>• brownfield and greenfield HVAC overhead transmission line delivery</li> <li>• brownfield and greenfield HVAC substation delivery.</li> </ul>	25
Understanding and approach	<p>The Applicant’s understanding of the opportunities and risks, and a credible approach to:</p> <ul style="list-style-type: none"> <li>• health and safety</li> <li>• project management</li> <li>• engineering and design</li> <li>• supply chain management</li> <li>• interface management</li> <li>• commissioning and operation</li> <li>• community and stakeholder management</li> <li>• social licence, including local content requirements and First Nations participation.</li> </ul>	35

Criterion	Description	Weighting (%)
Value for money and innovation	<ul style="list-style-type: none"> <li>identified opportunities for improvements that would yield a greater value for money proposition</li> <li>key innovation opportunities that would be able to be realised throughout the course of the development and into delivery.</li> </ul>	15

Based on the outcome of market sounding, TasNetworks determined the preferred delivery model would be based on:

- a modified EPC, which was assessed to be preferable to other models, like ECI, as it promotes greater price certainty and risk allocation. It also engages contractor competencies more fully, which is important given contractors have greater experience than TasNetworks in constructing large transmission projects
- a single entity (Principal Contractor) to provide sufficient flexibility in programming and delivery, reducing interface risks.

## 6.3 Phase 2 – initial RFP (June to November 2023)

In June 2023, TasNetworks issued its initial RFP to the three short-listed tenderers identified in the EOI phase. However, early in the process one tenderer withdrew from the process, leaving only two remaining. The initial RFP phase was scheduled to run from 28 June 2023 to 8 November 2023.

The initial RFP was designed to be highly interactive and involved workshops to provide tenderers with detailed project information to enable them to complete the returnable schedules. The interactive workshops assisted to ensure that the tenderers' submissions:

- were detailed, credible and compliant
- minimised the risk of tenderers misunderstanding the requirements of the Project
- promoted a collaborative exchange of information to ensure tenderers can deliver their best tender responses
- included competitive pricing, in the form of a maximum bid cost reflecting the lowest sustainable cost of delivering the Project to inform the FID.

The indicative high level evaluation criteria for the initial RFP included:

- project solution
- project delivery
- environmental, property, engagement and social sustainability
- commercial risk
- commercial certainty
- pricing.

The Government’s decision to stage the Project, which occurred mid-way through the initial RFP process, had significant implications for the tenderers’ responses especially in relation to the Project’s solution and delivery. TasNetworks assessed whether it should continue with its procurement process (initial RFP) or issue a revised RFP to the tenderers requesting them to incorporate in their responses the changes arising from project staging, being:

- removal of upgrade of the Sheffield – Farrell 220 kV transmission line, and removal of construction of the Hampshire Hills Switching Station and Burnie–Hampshire Hills 220 kV transmission lines
- utilising new construction methods for the Sheffield–Burnie 220 kV transmission line
- other changes to the Project scope relating to Burnie Substation, Heybridge Spur East 220 kV transmission line, and the new Heybridge Switching Station.

TasNetworks concluded that issuing a revised RFP, including updated returnable schedules aligned with the changes arising from project staging, would be the best approach. The timing of the revised RFP followed the conclusion of the initial RFP in accordance with its original timeframes to allow TasNetworks to obtain as much information as possible from tenderers, noting that this would facilitate a more efficient revised RFP process.

## 6.4 Phase 3 – revised RFP (March to May 2024)

In March 2024, TasNetworks issued a revised RFP to the two tenderers who had participated in the initial RFP process. To ensure efficiency and fairness, the revised RFP process did not require the tenderers to re-submit elements of the initial RFP that were not impacted by the decision to stage the Project, including the mandatory criteria and the Environment and Biosecurity requirements. The key focus of the revised RFP was to develop a more accurate and de risked construction price following an ECI phase. Tenderers were requested to provide open book pricing information, including native cost files upon which pricing is based, having regard for the revised construction methods for the new double-circuit Sheffield–Burnie 220 kV transmission line.

The revised RFP expanded on the scope of the initial RFP by introducing an ECI phase, which includes securing LLE and undertaking preconstruction works for tower and substation construction. This work will be undertaken by the successful Principal Contractor and is discussed in section 8.

In May 2024, [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

## 6.5 Phase 4 – evaluate and negotiate (May to October 2024)

To provide confidence to TasNetworks, the AER and consumers, that [REDACTED] response to the revised RFP is consistent with the lowest sustainable cost, TasNetworks has established a facilitated negotiation process [REDACTED]. This invites them to submit a tender response, based on an open book approach, for evaluation in accordance with the original close of tender date. Following TasNetworks’ initial evaluation, a detailed Negotiation Plan based on the evaluation’s findings will be developed for direct negotiation.

TasNetworks has also commissioned [REDACTED] to concurrently develop an independent cost estimate (owners cost) of the delivery cost to verify and validate the class 2 cost estimate determined through the ECI process. [REDACTED] will determine the cost based on its engineering expertise, benchmarking against other comparable regulated projects and knowledge from its role as independent estimator in other similar ECI processes.

This independent cost estimate will be finalised following receipt of the [REDACTED] proposal. This will allow it to take into account changes in the Project's solution and delivery to address the new construction methods required for overhead line delivery as well as the proposed substation and switching station delivery approaches. [REDACTED]

# Part C – Capex

# 7 Commercial and procurement

This section details the nature and scope of the early works commercial and procurement activities for Stage 1 of the Project and explains the associated actual and forecast capex.

Table 12 shows that the actual and forecast Stage 1 commercial and procurement capex is \$11.95 million.

Table 11 Early works commercial and procurement capex (\$ million, real 2023-24)

Commercial & procurement	2021-22	2022-23	2023-24	2024-25	2025-26	Total
Actual	1.41	2.89	2.99	0.00	0.00	7.30
Forecast	0.00	0.00	0.00	3.70	0.96	4.65
<b>Total</b>	<b>1.41</b>	<b>2.89</b>	<b>2.99</b>	<b>3.70</b>	<b>0.96</b>	<b>11.95</b>

## 7.1 Nature and scope of commercial and procurement activities

Commercial and procurement activities relate to a broad range of activities to support the Project. Procurement activities include assessing the suitability of negotiating price and other terms, as well as establishing new and updating existing contracts with specialist service providers. These activities also include developing a procurement strategy, overseeing the competitive multi-phase procurement process to identify the preferred Principal Contractor to deliver the Project. Key commercial activities include processing contractor invoices, project budget management, re-forecasting and monthly reporting.

## 7.2 Commercial and procurement process and approach

TasNetworks' approach to the procurement for the D&C of Stage 1 is discussed in section 6. This process was led by the Commercial and Procurement Team in accordance with the Procurement Strategy developed specifically for the Project. TasNetworks adopted a highly interactive and competitive procurement process to drive value for money for its customers.

The Commercial and Procurement Team has also engaged extensively with technical specialists required to support the delivery of all aspects of early works activities for the Project. This included negotiating, drafting, executing and managing contracts for over 25 service providers including:

- engineering specialist support to assist with ECI phase
- ██████████ to undertake an independent estimate of the project costs
- ██████████ to provide transactional support
- ██████████ to provide probity services
- ██████████ to provide technical engineering to de-risk the Project including transmission tower design and constructability issues

- ██████ to assist with all aspects of land and easement access and acquisition
- ██████████ and its sub-contractors to provide environment and land use planning services
- ██████████ to provide specialist advice on stakeholder engagement.

Some contracts were initially established for Project Marinus as a whole and following the separation of MLPL from TasNetworks, these contracts had to be re-established directly with TasNetworks for the delivery of the NWTD component of Project Marinus.

In its Final Decision on MLPL’s Stage 1 Part A (Early Works) revenue proposal, the AER explained that it reviewed TasNetworks’ tendering and procurement processes as part of its 2025-28 Revenue Determination process for TasNetworks and found them to be prudent and efficient. In particular, the AER concluded that:<sup>30</sup>

*Marinus Link, as a wholly owned subsidiary of TasNetworks, has utilised TasNetworks’ tendering and procurement processes to acquire these services. We assessed TasNetworks’ tendering and procurement processes during our revenue determination and we consider them to be prudent and efficient. We consider they will also deliver prudent and efficient outcomes for Marinus Link.*

### 7.3 Actual capex

Table 13 shows that TasNetworks’ actual commercial and procurement capex is \$7.30 million, comprising \$3.20 million for labour and labour related costs and \$4.09 million for indirect costs.

The bulk of these costs relate to the competitive procurement process discussed in section 6 undertaken to identify the preferred Principal Contractor to deliver the Project.

**Table 12 Actual procurement capex, labour and indirect costs (\$ million, real 2023-24)**

Commercial & procurement	2021-22	2022-23	2023-24	Total
Labour	0.91	1.23	1.07	3.20
Indirect costs	0.50	1.67	1.93	4.09
<b>Total</b>	<b>1.41</b>	<b>2.89</b>	<b>2.99</b>	<b>7.30</b>

#### Labour

TasNetworks’ actual labour costs of \$3.20 million relate to internal FTEs undertaking commercial and procurement activities for the Project. The team currently comprises 6.6 FTEs and was established in December 2022 to drive the competitive procurement process for Project. In the initial stages of the Project, from 2021-22, procurement support was provided by the business-as-usual (BAU) procurement function.

<sup>30</sup> AER, [Marinus Link Stage 1, Part A \(Early Works\)](#), December 2023 p.6. The AER refers to its 2024-29 Draft Determination for TasNetworks’ and in particular, references [Attachment 5, Capital Expenditure](#).



The Commercial and Procurement Team comprises:

- Commercial Lead
- Finance Lead (0.25 FTE)
- Commercial Manager
- Financial Specialist
- Procurement / Contract Manager
- Senior Procurement Specialist
- Regulatory Specialist
- Corporate Counsel (0.3 FTE).

The remit of the Commercial and Procurement Team is broad and covers the following activities over the period July 2021 to June 2024:

- preparing and implementing the Procurement Strategy, which involved intensive market research and preparing the market engagement reports
- managing all stages of the competitive RFP process, including preparation of the technical documents, returnable schedules site visits and interactive tender workshops with transactional support from the [REDACTED]
- managing the development of the EPC contract terms and conditions to meet the changing needs of the Project with external law firm [REDACTED]
- undertaking monthly budget re forecasting for the Project prior to receiving costs from contractors
- setting up financial processes to capture costs and ensuring alignment with other internal business systems including SAP
- managing purchase orders, receiving and processing contractor invoices and undertaking project budgeting and forecasting
- monthly reporting, including Board papers as required.

## Indirect activities

The actual indirect commercial and procurement capex for the period to June 2024 is \$4.09 million comprising:

- [REDACTED] to support the internal team with the competitive RFP procurement process discussed in section 6. [REDACTED], who are specialists in contemporary procurement and commercial matters, assisted the internal team with various aspect of the RFP process including:
  - developing and facilitating interactive tender workshops
  - developing project and evaluation plans and
  - providing transactional support which included facilitating the data room and coordinating timely responses to tenderers through the RFP process
- [REDACTED] in allowable reimbursable bid costs – these are the verifiable costs reasonably and properly incurred by the tenderers in preparing for and submitting their proposal or revised proposal (as the case may be) in accordance with the initial and revised RFP documents. The payment is made

only to the unsuccessful tenderer and the amount is set out in sections 8.14.2 and 8.14.3 of the revised RFP document

- [REDACTED] to provide specialist legal advice to support procurement process and the establishment of contracts and develop the construction contract (Head contract)
- [REDACTED] to provide specialist engineering advice to inform the procurement process
- [REDACTED] to undertake work, based on a [REDACTED]. This work commenced in June 2024 and the actual cost of [REDACTED] reflects the cost of the work incurred to 30 June 2024. The total value of the fee proposal is [REDACTED]. The remaining value of [REDACTED] for this work, which has not yet been incurred, is included in section 7.4.
- [REDACTED] to prepare, in collaboration with TasNetworks, an Economic Development Action Plan for the north west region of Tasmania impacted by Project Marinus<sup>31</sup>
- [REDACTED] to provide input on the options and criteria for strategic benefit payments (SBP) to landholders, recognising the desire to co-design the SBP scheme with [REDACTED]. These costs relate to reimbursement of the legal and other associated costs incurred by [REDACTED]
- [REDACTED] to provide legal advice comprising:
  - [REDACTED] for work described in its [REDACTED]. As discussed in section 7.4, the total cost in [REDACTED] and forecast capex includes [REDACTED] for the work that has not yet been undertaken
  - [REDACTED] for other legal advice that is separate to the [REDACTED]
- [REDACTED] probity advisors. [REDACTED] provided training to the internal team and attended tender workshops and briefings to ensure transparency in the RFP process
- [REDACTED] to provide legal advice on a range of procurement matters
- [REDACTED] for an independent specialist to provide strategic advice.
- [REDACTED], an advertising group to provide support across a range of publications
- [REDACTED] to provide specialist tax advice.

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<sup>31</sup> SGS Economics and Planning and TasNetworks, [Capturing the Economic Development Opportunities from Renewable Energy Investments in North-West Tasmania - Discussion Paper](#), August 2022

## 7.4 Forecast capex

Table 14 shows that TasNetworks' forecast commercial and procurement capex is \$4.65 million, comprising \$2.42 million for labour and labour related costs and \$2.23 million for indirect costs.

**Table 13 Forecast commercial and procurement capex, labour and indirect costs (\$ million, real 2023-24)**

Commercial & procurement	2024-25	2025-26	Total
Labour	1.56	0.86	2.42
Indirect costs	2.14	0.09	2.23
<b>Total</b>	<b>3.70</b>	<b>0.96</b>	<b>4.65</b>

### Labour

TasNetworks' forecast labour costs of \$2.42 million relate to internal FTEs undertaking commercial and procurement activities for the Project. The team comprises 6.6 FTEs, as described in section 7.3, with the addition of an additional Regulatory Specialist role from July 2024 and a Finance Support Officer commencing in September 2024. The key activities for the Commercial and Procurement Team over the period July 2024 to February 2026 are:

- finalise the RFP and the preferred contractor selection process
- finalise the contract development including for the financing contract
- complete negotiations with CEFC
- undertake payments and cashflow modelling. This includes managing the drawdown of CEFC funds against contractor invoices
- contract management with head contractor and other service provider contracts including with [REDACTED]
- manage financial payment claims
- administer the payments to landholders
- interfaces with InEight Pty Ltd (InEight) and project controls
- ongoing internal project reporting.

### Indirect activities

TasNetworks' forecast indirect commercial and procurement capex for the period July 2024 to February 2026 is \$2.23 million comprising:

- [REDACTED] to undertake the following key items of work as described in its [REDACTED]:
  - master loan facility agreements (MLFA) – assist TasNetworks to negotiate and execute MLFAs
  - CEFC financing – assist TasNetworks to negotiate and execute a facility agreement with CEFC in relation to this Stage 1 early works CPA and undertake due diligence

- ongoing contract management and associated advice to February 2026, including assistance with waivers, financier consents, amendments and responses to other ad hoc queries and advice
- EPC contract – assist TasNetworks to finalise and execute the EPC contract with the preferred Principal Contractor
- ongoing contract management – provide ongoing advice until February 2026 including on contract variations, extension of time requests and other contract management-related advice
- contractor dispute – provide advice and assistance on any contractual dispute matters that arise prior to February 2026

The total cost of [REDACTED], however these activities commenced in June 2024 and therefore [REDACTED] of costs reflected are in the actual costs. The forecast capex of [REDACTED] plus actual capex of [REDACTED] equals the total cost of [REDACTED].

- [REDACTED] to undertake the following work, based on a [REDACTED]. This forecast value is less than the fee proposal of [REDACTED] due to some costs having already been incurred in June 2024 [REDACTED] as discussed in section 7.3:
  - review the draft tender documents and price schedule and assist with the tender evaluation process
  - prepare an independent cost estimate (AACE Class 3) – this will be developed using a combination of first principles and application of comparable rates and cost build ups / benchmarking from relevant reference projects
  - contractor price evaluation and normalisation – this will involve reviewing the tenderers’ pricing and scope exclusions/inclusions for compliance with RFP document requirements and normalisation / risk adjustment
  - independent estimator support to contract award – this will involve participating in guaranteed maximum price (GMP) estimate development with the EPC contractor
  - review TasNetworks’ indirect (owners) costs – this will involve reviewing cost estimates for staff and third-party consultants in the context of the overall project program and execution strategy
  - assist with regulatory submissions and out-turn costs.
- [REDACTED] to undertake the following work, based on a [REDACTED] ([REDACTED]), to ensure that the Project Execution Strategy, the functional management plans (FMPs), the project execution plans (PEPs), and supporting artefacts are cohesive and aligned with the project and procurement strategy, inputs from the EPC contractor and new procedures being defined in the InEight software implementation. The undertaking includes:
  - update of the Project Execution Strategy – including undertake a gap analysis, update the strategy and develop a comments register
  - update of the FMPs and PEPs – to integrate the EPC contractor’s submission including any changes they proposed to the design, constructability, cost, program and commercial risk positions
  - InEight process integration – this includes updating the relevant FMP in relation to the final InEight functionality requirements in accordance with the procedures and information defined in the FMPs
- [REDACTED] to assist with quality systems. This work is based on a fee proposal, [REDACTED], including the following:
  - [REDACTED] for Quality Systems development of Quality Management system, input into the quality assurance plan, report development and expenses (note, this does not include [REDACTED] development)

- [REDACTED] for QRA Monte Carlo analysis including preparing the draft and final reports
- [REDACTED] for constructability including workshops with the EPC contractor, development of registers and preparing the final report
- [REDACTED] for allowable reimbursable bid costs – the verifiable costs reasonably and properly incurred by tenderers in preparing for and submitting their proposal or revised proposal (as the case may be) in accordance with the initial and revised RFP documents. The payment is made only to the unsuccessful tenderer and the amount is set out in sections 8.14.2 and 8.14.3 of the revised RFP document.

# 8 Project development

This section details the nature and scope of early works project development activities for Stage 1 of the Project and the associated actual and forecast capex.

Table 15 shows that the actual and forecast Stage 1 project development capex is \$92.71 million.

Table 14 Stage 1 early works project development capex (\$ million, real 2023-24)

Project development	2021-22	2022-23	2023-24	2024-25	2025-26	Total
Actual	4.65	3.48	1.58	0.00	0.00	9.71
Forecast	0.00	0.00	0.00	44.05	38.96	83.01
<b>Total</b>	<b>4.65</b>	<b>3.48</b>	<b>1.58</b>	<b>44.05</b>	<b>38.96</b>	<b>92.71</b>

## 8.1 Nature and scope of project development activities

Project development activities relate to the various engineering activities that are critical to the design, safe construction and operation of the Project to meet TasNetworks' reliability, security, safety and other technical standards and obligations. These activities include studies, surveys and assessments to support the engineering design and asset technical and functional requirements. Project development activities also include determining the bill of quantities for equipment and other key materials needed to construct the Project and as well as scheduling and resource planning.

Many of the technical engineering assessments, survey outcomes and reports developed by the Project Development Team were provided to the tenderers to inform their responses to the initial and revised RFP process, discussed in section 6. Providing detailed technical information to tenderers in this way serves to de-risk the Project by ensuring that tenderers' responses provide more accurate costings, so that customers pay no more than the efficient cost of delivery.

Project development activities are also central to the ECI phase of the procurement process. The Project Development Team is responsible for overseeing the EPC contractor undertake the ECI pre-construction activities. These activities will minimise construction costs and risks and enable construction to commence as soon as possible following the AER's approval of TasNetworks' Stage 1 application for construction to meet AEMO's 2030 target delivery date.

The Project Development Team is also currently undertaking a competitive tender process to appoint an engineering consultant from its engineering services panel to assist it in conducting design reviews, through the gated timeframes. This engagement is ongoing and will involve seven roles described in section 8.3.

## 8.2 Project development approach

Project development is central to the constructability and safe delivery of the Project. This is because it has overall responsibility for the internal functional and technical engineering requirements and compliance with TasNetworks' obligations under the ESI regulations in relation to network capability, power system security, quality or reliability supply, inter-regional power transfer capability. The key stages of the project development approach are discussed below.

### Initial RFP and DA/EIS

For the purpose of informing the initial RFP and DA/EIS development, the Project Development Team:

- developed the conceptual desktop transmission line routes, including suitable tower placement. As discussed in section 12, TasNetworks consulted on this to seek community and landholder feedback and made revisions to reflect feedback from landholders
- developed the suitable transmission tower structure family, including design and testing
- prepared standard primary design drawings for several 220 kV switching arrangements
- provided technical support for the evaluation through the ROI, EOI and initial RFP processes discussed in section 6. This included reviewing responses from tenderers to ensure that they are technically conforming and providing a scored evaluation of the responses
- provided technical design and engineering inputs to the Planning and Environment Team for the DA/EIS. This is discussed in section 11
- determined the quantity of major equipment procurement, including transmission line towers assemblies and major primary equipment such as switchgears
- developed the technical PPRs used for the initial RFP issued to tenderers in June 2023. These covered all aspects of the Project including:
  - substation and switching station design and configuration
  - compliance with fault levels and network capacity requirements
  - transmission tower structure family, including design and prototyping
  - outage plans to ensure compliance with the *Electricity Supply Industry Act 1995 (Tas)* (ESIA).

### Implications of project staging

Following the introduction of project staging, significant further project development work was required to reassess the Project's sequencing, route alignment and tower locations.

In particular, as discussed in section 3, the introduction of staging required further engineering refinement of the Sheffield–Burnie 220 kV transmission line route. The Project Development Team, in collaboration with [REDACTED]:

- undertook further technical studies to assess transmission outage impact on the of the existing Sheffield–Burnie 220 kV transmission line
- assessed the constructability challenges associated with the need to build the 220 kV double-circuit transmission line on the same easement as the existing 220 kV single-circuit transmission line.

This work identified the three new construction methods discussed in section 3.2, which required a revision to the tower locations. This in turn required:

- further engagement with landholders to explain the changes and seek additional access licences where necessary as well as access tracks to align with the required alignment offsets – this is discussed in section 10
- additional technical studies to inform the updated DA/EIS discussed in section 11
- updated PPRs for inclusion in the revised RFP issued to tenders in March 2024 – this is discussed in section 6.

## ECI including LLE and pre-construction development

Through this phase, the Project Development Team will oversee further development of the Project's design by the preferred EPC contractor and develop a more mature (accurate) cost estimate for a Stage 1 construction CPA by resolving risk and pricing uncertainty arising from project risks e.g. constructability, sub-surface conditions and inclement weather. The EPC contractor will also refine the engineering design and survey work to progress cost maturity to an AACE class 2 cost estimate and securing LLE to inform the Project's design and to not delay construction.

The Project Development Team will oversee the EPC contractor, who will lead the ECI works to:

- mitigate resourcing and supply chain risks by onboarding resources for the delivery stage
- understand TasNetworks' organisational structure and approval mechanisms
- familiarise itself with the Project, including the site, technical scope, local economy, landowners and existing and emerging risks, issues, and opportunities.

The Project Development Team will oversee the EPC contractor undertake the following 'pre-construction' activities:

- detailed design to IFC – the Project Development Team will ultimately provide endorsement of the detailed designs prior to IFC release
- safety in design and hazard and operability (HAZOP) – including through workshops, reviews, reports and presentations
- construction strategy and methodologies – providing advice on constructability issues to minimise rework and reduce uncertainty during execution of the project
- site specific information – undertaking a desktop study of the alignment and on-ground assessments including geotechnical investigations, contaminated land and soil resistivity testing. The EPC contractor is responsible for securing access to land to undertake the studies
- LLE and bill of quantities – providing a bill of quantities and materials aligned with the design documents and long-lead times to ensure construction is not delayed
- sustainability and Infrastructure Sustainability Council (ISC) rating – preparing a Sustainability Management Plan and developing a program of works that includes activities required to achieve the targeted ISC rating score
- technical interfaces and battery limits – clarifying and defining all battery limits for the work under the contract (WUC) and incorporating into a battery limits report for the WUC
- develop key project management plans – developing project management plans including but not limited to engineering and design, risk management, document control, safety, quality, construction, traffic management, procurement, stakeholder management, flora, fauna, waste management, heritage, water and waterways, noise and vibration



- engagement – working with TasNetworks to develop ‘start of work’ notifications, social media and media releases, engage with landholders, support TasNetworks community and stakeholder engagement
- construction program – developing the construction schedule taking account of key project constraints including planned outage availability, weather, landowners, stakeholder and community, access and clearing, environment (e.g., eagles), critical path items, supply chain and workforce
- construction costing – updating the construction pricing to reflect new inputs (e.g., geotechnical studies) and design development
- design elements – advancing the design of the transmission line from Burnie to Hampshire Hills, the switching station at Hampshire Hills and associated augmentation of Burnie Substation to Gate 4 IFC (notionally 100% design effort)
- risk management – optimising risk identification and treatment.

The costs of these pre-construction activities are discussed in section 8.4.

To avoid construction delays arising from LLE and ensure the Project is delivered to meet AEMO’s June 2030 delivery date, the EPC contractor has assessed that LLE is needed in the following asset areas:

- primary substation equipment
- secondary systems substation equipment
- transmission line equipment.

The EPC contractor has highlighted the capacity challenges in the market and that large-scale equipment orders require extensive lead times (around 19 months) due to factory order books nearing capacity. Given this, the EPC contractor has scheduled the following LLE activities over the period October 2024 to February 2026 to drive down cost of LLE and secure the best commercial terms through economies of scale and scope (by buying in bulk):<sup>32</sup>

- Step 1 – vendor drawings – these initial drawings are required to demonstrate how the equipment will safely integrate with the wider Project design. Vendor drawings are subject to milestone payments.
- Step 2 – purchase of raw materials – raw materials are procured in line with the initial vendor drawings. The purchase of raw materials is subject to milestone payments.
- Step 3 – approval of detailed drawings (specifications and requirements) and manufacture - subject to TasNetworks approving the detailed vendor drawings and the raw materials being procured, manufacture of the equipment can commence. The manufacture of LLE is subject to milestone payments.
- Step 4 – freight-on-board – once manufactured, the LLE is freighted to site. Freight-on-board is subject to milestone payments in line with the freight schedule.
- Step 5 – unit delivery – the LLE incurs a delivery payment, in line with milestone progress, for delivery to occur.

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<sup>32</sup> The ordering of LLE is based on an early construction start date of October 2025, which is aligned with the EIS/DA permit approval assuming no appeals.

The milestone payments for steps 1 to 5 are discussed in section 8.4. Undertaking these activities as early works will maximise benefits to customers by:

- providing the necessary cost certainty by locking in lower prices for LLE. This will provide confidence that they will not be over-or-under investing in the Project
- protecting against foreign exchange risk and future inflationary pressures, which are driving-up prices globally. This will ensure that the Project is delivered at the lowest sustainable cost
- securing supply-chain availability in a competitive global market, which is resulting in extensions on lead times for critical equipment. This will ensure the Project meets AEMO's June 2030 delivery date.

## 8.3 Actual capex

Table 16 shows TasNetworks' actual project development capex is \$9.71 million, comprising \$2.56 million for labour and labour related costs and \$7.15 million for indirect costs.

**Table 15 Actual project development costs, labour and indirect costs (\$ million, real 2023-24)**

Project development	2021-22	2022-23	2023-24	Total
Labour	1.13	0.80	0.63	2.56
Indirect costs	3.52	2.68	0.95	7.15
<b>Total</b>	<b>4.65</b>	<b>3.48</b>	<b>1.58</b>	<b>9.71</b>

### Labour

TasNetworks' actual labour costs of \$2.56 million relate to internal FTEs undertaking project development activities for the Project. In the initial stages of the Project, from 2020-21 to 2021-22, there were two Project Managers (one each for transmission lines and substations) who supported and scheduled the development of technical detail from the broader business' technical staff working on the Project. In 2023, due to the growing workload of the BAU technical staff and progress of the Project, a Project Development Team dedicated to the Project was established to lead the project development activities. The team comprises four FTEs:

- Leader Engineering
- Project Engineer Transmission Lines
- Project Engineer Primary and Secondary Substations
- Sustainability Specialist.

The Project Development Team continues to rely on support from the broader BAU operational teams and is also supported by external technical experts and specialist advisors on a range of matters that require specific skills and knowledge. The focus of the internal team's early works activities include:

- undertaking engineering integration studies
- assessing transmission tower structure designs
- developing the PPRs for the RFP issued to tenderers
- overseeing specialist technical experts and indirect activities

- coordinating the ECI with the principal contractor.

## Indirect activities

The actual indirect project development capex over the period to June 2024 is \$7.15 million. The key driver of these costs are:

- [REDACTED] to undertake a range of activities including:
  - geotechnical site investigations
  - transmission line geotechnical investigations
  - transmission line design reports
  - foundation and access track design reports
  - landslide assessments
  - transmission line support
  - foundation design reports for the tender process
  - engineering support
  - transmission line support
  - LiDAR surveys
  - Electromagnetic field (EMF) and noise studies
  - concept design and capital estimating
  - substation building fire risk assessment
  - transmission line geotechnical site investigations
  - network resilience and landslide studies
  - foundation and track designs
  - value engineering
- [REDACTED] for expert advice and support from [REDACTED] on the ECI process
- [REDACTED] to undertake geotechnical studies .

## 8.4 Forecast capex

Table 17 shows that TasNetworks' early works forecast project development capex is \$83.01 million, comprising \$2.22 million for labour and labour related costs, \$1.67 million for indirect costs and \$79.12 million for direct costs.

Table 16 Forecast project development costs, labour and indirect costs (\$ million, real 2023-24)

Project development	2024-25	2025-26	Total
Labour	1.28	0.94	2.22
Indirect costs	1.50	0.17	1.67
Direct costs	41.27	37.85	79.12
<b>Total</b>	<b>44.05</b>	<b>38.96</b>	<b>83.01</b>

### Labour

TasNetworks' forecast labour costs of \$2.22 million relate to internal FTEs undertaking project development activities for the Project. The team comprises the four FTE described in section 8.3 and new roles to assist with ECI including a Construction Manager commencing in February 2025.

The team will also draw on FTEs from across the business to provide support from time to time. The teams' key activities include:

- facilitating the ECI process, including managing the direct interface with the EPC contractor
- overseeing and managing the day-to-day EPC contractor activities and deliverables
- managing the gated process whereby the EPC contractor provides iterative draft detailed designs to TasNetworks for review and comment. The team will review the documents and collate and provide feedback to the EPC contractor for inclusion in their next iteration of design drafts
- accountability for endorsing the detailed substation and transmission line engineering designs at each gate
- managing design changes arising from the EPC contractor final design drafts
- managing the scope change and resolving matters raised by the EPC contractor.

### Indirect activities

TasNetworks' forecast indirect project development capex for the period July 2024 to February 2026 is \$1.67 million and comprises:

- [REDACTED] for an external engineering firm, appointed through a procurement process, to provide specialist engineering contractors to assist the Project Development Team conduct technical design reviews through the gated timeframes of the ECI process to ensure alignment with TasNetworks' standards. Seven roles are required including:
  - SCADA Specialist
  - Protection Systems Specialist
  - Primary Equipment Specialist

- Structural/Civil Engineer
- Geotechnical/Foundations Engineer
- Transmission Lines Specialist
- Civil Roads Engineer

This cost is based on:

- [REDACTED], the average cost of the [REDACTED] responses to the procurement process for a period of 12 months from June 2024 to June 2025, plus
- [REDACTED] to provide technical input on management plans. This work is based on a fee proposal ([REDACTED]). This work involves [REDACTED] reviewing and advising on the following management plans:
  - Project Execution Plan
  - Design and Engineering Management Plan
  - Construction Management Plan
  - Interface Management Plan.
- [REDACTED] to provide project administration support for 20 months from July 2024 to February 2026. This cost is based on the [REDACTED], where TasNetworks has allowed forecast \$0.20 million based on :
  - Project Manager for [REDACTED]
  - Project Director for [REDACTED]
  - Project administration for [REDACTED].

## Direct activities

TasNetworks' forecast direct project development capex over the period July 2024 to February 2026 is \$79.22 million. It comprises:

- \$40.12 million for the ECI phase – the EPC contractor's deliverables are outlined in section 8.2. These costs are based on the preferred EPC contractor's response
- \$39.10 million for LLE – to avoid construction delays arising from LLE, TasNetworks has included LLE milestone payments as determined by the EPC contractor relating to primary substation equipment, secondary systems substation equipment, and transmission line equipment. The LLE activities are explained in section 8.2. Table 18 to Table 20 set out the costs that will be incurred between October 2024 and February 2026, which relate to:
  - vendor drawings – 10 per cent milestone payments totalling \$6.74 million
  - purchase of raw materials – 20 per cent milestone payments totalling \$11.28 million
  - drawing approval and manufacture – 30 per cent milestone payments totalling \$3.66 million. The timing of payments prior to end February 2026 relate to primary substation equipment only
  - freight-on-board milestone payments totalling \$0.68 million. The timing of payments prior to end February 2026 relate to primary substation equipment only
  - delivery based on receipt of equipment totalling \$16.74 million. The timing of payments prior to end February 2026 relate to secondary system and transmission lines equipment only.

Table 17 Vendor drawings (10%) purchase of raw materials (20%) and drawing approval (30%) (\$ million, real 2023-24)

	Vendor drawings (10%)				Purchase raw materials (20%)					
	Sep 2024	Dec 2024	Jan 2025	Total	Jan 2025	Feb 2025	May 2025	Jul 2025	Oct 2025	Total
Primary substation equipment	2.32			2.32			2.44			2.44
Secondary systems substation equipment			1.24	1.24				1.73	0.75	2.47
Transmission line equipment		3.19		3.19	5.46	0.92				6.37
<b>Total</b>	<b>2.32</b>	<b>3.19</b>	<b>1.24</b>	<b>6.74</b>	<b>5.46</b>	<b>0.92</b>	<b>2.44</b>	<b>1.49</b>	<b>0.75</b>	<b>11.28</b>

Table 18 Milestone payments for drawing approvals and freight-on-board (\$ million, real 2023-24)

	Drawing approval (30%)			Freight-on-board	
	Jun 2025	Aug 2025	Total	Feb 2026	Total
Primary substation equipment	2.63	1.02	3.66	0.68	0.68
<b>Total</b>	<b>2.63</b>	<b>1.02</b>	<b>3.66</b>	<b>0.68</b>	<b>0.68</b>

Table 19 Unit delivery payments (\$ million, real 2023-24)

	Unit delivery (secondary system and transmission lines equipment)							
	Aug 2025	Sep 2025	Oct 2025	Nov 2025	Dec 2025	Jan 2026	Feb 2026	Total
Secondary systems substation equipment			0.43	0.62	0.80	0.62	0.62	3.09
Transmission line equipment	1.36		10.91				1.37	13.65
<b>Total</b>	<b>1.36</b>		<b>11.34</b>	<b>0.62</b>	<b>0.80</b>	<b>0.62</b>	<b>1.99</b>	<b>16.74</b>

# 9 Project management

This section details the nature and scope of project management early works activities for Stage 1 of the Project and the associated actual and forecast capex.

Table 21 shows that actual and forecast Stage 1 project management capex is \$23.03 million.

Table 20 Stage 1 early works project management capex (\$ million, real 2023-24)

Project management	2021-22	2022-23	2023-24	2024-25	2025-26	Total
Actual	3.78	4.89	4.14	0.00	0.00	12.82
Forecast	0.00	0.00	0.00	6.24	3.98	10.21
<b>Total</b>	<b>3.78</b>	<b>4.89</b>	<b>4.14</b>	<b>6.24</b>	<b>3.98</b>	<b>23.03</b>

## 9.1 Nature and scope of project management activities

Project management activities include the PMO for the Project, which has overall responsibility for establishing governance, managing and coordinating the Project's activities to efficiently deliver the agreed scope, program and budget. This includes implementing project control and management systems, scheduling, risk, quality and information management.

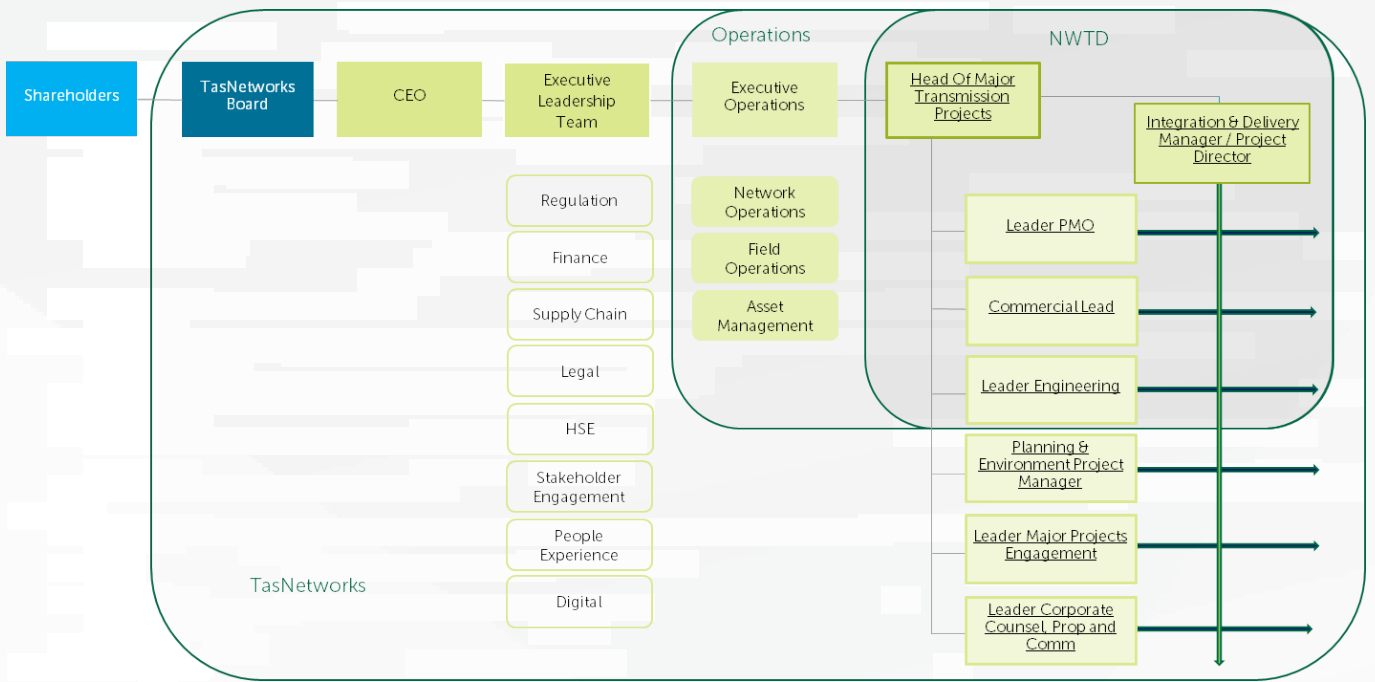
## 9.2 Project management approach

The Project is the first large scale transmission project that TasNetworks has undertaken in over a decade. As such, TasNetworks has needed to stand-up a dedicated Project Management Team and implement new organisational structures and resourcing strategies, governance and accountability frameworks, systems and software to enable the efficient management and delivery of the Project.

### NWTD organisational structure

Figure 6 below shows the current organisational model for the Project. Given the current early works stage of the Project, workforce planning inclusive of functional level resourcing plans continue to evolve as the Project progresses to the delivery phase to ensure effective delegated decision making, assurance and efficient delivery. In particular, as the Project transitions from early works to delivery, the organisational structure will shift in the make-up of functional resource and specialist services provided required to deliver the Project.

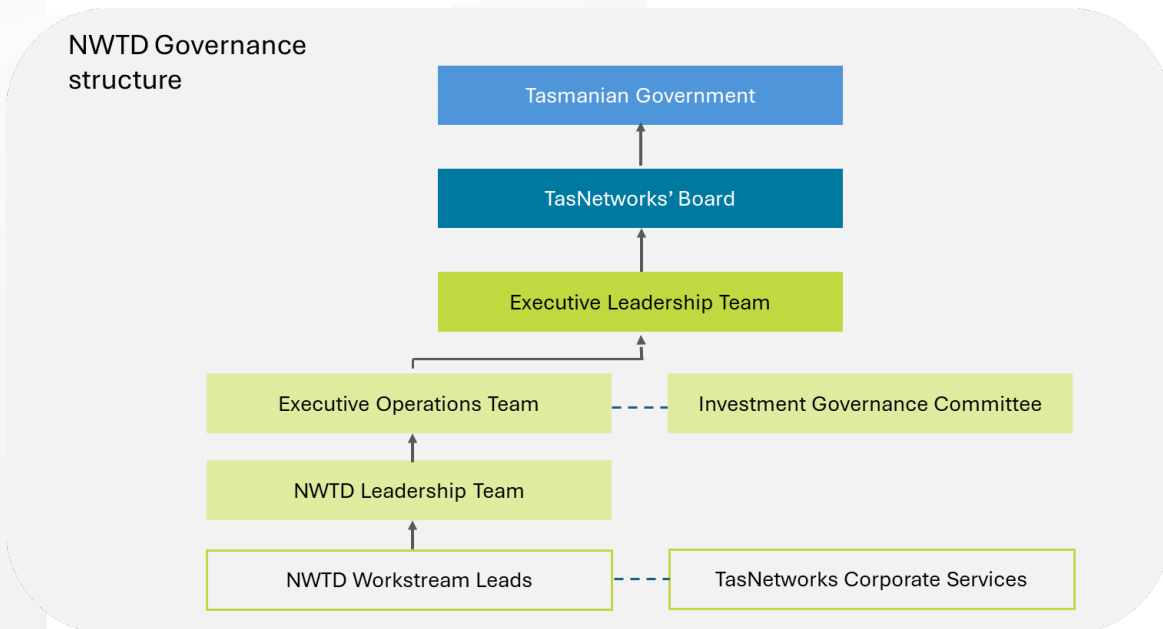
Figure 6 NWTD organisational model



## Governance and accountability

TasNetworks’ governance structures and practices are well defined in its Project Governance Framework document. Figure 7 shows that the overall Project is owned by the Tasmanian Government, which has nominated TasNetworks to deliver the Project, because of its high level of integration with TasNetworks’ existing assets and service delivery responsibilities. Figure 7 also details the hierarchy of decision making and membership that support the Project.

Figure 7 NWTD governance structure



TasNetworks will periodically review its Project Governance Framework, which is overseen by the Chief Executive Officer (CEO) and the Board.



## **TasNetworks' Board**

TasNetworks' Board is responsible for all whole of company decisions including:

- financial delegations in accordance with the TasNetworks Delegations Framework
- communications to external stakeholders including Shareholding Ministers
- change requests as per the approvals framework in the Change Management Plan
- strategic land acquisition
- procurement related activities in accordance with the TasNetworks Delegations Framework.

## **Executive Leadership Team (ELT)**

The ELT is chaired by the CEO and meets monthly. The ELT is accountable to the Board and is responsible for overall management of TasNetworks. The ELT provides oversight and strategic direction on the Project including on stakeholder management, program schedule, risk, and technical interface issues. This oversight and direction ensure that investment is prudent and efficient and integrated with TasNetworks' broader investment program of works.

The ELT's key responsibilities include:

- overseeing and endorsing recommendations to TasNetworks' Board
- monitoring and reporting on schedule activities and costs requiring approval
- monitoring and raising change requests on the program/project scope, and
- achieving required quality standards, cost, schedule key milestones, health, safety and environment (HSE) targets, etc.

## **NWTD Leadership Team**

The NWTD Leadership Team manages the tactical and day to day operational activities required to deliver the Project in accordance with the governance and reporting framework agreed by the NWTD Leadership Team. The group meets weekly and is led by the Head of Major Projects. The Project Director, who reports to the Head of Major Projects, is supported by a small core team of project specific technical, commercial, administrative and project management staff.

The NWTD Leadership Team's key responsibilities include:

- accountability for NWTD program integration
- endorsing upward recommendations
- making tactical decisions on higher risk activities.

## **Investment Governance Committee (IGC)**

TasNetworks' IGC assesses investment proposals for conformity against governance principles and any defined assessment criteria, and endorses recommendations for the relevant gated approval process by the CEO or the Board. The IGC has no approval authority.

The IGC's key responsibilities include:

- quarterly performance report
- investment governance
- endorsement of investments
- monitoring of investments.

## Gated Investment Framework

TasNetworks applies a Gated Investment Framework to manage and control investment in the Project. The framework outlines the principles to ensure the most efficient use of available funds. The Gated Investment Framework forms part of TasNetworks' broader governance framework for managing business risk. There are five decision gates required by the Gated Investment Framework. Each gate requires completion of a specific document before proceeding to the next. Gates two, three and five require approval in line with TasNetworks Delegations Framework. Table 22 summarises the deliverables at each stage of the framework.

**Table 21 Gated Investment Framework**

	Gate 1: Needs Analysis	Gate 2: Preferred Option	Gate 3: Financial Approval & Business Case	Gate 4: Contract Execution	Gate 5: Review & Close- out
Primary Documents	Needs Analysis	Options Paper	Business Case (IGC submission)  Business Case (non-IGC submission)	Project Status Report	Project Close-out Report  Post Implementation Review
Supporting Documents	Seed Funding Request  Preliminary Cyber Security Risk Assessment	Needs Analysis  Procurement Plan  Preliminary Cyber Security Risk Assessment	Needs Analysis  Options Paper  Request to Award  Project Management Plan/Project Plan  Asset Management Plan  Preliminary Cyber Security Risk Assessment	Variation to business Case  Cyber Security Risk Assessment	Contract Handover  Project Finalisation Checklist (Network, IT)  Cyber Security Risk Report

## Systems and software

New systems and software were introduced at the outset of the Project to manage the Project, including through the use of project controls/scheduling, cost estimating, interface management, quality and document control. These new systems and software have interface capabilities with TasNetworks' existing systems and processes.

Key systems and software include:

- InEight – this is a project management platform which provides software-based tools to plan and execute capital construction projects - Integrated Project Control System (IPCS). It does this through modules, including document and project controls, which interface with existing systems such as SAP, cost forecasting, estimating, project health and contract management. InEight modules are currently being designed, built and tested to manage functional project areas

- Borealis – this provides a stakeholder engagement management platform which is used to improve integration of information from stakeholders and engagement to inform TasNetworks communications activities
- Primavera P6 – this software facilitates program development and management as well as cost monitoring, analysis and reporting functions. It collects activity timeframe and resourcing inputs which can be transferred to the IPCS for analysis against actual monthly cost activity.

## 9.3 Actual capex

Table 23 shows TasNetworks' actual project development capex is \$12.82 million, comprising \$6.94 million for labour and labour related costs and \$5.88 million for indirect costs.

Table 22 Actual project management capex, labour and indirect costs (\$ million, real 2023-24)

Project management	2021-22	2022-23	2023-24	Total
Labour	2.50	2.76	1.68	6.94
Indirect costs	1.28	2.14	2.46	5.88
<b>Total</b>	<b>3.78</b>	<b>4.89</b>	<b>4.14</b>	<b>12.82</b>

### Labour

TasNetworks' actual labour costs of \$6.94 million relates to internal FTE undertaking project management activities for the Project. The PMO comprises 10.6 FTE who are responsible for the set up and overall project management of Project.

The PMO comprises:

- Head of Major Transmission Projects (0.8 FTE)
- Integration and Delivery Manager
- Project Engineer / Coordinator
- Project Administrator
- HR Partner (0.3 FTE)
- Project Services and Control Manager (0.7 FTE)
- Project Controls Lead
- Risk Specialist (0.5 FTE)
- Cost Engineer/Estimating Lead
- Scheduling Lead
- Information and Data Specialist
- Document and Drawing Controller
- Quality Assurance Lead (0.3 FTE).

The remit of the PMO is broad and covered the following activities over the period July 2021 to June 2024:

- establishing governance structures and appropriate forums
- developing and managing the project strategy, execution plan and functional plans
- design and implementation of core project controls, commercial processes and management systems
- managing the HSE management system to prevent or mitigate accidents, incidents and meet TasNetworks' legal obligations
- information and data management including document control
- developing and managing project schedule and cost baseline
- ongoing management of risk
- development of the quality aspects as the project evolves.

## Indirect activities

TasNetworks' actual indirect project management capex over the period July 2021 to June 2024 is \$5.88 million. This capex relates to consultant and professional fees to support the project management function and the establishment of systems and processes to manage the overall agreed scope, program and budget. These costs include:

- ██████████ for overhead costs – this is based on SAP transaction costs
- ██████████ direct labour hire costs – providing project management office support services
- ██████████ for travel – this relates to both interstate and international travel for the entire Project team to attend meetings and undertake site visits
- ██████████ for rent – this relates to two properties including:
  - a depot at Deloraine, which is owned by TasNetworks. The Project contributes \$3,750 per month to the cost of this depot until the end of the design and approval phase of the Project. This is used by TasNetworks' employees
  - a building at Cradle Coast – this provides a Project Hub for anyone interested in learning more about the Project and is used to host stakeholder activities and community sessions. This is based on rent of ██████████ per quarter (for calendar year 2024, escalated annually on 1 January)
- ██████████ – this cost relates to the development of bespoke software for TasNetworks to take a different approach to MLPL and does not include licence fees, which were included in MLPL's costs
- ██████████ is an ISC specialist who provided assistance to inform the ISC Project rating
- ██████████ – this cost relates to a portion of the licence fee for 2023-24 noting that MLPL otherwise incurred these costs. From 2024/25, TasNetworks will incur the full annual licence fee
- ██████████ – this is the registration for the Project only. The membership cost is covered by MLPL

- [REDACTED] for leased vehicles – three leased four wheel-drive vehicles from 2023 for the land agent to attend site. These vehicles are subject to a three-year contract totalling [REDACTED], commencing in mid-2023
- [REDACTED] to provide cost estimating services to inform the design and construction base line cost estimate.

## 9.4 Forecast capex

Table 24 shows that TasNetworks’ early works forecast project management capex is \$10.21 million, comprising \$6.30 million for labour and labour related costs and \$3.92 million for indirect costs.

**Table 23 Forecast project management costs, labour and indirect costs (\$ million, real 2023-24)**

Project management	2024-25	2025-26	Total
Labour	3.62	2.68	6.30
Indirect costs	2.62	1.30	3.92
<b>Total</b>	<b>6.24</b>	<b>3.98</b>	<b>10.21</b>

### Labour

TasNetworks forecast labour costs of \$6.30 million relate to internal FTE undertaking project management activities for the Project. The team comprises the 10.6 FTE described in section 9.3, with the addition of the Project Director commencing in October 2024.

### Indirect activities

TasNetworks’ forecast indirect project management capex over the period July 2024 to February 2026 is \$3.92 million and comprises:

- [REDACTED] for overhead costs – these are calculated in the same way as for actual overhead costs. Forecast capex of [REDACTED] is calculated as:
  - corporate overhead costs of [REDACTED], plus
  - project overhead costs of [REDACTED], plus
  - incremental cost reduction of [REDACTED].

Where:

- corporate overheads are calculated based on:
  - a fixed monthly rate of [REDACTED] x 20 months = [REDACTED] plus
  - a monthly variable fee of [REDACTED] x FTE x 20 months = [REDACTED] (based on average variable monthly fee of [REDACTED])
- project overhead costs are fixed monthly rate of [REDACTED] x 20 months = [REDACTED]
- The incremental cost reduction is based on a fixed amount of [REDACTED] per month x 20 months = [REDACTED]. This removes non-incremental overhead costs that are already included in the base year (for example, Board and executive costs)

- [REDACTED] for travel (intrastate, interstate and international) and accommodation for the Project. This has been calculated as follows, noting that the meal and accommodation allowances for both intrastate and interstate travel are based on Australian Tax Office guidelines and the travel costs are based on actual historical costs and other benchmarks:
  - [REDACTED] for intrastate travel - TasNetworks has forecast 435 trips totalling 1,389 nights for intrastate travel, predominately associated with site visits. The forecast capex of [REDACTED] is calculated as:
    - [REDACTED] = 1,389 nights x [REDACTED] per night for accommodation and meals plus 435 trips x [REDACTED] for vehicle costs (per trip)
- [REDACTED] for interstate travel - TasNetworks has forecast 177 trips totalling 660 nights for interstate travel, predominately associated with interstate employees travelling to Tasmania. The forecast capex of [REDACTED] is based on:
  - [REDACTED] = 660 nights x [REDACTED] per night for accommodation and meals plus 177 trips x [REDACTED] for vehicle costs (per trip)
- [REDACTED] for international travel - TasNetworks has forecast five trips totalling 20 nights for international travel, for inspection of manufactured equipment and insurance negotiations. The forecast capex of [REDACTED] is based on:
  - [REDACTED] = 20 nights x [REDACTED] per night for accommodation and meals plus five trips x [REDACTED] per trip in travel costs
- [REDACTED] – this is calculated based on the following supporting documents which total [REDACTED], noting that TasNetworks has incurred costs of [REDACTED] which are reflected in the actual costs:
  - [REDACTED] to undertake project management for the development (see [REDACTED] plus [REDACTED])
  - [REDACTED] for Implementation (see [REDACTED]), plus
  - [REDACTED] for licence fee based on the [REDACTED] ([REDACTED])
- [REDACTED] for leased vehicles – TasNetworks has forecast an average of 5.5 four-wheel drive vehicles using the current lease cost as the basis for the forecast. Forecast capex is calculated as:
  - 5.5 x ([REDACTED] monthly lease fee + [REDACTED] monthly fuel cost + [REDACTED] monthly service cost) x 20 months = [REDACTED]
- [REDACTED] – this is based on an [REDACTED] for the NWTD Project dated [REDACTED], for the registration of the Project, annual support costs and compulsory coordination and verification activities.
- [REDACTED] for training – this is based on a standard p.a. allowance of [REDACTED] per FTE, where the 40.93 FTEs (average) are forecast to require training. The forecast capex of [REDACTED] is calculated as:
  - [REDACTED] = [REDACTED] per month training allowance x 20 months x 40.93 FTEs
- [REDACTED] – these costs reflect:
  - the [REDACTED] ([REDACTED]), plus [REDACTED]

- the [REDACTED] – annual [REDACTED]. This service fee is based on the [REDACTED]. TasNetworks has converted this value to \$AUD using an exchange rate of [REDACTED]
- [REDACTED] for photocopying, stationary – these costs reflect ongoing stationary and associated costs based on standard allowance of [REDACTED] per month for the Project. The forecast capex of [REDACTED] is calculated as follows:
  - [REDACTED] per month x 20 months = [REDACTED]
- [REDACTED] for IT support – IT support costs relate to assistance to Project FTEs for all IT related matters such as software implementation, set-up of new employees, on call assistance. IT support costs are based on a standard allowance of [REDACTED] per month for 20 months. The forecast capex of [REDACTED] is calculated as follows:
  - [REDACTED] per month x 20 months = [REDACTED]
- [REDACTED] for rent – this relates to the Cradle Coast building which provides a Project Hub. The rent for this building is [REDACTED] and is required for six quarters. The forecast capex is based on the Cradle Coast [REDACTED] and is calculated as:
  - [REDACTED] x 6 quarters = [REDACTED]
- [REDACTED] for people costs – this relates to recruitment for the Project to fill new roles and existing roles that become vacant over the course of the Project. It is based on a standard allowance of [REDACTED] per month. The forecast capex of [REDACTED] is calculated as follows:
  - [REDACTED] per month x 20 months = [REDACTED].

# 10 Land and property

This section sets out the early works activities TasNetworks has undertaken with respect to land access and land and easement acquisitions required for Stage 1 of the Project. Table 25 shows that the actual and forecast Stage 1 land and property capex is \$16.65 million.

Table 24 Stage 1 early works land and property capex (\$ million, real 2023-24)

Land and property	2021-22	2022-23	2023-24	2024-25	2025-26	Total
Actual	2.37	2.38	2.35	0.00	0.00	7.11
Forecast	0.00	0.00	0.00	5.90	3.64	9.54
<b>Total</b>	<b>2.37</b>	<b>2.38</b>	<b>2.35</b>	<b>5.90</b>	<b>3.64</b>	<b>16.65</b>

## 10.1 Nature and scope of land and property

Stage 1 of the Project requires the acquisition of easements for over 131 km of transmission lines between the Palmerston and Burnie substations via the Sheffield substation and Heybridge spur (Project route). 346 private landholder parcels within the Project route are impacted by the proposed transmission line easement. Of these 346 private landholder parcels, 194 require new easements (i.e. the easement requires extension).

Removing duplicate landholders (i.e. landholders who own multiple parcels) from the 346 private landholder parcels results in 142 landholders being impacted by the proposed transmission line easement. TasNetworks is, therefore, required to enter into land access and licence and easement option agreements with 142 landholders to:

- secure access to land for the purpose of undertaking preconstruction surveys via a Land Access Agreement
- secure construction access and easement rights for the purpose of construction access and ongoing maintenance via a Licence and Easement Option Agreement (LEOA).

Securing land access and subsequently licence and easement option agreements over properties located within the Project route is critical to enable the following early works activities:

- undertake survey activities on land impacted by the Project to inform route alignment and changes and the preferred construction methods
- undertake field studies and investigations such as geotechnical surveys, and ecology, cultural heritage, geomorphology, geotechnical and environmental studies, which are critical to inform the final route as well as the planning and DA and EIS discussed in section 11
- undertake land valuations to determine appropriate compensation payable for land and easements
- commence negotiations with landholders on options agreements to enable construction to commence subject to FID and the AER's approval of both Stage 1 early works and Stage 1 construction CPAs



- negotiate with public authorities for easements or licences over public land parcels impacted by the Project
- acquire key project sites to reduce the total project costs and avoid project delay.

These activities are closely related to and supported by the community and stakeholder engagement activities discussed in section 5 and section 12. This is because landholders' willingness to enable TasNetworks to access or purchase land or acquire easements over properties needed for the Project depends on effective and meaningful engagement to build community understanding of and support for the Project.

## 10.2 Land access and land and easement acquisition process and approach

TasNetworks' approach to land access and land and easement acquisition involves working with landholders to reach voluntary, negotiated outcomes. This has required early and ongoing engagement with landholders on the proposed route and the Project more generally, including what it means for landholders, land access and easement acquisition. TasNetworks is committed to meaningfully engaging with impacted landholders and working with them to achieve safe and efficient land access and land and easement acquisition.

TasNetworks' land access and acquisition practices and compensation framework are contemporary, fair and equitable and are consistent with the:

- *Land Acquisition Act 1993 (Tas) (LAA)*
- *Electricity Supply Industry Act 1995 (Tas) (ESIA)*
- *Major Infrastructure Development Approvals Act 1999 (Tas) (MIDAA)*.

The LAA is the key legislation governing the acquisition of land. It specifies:

- how land is to be purchased
- how easements are to be acquired
- what the acquiring authority must do to purchase the land or acquire the easement
- landholders' responsibilities after being formally notified that the land is required
- how the compensation for the land or easement is determined
- the timeframe in which all of this happens.

The ESIA outlines the regulation and licensing of electricity entities in Tasmania.

The MIDAA provides a process to assess long linear projects including transmission lines and details when compensation is incurred because of a notified corridor being declared.

TasNetworks adheres to its overarching landholder engagement guiding principles in undertaking all its activities, including those for the Project. These have been informed by the Energy Charter's *Better Practice Social Licence Guideline* principles. These guiding principles are:

- respect landholders, their rights and interests
- be open, honest and respectful in negotiations
- offer fair and reasonable compensation

- be proactive and timely in engaging landholders and their representatives
- behave responsibly and respectfully when accessing properties
- minimise disruption business/farming/lifestyle activities and disturbance to properties
- comply with applicable laws, regulations and guidelines
- voluntarily acquire land and easements
- assist in all negotiations
- treat landholders equitably
- works with landholders to address their needs and reasonable requests.

Every landholder impacted by the Project is assigned a dedicated land agent who is always contactable. This approach has enabled TasNetworks to actively identify potential impacts associated with the construction and operation of the proposed transmission lines and work with landholders to minimise impacts wherever possible.

To meet AEMO’s June 2030 delivery date, TasNetworks engaged [REDACTED] to assist securing land access for surveys. [REDACTED] was selected through TasNetworks’ tendering and procurement processes. Through this process, TasNetworks secured survey access to 86 per cent of land parcels across the Project. As explained in section 7.2, the AER reviewed TasNetworks’ tendering and procurement processes as part of its 2025-28 Revenue Determination process for MLPL and found them to be prudent and efficient.<sup>33</sup>

TasNetworks is targeting to voluntarily secure LEOAs for the Sheffield–Palmerston 220 kV transmission line by December 2024 and the Sheffield–Burnie, Heybridge Spur East, and Heybridge Spur West 220 kV transmission lines by June 2025. These are target dates for TasNetworks to obtain voluntary access and easement acquisition, albeit that negotiations will continue up until the development permit is issued. The phases of the land access and land and easement acquisition process are outlined below.

As noted above, the willingness of landholders to enable TasNetworks to access or purchase land or easements over properties needed for the Project depends on effective and meaningful engagement to build community understanding of, and support for, the Project.

Section 5 and section 12 outline TasNetworks’ community and stakeholder engagement approach and activities.

## Phases of land access and easement acquisition

There are five key phases of land access and land and easement acquisition:

- Phase 1: initial landholder engagement
- Phase 2: land access negotiation
- Phase 3: surveys
- Phase 4: valuations

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<sup>33</sup> AER, [Marinus Link Stage 1, Part A \(Early Works\)](#), December 2023 p.6. The AER refers to its 2024-29 Draft Determination for TasNetworks’ and in particular, references [Attachment 5, Capital Expenditure](#).

- Phase 5: LEOA negotiations.

Each of these is discussed below.

### **Phase 1: initial landholder engagement (October 2020 – ongoing)**

Following the identification of the initial Project route, TasNetworks notified impacted landholders and held community engagement sessions.

In October 2020, TasNetworks assigned every landholder impacted by the Project an Engagement Coordinator to be their dedicated point of engagement throughout the project. This provided landholders with the opportunity to discuss the Project and the implications for them including access and easement requirements.

Given the variety of land uses on properties impacted by the Project's route (e.g. cropping and grazing, horticulture, recreational and rural lifestyle) this process also helped TasNetworks to understand the activities landholders undertake on their land and the potential impacts that the Project might have on those activities. This assisted TasNetworks in identifying ways to minimise the impact of the Project on landholders. The dedicated Engagement Coordinators play an important role in the success of the Project, recognising that engagement can be different for every landholder.

As noted, [REDACTED] was appointed at the outset of the Project to provide landholder engagement coordinator services. In April 2022, TasNetworks undertook a review of the arrangements and determined a more efficient approach would be to bring these services in-house. Accordingly, from January 2023, TasNetworks engaged two Landholder Engagement Coordinators to undertake these services in-house.

### **Phase 2: land access negotiation (November 2019 – ongoing)**

Obtaining land access is crucial to facilitate surveys, which are fundamental to the development and approvals phase of the Project. Surveys inform the development of project mapping, which in turn details the preferred route and property details. The project map is a living document that is routinely updated as the project develops.

Establishing the initial project map enabled TasNetworks to commence land access negotiations with impacted landholders. This involved face to face discussions with landholders in order to request access to their property to carry out surveys. The LAA sets out the access rights and obligations and specify the types of surveys TasNetworks is permitted to undertake. Landholders receive a land access fee upon providing access.

TasNetworks undertook initial land access negotiations from November 2019 until the appointment of [REDACTED]. Over the period October 2020 to September 2023, TasNetworks, in collaboration with [REDACTED], negotiated access licence agreements with impacted landholders. Since then, TasNetworks has entered several additional licences as required by the Project Development or Planning and Environment teams. The introduction of project staging impacted the project route and therefore required TasNetworks to enter new access licences along the Sheffield—Burnie 220 kV transmission line to undertake new surveys.

### **Phase 3: surveys (December 2020 – ongoing)**

Land access agreements with landholders are required to enable TasNetworks access to landholder properties to undertake surveys including geotechnical, geomorphology, ecological, cultural heritage field pre-construction surveys. The results of these surveys help to inform the route alignment and indicative tower locations. These surveys and investigations, which are discussed in section 11, concluded in July 2023 and were critical to informing the initial route alignment.

Landholders raised concerns around ground compaction and soil condition impacts due to construction. To address these concerns, specific soil and ground condition testing will be carried out on properties where construction works will be undertaken to ensure remediation can occur back to a pre-construction position.

#### **Phase 4: valuations (February 2022 – ongoing)**

TasNetworks' registered valuers undertake two types of valuations: desktop valuations to inform budgets and project planning; and on-ground valuations to inform the compensation offer made to the landholder. Both desktop and on-ground valuation assessments are conducted in accordance with the LAA, which details the components of compensation. These include market value, special value, severance, betterment, injurious affection and disturbance.

TasNetworks' valuers provided an initial desktop assessment in June 2022 and a revised assessment in April 2024 to account for changes in route alignment arising from the introduction of project staging.

On-ground valuations are more accurate and require the valuer to be physically present on the land so that they can consider all site-specific circumstances, conditions, and likely impacts. On ground assessments commenced in December 2022 and are currently on-going.

█ has completed the majority of the on-ground valuation reports for the Palmerston–Sheffield 220 kV transmission line. Based on this information, TasNetworks is currently preparing and presenting offer packages to landholders on this alignment. █ is continuing to undertake the valuation assessments for the Sheffield–Burnie, Heybridge Spur East, and Heybridge Spur West 220 kV transmission line routes, noting that it is required to re-do the majority of these due to the introduction of project staging.

█ and █ undertook specialised tree crop valuations for the commercial forestry properties. █ initial assessments were undertaken in January 2024 and █ initial assessments were undertaken in December 2022. The █ assessment for the Stage 1 properties will be updated prior to February 2026 to reflect accurate tree crop values as at the time the land is acquired.

#### **Phase 5: Licence and Easement Option Agreement negotiations (December 2023 – June 2025)**

This is the voluntary negotiation period in which TasNetworks seeks to finalise voluntary acceptance (execute the agreements) of landholder compensation offers to acquire land or an easement over land. Where the valuation has been completed and TasNetworks has received the valuation certificate, it prepares the required documentation to present the offer to landholders. The offer package includes:

- offer letter
- access and easement option agreements
- indicative easement map
- property management plan
- compensation summary
- easement terms and conditions
- taxation status form
- compensation guideline explaining the framework and title.

TasNetworks commenced LEOA negotiations with landholders along the Palmerston–Sheffield 220 kV transmission line in December 2023. Once TasNetworks receives the valuation certificates for the Sheffield–Burnie, Heybridge Spur East 220 kV transmission lines, it will commence LEOA negotiations with those landholders as well.

TasNetworks will continue negotiating with landholders up until the development permit is issued. Notwithstanding this, TasNetworks is targeting to have agreements in place by December 2024 for the Palmerston–Sheffield 220 kV transmission line and June 2025 for the Sheffield–Burnie and Heybridge Spur East 220 kV transmission lines. The duration of this phase reflects the need to ensure landholders have sufficient time to consider the agreement, seek professional advice and negotiate the terms.

TasNetworks will meet face-to-face with the landholder to:

- present offer package documentation
- explain the agreement, maps and other associated documentation
- allow the landholder to ask questions and provide all information available at the time.

TasNetworks advises landholders of their right to obtain independent professional advice including legal and valuation advice at this initial meeting. Once the landholder has had sufficient time to consider the offer, TasNetworks arranges a follow up meeting with the landholder to address any remaining questions.

## Compensation to landholders

There are range of compensation measures to compensate landholders for providing land access and entering into land and easement option agreements with TasNetworks, including:

- Participation fees - these fees are 'on account' of the LAA disturbance compensation and are paid to landholders for engaging with TasNetworks and allowing access and valuation of their land. This fee of [REDACTED] recognises the feedback from landholders seeking additional compensation to recompense them for their time engaging with TasNetworks on the Project. This fee brings forward a component of compensation 'on account' of the LAA's disturbance compensation and is subtracted from the compensation amount paid under the LEOA
- Land access fees - paid to each landholder upon entering into a land access agreement with TasNetworks, which enables TasNetworks to undertake surveys on their land. Initially, brownfield landholdings received a [REDACTED] access fee and greenfield landholdings received a [REDACTED] access fee. Following landholder feedback, TasNetworks adopted a blanket [REDACTED] access fee for all landholders
- Option fees - paid to each landholders once they sign the LEOA which enables TasNetworks to call for the grant of an easement within an agreed period. The option fee amount of [REDACTED] was recommended by TasNetworks' registered valuers as being a fair and reasonable amount and is designed to:
  - encourage landholders to sign up early by providing a monetary incentive
  - provide land access / easement certainty to TasNetworks
  - build trust, promote ongoing engagement and negotiation and reduce the likelihood of compulsory acquisition.

An option fee for commercial forestry landholders is [REDACTED] in recognition of the quantity of parcels held by each of these landholders.

- Professional advice fees – paid to reimburse landholders reasonable costs associated with:
  - legal and valuation advice to assist them to understand the LEOA. Based on advice from [REDACTED], TasNetworks has adopted legal cost reimbursement of [REDACTED] per landholder for a brownfield easement and [REDACTED] per landholder for a greenfield easement
  - professional advice to review the easement offer. TasNetworks has adopted a fee of [REDACTED] per landholder.

## Implications of project staging

The introduction of project staging in October 2023 has required additional new easements, primarily between Sheffield substation and Stowport Road, Stowport. Under the original construction method, very few new easements were required along this section of the alignment due to construction occurring primarily on the centreline and, therefore, entirely within the existing easements. Under the revised alignment and new construction methods, discussed in section 3, an additional 40.5 hectares of new easements are required within a 39 kilometre stretch between Sheffield to Stowport.

The 40.5 hectares consists of:

- 35 hectares for the Project's 220 kV new easement requirements
- 5.5 hectares for new easements for existing 110 kV infrastructure that will need to be moved to ensure safe clearances with the new 220 kV infrastructure.

This is estimated to impact 86 private landholders between Sheffield to Stowport. [REDACTED] will undertake re-valuation works for these easements and compensation costs payable under the LAA.

This has resulted in significantly more landholder engagement across the Sheffield–Burnie, Heybridge Spur East, and Heybridge Spur West 220 kV transmission lines, including landholder meetings with engineers to discuss technical options and micro-positioning of towers to minimise impact where possible.

As discussed in section 11, additional land surveys were also required for traffic and transport, terrestrial ecology and cultural heritage as a result of the revised transmission line alignment. In some cases, new access licences were required to undertake these surveys as the initial access licences had a defined time period which had lapsed. TasNetworks extended 90 access agreements by way of making the participation fee available to landholders.

## Strategic Benefit Payments

The SBP amount and scheme has not yet been finalised and is not intended to be paid until the transmission line is energised. On the instructions of the Shareholding Ministers, TasNetworks has been working with the Tasmanian Farmers and Graziers Association to negotiate an SBP amount.

## 10.3 Actual capex

Table 26 shows that actual land and property capex is \$7.11 million, comprising \$2.39 million for labour and labour related costs and \$4.72 million for indirect costs.

Table 25 Actual land and property capex, labour and indirect costs (\$ million, real 2023-24)

Land and property	2021-22	2022-23	2023-24	Total
Labour	0.41	0.80	1.18	2.39
Indirect costs	1.96	1.58	1.17	4.72
<b>Total</b>	<b>2.37</b>	<b>2.38</b>	<b>2.35</b>	<b>7.11</b>

### Labour

TasNetworks' actual labour costs of \$2.39 million relate to internal FTE specialists in land and property needed to establish the necessary land access agreements and undertake land assessments, valuations and negotiations with landholder in collaboration with expert advisors [REDACTED]. Establishing an internal team with the necessary expertise has been a key focus to drive down labour costs and provide value for money to customers.

In October 2022, TasNetworks undertook a review of the [REDACTED] for landholder engagement activities. TasNetworks decided a more efficient approach would be bring these services in-house. On this basis, TasNetworks employed two Landholder Engagement Coordinators to undertake landholder engagement for the Project alongside TasNetworks' existing Landholder Engagement Specialist.

The Land and Property Team comprises 6.9 FTEs, with the following roles:

- Leader Corporate Counsel Property and Commercial (0.8 FTE)
- Corporate Counsel, Property and Commercial Specialist (0.8 FTE)
- Landholder Engagement Specialist
- Landholder Engagement Coordinators (land agents) (two)
- Landholder Relations Agent (0.5 FTE)
- Paralegal and Wayleaves Coordinator (0.8 FTE)
- Geographic Information Systems Specialist.

The focus of the internal team's early works activities over the period to June 2024 include:

- engaging with landholders to introduce the Project and provide a principal point of contact for landholders enquiries
- overseeing and coordinating work undertaken by [REDACTED]
- working with [REDACTED] to negotiate and establish access agreements with landholders to obtain access to their property to undertake pre-construction surveys
- ensuring landholders have access to and funds for professional advice
- working with the planning and environment team to ensure access (by TasNetworks staff and their consultants [REDACTED]) to undertake surveys to inform route alignment and the DA/EIS

- working with the engineering team to ensure access (by TasNetworks staff and their consultants) to undertake surveys to inform route alignment and construction
- preparing and negotiating options agreement for transmission line easements/construction land access.

## Indirect activities

The actual indirect land and property costs over the period 1 July 2021 to 30 June 2024 are \$4.72 million. The key drivers of these costs include:

- [REDACTED] – this includes:
  - initial landholder engagement activities including face-to-face meetings, letter drops, land access negotiations, community engagement event attendance, and provision of landholder engagement advice
  - desktop valuation and on ground valuation assessments in accordance with the LAA. This involved property and market related research, due diligence, on ground inspections, meetings with landholders and TasNetworks along with producing property valuation reports
- [REDACTED] for participation fees of [REDACTED] paid to each landholder for engaging with TasNetworks and allowing access and valuation of their land
- [REDACTED] for option fees - paid to a landholder once they sign the LEOA which enables TasNetworks to call for the transfer of land or the grant of an easement within an agreed period
- [REDACTED] for professional advice fees - paid to reimburse landholders reasonable costs associated with legal and valuation and easement offers. As discussed in section 10.2, fees range from [REDACTED] for brownfield and [REDACTED] for greenfield
- [REDACTED] for land access fees - paid to each landholder upon entering into a land access agreement with TasNetworks, which enables TasNetworks to undertake surveys on their land
- [REDACTED] – who provided specialised legal services relating to property, commercial and land use planning law. [REDACTED] also assisted with the drafting of licence and easement option agreements and provided specialised advice on a range of matters, including public authority land access and land access agreements
- [REDACTED] - tree crop valuation assessments for [REDACTED] tree crops across the Project. [REDACTED] assessed tree crops within the Project route that would be impacted by the proposed easement
- [REDACTED] - to undertake specialised landholder engagement activities and assist in busy periods. These services include face-to-face meetings, letter drops, land access negotiations, community engagement event attendance, and provision of landholder engagement advice
- [REDACTED] - provided initial advice on a Tasmanian specific strategic benefit payment scheme.

The remaining actual costs relate to a range of professional and other services.



## 10.4 Forecast capex

Table 27 shows that TasNetworks' forecast land and property capex is \$9.54 million, comprising \$2.06 million for labour and \$7.49 million for indirect costs.

Table 26 Land and property capex, labour and indirect costs (\$ million, real 2023-24)

Land and property	2024-25	2025-26	Total
Labour	1.31	0.75	2.06
Indirect costs	4.59	2.89	7.49
<b>Total</b>	<b>5.90</b>	<b>3.64</b>	<b>9.54</b>

### Labour

TasNetworks' forecast labour costs of \$2.06 million relate to internal FTEs undertaking land and property activities. The team comprises the FTEs described in section 10.3 with the addition of Geographic Information System Support (0.6 FTE) bringing the total FTE to 7.5.

### Indirect activities

The forecast indirect land and property capex over the period to July 2024 to February 2026 are \$7.49 million. The key driver of these costs relates to:

- \$6.69 million comprising:
  - [REDACTED] for professional advice fees of to landholders – TasNetworks expects [REDACTED] greenfield landholders (unsigned) at [REDACTED] each, [REDACTED] brownfield landholders (unsigned) at [REDACTED] each, [REDACTED] forest landholders at [REDACTED] and [REDACTED] public authority landholders at [REDACTED] each. The forecast capex of [REDACTED] is calculated as:
    - [REDACTED] greenfield (unsigned) x [REDACTED] = [REDACTED] plus
    - [REDACTED] brownfield (unsigned) x [REDACTED] = [REDACTED] plus
    - [REDACTED] commercial forest landholders x [REDACTED] = [REDACTED] plus
    - [REDACTED] public authority landholders x [REDACTED] = [REDACTED]
  - [REDACTED] for option fees – TasNetworks has forecast [REDACTED] greenfield landholders (unsigned) will be paid an option fee of [REDACTED] and [REDACTED] forest landholders will be paid an option fee of [REDACTED]. The forecast capex of [REDACTED] is calculated as:
    - [REDACTED] greenfield landholders (unsigned) x [REDACTED] = [REDACTED] plus
    - [REDACTED] commercial forest landholders x [REDACTED] = [REDACTED]
  - [REDACTED] for JLL to undertake remaining property inspections and landholder meeting, finalise compensation assessments and certificates, prepare the valuation reports and attend valuer conferences. The total forecast capex of [REDACTED] comprises:
    - [REDACTED] for the period July 2024 to January 2025, based on a [REDACTED]
    - [REDACTED] for the period February 2025 to February 2026, based on the [REDACTED] for June 2024 to January 2025 period, adjusted to exclude the costs for valuer conferences, travel and accommodation.

- [REDACTED] to undertake the following activities, based on a fee proposal, noting that a small amount of costs ([REDACTED]), had already been incurred and are reflected in the actual costs:
  - general property due diligence on titles and property and general property commercial and land use planning advice
  - prepare and negotiate agreements for lay-down areas and brake and winch sites
  - prepare and negotiate agreements for access tracks
  - prepare and negotiate agreements for rail crossing access (including bridge crossing over rail)
  - prepare and negotiate agreements for private property access
  - prepare and negotiate licence and easement options agreements
  - assist with changes to land ownership and re-negotiation or variation of documentation relating to land access arrangements over the life of the Project
  - assist with general advice on land access strategy assuming a change in laws across the life of the Project
  - assist TasNetworks' engagement with public authorities including Crown, Councils, Hydro Tasmania, TasWater relating to infrastructure/easements/access over their land
  - assist with access agreements with Councils
- [REDACTED] for agronomist soil assessments for parcels with tower sites. The forecast cost is based on the fee proposal cost of [REDACTED] (inclusive of GST) per parcel and the total number of parcels with tower sites. The forecast capex is calculated as:
  - [REDACTED] x [REDACTED] parcels (with tower sites) = [REDACTED] (inclusive of GST)
- [REDACTED] for land access agreements – forecast 51 access agreements, calculated as
  - [REDACTED] land access fee x 51 access agreements = [REDACTED]
- [REDACTED] for Tasmanian Land Titles Office for caveat lodgement fees. These fees relate to TasNetworks caveats on titles to protect the rights secured under the LEOA. TasNetworks must lodge a caveat for each landholder noting the fee is [REDACTED] per property (per the last invoice from the Tasmanian Land Titles Office and the Land Titles Office brief schedule of fees - (effective on and from 1 July 2024)<sup>34</sup>. The forecast capex is calculated as:
  - 126 landholders x [REDACTED] = [REDACTED]

The actual costs include payments of [REDACTED] to 19 landholders [REDACTED]
- [REDACTED] for participation fees to one landholder, calculated as
  - [REDACTED] x [REDACTED] landholders = [REDACTED]
- [REDACTED] to provide updated tree valuation services for five properties.

<sup>34</sup> Land Titles Office, [Brief Schedule of Fees, effective on and from 1 July 2024](#)

# 11 Planning and environment

This section details the nature and scope of early works planning and environment activities for Stage 1 of the Project and the associated actual and forecast capex.

Table 28 shows that the actual and forecast Stage 1 planning and environment capex is \$15.31 million.

Table 27 Stage 1 early works planning and environment capex (\$ million, real 2023-24)

Planning and Environment	2021-22	2022-23	2023-24	2024-25	2025-26	Total
Actual	4.25	5.27	2.19	0.00	0.00	11.71
Forecast	0.00	0.00	0.00	2.87	0.73	3.60
<b>Total</b>	<b>4.25</b>	<b>5.27</b>	<b>2.19</b>	<b>2.87</b>	<b>0.73</b>	<b>15.31</b>

## 11.1 Nature and scope of planning and environment activities

The planning and environment activities for the Project relate to the preparation of environmental, land use planning and heritage (Aboriginal and Historic) approval documents across the State and Commonwealth that are needed to proceed to construction. The key assessment documents required to grant approval include the DA/EIS.<sup>35</sup> These documents outline the potential planning and environmental impacts of the Project as well as various management, mitigation or compensation measures for adverse impacts and risks (or achieving compliance) and to enhance the environmental and social benefits from the Project.

The DA/EIS contains numerous technical studies, a significant volume of data and explains the implications and key findings of these studies as well as the connections between them. These studies relate to a broad range of matters including logistics and planning, geographic information systems, ecology (flora and fauna) studies and traffic, noise and pollution and heritage assessments and surveys. The DA/EIS is a key document to assist stakeholders including landowners, First Nations communities, Councils and other relevant government agencies to understand the potential environmental, cultural heritage and land use planning impacts of the Project and provide assurance that the requirements have been properly met.

<sup>35</sup> The DA is a response to the planning criteria and the EIS together with the DA form the “permit application”. The EIS is contained in the DA.

## 11.2 Environmental approval process and milestones

### Overview of the planning and environment approvals process

Due to the size of the NWT D and the geographical expanse it will cover, significant works are required to obtain the environmental, land use planning and heritage approvals necessary for the Project to proceed to construction. A key element is seeking the approval of the Tasmanian Planning Commission (TPC) and endorsement by the Commonwealth Government of the DA and the EIS, which is required by:

- *Land Use Planning and Approvals Act 1993* (LUPAA) – requires that an application for permit is submitted for assessment against the planning criteria
- *Major Infrastructure Development Approval Act 1999 (Tas)* (MIDAA) - major infrastructure development projects having effects extending beyond a single council area can be assessed under this Act. The Minister may direct a combined planning authority or the Commission to undertake an assessment
- *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) – this provides the legal framework to protect and manage nine matters of national environmental significance (MNES) as follows:
  - listed threatened species and communities
  - listed migratory species
  - Ramsar wetlands of international importance
  - Commonwealth marine environment
  - world heritage properties
  - national heritage places
  - the Great Barrier Reef Marine Park
  - nuclear actions
  - water resources, in relation to coal seam gas and large coal mining development.

The TPC has been accredited by the Commonwealth Government to assess the Project in relation to MNES under the EPBC Act, although the final decision in relation to MNES remains with the Commonwealth Minister for the Environment.

The DA/EIS addresses the planning criteria prepared for the Project by the TPC in conjunction with the Commonwealth and the Tasmanian Environment Protection Authority (EPA). It does this by assessing the potential impact of the Project on the terrain and environment, both natural and social as well as various management and mitigation measures. This includes, amongst other things, visual impacts, traffic management, impacts on agricultural land as well as the potential impacts on threatened flora and fauna. The DA/EIS is lodged with the TPC following:

- declaration of the notified corridor, once the amendments have been finalised
- consent from all Crown landholders.

The latter triggers the commencement of the TPC's formal assessment process which involves public exhibition of the DA/EIS, submissions, and public hearings as well as the potential for appeals to the Tasmanian Civil and Administrative Tribunal (TASCAT).

Once the DA/EIS is exhibited, the public then have an opportunity to make submissions, which are subject to a hearing process to respond to the matters raised.

TasNetworks is then required to prepare an Environmental Report for submission to the TPC and the Department of Climate Change, Energy the Environment and Water (DCCEEW) that addresses the issues raised by stakeholders as well as any matters raised by the Commission in its review. Once all issues raised by stakeholders and the Commission have been addressed, the TPC concludes its assessment and finalises its Environmental Assessment Report (EAR), which sets out its determination on whether to grant a permit, subject to any conditions, or refuse the application.

The EAR seeks the Commonwealth Minister's endorsement for the TPC's determination. Interested stakeholders are able to appeal the TPC's determination to the TASCAT and the Commonwealth Minister may reserve its decision on whether to approve the Project under the EPBC Act until the appeals have been finalised.

## Specialist advisors leading the planning and environment approvals

Given the highly technical nature of the DA/EIS, in 2018 TasNetworks engaged [REDACTED] an expert in planning and environment, to provide environment, land use planning and heritage advisory services. [REDACTED] was engaged to lead the preparation of TasNetworks' DA/EIS, which is substantial document comprising 53 separate technical reports, many of which are over 1,000 pages in length. To assist it in the preparation of the DA/EIS, [REDACTED] subcontracted a range of specialist consultants to prepare and advise on the technical reports supporting and informing the DA/EIS.

Over the period to August 2023, Coffey undertook the following key environmental, land use planning and heritage services activities:

- field surveys
- geographic information systems and graphics
- support engaging with local First Nations people in the communities that will be impacted by the Project
- support and advise on route selection, noting that the route needs to be logical, defensible and avoid impacts wherever possible
- supporting public consultation on the Project
- undertaking geospatial analysis on the potential route
- technical studies and surveys including:
  - environment and ecology
  - land and flora and fauna
  - contaminated land, acid sulphate soils and landslide
  - emissions and climate including air quality, noise and vibration
  - socio economic impacts including traffic, accommodation, waste, EMF
  - traffic and transport
  - terrestrial ecology, geomorphology and geology
  - landscape and visual assessment
  - cumulative impacts and potential future projects on environment and fauna
  - decommissioning and rehabilitation measures
  - environmental management for construction, operation and maintenance

- assessing the environmental and socioeconomic baseline, potential Project impacts and the actions to avoid, mitigate, manage or compensate for these.

By August 2023, the DA/EIS was significantly advanced based on both the coastal and inland route and an informal review by the Crown stakeholders was underway.

## Implications of project staging

A key implication of project staging, which was announced by the Tasmanian Government in September 2023, was that the DA/EIS documents needed to be significantly revised. As explained in section 3.2, without the inland route it would not be possible to demolish the existing single-circuit 220 kV transmission line between Sheffield to Burnie prior to the construction of the new 220 kV double-circuit on the centre line of the existing easement. As a result, TasNetworks needed to revisit the placement of towers to avoid extended outages. This found that building on the centre line would only be feasible for around 17 per cent of the Sheffield—Burnie 220 kV transmission line and that three new construction methods would be used on the remaining 83 per cent of the alignment.

Moving the tower placement to enable these new construction methods encroaches on virgin land that was not assessed or surveyed as part of the original DA/EIS, nor was it subject to landowner negotiations. The revised transmission line alignment therefore requires TasNetworks to:

- negotiate with landowners impacted by the revised transmission line alignment
- update existing or undertake new surveys for land (particularly agriculture and farm land) that was not previously assessed, especially for:
  - traffic and transport – this involves collecting information for roads and intersections along access routes that were not previously captured as well as assessing public roads, intersections and new access points to private land for condition and safety
  - terrestrial ecology – this includes native vegetation that is affected by the revised transmission line alignment, access tracks and winch, drum and brake sites that have not previously been surveyed
  - cultural heritage – this includes assessing areas not previously assessed for historic Heritage Impacts, Aboriginal Heritage, Archaeological Potential
- update many of the background reports and calculations, such as in relation to vegetation clearance, visual impacts, reverse view shed analysis for eagles nests, landslip assessment.

These new surveys impacts on the substance of the overall DA/EIS document, which needs to be updated accordingly. This work is being led by [REDACTED], which has been engaged to update the document over the period June to December 2024.

Given this, TasNetworks now expects to:

- submit its DA/EIS for Crown and council consent to lodge MIDAA documentation with the TPC in mid-January 2025
- lodge the DA/EIS with the TPC in mid-February 2025.

The TPC will then publish the DA/EIS for public exhibition, which is expected to occur in March/April 2025. This will be followed by the hearings and appeals process. The hearing and appeal process can be lengthy and have a material impact on time and cost.

As noted above, the granting of a permit following the submission of the DA/EIS can come with material conditions that require further work to be undertaken.<sup>36</sup>

Following assessment and a decision to approve the EIS, a construction environmental management plan (CEMP) will be prepared. This will:

- describe the works
- set out objectives and targets for environmental management
- identify legal and other requirements as well as approval and permit conditions
- describe the roles and responsibilities in relation to environmental management
- describe environmental compliance requirements, including requirements to meet conditions of approval
- outline environmental management practices and procedures to be followed during works as well as any additional impacts and mitigations associated with minor design changes in accordance with the permit and conditions.

An operational environmental management plan (OEMP) will also be prepared during commissioning. This will include similar information to the CEMP but recognise the reduced impacts of operation and maintenance activities.

## 11.3 Actual capex

Table 29 shows that TasNetworks' actual planning and environment capex is \$11.71 million, comprising \$1.09 million for labour and \$10.62 million for indirect costs.

**Table 28: Actual planning and environment capex, labour and indirect costs (\$ million, real 2023-24)**

Planning and environment	2021-22	2022-23	2023-24	Total
Labour	0.26	0.44	0.39	1.09
Indirect costs	4.00	4.83	1.79	10.62
<b>Total</b>	<b>4.25</b>	<b>5.27</b>	<b>2.19</b>	<b>11.71</b>

### Labour

TasNetworks' actual labour costs of \$1.09 million relate to internal FTE undertaking planning and environmental approvals activities. The team currently comprises 1.8 FTE and was established mid-2022 to drive the planning and environmental consents. In the initial stages of the Project, from 2020-21 to 2021-22, environment approvals activities were provided by the BAU function.

The Planning and Environment Team comprises:

- an Environmental Project Manager

<sup>36</sup> A permit is granted as an outcome of submitting the EIS/DA. This may have conditions attached.

- an Environmental Planning Specialist (0.8 FTE).

The Planning and Environment Team is responsible for:

- working with the Project Development and Community and Stakeholder Engagement teams to oversee the route selection process including input from landholder, councils and other stakeholders
- engaging specialist consultants to conduct a wide range of planning and environment studies to support the DA/EIS
- overseeing the work by [REDACTED] to prepare the DA/EIS and interfacing with their sub-contractors
- ensuring compliance with overarching regulations and requirements
- coordinating with other teams across the Project, including the:
  - the Land and Property Team to ensure land access arrangement are in place to conduct surveys
  - the Community and Stakeholder Engagement Team in the preparation and conduct of engagement forums to inform stakeholders on progress and seek their input
  - the Project Development team to ensure the alignment of towers is feasible.

## Indirect activities

The actual indirect planning and environment costs over the period to June 2024 are \$10.62 million. The key driver of these costs relates to:

- [REDACTED] to prepare the DA EIS, noting that this document comprises around 53 separate documents, many of which are over 1000 pages in length. [REDACTED] engaged more than 10 expert advisors to assist it with various technical elements of the report
- [REDACTED] to provide technical reports on to EMF and landslip to support the DA/EIS
- [REDACTED] helicopter-based eagle searches
- [REDACTED] to assist with stakeholder engagement activities
- [REDACTED] which provided specialised legal services to assist the development of the DA/EIS
- [REDACTED] for surveys relating to various planning and environment elements required to inform the DA/EIS including ecology, traffic and roads, air quality, vegetation management, agriculture impacts, geomorphology/geology, water/erosion/flooding, visual aesthetics, tourism/economy, climate change, contaminated land, greenhouse gas emissions.



## 11.4 Forecast capex

Table 30 shows that TasNetworks' forecast planning and environment capex is \$3.60 million, comprising \$1.04 million for labour and \$2.56 million for indirect costs.

Table 29 Forecast planning and environment capex, labour and indirect costs (\$ million, real 2023-24)

Planning and environment	2024-25	2025-26	Total
Labour	0.64	0.40	1.04
Indirect costs	2.23	0.33	2.56
<b>Total</b>	<b>2.87</b>	<b>0.73</b>	<b>3.60</b>

### Labour

TasNetworks' forecast labour costs of \$1.04 million relate to internal FTE undertaking planning and environment approvals activities. The team comprises the FTE described in section 11.3 with the addition of an Environmental Planning Specialist that commenced in July 2024 on a part time (0.5 FTE) basis. The team is responsible for overseeing the DA/EIS and all other associated activities. The key focus areas for the team over the period July 2024 to February 2026 are:

- overall responsibility for the completion, lodgement and approvals of the DA/EIS
- coordination and management of [REDACTED] and its sub-consultants
- coordination and management of legal review and input to the DA/EIS
- providing materials for and attending community and stakeholder engagement activities
- supporting other areas of the Project team as needed.

### Indirect activities

The forecast indirect planning and environment costs over the period July 2024 to February 2026 are \$2.56 million. The key driver of these costs relates to:

- [REDACTED], which has been engaged to lead the development of the revised DA/EIS (Parts A-D). This forecast is based on a quotation for services ([REDACTED]). The total value of the quotation is [REDACTED], however TasNetworks has already incurred cost of [REDACTED] which are reflected in the actual costs. In accordance with this fee proposal, [REDACTED] will undertake the following work to support the DA/EIS (Parts A-D):
  - project management – key tasks include:
    - coordination and management of project deliverables
    - invoicing and accrual reporting in accordance with contract requirements
    - preparing a monthly report
    - budget management including preparation of monthly financial report
    - schedule management
    - regular liaison with TasNetworks

- study management – key tasks include:
  - technical specialists’ contracts, budgets and deliverables
  - direction and review of technical reports
  - managing, drafting and reviewing responses to comments on technical reports
- logistics and planning to support field surveys required to inform the traffic, ecology and heritage scopes. Key tasks include:
  - liaising with survey teams, TasNetworks and land agents
  - managing access requests required for field surveys
  - managing access data through the WebMap and FieldMaps app
  - preparing and reviewing Health, Safety, Security and Environment (HSSE) documentation, survey itineraries, in accordance with the project HSSE plan
  - daily check-ins with field teams during surveys
  - regular reporting on survey progress
  - managing survey documentation
- geographic information systems and graphics to manage geospatial data and maintain and update the WebMap. Key tasks include:
  - updating figures and figure series
  - WebMap hosting fee (\$500 per month)
  - WebMap updates and maintenance
  - FieldMaps support, updates and maintenance
  - regular data deliveries of new data to TasNetworks
  - subconsultant data management/support
  - figure finalisation and final figure numbering
  - updating the sensitive receiver layer
- [REDACTED] to undertake annual eagles nest surveys. This is required under item 6.1.2(d) of the MIDAA planning criteria for the development application approvals of the Project. The forecast capex includes safety equipment, meals and accommodation for observers, and helicopter fees which are estimated by the [REDACTED] based on [REDACTED]. Two searches will be undertaken and are included in the forecast capex, one search will be undertaken in July 2024 and one in March 2025. Helicopter flight costs have only been included for the March 2025 search because the helicopter costs for the July 2024 search have already been incurred. Forecast capex is calculated based on the TasNetworks agreement with the [REDACTED] for North West Transmission Development Eagle Nest Searching – December 2023 and the June 2024 Contract Variation, as follows:
  - July 2024 search - [REDACTED] plus
  - March 2025 search - [REDACTED]
- [REDACTED] for payment of EPBC fees to the Australian Government based on its EPBC Act Cost Recovery Fee Schedule dated [REDACTED], which requires the following payments:
  - [REDACTED] for Part A and Part B base fee

- [REDACTED] for post approval fees – evaluation of the action plan
- [REDACTED] for contingent fees
- [REDACTED] to review and draft section of the DA/EIS documents. This is based on a quotation from [REDACTED] for [REDACTED]. TasNetworks has not included the costs of the optional scope of work
- [REDACTED] to provide legal support during the Appeals Phase of the EIS/DA. This fee is based on a quotation dated [REDACTED] and covers:
  - [REDACTED] for general advice
  - [REDACTED] for preparation and review of stakeholder correspondence
  - [REDACTED] to review the DA / EIS
  - [REDACTED] to advise on and review information responses
  - [REDACTED] to review material for and attend TPC hearings
  - [REDACTED] to review permit conditions and TPC decisions requiring amendment or appeal
  - [REDACTED] for assistance with TASCAT appeal preparation
  - [REDACTED] for advice on appeal from TASCAT to the Supreme court
- [REDACTED] to undertake works on
  - landslide hazards - as described in [REDACTED], this work involves preparing draft and final landslide hazard reports, landslide assessments and updating tower foundation design in landslide locations. The total cost of this service contract is [REDACTED]. However, actual capex incurred against these invoices to date is [REDACTED]. This cost is reflected in TasNetworks' actual costs. The forecast capex is [REDACTED].
  - EMF Report - as described in [REDACTED], to prepare technical reports on EMF. The total cost of this service contract is [REDACTED]

# 12 Community and stakeholder engagement

This section details the nature and scope of the early works community and stakeholder activities for Stage 1 of the Project and the associated actual and forecast capex.

Table 31 shows that the actual and forecast Stage 1 community and stakeholder capex is \$6.72 million.

**Table 30 Early works community and stakeholder engagement capex (\$ million, real 2023-24)**

Community and stakeholder	2021-22	2022-23	2023-24	2024-25	2025-26	Total
Actual	2.04	1.43	0.96	0.00	0.00	4.43
Forecast	0.00	0.00	0.00	1.39	0.90	2.29
<b>Total</b>	<b>2.04</b>	<b>1.43</b>	<b>0.96</b>	<b>1.39</b>	<b>0.90</b>	<b>6.72</b>

## 12.1 Nature and scope of community and stakeholder engagement activities

Major transmission expansion projects, like the NWTED, can impact on local communities, landholders, First Nations people and primary producer groups. Both stages of the Project comprise 240 km of transmission lines (new and upgraded), which traverse six local government areas including Burnie, Central Coast, Waratah/Wynyard, Kentish, Meander Valley and Northern Midlands. An analysis of demographic characteristics shows the communities living and working in these local government areas are diverse and have different engagement needs.

The community and engagement activities relate to early and meaningful engagement on the Project, which is critical to build knowledge and understanding of, and support for the Project. Early engagement also helps to inform route selection, gain and maintain social licence, understand the social and economic impacts arising from the Project, and progress environmental and social impact assessments and approvals. It also informs the development of social licence initiatives including the Economic Development Action Plan, SBP and a CBSP for the Project.

## 12.2 Community and stakeholder engagement approach

This is outlined in section 5.

## 12.3 Actual capex

Table 32 shows that actual community and stakeholder engagement capex is \$4.43 million, comprising \$2.39 million for labour and \$2.04 million for indirect costs.

Table 31 Actual community and stakeholder engagement capex, labour and indirect costs (\$ million, real 2023-24)

Community and stakeholder	2021-22	2022-23	2023-24	Total
Labour	0.93	0.72	0.73	2.39
Indirect costs	1.11	0.71	0.23	2.04
<b>Total</b>	<b>2.04</b>	<b>1.43</b>	<b>0.96</b>	<b>4.43</b>

### Labour

TasNetworks' actual labour costs of \$2.39 million relate to 4.9 FTE dedicated to the Project including:

- Leader Major Projects Engagement (0.95 FTE)
- Engagement Partner (two) (1.6 FTE)
- Media and Events Specialist (0.9 FTE)
- Communications Specialist (0.95 FTE)
- Aboriginal Engagement Coordinator (0.5 FTE).

The team is responsible for all aspects of engagement across the Project including:

- developing and implementing the NWTD Engagement Strategy and the NWTD Communications Strategy and plans for each of the key project work streams
- organising and facilitating the SLG that meets every 2 months
- undertaking First Nations engagement activities
- coordinating and managing logistics for all engagement activities and events
- managing co-design processes for the CBSP and Economic Development Action Plan to maximise Project benefits, particularly at a regional level
- developing and implementing the community investment program
- Government and media relations
- supporting the development of social licence for all aspects of the Project.

## Indirect activities

Table 32 shows that actual indirect costs for community and stakeholder engagement are \$2.04 million. The key indirect activities over the period 1 June 2021 to 30 June 2024 include:

- [REDACTED] to assist with all aspects of stakeholder and community engagement. [REDACTED] include Engagement Directors and an Associate Director who have:
  - provided strategic advice on social licence initiatives
  - assisted with developing engagement strategies and plans
  - assisted with developing the CBSP approach – including initial engagement with key stakeholders and ongoing delivery of schedule of activities
  - assisted to scope and support the SLG
  - coordinated and attended engagement events
  - supported risk reporting and ongoing management
- [REDACTED] contribution to the Tasmanian Powered campaign - phase 1 of a multi-stage campaign (cinematic advertisement). The campaign intends to help viewers to understand the renewables path in Tasmania
- [REDACTED] for sponsorships and community investment noting that the Project has committed to continuing to provide support services to North West rural communities, as well as, being involved in local community and strategic events as sponsors:
  - establishing a community partnership with Rural Alive and Well mental health initiative providing free counselling and support services to individuals and communities in regional Tasmania (not for profit)
  - conference sponsorship, such as the Tasmanian Energy Development Conference
  - community grants for initiatives such as the Men’s Shed, community houses and the Lions Club, and
  - sponsorship of local community events including Agfest Tasmania
- [REDACTED] for the Regional Economic Development Officer at the Cradle Coast Hub and SLG Chair payments
- [REDACTED], a data strategy delivery agency, which provides strategy, policy, and communications advisory services
- [REDACTED] contribution to the Energy Charter’s Ag + Energy Collaboration.

## 12.4 Forecast capex

Table 33 shows that TasNetworks' forecast community and stakeholder engagement capex is \$2.29 million, comprising \$1.24 million for labour and \$1.06 million for indirect costs.

Table 32 Forecast community and stakeholder engagement capex, labour and indirect costs (\$ million, real 2023-24)

Community & Stakeholder	2024-25	2025-26	Total
Labour	0.76	0.48	1.24
Indirect costs	0.63	0.42	1.06
<b>Total</b>	<b>1.39</b>	<b>0.90</b>	<b>2.29</b>

### Labour

TasNetworks' forecast labour costs of \$1.24 million relate to internal FTE undertaking community and stakeholder engagement activities. For the period July 2024 to February 2026, the team will comprise the same 4.9 FTE described in section 11.3, noting that some roles will reduce slightly over the period.

The key focus areas for the team over the period July 2024 to February 2026 are:

- CBSP – develop governance arrangement to ensure the program is efficiently administered and is accessible to a wide range of organisations and community groups
- Economic Development Action Plan engagement - consult with stakeholders on the progression of the economic development plan through the SLG meetings, workshops and one-on-one discussions
- general engagement activities about early works – the purpose of these activities is to continue to build knowledge and support for the Project to be able to participate in the approvals process
- easement engagement – TasNetworks intends to work with the community to assess future use of public access easements in a way that supports the local communities impacted by the Project
- pre-construction activities – TasNetworks will work with the preferred tenderer to consult on a number of areas of interest with key stakeholders and the community
- public exhibition of the EIS/DA – in 2025, TasNetworks will commence consultation on the public exhibition of the EIS/DA through six face-to-face meetings and on-line sessions. These meetings will be attended by environmental specialists who are able to answer questions in relation to the EIS/DA.

### Indirect activities

The forecast indirect planning and environment costs over the period to July 2024 to February 2026 are \$1.06 million. The key driver of these costs relates to:

- [REDACTED] for community grants, sponsorships, and communications materials. The key drivers are:
  - [REDACTED] for the Future Energy Hub Facilitator, who is an employee of the Cradle Coast Authority. The purpose of the Hub and Facilitator role is to coordinate the engagement and information of renewable energy project proponents in the region. These costs are based on a current contract

- ██████████ for community grants, relating to small shared-value community investment opportunities. TasNetworks has forecast ██████████ each over the period from July 2024 to June 2025 and ██████████ grants of the same value for the period July 2025 to February 2026
- ██████████ for the CBSP preparation including Smarty Grants software purchase and implementation, promotion and the establishment of the Independent Community Assessment Panel. This cost is based on a quotation from ██████████
- ██████████ for a telephone survey in Tasmania to test community sentiment and guide communications and engagement approach. The last survey was conducted in 2021. This cost is based on quotations
- ██████████ for Rural Alive and Well, a Tasmanian not-for-profit organisation, providing free counselling and support services to individuals and communities in North West Tasmania. Tasmanian rural communities and landholders may already be hosting infrastructure such as transmission towers, irrigation or gas pipeline prior to being notified of a new development – like the NWTDD Project. It is recognised that these cumulative impacts can have negative mental health outcomes. This cost is based on current costs
- ██████████ for the Tasmanian Energy Development Conference, Devonport. This cost is based on the 2024 conference sponsorship request
- ██████████ for community engagement events – TasNetworks has forecast five events per annum including pop-up information stands at high foot traffic local events and dedicated drop-in sessions. This cost includes venue hire, catering and one session with a facilitator per year. TasNetworks has forecast ██████████ per event plus ██████████ for facilitation per year
- ██████████ for payment for members attending the SLG. This provides some recognition to members for their time and stipends, based on TasNetworks' terms of reference for engagement advisory groups.<sup>37</sup> This cost also reflects catering and venue hire costs
- ██████████ for communications including:
  - ██████████ for video content – this cost reflects online campaigns, digital communications including monthly and is based on six short videos per annum at a rate of ██████████ per video
  - ██████████ for print and design – this cost includes event materials including posters and signage
  - ██████████ for advertising – this cost reflects two annual campaigns at an average ██████████ per month x 20 months to advertise events and milestones.
- ██████████ for scholarships and other local event sponsorships. The forecast capex includes the costs for one scholarship for a University of Tasmania student for a period of two years totalling ██████████ and ██████████ small local event sponsorships (like Taste of North West event) at ██████████ per year, totalling ██████████
- ██████████ – The key deliverables for RPS include the following based on its fee proposal dated ██████████:

<sup>37</sup> Currently only the SLG Chair is a paid position, however TasNetworks is updating the Policy so all SLG members are offered payment in line with the SLG Chair.



- Construction Communications and Engagement Strategy – this involves reviewing construction and project documentation, holding online workshops to seek input into the strategy (expect two workshops) and preparing the draft and final Construction Communications and Engagement Strategy in consultation with TasNetworks
- CBSP – this involves ensuring the CBSP is ready at the start of construction including by:
  - reviewing stakeholder feedback and updating key documents
  - facilitating face to face workshops
  - design and attend community information sessions
  - establishing the Independent Community Assessment Panel
  - preparing template application documents, defining and documenting the selection process and preparing the recommendations report template
- CPA 2 documents – this involves facilitating workshops and drafting the engagement reports and providing detailed material to support the chapter drafting
- pre-EIS engagement support – this involves updating fact-sheets, providing strategic advice on communications and engagement approaches and supporting with issues management
- strategic advice – provide ongoing strategic advice throughout the Early Works phase of the project including through team meetings, engagement reports and coordinating and attending events.

# 13 Regulatory approvals and other support

This section details the nature and scope of early works regulatory and other approvals activities for Stage 1 of the Project and the associated actual and forecast capex.

Table 34 shows that the actual and forecast Stage 1 regulatory approvals capex is \$0.93 million.

**Table 33 Stage 1 early works regulatory approvals capex (\$ million, real 2023-24)**

Regulatory approvals	2021-22	2022-23	2023-24	2024-25	2025-26	Total
Actual	0.00	0.00	0.30	0.00	0.00	0.30
Forecast	0.00	0.00	0.00	0.59	0.04	0.63
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.30</b>	<b>0.59</b>	<b>0.04</b>	<b>0.93</b>

## 13.1 Nature and scope of regulatory approvals activities

The regulatory approvals activities relate to the preparation and submission of a CPA to the AER to recover the costs of delivering the Project. Under the NER, the Application is required to set out:

- the proposed expenditure
- the associated incremental revenue requirement
- the indicative customer bill impacts associated with the Project.

The regulatory approval costs relate to the preparation and submission of Applications for both Stage 1 early works and Stage 1 construction of the Project. These Applications involve:

- explaining and justifying forecast costs
- document preparation and management
- regulatory modelling
- commissioning expert reports
- independent assessment and verification of forecast costs.

The regulatory approvals activities also include the continued engagement with the AER, AEMO and MLPL.

## 13.2 Actual capex

Table 35 shows that actual regulatory approvals and other support capex is \$0.30 million.

Table 34 Actual regulatory approvals and other support capex (\$ million, real 2023-24)

Regulatory approvals	2021-22	2022-23	2023-24	Total
Labour	0.00	0.00	0.00	0.00
Indirect costs	0.00	0.00	0.30	0.30
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.30</b>	<b>0.30</b>

### Labour

TasNetworks' actual labour costs associated with regulatory approvals activities is included in the Commercial and Procurement stream. The key activities undertaken over the period from 1 June 2021 to 30 June 2024 include:

- undertaking the update for the Regulatory Investment Test for Transmission (RIT-T), together with MLPL
- preparing the Stage 1 early works Application
- engaging with the AER and AEMO on the development of the Application
- seeking specialist advice relating to the nature and scope of the Stage 1 Application and assurance for the costs included in the Application.

### Indirect activities

The key indirect activities over the period 1 June 2021 to 30 June 2024 relate to professional service advice from [REDACTED] on the nature and scope of the Application.

## 13.3 Forecast capex

Table 36 shows that TasNetworks' forecast regulatory approvals capex is \$0.63 million.

Table 35: Forecast regulatory approvals capex, labour and indirect costs (\$ million, real 2023-24)

Regulatory approvals	2023-24	2024-25	2025-26	Total
Labour	0.00	0.00	0.00	0.00
Indirect costs	0.00	0.59	0.04	0.63
<b>Total</b>	<b>0.00</b>	<b>0.59</b>	<b>0.04</b>	<b>0.63</b>

## Labour

TasNetworks' forecast labour costs for regulatory approvals activities for the period July 2024 to February 2026 is included in the Commercial and Procurement stream.

## Indirect activities

TasNetworks' forecast indirect regulatory approvals and other support capex for the period July 2024 to February 2026 is \$0.63 million comprising:

- [REDACTED] to provide expert advice on the nature and scope of the Application and future applications. This cost is based on the current fee proposal, dated [REDACTED], for the preparation of the Stage 1 early works CPA. TasNetworks' forecast capex reflects:
  - [REDACTED] – TasNetworks assumes the same level of support will be required for the Stage 1 construction CPA
  - [REDACTED] for the remaining balance against the [REDACTED] quotation for the Stage 1 early works CPA. As discussed above, TasNetworks has incurred actual costs of [REDACTED] against the quote for [REDACTED] and is seeking to add the remaining balance to the forecast capex
- [REDACTED] for GHD to undertake an independent assessment of the reasonableness of the forecast early works capex. This cost is based on the current fee proposal dated [REDACTED] for the independent verification and assessment of Stage 1 early works CPA costs. TasNetworks has assumed that the same level of support will be required for the Stage 1 construction CPA costs and has therefore based its forecast capex on this quotation.

# Part D – Forecast revenue, bill impacts and compliance

# 14 Forecast revenue and impact on customers' bills

This section sets out the incremental revenue forecast for Stage 1 early works and the indicative impact on transmission and distribution customer charges.

The forecast incremental smoothed revenue for Stage 1 early works is \$31.83 million (\$ nominal) over the 2024-29 regulatory period. Table 37 summarises the incremental revenue forecast by building block component, and briefly explains how we have calculated each component. Further detail is provided in – Revenue application.

As discussed in section 4.6, TasNetworks is progressing a concessional finance arrangement in relation to the capex costs for the Project, including the Stage 1 early works component. The revenue outcome in this Application has been forecast without reference to concessional finance. When a concessional finance arrangement is agreed TasNetworks will request the AER amend our revenue lower in accordance with the concessional finance agreement which will result in lower impacts on customer charges.

**Table 36 2024-29 incremental revenue forecast from Stage 1 early works (\$ million, nominal)**

Building block	Incremental revenue	Approach
Return on capital	38.41	Calculated by multiplying the forecast opening capital base updated to include expenditure on Stage 1 early works for a given year by the allowed rate of return set by the AER.
Return of capital	(8.48)	Calculated as forecast straight line depreciation for each asset class less indexation of the capital base. The value is negative because indexation is higher than depreciation over the 2024-29 regulatory period and indexation commencing prior to depreciation.
Opex	0.42	There is no change to the current opex allowance as part of this Application, other than to include the debt raising costs resulting from the revised capex allowance. Debt raising costs have been calculated using the AER's standard approach.
Revenue adjustments	1.07	An adjustment is included in the 2024-29 regulatory period for the revenue carry-over from the 2019-24 regulatory period as a result of the capex incurred during the 2019-24 period.
Corporate income tax	(0.52)	Calculated as forecast pre-tax income multiplied by the corporate tax rate, less the assumed value of imputation credits.
Unsmoothed annual revenue requirement	30.89	Total incremental impact on building block components.

Building block	Incremental revenue	Approach
Impact of smoothing	0.94	Incremental revenue smoothed over final four years of the regulatory period, calculated by resolving the year 2 to 5 X-factors so that the NPV of the smoothed revenue for the 2024-29 regulatory period matches the NPV of the unsmoothed revenue.
Smoothed annual revenue requirement	31.83	Incremental impact after smoothing.

Table 38 details the 2024-29 incremental revenue forecast of Stage 1 early works by year.

**Table 37 2024-29 incremental revenue forecast (smoothed) (\$ million, nominal)**

Revenue (smoothed)	2024-25	2025-26	2026-27	2027-28	2028-29	Total
2024-29 AER Determination	163.38	170.07	177.03	184.27	191.82	886.56
Impact of Stage 1 early works	-	2.89	6.06	9.54	13.35	31.83
Revised smoothed revenue requirement	163.38	172.95	183.09	193.81	205.17	918.40

Table 39 and Table 40 show the indicative distribution customer network bill impacts for the 2024-29 regulatory period of the Stage 1 early works for a typical residential customer and a typical small business customer. The Stage 1 early works results in an increase for both typical residential and small business network charges of approximately 0.4 per cent per year from 2025-26 for the 2024-29 regulatory period.

Table 41 shows the indicative charge impacts at an aggregated level for directly connected load transmission customers for the 2024-29 regulatory period. The impacts on transmission load customers are higher than for distribution customers as their charges are derived solely from our transmission revenue requirement rather than a combination of transmission and distribution revenue requirements recovered from distribution customers.

As discussed above, TasNetworks is progressing a concessional finance arrangement that will result in lower impacts on customer charges (both distribution and transmission) once implemented. Additionally, the cost increases in network charges are expected to be more than offset by savings in wholesale costs associated with Project Marinus in the future. In late 2023, Marinus Link engaged independent global consulting firm, FTI Consulting LLP (FTI), to consider the impact that Project Marinus is expected to have on customers across the NEM. This represents an update to a similar study carried out by FTI in 2020. Consistent with FTI's previous customer benefits analysis, FTI's 2023 study shows that Project Marinus is expected to materially reduce wholesale prices in all NEM regions.

The largest average annual wholesale price reductions during the 2031-50 study period occur in Tasmania (\$20-22/MWh reduction) and Victoria (\$17-20/MWh reduction), with smaller price reductions forecast for other NEM regions. FTI also modelled wholesale price reductions under a one cable scenario, which reduced the expected wholesale price impact to \$12-13/MWh in Tasmania and \$13-14/MWh in Victoria. The effect of the reduction in wholesale electricity prices is expected to equate to an annual \$148 to \$165 reduction in energy bills in Tasmania.

**Table 38 Impact of Stage 1 early works on typical residential customer bill (\$, real 2023-24)<sup>38</sup>**

Residential	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
2024-29 AER Determination	754.7	834.6	888.3	962.9	994.7	978.9
2024-29 AER Determination annual change		10.6%	6.4%	8.4%	3.3%	(1.6%)
Impact of Stage 1 early works	-	-	3.7	7.5	11.5	15.6
Impact of Stage 1 early works annual change	-	-	0.4%	0.4%	0.4%	0.4%
Revised typical residential customer bill	754.7	834.6	892.0	970.4	1,006.2	994.6
Revised residential customer charges annual change		10.6%	6.9%	8.8%	3.7%	(1.2%)

**Table 39 Impact of Stage 1 early works on typical small business customer bill (\$, real 2023-24)<sup>39</sup>**

Small business	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
2024-29 AER Determination	2,809.0	2,987.3	3,166.4	3,417.8	3,515.8	3,444.8
2024-29 AER Determination annual change		6.3%	6.0%	7.9%	2.9%	(2.0%)
Impact of Stage 1 early works	-	-	13.2	26.8	40.8	55.2
Impact of Stage 1 early works annual change		-	0.4%	0.4%	0.4%	0.4%

<sup>38</sup> The typical residential customer assumes annual consumption of 7,834 kWh on the default time of use consumption network tariff (TAS93)

<sup>39</sup> The typical small business customer assumes annual consumption of 33,578 kWh on the default time of use consumption network tariff (TAS94)



Small business	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
Revised typical small business customer bill	2,809.0	2,987.3	3,179.5	3,444.6	3,555.6	3,500.0
Revised small business customer charges annual change		6.3%	6.4%	8.3%	3.3%	(1.6%)

**Table 40 Impact of Stage 1 early works on transmission customer charges (\$ million, real 2023-24)**

Transmission customers (aggregated charges)	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
2024-29 AER Determination	39.52	42.32	45.55	49.20	49.97	50.55
2024-29 AER Determination annual change	-	7.1%	7.6%	8.0%	1.6%	1.2%
Impact of Stage 1 early works	-	-	1.14	1.99	2.85	3.77
Impact of Stage 1 early works annual change	-	-	2.7%	1.6%	1.6%	1.7%
Revised transmission customer charges	39.52	42.32	46.69	51.19	52.82	54.32
Revised transmission customer charges annual change	-	7.1%	10.3%	9.6%	3.2%	2.8%

# 15 Guide to compliance

Table 42 lists the NER requirements for a CPA, and where they have been addressed in this Application.

**Table 41 Compliance with NER requirements**

NER, clause 6A.8.2(b) requirements	Reference in Application
1. An explanation that substantiates the occurrence of the trigger event	Part A section 4
2. A forecast of the total capex for the contingent project	Part A section 2
3. A forecast of the capital and incremental opex, for each remaining regulatory year which the Transmission Network Service Provider considers is reasonably required for the purpose of undertaking the contingent project	Part A section 2 Part C – Capex
4. How the forecast of the total capex for the contingent project meets the threshold as referred to in clause 6A.8.A1(b)(2)	Part A section 4
5. The intended date for commencing the contingent project (which must be during the regulatory control period)	Part A section 4
6. The anticipated date for completing the contingent project (which may be after the end of the regulatory control period) and	Part A section 4
7. An estimate of the incremental revenue which the Transmission Network Service Provider considers is likely to be required to be earned in each remaining regulatory year of the regulatory control period as a result of the contingent project being undertaken as described in subparagraph (3), which must be calculated: <ul style="list-style-type: none"> <li data-bbox="188 1339 1046 1411">(i) in accordance with the requirements of the post-tax revenue model referred to in clause 6A.5.2</li> <li data-bbox="188 1429 976 1500">(ii) in accordance with the requirements of the roll forward model referred to in clause 6A.6.1(b)</li> <li data-bbox="188 1518 1046 1621">(iii) using the allowed rate of return for that Transmission Network Service Provider for the regulatory control period as determined in accordance with clause 6A.6.2</li> <li data-bbox="188 1639 948 1711">(iv) in accordance with the requirements for depreciation referred to in clause 6A.6.3, and</li> <li data-bbox="188 1729 1046 1800">(v) on the basis of the capex and incremental opex referred to in subparagraph (b)(3).</li> </ul>	Part D section 14

Table 43 lists the CPA requirements in the AER's Guidance Note and where these have addressed these in this Stage 1 Application.

Table 42 Compliance to AER Guidelines

AER Guideline requirement	Reference in Application
<b>Stakeholder engagement (section 2.2)</b>	
Overview of stakeholder engagement approach and feedback received	Part A section 5 Part C sections 10 and 12.
<b>Project governance (section 2.4)</b>	
Project governance framework and processes, including key roles, accountabilities and responsibilities	
Project (including risk) reporting, monitoring and evaluation arrangements	Part A section 5 Part C section 9
Any supporting assurance arrangements	
<b>Project Plans (section 2.4.2)</b>	
High level delivery schedule, with key milestones and timeframes	
Key dependencies and decision points for the project	A preliminary D&C delivery schedule is developed and will be finalised during the ECI Phase.
Project resourcing and capability arrangements	
Risk management framework and plan (see also section 2.6.3 - 'Risk management')	Project resourcing is discussed in Part C – Capex
Established arrangements for post completion project review	
<b>Procurement strategy, processes, and outcomes (section 2.5)</b>	
Overview of procurement strategy, including scope of work packages	
Tender Evaluation Plan(s), including roles and responsibilities of evaluation team	
Overview of procurement process(es), including summary of activities and timeline	Part B section 6
Outcomes of procurement activities	
Tender Evaluation and Probity Report(s)	

**Risk assessment (section 2.6)**

Detailed risk register containing identifiable projects risks, and

A summary of the efficient mitigation steps taken for the relevant risks

An assessment for each residual risk

A detailed risk register has been developed and risks and controls are evaluated quarterly.

The risk register will be further developed during the ECI phase.

# Appendix A – Revenue application

This appendix sets out the incremental revenue forecast for the early works for NWTD Stage 1, having regard for clause 6A.8.2(b)(9) of the NER.

On the basis of Stage 1 early works capex forecast, we are seeking AER approval to increase our 2024-29 MAR. This appendix shows:

- the impact on unsmoothed revenue (the individual building block requirements and the aggregated annual building block requirement) over the 2024-29 regulatory period
- the impact on MAR (smoothed revenue) over the remaining years of the 2024-29 regulatory period.

As discussed in section 4.6, TasNetworks is progressing a concessional finance arrangement in relation to the capex for the NWTD, including the Stage 1 early works component. The revenue outcome in this Application has been forecast without reference to concessional finance. When a concessional finance arrangement is agreed TasNetworks will request that the AER amend our revenue lower in accordance with the concessional finance agreement, which will also result in lower impacts on customer charges.

Table 44 sets out the incremental revenue requirement for the NWTD Stage 1 early works and the revised total revenue requirement for the 2024-29 regulatory period. This has been calculated using the AER's 2024-29 Final Decision PTRM, updated for incremental forecast capex and opex for the Project.

**Table 43 Incremental revenue requirement (\$ million, nominal)**

MAR (smoothed revenue)	2024-25	2025-26	2026-27	2027-28	2028-29	Total
2024-29 AER Determination	163.38	170.07	177.03	184.27	191.82	886.56
Impact of Stage 1 early works	-	2.89	6.06	9.54	13.35	31.83
Revised MAR	163.38	172.95	183.09	193.81	205.17	918.40

The rest of this appendix:

- identifies the weighted average cost of capital (WACC) and standard asset life assumptions
- sets out projected return on capital, regulatory depreciation, tax allowance, debt and equity raising costs, revenue requirements
- details the potential customer bill impacts from the incremental revenue requirements resulting from the Project.

# A.1 WACC

We have calculated the incremental revenue for the Project using the same WACC parameters as those approved by the AER in its 2024-29 Revenue Determination for TasNetworks. This is consistent with clause 6A.8.2(b)(4)(ii) of the NER. The WACC parameters are set out in Table 45.

Table 44 WACC parameters

Parameter	2024-29 Revenue Determination
Forecast inflation	2.66%
Value of imputation credits	57%
Gearing	60%
Nominal pre tax return on debt (2024-25)	4.46%
Nominal pre tax return on debt (2025-26)	4.63%
Nominal pre tax return on debt (2026-27)	4.67%
Nominal pre tax return on debt (2027-28)	4.75%
Nominal pre tax return on debt (2028-29)	4.89%
Nominal post-tax return on equity	7.92%
Nominal vanilla WACC (2024-25)	5.84%
Nominal vanilla WACC (2025-26)	5.94%
Nominal vanilla WACC (2026-27)	5.97%
Nominal vanilla WACC (2027-28)	6.02%
Nominal vanilla WACC (2028-29)	6.10%

## A.2 Asset lives

We have allocated our forecast capex for Stage 1 early works across existing regulatory asset classes. The standard asset lives used are consistent with the asset lives used in TasNetworks' 2024-29 Revenue Determination. The applicable standard asset lives relevant to Stage 1 early works are set out in Table 46.

**Table 45 Incremental MAR (\$ million, nominal)**

Asset Class	Standard Life (years)
Transmission line assets – long life (60)	60
Transmission line assets – medium life (45)	45
Substation assets - long life (60)	60
Substation assets – medium life (45)	45
Other – medium life (40)	40
Protection and control – short life (15)	15
Land and Easements	Not applicable

## A.3 Return on capital

Table 47 sets out TasNetworks' forecast incremental regulatory depreciation for the 2024-29 regulatory period for the Project, consistent with clause 6A.8.2(b)(7)(iv) of the NER. This forecast has been calculated using the PTRM, projected incremental capex, and the asset lives in section Asset lives.

**Table 46 Incremental return on capital (\$ million, nominal)**

Return on capital	2024-25	2025-26	2026-27	2027-28	2028-29	Total
2024-29 AER Determination	97.40	100.82	104.22	107.37	111.39	521.19
Impact of Stage 1 early works	2.27	6.38	9.73	9.90	10.13	38.41
Revised return on capital	99.67	107.20	113.94	117.27	121.52	559.60

## A.4 Regulatory depreciation

Table 48 sets out TasNetworks' forecast of incremental regulatory depreciation for the Project in the 2024-29 regulatory period, consistent with clause 6A.8.2(b)(7)(iv) of the NER. This forecast has been calculated using the PTRM, projected incremental capex, and the asset lives in section A.2.

The standard 'as-commissioned' depreciation approach under the AER's regulatory models for transmission networks has been applied. No assets have been depreciated on an as-incurred basis. Consistent with the AER decision for VNI West Stage 1 capex, the commissioning of the Stage 1 early works capex for this Application is assumed to be independent from the Stage 2 capex. The early works capex has been treated as commissioned at the expected end of early works (February 2026) resulting in regulatory depreciation commencing after that date.

Incremental regulatory depreciation is negative \$8.5 million over the 2024-29 regulatory period. This is because the negative adjustment for indexation on opening RAB commences prior to the commencement of straight-line depreciation and the long-lived nature of the assets leads to indexation being higher than real straight-line depreciation earlier in the lives of those assets. This relationship will reverse later in the assets' lives, leading to positive regulatory depreciation.

**Table 47 Incremental regulatory depreciation (\$ million, nominal)**

Regulatory depreciation	2024-25	2025-26	2026-27	2027-28	2028-29	Total
2024-29 AER Determination	25.22	23.10	26.30	22.93	22.82	120.37
Impact of Stage 1 early works	(1.03)	(2.86)	(1.56)	(1.53)	(1.50)	(8.48)
Revised regulatory depreciation	24.19	20.25	24.74	21.40	21.33	111.90

Regulatory depreciation is equal to straight line depreciation less indexation on TasNetworks' opening RAB. Straight line depreciation commences once assets are commissioned. For early works expenditure this is in 2025-26, so straight line depreciation commences in 2026-27. However, the adjustment for indexation on opening RAB is based on incurred expenditure so the indexation adjustment related to early works expenditure commences prior to straight line depreciation commencing. The impacts on straight line depreciation and indexation on the opening RAB are shown in Table 49 and Table 50.

**Table 48 Incremental straight-line depreciation (\$ million, nominal)**

Regulatory depreciation	2024-25	2025-26	2026-27	2027-28	2028-29	Total
2024-29 AER Determination	69.56	68.22	72.73	70.38	71.39	352.28
Impact of Stage 1 early works	0.00	0.00	2.77	2.84	2.92	8.53
Revised straight line depreciation	69.56	68.22	75.50	73.22	74.31	360.81



**Table 49 Incremental indexation on opening RAB (\$ million, nominal)**

Regulatory depreciation	2024-25	2025-26	2026-27	2027-28	2028-29	Total
2024-29 AER Determination	44.34	45.11	46.43	47.45	48.57	231.90
Impact of Stage 1 early works	1.03	2.86	4.33	4.37	4.42	17.02
Revised indexation on opening RAB	45.37	47.97	50.76	51.82	52.99	248.92

## A.5 Tax allowance

Table 51 sets out the forecast incremental net tax allowance for 2024-29 regulatory period attributed to the Project. This has been calculated using the PTRM and projected incremental capex.

We have not made any other changes to the net tax calculation from that used in TasNetworks' 2024-29 Revenue Determination.

**Table 50 Incremental tax allowance (\$ million, nominal)**

Tax Allowance	2024-25	2025-26	2026-27	2027-28	2028-29	Total
2024-29 AER Determination	4.10	2.67	3.03	3.23	3.92	16.95
Impact of Stage 1 early works	0.03	0.08	(0.25)	(0.21)	(0.17)	(0.52)
Revised tax allowance	4.13	2.75	2.77	3.02	3.75	16.42

## A.6 Debt and equity raising costs

Our forecast incremental revenue considers allowances for debt and equity raising costs, consistent with the AER's 2024-29 Revenue Determination. Both costs are calculated automatically within the PTRM based on changes in underlying inputs.

Debt raising costs are included within the opex allowance and are calculated as follows:

- projected opening RAB at the start of each regulatory year is multiplied by assumed gearing of 60 per cent and a debt raising cost benchmark of 0.087 per cent
- equity raising costs are included within the capex forecast and recovered via the return on and of capital building blocks. These costs are calculated as follows:
  - retained cash flows are projected by subtracting opex, interest payments, revenue adjustments, tax payable, and dividends from projected smoothed (i.e. MAR) revenue
  - equity raising is projected by subtracting retained cash flows from the equity funding component of projected capex (assuming 60% gearing), and split between distribution reinvestment and external equity raising sources

- equity raising costs are calculated by multiplying the two sources by assumed benchmark equity raising cost rates.

No equity raising costs were projected in the AER’s 2024-29 Revenue Determination for TasNetworks because retained cash flows were sufficient to cover projected equity funding. The level of early works capex for the Project does not change this outcome, the PTRM projects that no equity raising will be required for the early works expenditure.

Additional debt raising costs are forecast given the Stage 1 early capex impacts RAB, the incremental debt raising costs are provided in Table 52.

**Table 51 Incremental debt raising costs (\$ million, nominal)**

Debt raising costs	2024-25	2025-26	2026-27	2027-28	2028-29	Total
2024-29 AER Determination	0.88	0.89	0.92	0.93	0.95	4.57
Impact of Stage 1 early works	0.03	0.07	0.10	0.11	0.11	0.42
Revised debt raising costs	0.91	0.96	1.02	1.04	1.06	4.99

## A.7 Opex allowance

No additional opex allowance is included as part of this Application, except for the incremental debt raising costs discussed above, which arise given the higher RAB associated with the Stage 1 early works capex.

## A.8 Revenue adjustment

There is no change to efficiency scheme outcomes. An adjustment is included in the 2024-29 regulatory period for the revenue carry-over from the 2019-24 regulatory period of \$1.07 million as a result of the capex incurred during the 2019-24 period.

## A.9 Incremental revenue requirements for each year to end of period

Table 53 details the incremental annual building block revenue requirements for the Project, based on forecasts provided above and developed using the PTRM.

Table 52 Incremental revenue requirements (\$ million, nominal)

	2024-25	2025-26	2026-27	2027-28	2028-29	Total
<b>2024-29 AER Determination</b>						
Return on capital	97.40	100.82	104.22	107.37	111.39	521.19
Regulatory depreciation	25.22	23.10	26.30	22.93	22.82	120.37
Opex	40.86	43.81	46.00	47.39	48.67	226.72
Revenue adjustments	2.05	(3.22)	(0.23)	0.91	0.60	0.11
Tax allowance	4.10	2.67	3.03	3.23	3.92	16.95
Unsmoothed revenue requirement	169.63	167.18	179.31	181.82	187.40	885.34
<b>Impact of Stage 1 early works</b>						
Return on capital	2.27	6.38	9.73	9.91	10.14	38.43
Regulatory depreciation	(1.03)	(2.86)	(1.56)	(1.53)	(1.50)	(8.48)
Opex	0.03	0.07	0.10	0.11	0.11	0.42
Revenue adjustments	1.07	-	-	-	-	1.07
Tax allowance	0.03	0.08	(0.25)	(0.21)	(0.17)	(0.52)
Unsmoothed revenue requirement	2.36	3.68	8.02	8.27	8.58	30.91
<b>Revised revenue requirement</b>						
Return on capital	99.67	107.20	113.94	117.27	121.52	559.60
Regulatory depreciation	24.19	20.25	24.74	21.40	21.33	111.90
Opex	40.89	43.88	46.10	47.49	48.78	227.14
Revenue adjustments	3.11	(3.22)	(0.23)	0.91	0.60	1.18
Tax allowance	4.13	2.75	2.77	3.02	3.75	16.42
Unsmoothed revenue requirement	171.99	170.86	187.32	190.09	195.97	916.23

## A.10 Amended MAR (smoothed revenue)

The incremental unsmoothed revenue requirement shown in Table 53 has been smoothed from 2025-26 onwards, as 2024-25 revenue is already set from a revenue recovery perspective. TasNetworks will begin to recover the incremental revenue approved by the AER for the 2024-29 regulatory period from 2025-26, in accordance with our approved Transmission Pricing Methodology.

**Table 53 Revised smoothed revenue requirement (\$ million, nominal)**

Revenue (smoothed)	2024-25	2025-26	2026-27	2027-28	2028-29	Total
2024-29 AER Determination	163.38	170.07	177.03	184.27	191.82	886.56
Impact of Stage 1 early works	-	2.89	6.06	9.54	13.35	31.83
Revised smoothed revenue requirement	163.38	172.95	183.09	193.81	205.17	918.40

Table 55 shows the revenue has been smoothed consistent with the approach in the 2024-29 AER Revenue Determination for TasNetworks, with a uniform X-factor set for the final four years of the 2024-29 regulatory period.

**Table 54 Revised X-factors (%)**

X-factor	2024-25	2025-26	2026-27	2027-28	2028-29
2024-29 AER Determination	-1.40	-1.40	-1.40	-1.40	-1.40
Impact of Stage 1 early works	-	-1.72	-1.72	-1.72	-1.72
Revised smoothed revenue requirement	-1.40	-3.12	-3.12	-3.12	-3.12

# Appendix B – Project scope

This appendix supports TasNetworks' CPA to the AER for Stage 1 of the NWTD, which is required to support Project Marinus.

The purpose of this appendix is to:

- provide an overview of the technical scope of works for NWTD required to support the delivery of Project Marinus
- describe in detail the technical scope of upgrade and construction activities associated with NWTD, necessary to deliver Stage 1 of Project Marinus.

NWTD activities likely to be required to support Stage 2 of Project Marinus are described in this document, however these are indicative only and are subject to change arising from the outcomes of Stage 1 of NWTD.

## B.1 NWTD technical scope

This section describes the technical scope of NWTD for Stage 1 and Stage 2, identifying where existing assets are to be upgraded, where new assets require construction, and how staging of NWTD impacts on the sequencing of key activities.

It does not present the capital works program in its entirety – instead focusing on those activities that will result in material changes to the design, functionality, and security of the transmission network.

There are also ancillary and other supporting works proposed for the transmission network that are required as part of Stage 1 and/or Stage 2 of the NWTD, including but not limited to:

- construction and/or upgrade of substation assets such as disconnectors, earth switches, current transformers, voltage transformers, and services transformers, and the associated civil works required for these activities
- alterations to distribution feeders required to facilitate adjacent transmission network upgrades and construction
- installation and/or upgrade of telecommunication and secondary assets required to provide protection and other communications functionality at the asset level, site level, and between sites
- installation and/or upgrade of control systems and supporting hardware required to oversee and manage the expanded transmission power system.

The nature and scope of these supporting works are described in the PPR.

## B.1.1 NWTD scope summary

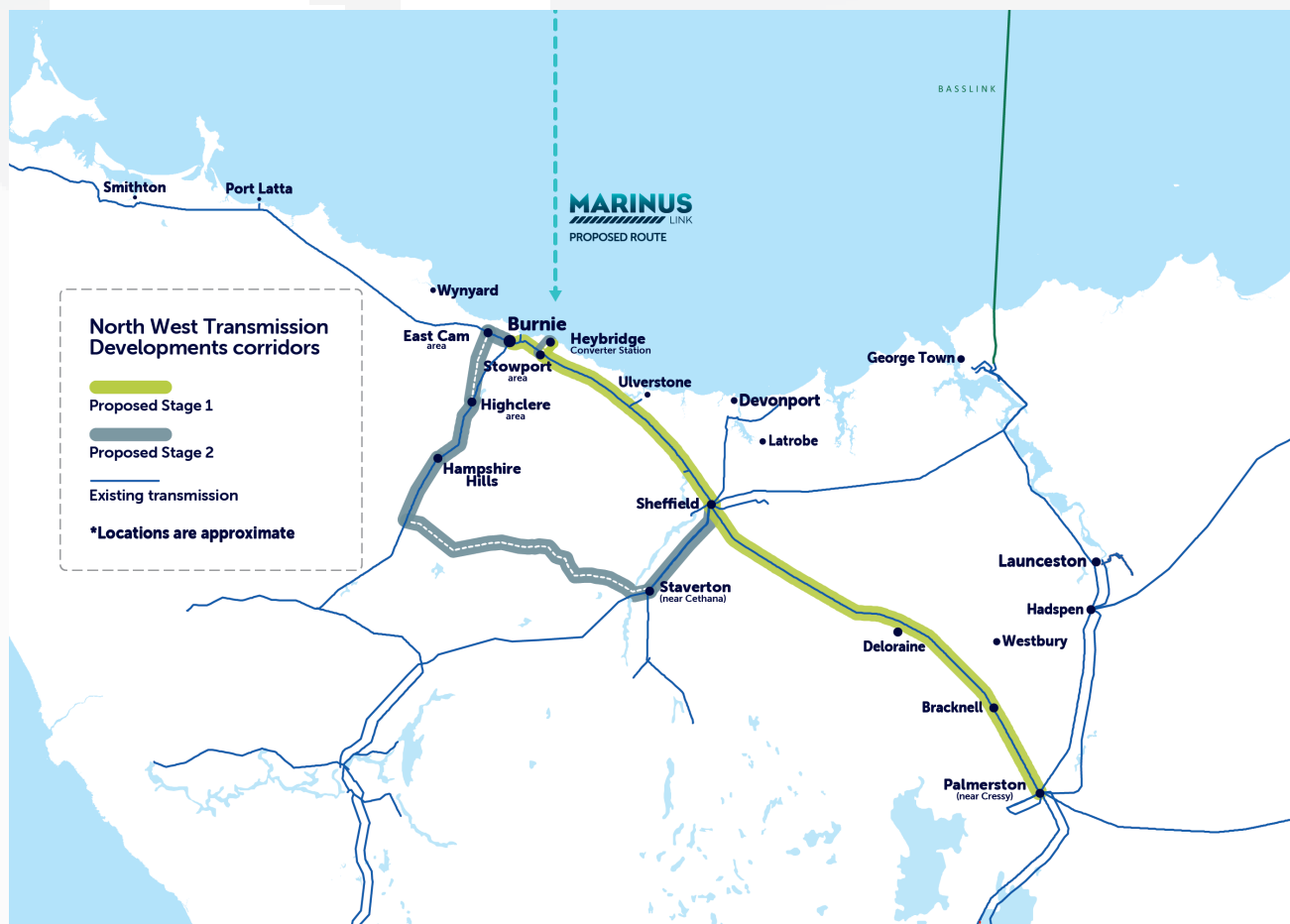
Table 56 presents a summary of the transmission lines, substations and switching stations impacted by upgrade or construction activities required to support Project Marinus as part of Stage 1 and/or Stage 2.

**Table 55 Summary of NWTD scope (material works only)**

Impacted Site	Site Status	NWTD Stage 1	NWTD Stage 2
Palmerston–Sheffield 220 kV transmission line (TL)	Existing	✓	-
Sheffield–Burnie 220 kV TL	Existing	✓	✓
Sheffield–Burnie 110 kV TL	Existing	✓	-
Heybridge Spur East 220 kV TL	New	✓	✓
Heybridge Spur West 220 kV TL	New	-	✓
Sheffield–Farrell 220 kV TL	Existing	-	✓
Sheffield–Wilmot 220 kV TL	Existing	-	✓
Sheffield–Cethana 220 kV TL	Existing	-	✓
Sheffield–Lemonthyme 220 kV TL	Existing	-	✓
Sheffield–Fisher 220 kV TL	Existing	-	✓
Staverton–Hampshire Hills 220 kV TL	New	-	✓
Burnie–Hampshire Hills 220 kV TL	New	-	✓
Heybridge Switching Station	New	✓	✓
Palmerston Substation	Existing	✓	-
Sheffield Substation	Existing	✓	✓
Burnie Substation	Existing	✓	✓
Staverton Switching Station	New	-	✓
Hampshire Hills Switching Station	New	-	✓

Figure 8 presents a graphical overview of the north-west region of Tasmania, showing the NWTDC corridors and proposed staging.

Figure 8 Proposed staging of NWTDC



## B.2 Transmission lines

### B.2.1 Palmerston–Sheffield 220 kV TL (PM-SH)

- Stage 1:
  - construction of 80km of new double-circuit 220 kV transmission line, including 190 new steel transmission towers
  - decommissioning and removal of 261 old transmission towers and associated hardware
  - overall reduction in average easement width from 80 m to 50 m.
- Stage 2:
  - no material asset upgrades or construction works required.

### B.2.2 Sheffield–Burnie 220 kV TL (SH-BU 220 kV)

- Stage 1:
  - construction of 47 km of new double-circuit 220 kV transmission line, including 100 new steel transmission towers
  - decommissioning and removal of 140 old transmission towers and associated hardware
  - widening of the existing easement at a various locations, typically comprising an increase of 20 m.
- Stage 2:
  - minor works at Stowport to facilitate the rearrangement of the circuits connecting Heybridge Switching Station to Sheffield–Burnie 220 kV transmission line via Heybridge Spur East and Heybridge Spur West 220 kV transmission lines (described below).

### B.2.3 Sheffield–Burnie 110 kV TL (SH-BU 110 kV)

Due to their close proximity, realignment of Sheffield–Burnie 110 kV transmission line is required in two locations to support construction of the upgraded Sheffield–Burnie 220 kV transmission line.

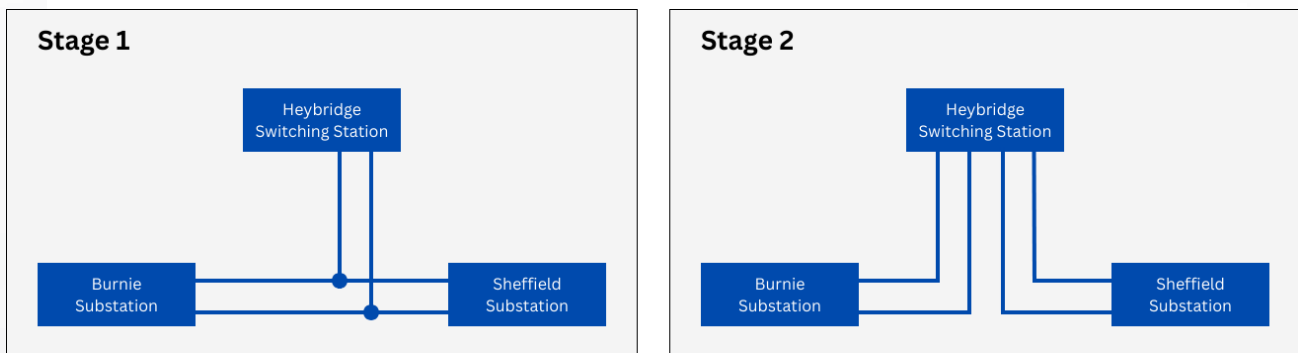
- Stage 1:
  - realignment of 4 km of 110 kV transmission line, including construction of 14 new steel transmission poles
  - decommissioning and removal of 14 old transmission towers and associated hardware.
- Stage 2:
  - no material asset upgrades or construction works required.



## B.2.4 Heybridge Spur East 220 kV TL (HB Spur East) and Heybridge Spur West 220 kV TL (HB Spur West)

- Stage 1:
  - new easement secured with 60 m width
  - **HB Spur East** - construction of 3 km of new double-circuit 220 kV transmission line, including nine (9) new steel transmission towers
  - construction of HB Spur East will facilitate the connection of Heybridge Switching Station (and therefore Marinus Link) to Sheffield–Burnie 220 kV transmission line and the broader north-west 220 kV transmission network via two 3-ended circuits:
    - Sheffield–Heybridge–Burnie No. 1 220 kV transmission circuit
    - Sheffield–Heybridge–Burnie No. 2 220 kV transmission circuit.
- Stage 2:
  - Widening of the easement by 30 m, resulting in a total width of 90 m
  - **HB Spur West** - construction of 3 km of new double-circuit 220kV transmission line, including nine (9) new steel transmission towers
  - **HB Spur East and HB Spur West** - construction of HB Spur West will facilitate a change to the connection of Heybridge Switching Station (and therefore Marinus Link) to the broader north-west 220 kV transmission network via four (4) circuits:
    - Sheffield–Heybridge No. 1 220 kV transmission circuit (via HB Spur East)
    - Sheffield–Heybridge No. 2 220 kV transmission circuit (via HB Spur East)
    - Heybridge–Burnie No. 1 220 kV transmission circuit (via HB Spur West)
    - Heybridge–Burnie No. 2 220 kV transmission circuit (via HB Spur West).

Figure 9 Transmission network configuration between Sheffield, Burnie, and Heybridge stations

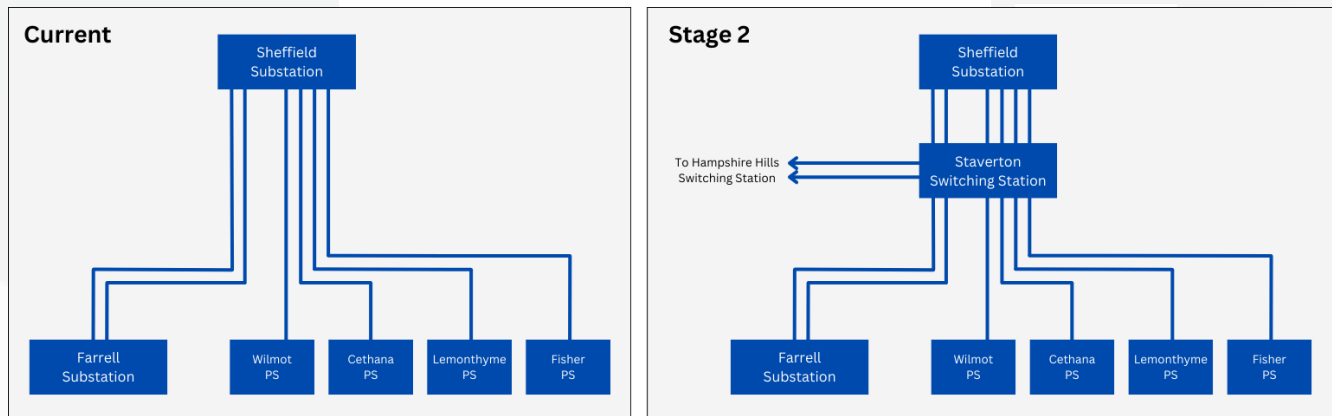


## B.2.5 Sheffield–Farrell 220 kV TL (SH-FA) and Mersey Forth Hydro Scheme

The scope of work described here for Stage 2 is indicative only and is subject to potential changes arising from the outcomes of Stage 1 of NWTD.

- Stage 1:
  - no material asset upgrades or construction works required.
- Stage 2:
  - upon construction of Staverton Switching Station (described below), the existing SH-FA 220 kV transmission line will be terminated into Staverton Switching Station, thereby creating four (4) new circuits:
    - Sheffield–Staverton No. 5 220 kV transmission circuit
    - Sheffield–Staverton No. 6 220 kV transmission circuit
    - Staverton–Farrell No. 1 220 kV transmission circuit
    - Staverton–Farrell No. 2 220 kV transmission circuit.
  - upon construction of the new Staverton Switching Station, four (4) transmission circuits that currently connect four (4) power stations in the Mersey Forth catchment area with Sheffield Substation will be terminated into Staverton Switching Station, thereby creating eight (8) new circuits:
    - Staverton–Wilmot 220 kV transmission circuit
    - Staverton–Cethana 220 kV transmission circuit
    - Staverton–Lemonthyme 220 kV transmission circuit
    - Staverton–Fisher 220 kV transmission circuit
    - Sheffield–Staverton No. 1 220 kV transmission circuit
    - Sheffield–Staverton No. 2 220 kV transmission circuit
    - Sheffield–Staverton No. 3 220 kV transmission circuit
    - Sheffield–Staverton No. 4 220 kV transmission circuit.
  - of these circuits, four (4) will be upgraded between Sheffield and Staverton stations (19 km) such that their design temperature is increased to 70°C:
    - Sheffield–Staverton No. 1 220 kV transmission circuit
    - Sheffield–Staverton No. 2 220 kV transmission circuit
    - Sheffield–Staverton No. 3 220 kV transmission circuit
    - Sheffield–Staverton No. 4 220 kV transmission circuit

Figure 10 Transmission network before and after construction of Staverton Switching Station



## B.2.6 Staverton–Hampshire Hills 220 kV TL (SV-HH)

The scope of work described here for Stage 2 is indicative only and is subject to potential changes arising from the outcomes of Stage 1 of NWTD.

- Stage 1:
  - no material asset upgrades or construction works required.
- Stage 2:
  - new easement secured with a width of 50 m for the majority of the 60 km route between Staverton Switching Station and Hampshire Hills Switching Station
  - widening of some existing easements to 90 m
  - construction of 60 km of new double-circuit 220 kV transmission line, including 124 new steel transmission towers.

## B.2.7 Burnie–Hampshire Hills 220 kV TL (BU-HH)

The scope of work described here for Stage 2 is indicative only and is subject to potential changes arising from the outcomes of Stage 1 of NWTD.

- Stage 1:
  - no material asset upgrades or construction works required.
- Stage 2:
  - **Highclere to Hampshire Hills** (9 km) – widening of the existing easement by 25 m, resulting in a total width of 75 m
  - **East Cam to Highclere** (15 km) – new easement secured with a width of 50 m
  - **Burnie to East Cam** (5 km) – widening of the existing easement by 10 m, resulting in a total width of 90 m
  - construction of 29km of new double-circuit 220 kV transmission line, including 62 new steel transmission towers.

## B.3 Substations and switching stations

### B.3.1 Heybridge Switching Station

Construction of a new 220 kV switching station adjacent to the Marinus Link AC/DC converter station at Heybridge, utilising Gas Insulated Switchgear (GIS).

Heybridge Switching Station will be owned by TasNetworks and will be the interface between the Marinus Link Converter Station (MLCS) and TasNetworks' transmission network.

- Stage 1:
  - installation of nine (9) 220 kV GIS circuit breakers in a double-breaker configuration
  - single point of connection to MLCS via Converter Station #1 220kV transmission circuit
  - double-circuit connection to the transmission network via HB Spur East 220 kV transmission line.
- Stage 2:
  - additional point of connection to MLCS via Converter Station #2 220kV transmission circuit
  - additional double-circuit connection to the transmission network via HB Spur West 220kV transmission line
  - reconfiguration of GIS at Heybridge Switching Station to breaker-and-a-half.

### B.3.2 Palmerston Substation

Bay augmentations are required to support integration with PM–SH 220 kV transmission line that will be upgraded as part of Stage 1.

- Stage 1:
  - installation of six (6) live-tank 220 kV circuit breakers in a breaker-and-a-half configuration.
- Stage 2:
  - no material asset upgrades or construction works required.

### B.3.3 Sheffield Substation

Bay and busbar augmentations are required to support integration with PM–SH, SH–BU, and SH–FA 220 kV transmission lines as part of Stage 1, and in readiness for Stage 2 design temperature upgrades of the Sheffield–Wilmot, Sheffield–Cethana, Sheffield–Lemonthyme, and Sheffield–Fisher 220 kV transmission lines between Sheffield and Staverton stations.

- Stage 1:
  - extension of 220 kV buses A, B and E
  - installation of 14 live-tank 220 kV circuit breakers in a double-breaker configuration
  - bay relocations for Sheffield–Wilmot, Sheffield–Cethana and Sheffield–Lemonthyme 220 kV transmission lines.
- Stage 2:
  - no material asset upgrades or construction works required.

some minor bay works are likely to be required to support integration with transmission lines connecting to Staverton Substation (see 0

- Sheffield–Farrell 220 kV TL (SH-FA) and Mersey Forth Hydro Scheme).

### B.3.4 Burnie Substation

Bay and busbar augmentations are required to support integration with SH–BU 220 kV transmission line that will be upgraded as part of Stage 1, and in readiness for connection to BU–HH 220 kV transmission line that will be constructed as part of Stage 2.

- Stage 1:
  - extension of 220 kV buses A and B
  - installation of four (4) live-tank 220 kV circuit breakers in a double-breaker configuration
  - installation of one (1) live-tank 220 kV circuit breaker and one (1) live-tank 110 kV circuit breaker to facilitate commissioning of pre-existing T3 220/110 kV network transformer.
- Stage 2:
  - installation of two (2) live-tank 220kV circuit breakers to facilitate the connection of BU-HH 220 kV transmission line, to be configured as breaker-and-a-half (together with one of the 220 kV circuit breakers installed as part of Stage 1)
  - connection to the newly constructed BU–HH 220kV transmission line
  - reconfiguration of the connection to the SH–BU 220kV transmission line to breaker-and-a-half.

### B.3.5 Staverton Switching Station

The scope of work described here for Stage 2 is indicative only and is subject to potential changes arising from the outcomes of Stage 1 of NWTD.

- Stage 1:
  - no material asset upgrades or construction works required.
- Stage 2:
  - construction of a new 220 kV switching station at Staverton, splitting the existing Sheffield–Farrell, Sheffield–Wilmot, Sheffield–Cethana, Sheffield–Lemonthyme, and Sheffield–Fisher 220 kV transmission lines (additional information is provided in section 3), while also connecting to the new Staverton–Hampshire Hills 220 kV transmission line.

### B.3.6 Hampshire Hills Switching Station

The scope of work described here for Stage 2 is indicative only and is subject to potential changes arising from the outcomes of Stage 1 of NWTD.

- Stage 1:
  - no material asset upgrades or construction works required.
- Stage 2:
  - construction of a new 220 kV switching station at Hampshire Hills, connected to the broader north-west transmission network via two new double-circuit transmission lines constructed as part of Stage 2 (more information provided in section 3):
    - Burnie–Hampshire Hills 220 kV transmission line
    - Staverton–Hampshire Hills 220 kV transmission line

## B.4 RIT-T and ISP alignment

The ISP is developed biennially by AEMO in its role as the National Transmission Planner<sup>40</sup>. The ISP is a whole-of-system plan providing an integrated roadmap for the efficient development of the NEM, optimising value to end consumers by designing the lowest cost, secure and reliable energy system.

Regulatory Investment Tests (RITs) are an important input to the ISP, as their purpose is to promote efficient transmission investment in the national electricity market by promoting greater consistency, transparency and predictability in transmission investment decision making.

The RIT-T achieves this by identifying credible options, including a preferred option, for meeting an identified need that maximises net economic benefit for all those who produce, consume and transport electricity in the market.

It is incumbent on TasNetworks to demonstrate in its CPAs for NWTDD that:

- the Project aligns with the scope of the preferred option, as communicated in both the ISP and the RIT-T, and
- the project will be delivered as prudently and efficiently as possible in terms of both cost and timing.

### B.4.1 RIT-T alignment

In June 2021 the RIT-T process for Project Marinus concluded with the publication of the Project Assessment Conclusions Report (PACR) by TasNetworks.

The PACR concluded that 'Option D' delivered the highest net economic benefit compared to the other credible options considered.

*"Option D: A 1,500 MW HVDC interconnector, comprising two 750 MW symmetrical monopole HVDC interconnectors, plus associated AC network upgrades."*<sup>41</sup>

The PACR also elaborated on the scope of work for Option D.<sup>42</sup> This more detailed description is presented in Table 57, together with the corresponding section of this document showing where each required 'Development' is addressed by the Project.

In reviewing the information presented in Table 57 it can be seen that the Project scope aligns with the scope of the RIT-T preferred option.

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<sup>40</sup> National Electricity law – Section 49(2)

<sup>41</sup> Page 51: Marinus Link – RIT-T Project Assessment Conclusions Report (June 2021)

<sup>42</sup> Page 81: Marinus Link – RIT-T Project Assessment Conclusions Report (June 2021)

Table 56 Scope of work for the preferred RIT-T option

Investment type	Development	Evidence of inclusion in NWTD
DC assets	Two parallel 750 MW HVDC interconnectors using voltage source converter technology and symmetrical monopole configuration. The first 750 MW interconnector is targeted for commissioning, as early as 2027 and the second as early as 2029.	Out of Scope (to be addressed by Marinus Link)
	Converter stations located at Heybridge in Tasmania and the Hazelwood area in Victoria. HVDC transmission to use buried cable for the entire route.	Out of Scope (to be addressed by Marinus Link)
<b>AC network augmentations in Tasmania:</b>		
AC assets	Construction of a new 220 kV switching station at Heybridge adjacent to the converter station	Section B.3.1
	Establishment of a new 220 kV switching station at Staverton	Section B.3.5
	Construction of a new double-circuit 220 kV transmission line from Staverton to Heybridge via Hampshire and Burnie;	Sections B.2.3, B.2.4, B.2.6 and B.2.7.
	Construction of a new double-circuit 220 kV transmission line from Palmerston to Sheffield;	Section B.2.1
	Construction of a new double-circuit 220 kV transmission line from Heybridge to Sheffield and the decommissioning of the existing 220 kV single-circuit transmission line in this corridor.	Sections B.2.2, B.2.3, and B.2.4.
	Limited AC augmentations may be required in Victoria as there is sufficient transmission capacity to accommodate power flows to or from the interconnector.	Out of Scope (to be addressed by Marinus Link)
	Limited 500 kV connection assets are required to connect the HVDC converter station to the Hazelwood area.	Out of Scope (to be addressed by Marinus Link)

## B.4.2 ISP alignment

In June 2024 AEMO published the 2024 ISP, confirming Project Marinus as a single actionable ISP project without decision rules.

The ISP also describes the required network capacity for Project Marinus, being:

- Stage 1 – 750 MW in both directions
- Stage 2 – 750 MW in both directions

Appendix 5 of the 2024 ISP provides a description of the credible options that constitute the optimal development path for Stage 1 (Cable 1) and Stage 2 (Cable 2) of Project Marinus. The scope of works described in the ISP for each stage is presented in Table 58, together with the corresponding section of this document showing where each required ‘Development’ is addressed by the Project.

In reviewing the information presented in in Table 58, it can be seen that the Project scope aligns with the scope described in the ISP.

**Table 57 Scope of work as described in the ISP**

Investment type	Development	Evidence of inclusion in NWTD
DC assets	<b>Stage 1</b> <ul style="list-style-type: none"> <li>• A 750 MW monopole HVDC link between Burnie area in Tasmania and Hazelwood area in Victoria</li> <li>• A new 750 MW HVDC monopole converter station in Burnie area</li> <li>• A new 750 MW HVDC monopole converter station in Hazelwood area</li> </ul>	Out of Scope (to be addressed by Marinus Link)
	<b>Stage 2</b> <ul style="list-style-type: none"> <li>• Additional 750 MW monopole HVDC link between Burnie area in Tasmania and Hazelwood area in Victoria</li> <li>• Additional new 750 MW HVDC monopole converter station in Burnie area</li> <li>• Additional new 750 MW HVDC monopole converter station in Hazelwood area</li> </ul>	Out of Scope (to be addressed by Marinus Link)
AC assets	<b>Stage 1</b> <ul style="list-style-type: none"> <li>• A new 220 kV switching station at Heybridge adjacent to the converter station</li> </ul>	Section B.3.1
	<ul style="list-style-type: none"> <li>• A new double-circuit 220 kV transmission line between Sheffield, Heybridge and Burnie</li> </ul>	Sections B.2.2, B.2.3 and B.2.4



Investment type	Development	Evidence of inclusion in NWTD
	<ul style="list-style-type: none"> <li>A new 220 kV double-circuit line from Palmerston to Sheffield with decommissioning of the existing single-circuit line</li> </ul>	Section B.2.1
	<ul style="list-style-type: none"> <li>Decommission existing Sheffield – Burnie 220 kV line</li> </ul>	Section B.2.2
	<ul style="list-style-type: none"> <li>(Victoria) A new 500 kV connection from converter station in Hazelwood area</li> </ul>	Out of Scope (to be addressed by Marinus Link)
	<b>Stage 2</b>	
	<ul style="list-style-type: none"> <li>A new 220 kV switching station at Staverton</li> </ul>	Section B.3.5
	<ul style="list-style-type: none"> <li>A new double-circuit 220 kV transmission line from Staverton to Burnie via Hampshire</li> </ul>	Sections B.2.6 and B.2.7
	<ul style="list-style-type: none"> <li>Cut-in both Sheffield-Mersey Forth double-circuit 220 kV lines at Staverton</li> </ul>	Sections B.2.5 and B.3.5
	<ul style="list-style-type: none"> <li>Capacity increase of the four Sheffield–Staverton 220 kV transmission circuits</li> </ul>	Section B.2.5
	<ul style="list-style-type: none"> <li>(Victoria) A new 500 kV connection from converter station in Hazelwood area</li> </ul>	Out of Scope (to be addressed by Marinus Link)

# Appendix C – Glossary

Abbreviation/Acronym	Definition
<b>2024 ISP</b>	The Australian Energy Market Operator's Final 2024 Integrated System Plan
<b>AACE</b>	Association for the Advancement of Cost Engineering International
<b>AEMO</b>	Australian Energy Market Operator
<b>AEMC</b>	Australian Energy Market Commission
<b>AER</b>	Australian Energy Regulator
<b>Application</b>	The Contingent Project Application for the North West Transmission Developments
<b>BAU</b>	Business as usual
<b>Capex</b>	Capital expenditure
<b>CBSP</b>	Community benefit sharing program
<b>CEFC</b>	Clean Energy Finance Corporation
<b>CEMP</b>	Construction environmental management plan
<b>CEO</b>	Chief Executive Officer
<b>CESS</b>	Capital Expenditure Sharing Scheme
<b>CPA</b>	Contingent project application
<b>CPA 1</b>	TasNetworks' Stage 1 contingent project application for the NWTD early works
<b>CPA 2</b>	TasNetworks' Stage 1 contingent project application for the NWTD construction and delivery
<b>DA</b>	Development Approval
<b>D&amp;A</b>	Design and Approvals
<b>D&amp;C</b>	Design and Construction

Abbreviation/Acronym	Definition
<b>DCCEEW</b>	Department of Climate Change, Energy the Environment and Water
<b>EAR</b>	Environmental Assessment Report
<b>ECI</b>	Early contractor involvement
<b>EIS</b>	Environmental Impact Statement
<b>ELT</b>	Executive Leadership Team
<b>EOI</b>	Expressions of Interest
<b>EMF</b>	Electromagnetic field
<b>EPA</b>	Environmental Protection Authority
<b>EPBC Act</b>	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
<b>EPC</b>	Engineering, Procurement and Construction
<b>ERP</b>	Enterprise resource planning
<b>ESIA</b>	<i>Electricity Supply Industry Act 1995 (Tas)</i>
<b>ESI regulations</b>	<i>Electricity Supply Industry (Network Planning Requirements) Regulation 2018</i>
<b>FID</b>	Final investment decision
<b>FMP</b>	Functional management plans
<b>FPA</b>	Forest Practices Authority
<b>FTE</b>	Full time equivalent
<b>GIS</b>	Gas insulated switchgear
<b>GMP</b>	Guaranteed maximum price
<b>GWh</b>	Gigawatt Hour
<b>HAZOP</b>	Hazard and operability
<b>HSE</b>	Health, safety and environment
<b>HSSE</b>	Health, Safety, Security and Environment

Abbreviation/Acronym	Definition
<b>HVAC</b>	High voltage alternative current
<b>HVDC</b>	High voltage direct current
<b>IFC</b>	Issued for construction
<b>IGC</b>	Investment Governance Committee
<b>IPCS</b>	Integrated Project Control System
<b>ISP</b>	Integrated System Plan
<b>ISC</b>	Infrastructure Sustainability Council
<b>km</b>	Kilometre
<b>kV</b>	Kilovolt
<b>LAA</b>	<i>Land Acquisition Act 1993 (Tas)</i>
<b>LEOA</b>	Legislation and Easement Option Agreements
<b>LLE</b>	Long lead equipment
<b>LUPAA</b>	<i>Land Use Planning and Approvals Act 1993</i>
<b>M</b>	Millions
<b>m</b>	Metre
<b>MAR</b>	Maximum Allowed Revenue
<b>MIDAA</b>	<i>Major Infrastructure Development Approvals Act 1999 (Tas)</i>
<b>MLCS</b>	Marinus Link Converter Station
<b>MLFA</b>	Master loan facility agreements
<b>MLPL</b>	Marinus Link Pty Ltd
<b>MNES</b>	Matters of national environmental significance
<b>MOU</b>	Memorandum of Understanding
<b>MW</b>	Megawatt
<b>MWh</b>	Megawatt Hour

Abbreviation/Acronym	Definition
<b>NEM</b>	National Electricity Market
<b>NER (Rules)</b>	National Electricity Rules
<b>NPV</b>	Net present value
<b>NWTD</b>	North West Transmission Developments
<b>ODP</b>	Optimal Development Path
<b>OEMP</b>	Operational environmental management plan
<b>Opex</b>	Operating expenditure
<b>PACR</b>	Project Assessment Conclusions Report
<b>PEP</b>	Project execution plan
<b>PMO</b>	Project Management Office
<b>PPR</b>	Principal's Project Requirements
<b>Project</b>	North West Transmission Developments
<b>PTRM</b>	Post-Tax Revenue Model
<b>RAB</b>	Regulatory Asset Base
<b>RFP</b>	Request for proposal
<b>RFM</b>	Roll Forward Model
<b>RIT</b>	Regulatory Investment Test
<b>RIT-T</b>	Regulatory Investment Test for Transmission
<b>ROI</b>	Registration of Interest
<b>SBP</b>	Strategic Benefit Payments
<b>SLG</b>	Stakeholder Liaison Group
<b>TAB</b>	Tax Asset Base
<b>TASCAT</b>	Tasmanian Civil and Administrative Tribunal
<b>TasNetworks</b>	TasNetworks Pty Ltd

Abbreviation/Acronym	Definition
<b>TPC</b>	Tasmanian Planning Commission
<b>TFS</b>	Technical Forest Service
<b>TREAP</b>	Tasmanian Renewable Energy Action Plan
<b>TRET</b>	Tasmanian Renewable Energy Target
<b>WACC</b>	Weighted average cost of capital
<b>WUC</b>	Work under contract



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North West Transmission Developments Stage 1 CPA 1 Early Works  
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