# North West Transmission Developments Stage 1 (Construction)

Contingent Project Application for Stage 1 Construction

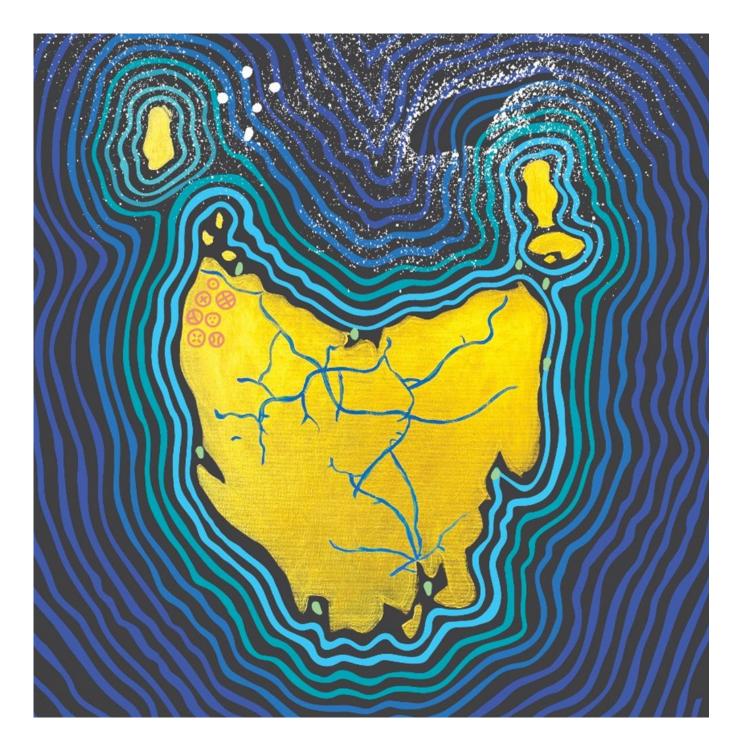
Principal Application document

31 October 2025

Official



Version	Date	Author initials
V 1.0	31/10/2025	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.

## **Contents**

A me	A message from our CEO			
Exec	cutive Summary	7		
This	Application	7		
The	Project	7		
Worl	ks since CPA-1	8		
Scop	be of Stage 1 construction and delivery activities	8		
Capi	tal expenditure	8		
Ope	rating expenditure	9		
Incre	emental revenue requirement and customer bill impact	10		
Com	nmunity and stakeholder engagement	11		
1	This Project and this Application	12		
1.1	The Project	12		
1.2	Early works activities	14		
1.3	This Application	15		
1.4	Structure of this document	17		
1.5	Structure of the Application	17		
2	Regulatory requirements	19		
2.1	Regulatory requirements	19		
2.2	Trigger events	20		
2.3	AEMO feedback loop confirmation	21		
2.4	Material change in circumstances assessment	21		
2.5	Project timing	22		
2.6	Capex threshold	25		
2.7	Application of the Capital Expenditure Sharing Scheme	25		
2.8	Government support	32		
3	Community and stakeholder engagement	33		
3.1	Commitment to sharing benefits	34		
3.2	Engagement activities	37		
3.3	How engagement has shaped the project	42		
4	Capex forecast	43		
4.1	Stage 1 construction and delivery capex	43		



4.2	Stage 1 construction and delivery activities	44
4.3	Stage 1 construction and delivery capex is prudent and efficient	45
5	Opex forecast	46
6	Forecast revenue and impact on customers' bills	47
7	Guide to compliance	50
Appe	ndix A – Revenue application	53
A.1	WACC	54
A.2	Asset lives	55
A.3	Return on capital	55
A.4	Regulatory depreciation	56
A.5	Tax allowance	58
A.6	Debt and equity raising costs	58
A.7	Opex allowance	59
A.8	Revenue adjustment	59
A.9	Incremental revenue requirements for each year to end of period	59
A.10	Amended MAR (smoothed revenue)	61
Appe	ndix B – Project scope	62
B.1	NWTD technical scope	62
B.2	Transmission lines	65
B.3	Substations and switching stations	69
B.4	RIT-T and ISP alignment	72
Appe	ndix C – Glossary	76

Figures and tables may not add due to rounding

# A message from our CEO

I am pleased to present the contingent project application (CPA) for the construction and delivery phase of Stage 1 of the North West Transmission Developments (NWTD or Project).

The construction of Stage 1 of the NWTD involves 130 km of new overhead transmission lines in North-West Tasmania. The first stage will link Cressy, Sheffield and Burnie, covering a diverse range of communities and land uses.

The first stage of the NWTD will facilitate the efficient connection and operation of Stage 1 of Marinus Link, which includes a new 750-megawatt (MW) high voltage direct current undersea cable linking Tasmania and Victoria. Together, the two projects will form Stage 1 of Project Marinus.

Project Marinus will support Tasmania's increasing energy demands and strengthen our energy security for decades to come, providing greater access to mainland generation and unlocking new renewable energy developments within Tasmania. Project Marinus will support the national transition to a clean energy future, while generating significant benefits and opportunities for Tasmanian communities and businesses.

The Australian Energy Market Operator's (AEMO) Integrated System Plan (ISP) outlines Project Marinus as an actionable project in the optimal development path, with the NWTD a critical grid investment that is needed urgently. AEMO's 2024 ISP (2024 ISP), along with their feedback loop confirmation, confirms that the timing of Cable 1 is by June 2030 and commencing construction and delivery of Stage 1 of the NWTD in early 2026 will ensure the Tasmanian transmission system is ready for the connection of Marinus Link.

The Project Marinus Stage 1 final investment decision (FID) was reached by TasNetworks and Marinus Link's shareholders in July 2025. Announced as part of the FID, the Australian Government has also committed to a \$346 million grant for TasNetworks to contribute to offsetting the increase in Tasmanian's transmission network service charges due to Stage 1 of Project Marinus. TasNetworks is on-track to deliver Stage 1 of the NWTD efficiently and cost-effectively and this new contribution from the Australian Government will save Tasmanians even more.

As one of Tasmania's largest infrastructure projects, the NWTD relies on maintaining community support, keeping stakeholders informed, minimising disruptions, and maximising social value and project benefits during the construction phase. Since 2019, TasNetworks has undertaken extensive and ongoing engagement in relation to the NWTD with a broad range of stakeholders. The feedback we have gathered has been vital in helping us to understand what is important to the local community and balancing the best outcomes for the environment, landholders, customers, businesses and the wider community in delivering the NWTD. Maintaining social licence through the construction phase will be crucial to the successful delivery of the Project and our broader role in the ongoing renewable energy transition.

TasNetworks is further committed to achieving social licence within communities by being a proud Energy Charter signatory and publicly disclosing, on an annual basis, how we deliver against the Energy Charter principles. TasNetworks is also striving to deliver environmentally sustainable outcomes for all phases of the Project under the Infrastructure Sustainability Council's (ISC) Rating Scheme. The NWTD is one of the first Tasmanian projects to register and pursue an ISC Rating, presenting an opportunity for TasNetworks to lead the way in sustainability practices in Tasmania.

Choosing to stage the cost recovery process by submitting multiple CPAs for the NWTD has helped us determine construction and delivery costs with a higher degree of accuracy. Progressing the early works activities will ensure construction and delivery can commence in early 2026 and provides us with certainty



that we can recover the prudent and efficient costs. In this way, we can provide customers with more certainty of the expected costs of the construction and delivery of the NWTD.

To allow us to proceed with the construction and delivery of Stage 1 of the NWTD, we request approval from the Australian Energy Regulator for the incremental revenue commensurate with the capital and operating expenditure we have proposed in this CPA.

We look forward to the key role North-West Tasmania can play in delivering reliable and clean energy to Tasmania and the broader National Electricity Market.

Dr Seán Mc Goldrick

Chief Executive Officer

# **Executive Summary**

## This Application

Tasmanian Networks Pty Ltd (**TasNetworks**) is pleased to submit this contingent project application (Application) for the NWTD. The NWTD is a component of Project Marinus, which is jointly delivered by TasNetworks and Marinus Link Pty Ltd (**MLPL**). This Application sets out TasNetworks' proposed expenditure, the associated incremental revenue requirement and the indicative customer bill impacts for the construction and delivery of Stage 1 of the Project.

This Application seeks the Australian Energy Regulator's (AER) approval of construction and delivery costs for Stage 1 of the Project. Undertaking these activities now is necessary for TasNetworks to support delivery of Project Marinus Stage 1 and Marinus Link's connection to the Tasmanian transmission system by June 2030.

## 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 and the optimal delivery timing of Stage 1 by June 2030.<sup>1</sup>

Project Marinus will provide significant value to the National Electricity Market (**NEM**) by enabling the flow of electricity in both directions between Tasmania and Victoria. This will deliver reliable and clean energy for customers and provide vital dispatchable capacity to firm intermittent renewable generation as coal plants close. 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 consists of 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); and
- the 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.

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 FID for Cable 1 (Government's decision to stage the project<sup>2</sup> or project staging).

This Application relates to construction and delivery for NWTD 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>3</sup>, referred to as the 'coastal' route. This will support Cable 1.



<sup>&</sup>lt;sup>1</sup> AEMO, Final 2024 Integrated system Plan (2024 ISP), p.62 (in service timing).

<sup>&</sup>lt;sup>2</sup> Department of Climate Change, Energy, the Environment and Water, Joint media release: Investing in the future of Tasmanian energy with Marinus Link', 3 September 2023.

<sup>&</sup>lt;sup>3</sup> Heybridge Spur West 220 kV transmission line is part of Stage 2.

#### Works since CPA-1

Since submitting our Stage 1 early works contingent project application (**CPA-1**) in October 2024, we have continued to progress early works activities. This has included:

- finalising the procurement of our engineering, procurement and construction contractor and engaging GenusPlus Group Ltd (referred to as the **Principal Contractor** or **Genus** herein);
- undertaking early contractor involvement (ECI) activities with Genus, including progressing design works and the purchase of long lead time items (LLI) to minimise delays to construction;
- securing concessional finance from the Clean Energy Finance Corporation (CEFC) for early works costs and continuing to progress negotiations of the long term facility that will include construction costs;
- progressing the required regulatory, environmental and planning approvals (including AER approval of CPA-1 and the submission of this Application);
- continuing to establish land access and easement acquisition; and
- continuing to engage meaningfully and constructively with the community, landholders and other stakeholders.

## Scope of Stage 1 construction and delivery activities

TasNetworks will commence construction and delivery following the completion of early works activities (expected in February 2026). Construction and delivery will largely involve direct capital expenditure (capex) activities, which will include land and easement acquisition, and construction and delivery works undertaken by the Principal Contractor to:

- upgrade the Palmerston-Sheffield and Sheffield-Burnie 220 kV transmission lines, and the Palmerston, Sheffield and Burnie substations; and
- construct the new Heybridge Spur East 220 kV transmission line and the new 220 kV Heybridge Switching Station.

Indirect capex activities and Owners Team labour will support the Principal Contractor in their delivery of the works to ensure completion of all construction activities by 2030.

## Capital expenditure

Table 1 shows that TasNetworks' forecast NWTD Stage 1 construction and delivery capex will be \$970.90 million over the period 1 July 2025 to 30 June 2030. 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.

Direct construction capex of \$632.43 million is the single largest category of capex, comprising over 65 per cent of the total capex. This is driven by Principal Contractor costs, comprising transmission lines and substations costs, along with all other costs the Principal Contractor will incur to complete construction of the Project by 2030. This delivery date will provide sufficient time for the Marinus Link integration (including inter-network testing).

This capex is incremental to the capex approved by the AER in its 2024-29 Revenue Determination and its CPA-1 decision for TasNetworks. This is because it relates to activities that are additional to normal



business activities, were not included in CPA-1 and would not be incurred other than for undertaking construction and delivery works for the Project.

Table 1 Construction and delivery capex by category (\$ million, real 2023-24)

Capex category	2025-26	2026-27	2027-28	2028-29	2029-30	Total	% of total
Direct construction	68.99	289.28	165.53	106.70	1.92	632.43	65.14
Project risks	20.33	16.91	16.91	16.91	60.46	131.52	13.55
Land and property	42.87	5.96	3.32	16.77	16.22	85.14	8.77
Commercial and procurement	3.58	2.61	2.57	2.58	0.65	12.00	1.24
Project execution	5.47	12.49	12.16	11.78	3.83	45.74	4.71
Project management	10.01	11.87	11.71	11.50	3.11	48.20	4.96
Planning and statutory assessment	0.24	0.15	0.15	0.15	0.01	0.71	0.07
Community and stakeholder engagement	0.53	3.71	5.41	5.42	0.08	15.16	1.56
Total capex	152.03	342.98	217.76	171.83	86.30	970.90	100.00

Equity raising costs of \$6.68 million are also forecast (calculated using the AER's Post-Tax Revenue Model (PTRM)). Including equity raising costs, the total forecast capex is \$977.59 million.

## Operating expenditure

Table 2 shows that TasNetworks' forecast NWTD Stage 1 construction and delivery operating expenditure (opex) will be \$0.82 million over the period 1 July 2025 to 30 June 2029.

This opex is incremental to the opex approved by the AER in its 2024-29 Revenue Determination and its CPA-1 decision for TasNetworks. This is because it relates to activities that are additional to normal business activities, were not included in CPA-1 and would not be incurred other than for undertaking construction and delivery works for the Project.

The commissioning of the assets coincides with the end of the 2024-29 regulatory period. Therefore, incremental opex costs arising in the current regulatory control period are not expected except for debt raising costs.

Table 2 Incremental opex by category (\$ million, real 2023-24)

Opex category	2025-26	2026-27	2027-28	2028-29	Total	% of total
Debt raising costs	0.00	0.09	0.29	0.43	0.82	100.00
Total opex	0.00	0.09	0.29	0.43	0.82	100.00

## Incremental revenue requirement and customer bill impact

Based on the Stage 1 construction and delivery 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 construction works is \$53.96 million (\$ nominal) over the 2024-29 regulatory period, as shown in Table 3.

TasNetworks is progressing a concessional finance arrangement with the CEFC in relation to the capex costs for Stage 1 of the NWTD, noting an agreement is already in place for the Stage 1 early works component which will be refinanced into a complete Stage 1 agreement once negotiations are finalised. The revenue outcome in this Application has been forecast without reference to concessional finance. When a concessional finance arrangement is agreed that covers all Stage 1 works, TasNetworks will amend our revenue in accordance with the concessional finance agreement, which will reduce the impacts on customer charges.

Based on the forecast revenue adjustment and an indicative range of concessional finance outcomes, the Stage 1 construction and delivery results in a minor impact (less than +/- one per cent per annum) for both typical residential and small business network charges for the final two years of the regulatory control period.

Table 3 Incremental MAR (smoothed) (\$ million, nominal)

Revenue (smoothed)	2024-25	2025-26	2026-27	2027-28	2028-29	Total
2024-29 AER Determination (updated for NWTD early works and 2025-26 Return on Debt (RoD)) <sup>4</sup>	163.38	172.96	183.10	193.84	205.21	918.50
Impact of Stage 1 (construction)	-	-	8.21	17.78	27.97	53.96
Revised smoothed revenue requirement	163.38	172.96	191.31	211.62	233.17	972.45

<sup>&</sup>lt;sup>4</sup> AER, TasNetworks Transmission 2024-29 – Final Decision – PTRM -2025-26 Return on debt update – March 2025.



## Community and stakeholder engagement

The NWTD supports increases to Tasmania's clean energy production, aligning with TasNetworks' focus on delivering safe, reliable and affordable power, while embracing change in customer and community expectations driven by the renewable energy transition.

Community engagement is critical to gain and maintain social licence needed to deliver the NWTD. TasNetworks recognises it has a responsibility to minimise the impacts that the project may have on communities and work towards shared value outcomes for stakeholders and the North-West region.

Since 2019, we have hosted more than 60 in-person and online community information events about the NWTD, held and attended more than 23 independently chaired NWTD Stakeholder Liaison Group (SLG) meetings, briefed councils affected by the NWTD over 40 times and shared over 40 regular project newsletters with subscribers.

Recognising the role community acceptance and social licence play in large energy infrastructure projects, we have developed initiatives to build project support, leveraged national initiatives such as the Energy Charter's Better Practice Social Licence Guideline, collaborated with other transmission network service providers and adopted contemporary approaches to engagement.

Construction of the NWTD will mark the commencement of the NWTD Community Benefits Sharing Program (CBSP), a \$10 million regional fund that will be administered by an Independent Community Assessment Panel (ICAP). The framework for this approach to community benefits sharing was co-designed by a Youth Panel and stakeholders to ensure it delivers benefits that are most valued by the local community.

Further recognising social and economic opportunities arising from Project Marinus and renewable energy developments in Tasmania's North-West, the co-designed Regional Economic Development Plan will continue to support industry collaboration and action through the construction phase.

TasNetworks has also engaged closely with customers and stakeholders to develop a Strategic Benefit Payment (SBP) framework for landholders hosting electricity transmission infrastructure associated with the NWTD. The CBP will commence once the transmission assets are commissioned, with costs forecast to be incurred in the next regulatory period.



# 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>5</sup> reconfirms the actionable status of Project Marinus.

Project Marinus will provide significant value to the NEM by enabling the flow of electricity in both directions between Tasmania and Victoria, delivering reliable and clean energy for customers. It will provide much needed firming capacity to support the growth in renewable generation and electricity demand that is essential for Australia to meet its emission reduction targets.

#### 1.1.1 The evolution to a staged actionable ISP project

Project Marinus was first identified as an actionable project in AEMO's 2020 ISP.<sup>6</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>7</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 October 2022, the State and Federal Governments provided access to concessional financing<sup>8</sup> under the Rewiring the Nation plan to progress Project Marinus and reduce the annual costs of the Project to electricity customers.<sup>9</sup>

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 (Government's decision to stage the project or project staging).

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; and

<sup>&</sup>lt;sup>9</sup> Media Release, Rewiring the nation plugs in marinus link and Tasmanian jobs, October 2022.



<sup>&</sup>lt;sup>5</sup> AEMO, 2024 ISP, June 2024 p.14.

<sup>&</sup>lt;sup>6</sup> AEMO, 2020 ISP, July 2020 p.15. AEMO's references to Marinus Link are references to Project Marinus.

<sup>&</sup>lt;sup>7</sup> TasNetworks, Regulatory Investment Test for Transmission (RIT-T) Project Assessment Conclusions Report (PACR), June 2021.

<sup>&</sup>lt;sup>8</sup> Concessional financing is subject to negotiation and agreement with the Clean Energy Finance Corporation.

• the increase in the forecast total costs of delivering Project Marinus. 10

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. 11

In May 2025, the Board of MLPL and the Board of TasNetworks made a FID recommendation to the shareholders of each company (i.e. MLPL Board to MLPL' shareholders and TasNetworks Board to TasNetworks' shareholders).

In July 2025, MLPL published another RIT-T update to assess whether the preferred option is unchanged from the PACR due an increase in the forecast total costs of delivering Project Marinus following the completion of competitive tender processes for several elements of Project Marinus (including the HVDC cable system and converter station equipment for Marinus Link, and the engineering, procurement and construction (EPC) contractor for the NWTD).<sup>12</sup>

The RIT-T update confirmed that, notwithstanding these cost increases, 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 July 2025, MLPL and TasNetworks submitted a feedback loop request to AEMO, requesting a feedback loop assessment of Project Marinus. As part of this request, MLPL and TasNetworks confirmed that the proposed timing of Stage 2 is delayed by two years (to 2034) relative to the 2024 ISP.

In August 2025, the Tasmanian Government (as shareholders of TasNetworks and partial shareholders of MLPL) made a positive FID on Stage 1 of Project Marinus. The Australian and Victorian Governments (as other shareholders of MLPL) also made a positive FID on Stage 1 of Marinus Link.

In August 2025, AEMO confirmed that Project Marinus addresses the relevant identified need specified, and aligns with the optimal development path (**ODP**) referred to in the 2024 ISP and the total cost of the project does not change the status of the actionable ISP project as part of the ODP specified in the 2024 ISP.<sup>13</sup>

#### 1.1.2 Project Marinus delivery

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).<sup>14</sup>

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.

<sup>&</sup>lt;sup>14</sup> As part of its FID on Project Marinus, the Tasmanian Government announced changes to its ownership share of MLPL.



<sup>&</sup>lt;sup>10</sup> MLPL, Project Marinus RIT-T update - April 2024, 16 April 2024.

<sup>&</sup>lt;sup>11</sup> AEMO, 2024 ISP, June 2024, p.62 (in service timing).

<sup>&</sup>lt;sup>12</sup> MLPL, Project Marinus RIT-T Update - July 2025, 11 July 2025.

<sup>&</sup>lt;sup>13</sup> AEMO, ISP Feedback Loop Notice - Project Marinus, 15 August 2025.

TasNetworks is responsible for the NWTD component of Project Marinus. 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 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 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.

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 ODP.

## 1.2 Early works activities

In its decision on CPA-1, the AER approved NWTD early works capex of \$151.92 million (real 2023-24). Our construction and delivery forecast expenditure, which reflects the bulk of the Project's costs, is informed by the outcomes of our early works activities, which have been progressed in line with the AER's decision on our CPA-1. <sup>15</sup>

Table 4 provides a summary of the total expenditure previously approved by the AER in CPA-1 and the actual/forecast costs incurred through to 2025-26. The actual for 2024-25 is lower than the CPA-1 approved forecast due to delays in commencing the purchase of LLI. These LLI will instead be purchased in 2025-26 ahead of construction commencement.

The delay in ordering the LLI is primarily due to prevailing market conditions and the finalisation of the Principal Contractor construction schedule. The Principal Contractor has adopted a procurement approach that avoids ordering materials earlier than required for site delivery, ensuring alignment with the construction sequence and reducing risks associated with early storage or handling.

In addition, market conditions have improved since the time of tender, allowing TasNetworks to defer procurement while maintaining cost competitiveness. This approach also mitigates the risk of warranty periods expiring before installation and commissioning. The procurement of LLI will still occur during the early works phase and the delay is not expected to impact construction readiness or the project's practical completion timeline.

Table 4 CPA-1 total expenditure and actual costs (\$ million, real 2023-24)

	Pre-2024-25 Actual	2024-25 Forecast/Actual <sup>16</sup>	2025-26 Forecast	Total
Approved in CPA-1	37.99	64.74	49.20	151.92
Current forecast	37.99	26.98	86.96	151.92

<sup>&</sup>lt;sup>16</sup> CPA-1 reflected a forecast for this year whilst the current forecast reflects actuals.



<sup>&</sup>lt;sup>15</sup> AER, NWTD Stage 1 early works decision, March 2025.

The approval of CPA-1 has enabled us to continue to progress a range of early works activities including:

- Commercial and procurement undertaking commercial activities including finance and budget management and reporting, finalising procurement of specialist service providers and ensuring manufacturing capacity of suppliers.
- Project development undertaking 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 have included ECI activities including site investigations, design, pre-construction development activities, and progressing LLI purchases (which will be done through early works agreements) to resolve risk and pricing uncertainty, and drive cost and design efficiency.
- **Project management** establishing sound governance, risk and project management processes including project control and management systems, scheduling, risk and cost estimating and forecasting to ensure the timely and efficient delivery of the Project.
- Land and property continuing to establish 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, and submitting the permit application to the Tasmanian Planning Commission (TPC).
- Community and stakeholder engagement continuing to engage with the community, landholders and other stakeholders to build knowledge and support for the Project and maintain social licence. This is critical to minimise the risk and costs of project delays.
- Regulatory approvals and other support development and submission of this Application to the AER and submission of a feedback loop request to AEMO, with confirmation provided in August 2025.

As we continue to finalise the early works phase of the Project over the next several months where the project design will be finalised, remaining internal labour onboarded, procurement of LLI completed, land access arrangements finalised and final approvals obtained, we will be ready to commence delivery of the construction phase of the Project in March 2026. This will ensure we are well positioned with MLPL to ensure energisation of Marinus Link in 2030 and to allow MLPL to commence commercial operations in 2031.

As a result of early works activities, our construction and delivery capex forecast is in line with an Association for the Advancement of Cost Engineering International (AACE) class 2 cost estimate.

## 1.3 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 we can recover the efficient costs of construction and delivery activities for NWTD Stage 1.<sup>17</sup>

There are eight key categories of construction and delivery capex. The activities and scope of capex within these categories include:

• **Direct construction** – works undertaken by the Principal Contractor to upgrade the Palmerston-Sheffield and Sheffield-Burnie 220 kV transmission lines, upgrade the Palmerston, Sheffield



<sup>&</sup>lt;sup>17</sup> In accordance with clause 6A.8.2 of the NER.

and Burnie substations, construct the new Heybridge Spur East 220 kV transmission line and construct the new 220 kV Heybridge switching station.

- **Project risks** the P50 risk cost quantum (also known as risk and contingency) which is to allow for items, conditions, or events for which the state, occurrence, or effect is uncertain but experience shows will likely result in additional costs.
- Land and property completing the acquisition of new easements, securing use of brake and winch sites and laydown areas, and providing ongoing landholder management support.
- Commercial and procurement undertaking commercial activities including finance and budget management and reporting, managing the EPC contract and other existing supplier contracts, and procuring additional specialist service providers as required.
- **Project execution** undertaking direct management of the Principal Contractor and monitoring and supporting the Principal Contractor in their delivery of the Project.
- **Project management** overseeing project governance and managing and coordinating the Project's activities through project control and management systems, scheduling, risk and cost estimating and forecasting to ensure the timely and efficient delivery of the Project.
- **Planning and statutory assessment** ensuring compliance with planning approvals and other permits, reporting to the TPC and overseeing eagle mortality commitments.
- Community and stakeholder engagement continuing to engage with the community, landholders and other stakeholders to maintain community support, keep stakeholders informed, minimise disruptions, and maximise social value and project benefits during the construction phase. This will include implementation of the CBSP, which has been developed in a way that ensures it delivers benefits that are most valued by the local community.

Undertaking the construction and delivery activities noted above (commencing from March 2026) will ensure successful delivery of the Project at the lowest sustainable cost and that the Tasmanian transmission system is ready for the connection of Marinus Link.

This Application focuses solely on the NWTD Stage 1 construction and delivery 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>18</sup>

The information contained in this Application is provided solely to support this Application and assist the AER in its assessment and determination of the same. It is not intended to be relied on by any other party or for any other purpose. No guarantees are made about its accuracy or completeness beyond its use in this Application.

Powering a

TasNetworks Bright Future

<sup>&</sup>lt;sup>18</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 submitted its Stage 1 Part B (Construction) Revenue Proposal to the AER in December 2024 (covering the HVDC cable system and converter station equipment) and its Revised Proposal in July 2025 (covering the balance of works). At the time of writing, the AER has published its initial Draft Decision, with its supplementary Draft Decision and Final Decision expected over the coming months.

#### 1.4 Structure of this document

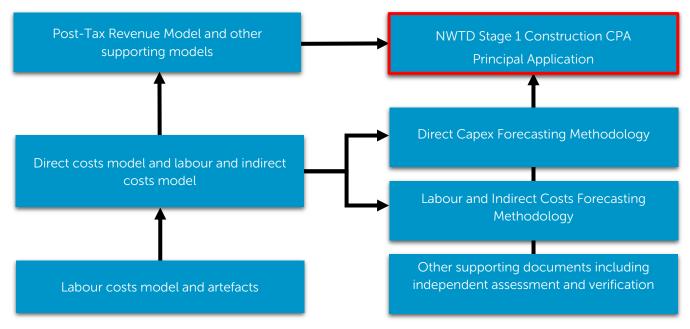
This document is structured as follows:

- Section 1 describes the Project and this Application.
- Section 2 sets out the regulatory requirements for this Application.
- Section 3 describes the community and stakeholder engagement activities undertaken.
- Section 4 sets out the forecast capex for Stage 1 construction and delivery.
- Section 5 sets out the forecast opex for Stage 1 construction and delivery.
- Section 6 sets out forecast incremental revenue for the Stage 1 construction and delivery activities and the indicative customer bill impact.
- Section 7 sets out how the National Electricity Rules (**NER**) and AER Guidance note requirements have been addressed.
- Appendix A Revenue application sets out the incremental revenue forecast for the early works costs for NWTD 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

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

Figure 1 Document structure for NWTD Stage 1 Application for construction and delivery



This document should be read in conjunction with GHD Advisory's (**GHD**) independent assessment and verification of the capex for construction and delivery and other supporting documents. The attachments and models are summarised in Table 5.



Table 5 Documents and models comprising this Application (excluding other supporting documents)

Document /model number	Name	Content/purpose
A.1	North West Transmission Developments Stage 1 (Construction) – Principal Application	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 Stage 1 construction and delivery costs.
A.2	Direct Capex Forecasting Methodology	Explains and justifies our Stage 1 construction and delivery direct capex. This includes direct construction costs, Owners risk costs and activities directly associated with the acquisition of land and easements.
A.3	Labour and Indirect Costs Forecasting Methodology	Explains and justifies our labour and indirect support costs required to deliver the Project. This includes costs under the following workstreams: land and property; commercial and procurement; project execution; project management; planning and statutory assessment; and community and stakeholder engagement.
A.4	GHD Advisory North West Transmission Developments CPA-2 – Independent Verification and Assessment	An independent assessment of the scope, procurement process and forecast capex for Stage 1 construction and delivery.
Capex mode	els	
A.5	Direct costs model	Builds up the direct construction costs, Owners risk costs and land acquisition direct costs.
A.6	Labour and indirect costs model	Builds up the indirect costs. Also notes the labour costs from the labour costs model and calculates labour escalation so the total costs in this model reconcile with the Labour and Indirect Costs Forecasting Methodology.
PTRM and o	ther regulatory models	
A.1A	NWTD Stage 1 (construction) – 2024-29 – PTRM	Demonstrates the calculations of our incremental revenue requirements and MAR for the 2024-29 regulatory period, based on Stage 1 construction and delivery costs.

In addition, we have provided the AER with other supporting documents that are referenced within the documents listed in Table 5.

# 2 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; and
- the AER's Guidance Note for the Regulation of actionable ISP projects.

The key requirements are outlined below. Section 7 of this Application shows how we have met these requirements.

## 2.1 Regulatory requirements

Clause 6A.8.2 of the NER includes 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 2024-29 regulatory control period;
- to amend the revenue determination that applies to TasNetworks in respect of an actionable ISP project for which the trigger event has occurred; and
- as soon as practicable after the occurrence of the trigger event.

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

- (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);
- (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;
- (v) on the basis of the capital expenditure and incremental operating expenditure referred to in subparagraph (b)(3);

...

(10) if the application is in respect of an actionable ISP project which was previously the subject of an early works contingent project application, a summary of the total expenditure previously approved by the AER and the actual costs incurred in respect of that actionable ISP project.

In addressing these requirements, this document has been developed in accordance with:

- the actionable ISP framework under the NER;
- the AER's Guidance Note for Regulation of actionable ISP projects;
- the AER's Process guideline for contingent project applications;<sup>19</sup> and
- TasNetworks' approved Cost Allocation Methodology.

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

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

- the forecast of the total capex proposed in this Application meets the threshold as referred to in clause 6A.8.1(b)(2)(iii);
- the amounts of forecast capex and incremental 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.

Unless otherwise stated, all forecast capex values in this document are presented in real 2023-24 dollars and include real labour escalation (for labour related costs).

## 2.2 Trigger events

In accordance with clause 6A.8.2(a)(2) of the NER, we confirm that the trigger events under clause 5.16A.5 of NER has occurred. Specifically, we have:

- issued a PACR that meets the requirements of clause 5.16A.4 of the NER and which identifies the Project as the preferred option (noting this Application relates to a stage of the Project which is an actionable ISP project);<sup>20</sup>
- requested written confirmation from AEMO that:
  - the preferred option addresses the relevant identified need specified, and aligns with the ODP referred to, in the most recent draft or final ISP; and

<sup>&</sup>lt;sup>20</sup> The PACR has been superseded by the RIT-T update published in July 2025, which confirmed that the preferred option remained unchanged from the PACR.



<sup>&</sup>lt;sup>19</sup> AER, *Process guideline for contingent project applications under the National Electricity Rules*, September 2007.

- the cost of the preferred option does not change the status of the actionable ISP project as part of the ODP in the most recent draft or final ISP.
- no dispute notice has been given to the AER under rule 5.16B(c) of the NER; and
- the cost of the preferred option (set out in CPA-1 and this Application) is not greater than the cost considered in AEMO's assessment under clause 5.16A.5(b) of the NER.

### 2.3 AEMO feedback loop confirmation

In accordance with clause 5.16A.5 of the NER, in order to submit a CPA for the construction and delivery phase of the NWTD to the AER, TasNetworks is required to request written confirmation from AEMO (also referred to as the 'feedback loop' request) that:

- the preferred option under the RIT-T addresses the relevant identified need specified in the most recent ISP and aligns with the ODP referred to in the most recent ISP; and
- the cost of the preferred option does not change the status of the actionable ISP project as part of the ODP in the most recent draft or final ISP.

TasNetworks, in conjunction with MLPL, submitted a feedback loop request to AEMO on 11 July 2025. The purpose of the feedback loop is for AEMO to assess whether, at the revised cost of the NWTD together with the revised costs of Marinus Link, Project Marinus remains on the ODP. The ODP is the lowest cost pathway of essential generation, storage and transmission infrastructure to meet consumers' needs for secure, reliable and affordable electricity, and to achieve net zero emissions targets. The most recent ISP is the AEMO Final 2024 ISP, released on 26 June 2024.<sup>21</sup>

AEMO published its feedback loop confirmation on 15 August 2025.<sup>22</sup> AEMO confirmed the Project (as part of Project Marinus) continues to optimise benefits to consumers and remains aligned with the ODP in the AEMO 2024 ISP.

As part of the feedback loop request, we submitted that the total cost to deliver the Project was \$1,144 million (real 2022-23). Escalated to the same reference terms as CPA-1 and this Application (real 2023-24 dollars), the total cost of the Project as assessed through the feedback loop is \$1,187 million.

We can confirm that cost of the preferred option (set out in CPA-1 and this Application) is not greater than the cost considered in AEMO's feedback loop assessment under clause 5.16A.5(b) of the NER. Specifically, between CPA-1 (gross capex of \$167.31 million) and this Application (\$970.90 million), the total Project costs (excluding equity raising costs) are \$1,138 million, approximately \$49 million less than the figure assessed in the feedback loop.

## 2.4 Material change in circumstances assessment

Clause 5.16A.4(n) of the NER requires a consideration of whether there has been a material change in circumstances which, in TasNetworks' reasonable opinion, means that the preferred option identified through the RIT-T has changed. To address this obligation and demonstrate the project continues to deliver net market benefits, MLPL and TasNetworks updated the RIT-T in 2025.<sup>23</sup> This was the second RIT-T update, with an earlier update published in April 2024.



<sup>&</sup>lt;sup>21</sup> AEMO, 2024 ISP.

<sup>&</sup>lt;sup>22</sup> AEMO, ISP Feedback Loop Notice - Project Marinus, 15 August 2025.

<sup>&</sup>lt;sup>23</sup> MLPL, Project Marinus RIT-T Update - July 2025, 11 July 2025.

The purpose of the 2025 RIT-T update was to determine whether the previously identified preferred option continued to be the optimal solution despite changes to costs and market conditions since the 2024 RIT-T update. MLPL engaged Ernst & Young (EY) to undertake independent market modelling, using the same modelling approach employed in the PACR and the 2024 RIT-T update.

Consistent with the AER's commentary in their determination on TasNetworks' CPA-1, the 2025 RIT-T update adopted the latest available information from AEMO's 2025 Inputs, Assumptions and Scenarios Report (IASR). EY initially computed the gross market benefits of a 750 MW and 1500 MW link using the Draft 2025 IASR and the two most likely scenarios from the AEMO 2024 ISP, being the Step Change and Progressive Change scenarios. This analysis, combined with the latest project cost information, confirmed that the preferred option (a 1500 MW link delivered in two 750 MW stages) remained unchanged from the PACR and the April 2024 RIT-T update.

To ensure the assessment was based on the most recent information, EY undertook further modelling following publication of AEMO's Final 2025 IASR. This analysis adopted the updated scenarios for the AEMO 2026 ISP, namely the Step Change, Slower Growth and Accelerated Transition scenarios. Consistent with the earlier assessment based on the Draft IASR, this analysis demonstrated that the preferred option remains unchanged.

## 2.5 Project timing

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

- date for commencement 1 July 2025 (commencement of costs included in this Application).<sup>24</sup>
- anticipated date for construction completion June 2029.
- anticipated date for project finalisation June 2030.

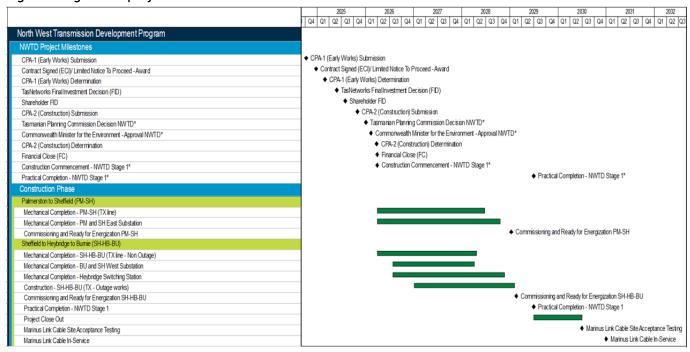
Although early works capex commenced in 2019-20 to meet the delivery timeframes in earlier ISPs, CPA-1 only included early works capex from 1 July 2021. This is because capex in the 2019-20 and 2020-21 regulatory years was incurred as part of Project Marinus and forms a component considered in the sale of MLPL, which occurred in March 2024.

Figure 2 below provides a high-level schedule of the Project. Past dates reflect when activities occurred while future dates (as at the date of this Application) reflect the timing of the current project schedule.

<sup>&</sup>lt;sup>24</sup> Only incremental costs that were not included in CPA-1 for the period 1 July 2025 to 28 February 2026 have been included in this Application.



Figure 2 High-level project schedule



As shown above, the construction phase of the Project is expected to achieve practical completion (PC) in June 2029. However, the overall project will not be finalised until June 2030. During this period the Owners Team presence will reduce significantly, though a core team will remain in place to manage the activities that typically extend beyond PC.

#### Construction close-out

The contractual defects liability period will be in force post-PC, during which the Principal Contractor will be required to address any defects or performance issues that arise once NWTD assets are in service. Substantial project close-out tasks are also required, such as finalising as-built drawings, operations and maintenance manuals, asset registers and digital models, settling contract claims and financial reconciliations. Depending on final delivery schedules, this period may also include works such as removal of decommissioned transmission lines.

Post-PC support for Marinus Link will involve ongoing commissioning activities, such as integration with the NEM commissioning program, performance testing, and operational readiness support for TasNetworks and AEMO.

#### Other close-out

A range of 'conditions subsequent' will extend beyond PC, particularly in relation to environmental obligations. These may include environmental reinstatement activities such as revegetation and erosion control, along with the completion of regulatory closure obligations. Some requirements are already embedded in the Project's environmental and social management measures, while others may be directed by the TPC and/or Commonwealth to document final completion and confirm compliance with permits and conditions.

Key management measures include implementing rehabilitation plans to deliver stable, self-supporting landforms consistent with property management plans (CM014), providing vegetation screening in consultation with landholders to mitigate visual impacts (CM015) and managing vegetation residue to stabilise soils and minimise runoff (CM045).



A substantial amount of post-construction work will be required to finalise land and easement acquisition. This will include surveying easements, preparing and registering transfer documentation, liaising with landholders to execute agreements, coordinating with the Tasmanian Land Titles Office and State Revenue Office on title registration and stamp duty, facilitating remaining compensation and Strategic Benefit Payments to landholders, and resolving disturbance disputes or claims.

From a commercial perspective, insurance and financing close-out, and the management of any residual payment matters, disputes, cost tracking and ongoing reporting requirements will still be required until project finalisation.

From a project management and community and stakeholder engagement perspective, a formal post implementation review and project close out report will be undertaken and prepared by the Project Management Office (in accordance with TasNetworks' Gated Investment Framework and Project Delivery Framework), and surveys, evaluation and reporting will be undertaken (including for the CBSP) to ensure community benefits from the Project are understood and engagement learnings are captured and used to inform future projects.

Collectively, these activities will ensure the asset is not only technically compliant and operationally reliable, but also environmentally, socially, and commercially finalised, allowing the Project to be formally closed out by June 2030.

## 2.6 Capex threshold

As a stage of an actionable ISP project, the NER clause 6A.8.A1(b)(2)(iii) requires that the forecast capex within this Application exceeds the relevant threshold of \$30 million, or five per cent of the MAR for the first year of the regulatory control period, whichever is the larger amount.

Table 6 shows that the forecast capex of \$970.90 million exceeds the threshold. This means that the capex is covered by the contingent project requirements of the NER.

Table 6 Contingent project thresholds (\$ million, nominal)

2024-25 MAR	5% of MAR	Contingent Project Capex	Pass/Fail
163.38	8.17	970.90	Pass (Capex > 30) <sup>25</sup>

## 2.7 Application of the Capital Expenditure Sharing Scheme

In its Final Determination on TasNetworks' 2024-29 regulatory proposal, the AER stated that it would consider the application of the Capital Expenditure Sharing Scheme (CESS) to the NWTD as part of the CPA process. This is consistent with the AER's Capital Expenditure Incentive Guidelines for Electricity Network Service Providers (Guidelines) that suggests, 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 an exemption;
- the size of the project;
- the degree of capital expenditure forecasting risk; and
- stakeholder views.

In CPA-1, we proposed that the AER should not apply the CESS to NWTD capex. This was on the basis that applying the CESS to the NWTD is inconsistent with the objective of the scheme, which is to incentivise TasNetworks to undertake efficient capital expenditure during a regulatory control period.

In its CPA-1 decision, the AER noted it will determine the application of the CESS when assessing this Application. This was on the basis that they did not consider it appropriate to make a decision on the application of the CESS until the full costs of the project have been assessed, which will occur in this Application.

Since the submission of CPA-1, we have considered the CESS more broadly and discussed the application of CESS to Stage 1 NWTD with stakeholders. Based on these discussions, rather than request that the AER not apply the CESS to NWTD capex, we instead propose that the AER applies:

- a 10 per cent sharing ratio to NWTD capex on the basis that this sharing ratio is reflective of the proportion of NWTD costs TasNetworks will have reasonable control over;
- a cap to the CESS of +-30 per cent on the basis that a cap will provide further certainty to financing parties in the event of an overspend; and

<sup>&</sup>lt;sup>25</sup> A threshold of \$30 million has been used as it is the larger of \$30 million or five per cent of MAR.



- a sharing ratio equal to TasNetworks' average concessional financing costs to any overspend above 30 per cent on the basis that TasNetworks will require little incentive not to defer capex given:
  - the NWTD's interface with Stage 1 of Marinus Link; and
  - the minimal financing benefit TasNetworks will obtain from doing so due to highly concessional finance funding the project for the benefits of consumers.

Given the size and importance of the Project to the energy transition and the benefits concessional financing will provide consumers (relative to if the Project was delivered expecting a non-concessional return), we believe that it is in the interests of both TasNetworks and consumers to adopt a CESS arrangement that recognises TasNetworks' level of control over project capex and provides certainty and an appropriate return (in all circumstances) to financing parties.

This will ensure TasNetworks is appropriately incentivised to drive efficiencies and that the necessary capital is committed to the Project to ensure successfully delivery (even if project risks materialise in excess of the approved risk and contingency).

We also note that the AER has recently undertaken a review of its Guidelines.<sup>26</sup> This review was initiated due to the Australian Energy Market Commission's (**AEMC**) amending rule on *managing ISP project uncertainty through targeted ex post reviews*<sup>27</sup>, which required the AER to update these Guidelines to enable them to carry out a separate targeted ex post review for ISP projects.

We appreciate the AER taking the time to undertake this review and we welcome their updates to the Guidelines. We hope that these updates will provide pragmatic and reasonable solutions to address some of the uncertainty associated with delivering ISP projects, whilst ensuring appropriate protections remain in place for consumers.

We believe our updated CESS proposal is more aligned to the updated Guidelines, in that it is a pragmatic and reasonable proposal that will address some of the uncertainty with delivering the NWTD, whilst still providing consumers with appropriate protections through a modified sharing ratio, a suitable cap and ultimately the ex post review if required.

Further justification on our CESS proposal is outlined below.

#### Level of incentive

We consider that the CESS sharing ratio for the Project should be set at a level that incentivises TasNetworks to undertake efficient capex while not unduly rewarding or penalising us for changes in costs that are beyond TasNetworks' reasonable control. Although TasNetworks has direct influence over our labour and indirect costs, we have less influence over costs incurred by the Principal Contractor under the EPC contract (approximately 65.1 per cent of construction and delivery costs) or costs directly associated with the acquisition of land and easements (approximately 8.1 per cent of construction and delivery costs, largely made up of by law compensation).

Under the EPC contract, TasNetworks' primary responsibility is to manage the Principal Contractor to deliver the project safely, on time and within budget, whilst providing active oversight and direction. TasNetworks has also sought to include mechanisms within the EPC contract to incentivise the Principal Contractor to be prudent and efficient and deliver the project safely, on time and at the lowest sustainable cost. These mechanisms are in the interests of both TasNetworks and consumers.

<sup>&</sup>lt;sup>27</sup> AEMC, Managing ISP project uncertainty through targeted ex post reviews - Australian Energy Market Commission.



<sup>&</sup>lt;sup>26</sup> AER, Capital Expenditure Guideline Review 2025 - Australian Energy Regulator.

TasNetworks considers the CESS sharing ratio should be set at a level that incentivises TasNetworks to responsibly and efficiently manage the delivery of the project, while acknowledging we will have limited control over large components of the costs the Principal Contractor will incur to deliver the agreed scope of works.

As described above, although TasNetworks does not directly influence the factors that may drive increases in the Principal Contractor's costs, we have included controls and incentives within the EPC contract to ensure the Project is delivered efficiently and prudently. While the CESS provides an incentive to TasNetworks to ensure we efficiently manage the Principal Contractor, it does not provide an incentive for the Principal Contractor to be more efficient. This is more appropriately incentivised through TasNetworks' direct management of the Principal Contractor.

Accordingly, the level of incentive applied under the CESS should reflect the extent to which TasNetworks can reasonably influence overall project costs, ensuring the scheme encourages efficient performance without providing undue rewards or penalties for cost movements outside our control. This concept is explored further in the following section.

In addition to costs payable under the EPC contract, TasNetworks also has less influence over costs associated with the acquisition of land. TasNetworks is required to pay compensation to landholders in accordance with the *Land Acquisition Act 1993* (Tas). Jones Lang LaSalle (**JLL**) have undertaken assessments of all impacted landholder parcels to determine the total compensation payable. These assessments have been completed through either a desktop assessment or an on-ground assessment, dependent on being provided with access to the property by the landholder.

The landholder compensation included in this Application is the <u>minimum</u> TasNetworks expects to pay (i.e. what TasNetworks has agreed with or presented to landholders), with no ability to drive efficiencies in the payment of this compensation and additional compensation potentially payable as further on-ground assessments are undertaken and any further Licence and Easement Option Agreements are entered into.

#### **Commensurate CESS**

As noted in clause 6A.6.5A(c) of the NER, in developing a CESS the AER must take into account the following principles:

- NSPs should be rewarded or penalised for improvements or declines in the efficiency of capex; and
- these rewards and penalties should be commensurate with the efficiencies or inefficiencies in capex, but rewards and penalties do not need to be the same.

As noted by Incenta Economic Consulting in its report prepared for MLPL in support of MLPL's CESS proposal:<sup>28</sup>

Implicit in the discussion [...] about the ease of controlling costs and making efficiency gains is that the expenditure is controllable, and so any measured change in expenditure compared to the forecast would reflect the effort of the business – either an efficiency gain (for which a reward is due) or inefficiency (for which a penalty is appropriate). However, forecasts of expenditure will inevitably contain an element of uncertainty that arises due to factors beyond the control of the business, and hence part of the reward or penalty (and so the gap between price and efficient cost) will not reflect a change in efficiency, but rather will reflect the randomness of expenditure requirements, that is, a "windfall".

<sup>&</sup>lt;sup>28</sup> Incenta Economic Consulting, Application of the capital expenditure sharing scheme to the Marinus Link project, p.12.



In the event an NSP has limited control over its capex for a large, complex project, any CESS reward or penalty should be commensurate with the efficiencies or inefficiencies the NSP has actually driven during the delivery of that capex.

Implementing a CESS that is not cognisant of the level of control the NSP has over project costs would go against the interests of both the NSP and consumers. Specifically, if the NSP was inefficient in capex categories it had greater control over (i.e. Owners Team labour or indirect costs) but its principal contractor/delivery partner was efficient on their own accord or only limited risk and contingency was required, the NSP would likely receive a CESS bonus.

Alternatively, if the NSP successfully drove efficiencies in capex categories it had greater control over but transmission project costs continued to increase, risks eventuated in excess of the NSPs P50 or by law land compensation payments exceeded the NSPs' allowance due to valuations increasing after the CPA submission, the NSP would likely receive a CESS penalty.

Adopting a CESS that is cognisant of the level of control TasNetworks has over NWTD costs would therefore be in the best interests of TasNetworks and consumers. TasNetworks considers that adopting a 10 per cent sharing ratio would meet the principles of a commensurate CESS by driving efficiency in delivering capex that the business can reasonably control. Table 7 demonstrates how the 10 per cent sharing ratio has been calculated (noting proportions are reflective of early works and construction and delivery costs).

As shown, we consider that the status quo CESS rate of 30 per cent is appropriate for labour and indirect costs, as TasNetworks has direct control over these costs (or in the event of contracted indirect services, a portfolio effect exists through the use of many service providers). A lower sharing ratio has been adopted and is considered more appropriate for costs that TasNetworks has less direct influence over. This will ensure the objective of the CESS is maintained, providing sufficient incentive for TasNetworks to drive the delivery of efficient capex.

Table 7 Basis of proposed CESS sharing ratio

Cost Type	Proportion of total project costs (CPA-1 + CPA-2) (A)	CESS rate (B)	Contribution to sharing ratio (A x B)
Direct construction costs	62.5	5.0	3.1
Owners risk and contingency	11.6	10.0	1.2
Costs directly associated with land acquisition	8.0	5.0	0.4
Labour and indirect	17.9	30.0	5.4
Total	100.0	N/A	10.1

#### Funding sources & concessional finance

#### **Funding sources**

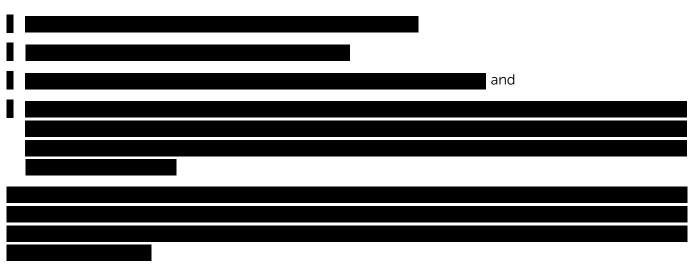
In determining whether to apply a modified CESS, TasNetworks considers it prudent for the AER to consider what pressures already exist on TasNetworks to deliver efficient capex. This includes



consideration of what funding sources are available to TasNetworks to fund any overspends. TasNetworks is unique amongst NSPs in that our position as a Tasmanian State-Owned Company limits the ease by which we can access funding for major projects.

Consistent with the Letter of Intent (**LoI**) between the Commonwealth and the State of Tasmania, the Project will be financed with a mix of debt and equity. Of project costs will be funded with concessional debt from the CEFC, of project costs will be funded with equity from the Tasmanian Government (where, consistent with the LoI, they will accept an equity return that is lower than TasNetworks' current regulated return on equity).

If TasNetworks was to incur project costs above its AER approved allowance, the business would have limited avenues to source additional funding as CEFC funding will be limited to the documented commitment amount. Based on current arrangements, the only parties able to provide any form of additional finance include:



Although there are already limited additional funding sources, the application of the CESS in its standard form may further disincentivise these sources to provide any additional funds, as incremental revenues associated with the overspend may be more than offset in the short-medium term by a CESS penalty, or not recovered at all if removed from the regulatory asset base (RAB) during an ex post review.

As such, a modified CESS is appropriate in this instance to ensure the inability to access additional capital doesn't inhibit project completion, as failing to deliver the Project would not be in the interests of TasNetworks or consumers.

#### Concessional finance

Similar to Marinus Link Stage 1,<sup>29</sup> the Project will be financed entirely via concessional finance

The benefits of this concessional finance

will be passed on to consumers through a concessional finance agreement.<sup>30</sup>

TasNetworks understands that the AER adopts a policy of ignoring the actual financial decisions of regulated businesses in the ordinary course of events, with the effect that regulated businesses bear the risk of their own financing decisions but also reap the benefits. However, given the unique financing



<sup>&</sup>lt;sup>29</sup> As noted in the Incenta Economic Consulting report - Application of the capital expenditure sharing scheme to the Marinus Link project, p.19.

<sup>&</sup>lt;sup>30</sup> That will comply with clause 6A.3.3 of the NER.

arrangements for the Project that are intended to benefit consumers directly, consideration should be given to these financing arrangements when determining the incentive rate.

In addition to the limited sources of additional funding available to TasNetworks, forecast project financial outcomes in the early years post commissioning are impacted by concessional finance outcomes , a limited equity return is generated with the debt return going towards covering interest costs) and regulatory depreciation outcomes (i.e. negative regulatory depreciation occurs due to inflation on the opening RAB exceeding straight-line depreciation<sup>31</sup>). Adopting a CESS sharing ratio of 10 per cent with a cap of +-30 per cent instead of the standard sharing ratio of 30 per cent (with a +-10 per cent cap, if a similar approach to HumeLink was adopted) will ensure any equity return is not largely erased in the early years post commissioning in the event of an overspend and a subsequent CESS penalty.

The limited sources of additional funding (and potential complexities in accessing those funding sources) and project financial outcomes will already create a strong motivation for TasNetworks to manage the project as prudently and efficiently as possible and ensure it is delivered within the AER approved allowance. It will also magnify the effects of the CESS and ex post review which should further motivate TasNetworks to ensure efficient delivery of the Project within the AER approved allowance.

#### **CESS** cap

In addition to the 10 per cent sharing ratio, we are proposing that the AER caps the CESS at +-30 per cent of forecast capex. This will provide appropriate certainty, through a clear framework with certain outcomes, to financing parties in the event of an overspend and should provide the AER with sufficient comfort that a two staged ex post review is not required unless there has been egregious investment decisions or behaviour. This is because, in the event of an overspend, this higher cap (relative to the cap the AER applied to HumeLink) will ensure there continues to be a strong incentive, in addition to the various other incentives discussed above, for TasNetworks to be prudent and efficient and to minimise the overspend.

The CEFC have previously expressed a preference<sup>32</sup> that the AER should rely on the CESS for ISP projects (given the clear framework with a certain outcome) and only use the ex post review to remove capex from a NSPs' RAB in the event of egregious investment decisions or behaviour.

Adopting a 10 per cent sharing ratio with a +-30 per cent cap is in the interests of all parties as it will strike an appropriate balance that provides TasNetworks and financing parties with appropriate certainty whilst giving the AER and consumers comfort that there is sufficient incentive placed upon TasNetworks to attempt to deliver the Project to forecast or to minimise any overspend if a situation is reached where it is unavoidable.

#### Forecasting risk and size of Project

In addition to the certainty a CESS cap provides financing parties, TasNetworks also considers that forecasting risk and size of the Project are relevant considerations in adopting a CESS cap. The scale of new investment required to facilitate the energy transition will inevitably result in an increase in the cost of delivering transmission network projects, as NSPs will be competing for the same labour and materials which will drive up demand with no guarantee of a commensurate increase in supply.

<sup>&</sup>lt;sup>32</sup> Clean Energy Finance Corporation, Submission to AER Capital Expenditure Incentive Guideline Review Consultation Paper.



<sup>&</sup>lt;sup>31</sup> TasNetworks has investigated making a financeability request as part of this Application. However, internal modelling suggests the benefits of any financeability adjustment would be marginal.

This has already been clearly demonstrated through GHD's findings in its recent update of the Transmission Cost Database (TCD). In its Final Report<sup>33</sup>, GHD indicated that the total cost estimate of indicative (but representative) HVAC overhead line projects increased by approximately 25 to 55 per cent in real dollar terms between the 2023 TCD and 2025 TCD.<sup>34</sup>

Combined with a 10 per cent sharing ratio, adopting a 30 per cent CESS cap means TasNetworks will face a constant incentive to deliver efficient capex while acknowledging the inherent forecasting risk associated with these major transmission projects. If the CESS was applied in its standard form, further increases in transmission costs would result in a substantial CESS penalty for TasNetworks driven by matters outside of our control (i.e. forecasting risk as opposed to inefficient capex).

TasNetworks is aware of the AER final decision on HumeLink to adopt a sharing ratio of 30 per cent of any overspends below 10 per cent of total project costs and to apply a sharing ratio equivalent to the average financing costs beyond 10 per cent. If the AER adopts a 10 per cent sharing ratio as requested, TasNetworks considers that a cap of +-30 per cent is more appropriate for the Project. This will provide consumers with more assurance that TasNetworks will continue to achieve the lowest possible cost for a broader range of unforeseen events.

#### **CESS** rate post cap

In its HumeLink decision, the AER determined to apply a sharing ratio equal to the average financing cost to any capex that exceeds the 10 per cent CESS cap the AER applied. The AER noted that this has the same financial effect as having no CESS however, ensures there is no incentive to defer capex between years.

If the AER accepts our proposed +-30 per cent cap or applies an alternative cap, we propose that the AER should apply a CESS sharing ratio equal to our average concessional financing costs to any overspend above the cap on the basis that we require little incentive not to defer capex.

Given the substantial oversight over the NWTD/Marinus Link interface, including the agreements between TasNetworks and MLPL and the Memorandum of Understanding (MoU) between the Commonwealth, Tasmania and Victoria, TasNetworks requires little incentive to not defer capex until later years for the sole purpose of obtaining additional financing benefits. This financing benefit would also be substantially concessional financing provided for the NWTD and its benefits being passed reduced given the through to consumers.

TasNetworks therefore has minimal incentive to risk breaching multiple legal agreements for sole purpose of obtaining minimal additional financing benefits. If the purpose of the CESS rate post cap is to disincentive deferring capex for the benefit of accruing financing benefits, any CESS rate post cap should be reflective TasNetworks' actual financing costs (i.e. at the concessional rates).

<sup>&</sup>lt;sup>34</sup> GHD Advisory, 2025 Transmission Cost Database Update Final Report, p.iii.



<sup>&</sup>lt;sup>33</sup> GHD Advisory, 2025 Transmission Cost Database Update Final Report, 20 May 2025.

### 2.8 Government support

Project Marinus and the NWTD 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 Australian and Tasmanian Governments established a 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 of 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 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; and
- access for TasNetworks to low-cost debt for the NWTD through the CEFC.

In August 2025, it was announced that an additional \$346 million Commonwealth grant to develop the NWTD had also been secured by the Tasmanian Government.<sup>35</sup> This agreement will ensure that the costs of the NWTD will be fairly shared with the Australian Government. The details of how the benefit from the \$346 million will be passed through to Tasmanian customers by TasNetworks is currently being determined and is not considered in the revenue and customer impacts provided in this Application. However, the Project Marinus Final Investment Decision Assessment Report<sup>36</sup> estimates the grant will reduce transmission charges for Tasmanian customers by approximately \$15 million per annum (in addition to the benefit of the concessional financing arrangement).

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

The revenue application contained within this Application has 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.

<sup>&</sup>lt;sup>36</sup> Tasmanian Government, Project Marinus Stage 1 Final Investment Decision Assessment Report, July 2025



<sup>&</sup>lt;sup>35</sup> Premier of Tasmania, Tasmania secures significant agreement for Marinus, 1 August 2025.

# 3 Community and stakeholder engagement

Understanding and responding to our customers and the community's needs is a key focus of TasNetworks' corporate strategy. Since 2019, TasNetworks has undertaken extensive and ongoing engagement in relation to the NWTD with a broad range of stakeholders, community members and landholders. The feedback we have gathered has been vital in helping us to understand what is important to the local community and balancing the best outcomes for the environment, landholders, customers, businesses and the wider community in delivering the NWTD.

Ensuring effective engagement from the outset and providing transparency in how feedback influences our decisions has been critical to building social licence during the planning phase of the NWTD. Maintaining social licence through the construction phase will be crucial to the successful delivery of the project and our broader role in the ongoing renewable energy transition.

The overarching communications and engagement objectives for the NWTD construction phase are to:

- Share benefits with the community by partnering with stakeholders to implement social licence initiatives that enhance project outcomes and deliver a positive regional legacy.
- Foster positive, trust-based relationships with stakeholders to reinforce confidence in TasNetworks' ability to deliver complex, large-scale infrastructure projects.
- Provide clear, consistent, and accurate information about construction progress and key milestones to keep stakeholders and the community well informed throughout the project.
- Actively listen and respond to feedback regarding construction activities and implement mitigation measures to minimise potential impacts.
- Demonstrate how stakeholder and community feedback has influenced the project to date, and provide clear, transparent information about how ongoing input can shape the construction phase.

The TasNetworks Engagement Framework sets the foundation for stakeholder and community engagement for the NWTD and is guided by our NWTD Construction Communications and Engagement Strategy, further supported by various other plans and protocols. Our engagement approach has been informed by The Energy Charter Principles, research into industry best-practice and the Engagement Institute's Public Participation Spectrum.

Table 8 outlines the relevant guiding documents for NWTD engagement.



#### Table 8 NWTD engagement guiding documents

Frameworks	TasNetworks Engagement Framework			
Strategies	NWTD Construction Communications and Engagement Strategy			
Plans	Community Benefits Sharing Program Plan Economic Development Action Plan Aboriginal Communities Engagement Plan			
Protocols	NWTD Enquiries and Complaints Procedure  NWTD Media Handling Policy  TasNetworks Complaints Handling Policy			

## 3.1 Commitment to sharing benefits

Community benefits sharing programs are a common element of major projects, nationally and internationally. They recognise that while major projects may deliver broad benefits to communities across a region, a state or even across the country, project impacts are only felt by the local communities surrounding the project. Benefits sharing programs provide additional benefits to local communities to ensure there is a more equitable distribution of benefits.

The infrastructure we build as part of the NWTD has significant social, environmental and economic impacts on the local community surrounding the project in North-West Tasmania. Developing a Community Benefits Sharing Program (CBSP) is a critical part of TasNetworks' commitment to ensuring an ongoing and sustainable positive legacy for communities in this region.

This commitment is consistent with the Tasmanian Government's *Renewable Energy Coordination Framework*<sup>37</sup> and Guideline for Community Engagement, Benefit Sharing and Local Procurement<sup>38</sup>, which states: "Sharing with the community the financial benefits of renewable energy growth will provide for a long-lasting positive contribution to regional Tasmania. This sharing is essential, as the renewable energy vision will require high levels of engagement and acceptance". It also accords with expectations set out by the Energy Charter's *Better Practice Social Licence Guideline*.

The CBSP for the NWTD has been co-designed in partnership with a Youth Panel, North-West communities, and key stakeholders to ensure it delivers benefits that are most valued by the local community. This collaborative approach has been instrumental in building trusted relationships with impacted communities and securing the social licence to operate as the project moves into the construction phase. The following provides an overview of how the process was co-designed.

#### Early engagement

Early engagement was an important feature of the development of the CBSP. Commencing in 2022, early in the Project's planning, TasNetworks undertook an extensive co-design and community collaboration approach to develop, refine, and finalise a CBSP for the NWTD. Underlying this approach was the

<sup>&</sup>lt;sup>38</sup> Renewables, Climate and Future Industries Tasmania, Renewable Energy Development in Tasmania A Guideline for Community Engagement, Benefit Sharing and Local Procurement, Technical Supplement 4, May 2024.



<sup>&</sup>lt;sup>37</sup> Renewables, Climate and Future Industries Tasmania, Renewable Energy Coordination Framework, May 2022.

sentiment that local communities are best placed to develop and decide on potential social licence initiatives for their region as they are usually the most impacted.

Further, the Australian Government's Community Engagement Review (undertaken in 2023) recommended that "States, territories and local governments to encourage local community groups to proactively identify opportunities for the broader community's benefit, as well as to take ownership of sound opportunities to secure support and funding". 39

#### Youth Panel

A key aspect of the co-design process was the creation of a Youth Panel. Engaging youth was an important first step in developing a Community Benefits Sharing (CBS) Framework for North-West Tasmania. Not only are young people the community members who will be living with the infrastructure for the longest, but they are often completely absent from community engagement processes. Therefore, it is vital young people are included in decisions that affect their community.

The Youth Panel was tasked with developing a CBS Framework to ensure the values, concerns, and priorities of the local community, and in particular young people in North-West Tasmania, are reflected in the benefits the program seeks to deliver.

#### **Community input**

The co-design process also involved local community members and stakeholders who were invited to share their feedback about the Youth Panel's draft CBS framework. Opportunities to provide feedback included informal and formal methods such as community BBQ events, focus groups, stakeholder workshops, an online survey and during NWTD SLG meetings. This collective feedback was considered by the Youth Panel before it delivered its final recommendations to TasNetworks, which were accepted by TasNetworks' Board in March 2023.

The final element of the co-design process was progressed in 2024 and involved local stakeholders in the development of the governance arrangements for the CBSP's implementation. Stakeholders with expertise in community grant programs, including the Tasmanian Community Fund, shared their insights into the governance elements that are needed to effectively administer a benefits program.

Utilising this iterative, co-design approach for both the development of the benefits program and how it will be implemented, ensures the CBSP is designed to address local concerns, interests and priorities. Importantly, this approach has supported TasNetworks to build trusted relationships and set an expectation that TasNetworks will deliver benefits that the community value.

#### **Program design**

The CBSP is designed to enhance social licence for the NWTD through benefits sharing. To this end, the Project does not assume specific social licence initiatives for communities but rather provides the mechanism for communities to decide for themselves and apply for support and funding. The program will offer four funding tiers, providing communities with flexible options from small grants to support local projects through to funding for major regional initiatives.

An ICAP will be established to assess and select initiatives funded through the CBSP. This approach responds directly to a key recommendation from the Youth Panel and key stakeholders, to ensure that funding decisions are made by the community, for the community. The ICAP will include community

<sup>&</sup>lt;sup>39</sup> Department of Climate Change, Energy, the Environment and Water Community Engagement Review Report, December 2023



members and skilled regional representatives from across the five municipalities impacted by the Project, ensuring initiatives reflect local priorities and values.

Based on the work developed as part of the co-design and collaborative processes outlined above, the CBSP encompasses key elements of eligibility and funding, together with the governance and administration elements (detailed in the CBSP Implementation Plan<sup>40</sup>).

#### **Basis for investment**

Investing in CBS is common and critical to building and maintaining social licence for major projects. Not including provisions for CBS could result in project delays and lead to higher costs for the project and customers (Next Generation Engagement Program's 2019 *State of Infrastructure and Engagement Survey*<sup>41</sup>). In the absence of a CBSP, the ability to proceed with the delivery of the NWTD would be significantly impacted due to community expectation from early and sustained engagement on the matter.

A review of similar national and international programs identified one international example of a systematic method of calculating community benefit funding for transmission projects, from Irish-based utility EirGrid. Research also identified a range of (non-transmission) renewable energy and major infrastructure projects with CBS programs with various approaches to both programs and methods for calculating financial investment. Across these examples, which resulted in varying levels of community impact, an investment range between 0.1 to 0.9 per cent of the total project budget was identified.

While the NWTD CBS investment was developed with reference to the approaches of other major projects, it was also considered in relation to the specific attributes, scope and likely impacts of the Project. The investment approach considered the likely impacts of the NWTD as an entirely overhead transmission development, spanning a large geographic area and several distinct communities (i.e. predominantly agricultural land, suburban communities and industrial forestry). It also considered the options available and the perception of a regulated asset of a Government-owned business, which are materially different to the options suitable for a privately-owned generation development.

The \$10 million CBSP will commence alongside the construction of the NWTD and is expected to operate between 2026 and 2029, or until such time as the committed funding has been fully allocated.

<sup>&</sup>lt;sup>41</sup> Australian National University, Crawford School of Public Policy, *Delivering Australia's \$600 billion infrastructure need? Communities must be front-and centre*, 21 August 2019.



<sup>&</sup>lt;sup>40</sup> TasNetworks, Community Benefits Sharing Program Implementation Plan, October 2025.

## 3.2 Engagement activities

Stakeholder and community engagement for the NWTD has been undertaken since 2019, to connect, inform, consult and collaborate with project stakeholders. Six-monthly engagement reports are published on the TasNetworks website outlining the engagement activities carried out for that period, feedback received from community members and how it has shaped the project.

Figure 3 summarises how TasNetworks has engaged with the community.

Figure 3 How TasNetworks has engaged with the community



Table 9 outlines the topics we have engaged with stakeholders on in the lead up to the construction phase.

Table 9 Key engagement topics

Timing	Engagement topic	Stakeholders	Description
2018 - 2021	Project Marinus RIT-T engagement	Tasmanian customers and representative groups	TasNetworks conducted seven industry forums across three capital cities and a webinar during the RIT-T assessment for Project Marinus, along with over 50 targeted briefings to address consumer and stakeholder questions on economic and technical matters. Initial engagement began with the February 2019 Feasibility Report, outlining indicative costs and benefits.
			In response to stakeholder requests for alignment with the 2020 ISP, TasNetworks carried out additional modelling, publishing results in the November 2020 Supplementary Analysis Report. This report incorporated updated ISP scenarios and responded to feedback on the earlier Project Assessment Draft Report (PADR). A further consultation round invited input on the Supplementary Report, allowing stakeholders to review and influence the updated modelling before the final PACR was published, which reflected feedback from both the PADR and Supplementary Report stages.
2019 - 2021	Route engagement	NWTD landholders, Councils, and NW community	TasNetworks began consulting on the Staverton to Hampshire Hills transmission line route in late 2019, collecting feedback through drop-in sessions, a webinar and online survey. Community feedback led to further investigations and adjustments to the route, with a preferred route released in 2020. Further adjustments were made to the preferred route in 2021 based on the findings of technical assessments to avoid sensitive geological and ecological areas.
			Between 2020 and 2021, TasNetworks engaged with stakeholders and the community to gather feedback on the remaining proposed routes, to understand their concerns and what was important to them. Feedback was collected through 14 community information events, four online focus groups and an online webinar. The feedback, along with the technical study findings and landowner engagement, was used to develop the preferred route for the transmission lines and adjust the location of transmission towers to minimise impacts.
2019 - 2025	Future Energy Hub	NW community and project proponents in the region	TasNetworks has been working in partnership with the Cradle Coast Authority ( <b>CCA</b> ) since 2019. The Future Energy Hub and dedicated resource was established to foster greater collaboration and information sharing

Timing	Engagement topic	Stakeholders	Description
			between renewable energy projects and the community.
			The CCA has helped to connect communities, business and government with TasNetworks and other renewable energy projects to work together for the good of the region and address cumulative impact issues.
2022, 2025	Economic Development Plan engagement	Economic development stakeholders, including NWTD SLG	In 2022, TasNetworks worked with SGS Economics and Planning to publish a discussion paper <i>Capturing the economic development opportunities from renewable energy investments in North West Tasmania.</i> The paper outlines the opportunities and challenges in pursuing economic development off the back of the significant pipeline of energy developments proposed in North-West Tasmania, including the NWTD.
			Following release of the paper, TasNetworks undertook a co-design process with regional stakeholders to develop an Economic Development Action Plan to identify actions for TasNetworks and regional stakeholders to pursue to maximise economic benefits for projects being progressed in the region, including the NWTD. A number of these actions have been taken up by TasNetworks and members of the NWTD SLG.
			TasNetworks has continued to engage with stakeholders to progress economic development actions. Key activities have included bi-monthly meetings with the NWTD and meetings with councils and other economic development stakeholders.
			In 2025, TasNetworks re-engaged with regional stakeholders to refresh the Economic Development Action Plan and update actions for the construction phase.
2021 - 2023	Community benefits engagement	Youth Panel, NWTD SLG, NW community, other key stakeholders	During 2022, TasNetworks undertook a co-design process with the local community and stakeholders to develop, refine and finalise a CBSP for the NWTD. A key aspect of the process was the creation of a Youth Panel. The Youth Panel was tasked with drafting a community benefits sharing framework to ensure the values, concerns and priorities of the local community, and in particular young people in North-West Tasmania, were reflected in the benefits the program will deliver.
			The co-design process also involved local community members and stakeholders who were invited to share their feedback about the Youth Panel's draft framework. Opportunities to provide feedback included

Timing	Engagement topic	Stakeholders	Description
			community BBQ events, focus groups, stakeholder workshops, an online survey and during meetings of the NWTD SLG. This collective feedback was considered by the Youth Panel and informed their final recommendations. The final CBS Framework was endorsed by TasNetworks Board in March 2023.
2021 - 2025	Planning and approvals engagement	Landholders, Councils, Aboriginal communities, key stakeholder groups, NW community	TasNetworks designed and delivered engagement activities to collect feedback to inform the preparation of technical studies and the Permit Application. Information sessions, online surveys, webinars and focus groups were used to collect feedback from the broader community, including what was important to them and what they were concerned about.  Specific engagement was carried out with stakeholders to seek feedback on cultural heritage, land use, tourism and socio-economic impacts. Interviews, workshops, meetings and webinars were used to capture feedback from key stakeholder groups. Feedback was used to inform the technical studies and Permit Application, by identifying potential impacts and measures to minimise impacts.  In 2025, TasNetworks committed to share the findings of the Development Application and Environmental Impact Statement ahead of formal exhibition by the Tasmanian Planning Commission. This was facilitated through six face-to-face community information sessions and one on-line session. These meetings were attended by environmental specialists who were able to talk to the documents and answer questions.
2021 - 2025	NWTD SLG	Representation across key industry groups, peak bodies, education, skills and training sectors and state government organisations	The NWTD SLG is an independently chaired group and provides an important engagement forum for the NWTD project during the design and approvals phase. TasNetworks shared information about the project, as well as discussed potential impacts and opportunities. Stakeholder perspectives and feedback were sought on a range of matters related to the Project.  Based on feedback, a new Community Construction Group will be established in the construction phase. This will provide stakeholders and landholder and community representatives with regular and direct access to TasNetworks and the Principal Contractor during the construction phase to provide information and a forum for them to raise any feedback or concerns.

Timing	Engagement topic	Stakeholders	Description
2022 - 2025	Strategic Benefit Payments	Landholders, TasFarmers, Tasmanian Government, key stakeholders	TasNetworks has engaged landholders and key stakeholders, including TasFarmers, since 2022 to support the Tasmanian Government to arrive at a fair and equitable SBP scheme for new major transmission projects.  The engagement with TasFarmers, who represented some landholders, involved regular meetings and financial support to allow the negotiation to balance the needs of farmers with the needs of Tasmanian electricity customers and industries.  In addition to regular one-on-one meetings and correspondence with landholders, four drop-in sessions were held seeking feedback on the proposed SBP. Based on landholder feedback and negotiation with TasFarmers, the Tasmanian Government announced the Tasmanian SBP Scheme in
			October 2025.
2023 - 2025	Contingent Project Applications engagement	TasNetworks advisory groups and interested stakeholders	TasNetworks engaged with stakeholders, customers and the community in preparing our CPAs for the early works and construction stages of the Project.  Meetings and briefings were held with the NWTD SLG, TasNetworks Stakeholder Advisory Group, TasNetworks Customer Advisory Group and transmission customers to inform the development of CPA-1 and this Application.  TasNetworks held three stakeholder webinars in the lead up to submitting CPA-1 and this Application.  The first webinar (held in April 2024) involved providing information about the project, including scope and benefits.  The second (held in October 2024, pre-CPA-1 submission) and third webinars (held in October 2025, pre-CPA-2 submission) focussed on further project updates, sharing project costs and explaining what this means for customer bills.
2025	Pre-construction activities	Local contractors and suppliers, Councils, Landholders, NW community	To prepare for the construction phase, we have partnered with the preferred Principal Contractor to consult on areas of interest with key stakeholders and the community. These include:  • workforce accommodation planning;  • workforce skills and training opportunities;  • local procurement opportunities; and



Timing	Engagement topic	Stakeholders	Description				
			<ul> <li>what to expect during construction.</li> </ul>				
			This has been facilitated through stakeholder meetings, regular access for the NWTD SLG to Genus and a successful 'Meet the Contractor' event with over 150 attendees.				

## 3.3 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; and
- 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 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 form and frequency preferred by stakeholders.



## 4 Capex forecast

This section details the nature and scope of the Stage 1 construction and delivery capex and why TasNetworks' costs are prudent and efficient.

## 4.1 Stage 1 construction and delivery capex

Construction and delivery capex for the Project comprises:

- Direct capex works undertaken by the Principal Contractor to construct a new switching station at Heybridge, construct the new Heybridge Spur East transmission line and upgrade the other relevant transmission lines and substations, project risk costs and costs directly associated with the acquisition of land and easements.
- Labour costs Owners Team labour and labour related costs associated with resources that will provide project services and will work with and manage the Principal Contractor to ensure successful delivery of the Project.
- Indirect costs standard project related indirect costs (i.e. vehicles, travel and accommodation, and overheads) and services from specialist service providers that are required to ensure successful delivery of the Project.

Table 10 summarises the Stage 1 forecast construction and delivery capex for the period 1 July 2025 to 30 June 2030. This capex is incremental to the capex approved by the AER in its 2024-29 Revenue Determination and its CPA-1 decision for TasNetworks. This is because it relates to activities that are additional to normal business activities, were not included in CPA-1 and would not be incurred other than for undertaking construction and delivery works for the Project.

Table 10 Summary of forecast capex for NWTD Stage 1 construction and delivery (\$ million, real 2023-24)

Stage 1 (construction)	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Forecast capex	152.03	342.98	217.76	171.83	86.30	970.90

Equity raising costs of \$6.68 million are also forecast (calculated using the AER's PTRM). Including equity raising costs, total capex is \$977.59 million.



## 4.2 Stage 1 construction and delivery activities

Table 11 summarises the Stage 1 forecast construction and delivery activities for the period 1 July 2025 to 30 June 2030 by capex category.

Table 11 Summary of forecast capex for Stage 1 construction and delivery activities (\$ million, real 2023-24)

Capex category	Summary of construction and delivery activities	Forecast capex	% of total
Direct construction	Works undertaken by the Principal Contractor to construct a new switching station at Heybridge, construct the new Heybridge Spur East transmission line and upgrade the other relevant transmission lines and substations	632.43	65.14
Project risks	Risk and contingency to allow for items, conditions, or events for which the state, occurrence, or effect is uncertain, but experience shows will likely result in additional costs.	131.52	13.55
Land and property	Completing the acquisition of new easements, securing use of brake and winch sites and laydown areas, and providing ongoing landholder management support.	85.14	8.77
Commercial and procurement	Undertaking commercial activities including finance and budget management and reporting, managing the EPC contract and other existing supplier contracts, and procuring additional specialist service providers as required.	12.00	1.24
Project execution	Undertaking direct management of the Principal Contractor and monitoring and supporting the Principal Contractor in their delivery of the Project.	45.74	4.71
Project management	Overseeing project governance and managing and coordinating the Project's activities through project control and management systems, scheduling, risk and cost estimating and forecasting to ensure the timely and efficient delivery of the Project.	48.20	4.96
Planning and statutory assessment	Ensuring compliance with planning approvals and other permits, reporting to the TPC and overseeing eagle mortality commitments.	0.71	0.07
Community and stakeholder engagement	Continuing to engage with the community, landholders and other stakeholders to maintain community support, keep stakeholders informed, minimise disruptions, and maximise social value and project benefits during the construction phase. This will include implementation of the CBSP which has been developed in a way that ensures it delivers benefits that are most valued by the local community.	15.16	1.56
		970.90	100.00

## 4.3 Stage 1 construction and delivery capex is prudent and efficient

TasNetworks engaged GHD to undertake an independent engineering verification and assessment of the Stage 1 construction and delivery capex in this Application. GHD's assessment:

- verified that the scope of the Stage 1 construction and delivery activities is realistic to meet the investment need and that our forecast capex is efficient and is consistent with that which would be incurred by a prudent and efficient business;
- found that the overall project timeline is reasonable to meet AEMO's June 2030 delivery date;
- confirmed that the procurement processes and costs are reasonable;
- found that indirect and external labour costs are reasonable and are supported by tender outcomes, quotations and benchmarking; and
- found that forecast internal labour costs are reasonable and benchmark in line with other ISP projects.

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

## 5 Opex forecast

This section details the Stage 1 construction and delivery forecast opex for the 2024-29 regulatory control period. Except for debt raising costs, there is no incremental opex forecast for the current regulatory control period.

The incremental opex forecast considerations are summarised below:

- operating and maintenance activities are assumed to begin once capital assets are installed and commissioned;
- property ownership costs are assumed to be incurred once land and easements are acquired;
- a SBP to landholders is assumed to commence once the transmission lines are commissioned;
- operational insurance coverage will commence once the assets are commissioned; and
- debt raising costs are assumed to be incurred when new debt is required to fund capital investment. This alignment ensures that the same considerations underpinning our capex forecast are captured, albeit indirectly, in the operating forecast.

The commissioning of the assets coincides with the end of the 2024-29 regulatory period. Therefore, incremental opex costs arising in the current regulatory control period are not expected except for debt raising costs.

Debt raising costs have been included in the incremental revenue allowance for the NWTD and have been calculated automatically within the PTRM based on changes in underlying inputs as established through the AER approved benchmarked allowance.

As the assets are forecast to be commissioned at the end of our current regulatory control period (June 2029, with the minor balance of works forecast for 2029-30 commissioned in June 2030), other opex costs are not forecast to arise until the 2029-34 regulatory control period. As the Project is predominantly brownfield, incremental opex costs are not expected to be significant, with the exception of SBPs, and will be considered as part of TasNetworks 2029-34 Revenue Proposal.

Table 12 summarises forecast incremental opex required for Stage 1 construction and delivery over the period 1 July 2025 to 30 June 2029.

Table 12 Summary of opex for NWTD Stage 1 construction and delivery (\$ million, real 2023-24)

Opex category	2025-26	2026-27	2027-28	2028-29	Total
Debt Raising Costs	0.00	0.09	0.29	0.43	0.82
Total opex	0.00	0.09	0.29	0.43	0.82

This opex is incremental to the opex approved by the AER in its 2024-29 Revenue Determination and its CPA-1 decision for TasNetworks. This is because it relates to activities that are additional to normal business activities, were not included in CPA-1 and would not be incurred other than for undertaking construction and delivery works for the Project.

# 6 Forecast revenue and impact on customers' bills

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

The forecast incremental smoothed revenue for Stage 1 construction and delivery is \$53.96 million (\$ nominal) over the 2024-29 regulatory period. Table 13 summarises the incremental revenue forecast by building block component and briefly explains how we have calculated each component. Further detail is provided in Appendix A – Revenue application.

As discussed in section 2.8, TasNetworks is progressing a concessional finance arrangement in relation to the capex costs for the Project, including the Stage 1 construction and delivery component. The revenue outcome in this Application has been forecast without reference to concessional finance. When a concessional finance arrangement is agreed, we will request the AER amend our revenue in accordance with the concessional finance agreement which will result in lower customer charges.

Table 13 2024-29 incremental revenue forecast from Stage 1 construction and delivery (\$ million, nominal)

<b>Building block</b>	Incremental revenue	Approach
Return on capital	93.22	Calculated by multiplying the forecast opening capital base updated to include expenditure on Stage 1 construction and delivery for a given year by the allowed rate of return set by the AER.
Return of capital -40.34		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 commences prior to depreciation.
Opex	0.82	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.
Corporate income tax	0.43	Calculated as forecast pre-tax income multiplied by the corporate tax rate, less the assumed value of imputation credits.
Unsmoothed annual revenue requirement	54.13	Total incremental impact on building block components.
Impact of smoothing	-0.18	Incremental revenue smoothed over final three years of the regulatory period, calculated by resolving the year 3 to 5 X-factors

Building block	Incremental revenue	Approach
		so that the net present value ( <b>NPV</b> ) of the smoothed revenue for the 2024-29 regulatory period matches the NPV of the unsmoothed revenue.
Smoothed annual revenue requirement	53.96	Incremental impact after smoothing.

Table 14 details the 2024-29 incremental revenue forecast of Stage 1 construction and delivery by year.

Table 14 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 (updated for NWTD early works and 2025-26 RoD)	163.38	172.96	183.10	193.84	205.21	918.50
Impact of Stage 1 construction and delivery annual change	-	-	8.21	17.78	27.97	53.96
Revised smoothed revenue requirement	163.38	172.96	191.31	211.62	233.17	972.45

As discussed above, we are progressing a concessional finance arrangement that will result in lower impacts on customer transmission charges once implemented. As the concessional finance arrangement is currently being negotiated, the benefit to be passed through to customers has not yet been finalised. The indicative price impacts shown in this Application therefore reflect a range of potential outcomes.

Table 15 and Table 16 show the indicative distribution customer network bill impacts of the Stage 1 construction and delivery after concessional finance for the 2024-29 regulatory period for a typical residential customer and a typical small business customer.

Based on the forecast revenue adjustment and an indicative range of concessional finance outcomes, the Stage 1 construction and delivery results in a minor impact (less than +/- one per cent per annum) for both typical residential and small business network charges for the final two years of the regulatory control period (given the timing of the annual pricing process and the expected timing of an AER determination on this Application, the indicative pricing shown assumes 2026-27 Stage 1 construction and delivery annual charges net of concessional finance benefits are recovered in 2027-28).

The impacts on transmission load customers are greater 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. The impacts for individual transmission customers will be provided directly to those customers.



Table 15 Impact of Stage 1 construction and delivery on typical residential customer bill (\$, real 2023-24)42

Residential	2024-25	2025-26	2026-27	2027-28	2028-29
Base Annual Charges <sup>43</sup>	835	891	976	1,012	1,001
Impact of Stage 1 construction and delivery – including concessional finance benefits	-	-	-	-6.4 - 7.2 (-0.6% - 0.7%)	-9.0 - 6.1 (-0.9% - 0.6%)
Revised typical residential customer bill	835	891	976	1,006 - 1,019	992 - 1,007

Table 16 Impact of Stage 1 construction and delivery on typical small business customer bill (\$, real 2023-24)44

· •		• • •		***		
Small business	2024-25	2025-26	2026-27	2027-28	2028-29	
Base Annual Charges <sup>43</sup>	2,987	3,189	3,471	3,588	3,533	
Impact of Stage 1 construction and delivery – including concessional finance benefits	-	-	-	-22.7 - 25.7 (-0.6% - 0.7%)	-31.9 - 21.5 (-0.9% - 0.6%)	
Revised typical small business customer bill	2,987	3,189	3,471	3,565 - 3,614	3,502 - 3,533	

<sup>&</sup>lt;sup>42</sup> The typical residential customer assumes annual consumption of 7,834 kWh on the default time of use consumption network tariff (TAS93).

<sup>&</sup>lt;sup>43</sup> Based on 2024-29 AER Determination (updated for NWTD early works and 2025-26 RoD) and other annual pricing adjustments.

<sup>&</sup>lt;sup>44</sup> The typical small business customer assumes annual consumption of 33,578 kWh on the default time of use consumption network tariff (TAS94).

## 7 Guide to compliance

Table 17 lists the NER requirements for a CPA, and where they have been addressed in this Application.

#### Table 17 Compliance with NER requirements

NE	R, clau	ise 6A.8.2(b) requirements	Reference in Application			
1.	An ex	xplanation that substantiates the occurrence of the trigger .	Section 2.2			
2.	A fore	ecast of the total capex for the contingent project.	Section 4			
3.	regula consi	ecast of the capital and incremental opex, for each remaining atory year which the Transmission Network Service Provider ders is reasonably required for the purpose of undertaking the ngent project.	Section 4 Section 5			
4.		the forecast of the total capex for the contingent project meets reshold as referred to in clause 6A.8.A1(b)(2).	Section 2.6			
5.	5. The intended date for commencing the contingent project (which must be during the regulatory control period).  Section 2.5					
6.		nticipated date for completing the contingent project (which be after the end of the regulatory control period).	Section 2.5			
7.	Netwood earne period	ork Service Provider considers is likely to be required to be d in each remaining regulatory year of the regulatory control d as a result of the contingent project being undertaken as libed 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);	Section 6 Appendix A			
	(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;	, препам,			
	(iv)	in accordance with the requirements for depreciation referred to in clause 6A.6.3; and				
	(v)	on the basis of the capex and incremental opex referred to in subparagraph (b)(3).				

NER, clause 6A.8.2(b) requirements	Reference in Application
10. If the application is in respect of an actionable ISP project which was previously the subject of an early works contingent project application, a summary of the total expenditure previously approved by the AER and the actual costs incurred in respect of that actionable ISP project.	Section 1.2

Table 18 lists the CPA requirements in the AER's Guidance Note and where these have addressed these in this Stage 1 Application.

#### Table 18 Compliance to AER Guidelines

AER Guideline requirement	Reference in Application
Stakeholder engagement (section 2.2)	
Overview of stakeholder engagement approach and feedback received	Section 3
Project governance (section 2.4)	
Project governance framework and processes, including key roles, accountabilities and responsibilities	Section 7 of Labour and
Project (including risk) reporting, monitoring and evaluation arrangements	Indirect Costs Forecasting Methodology
Any supporting assurance arrangements	

#### **Project Plans (section 2.4.2)**

High level delivery schedule, with key milestones and timeframes

Project resourcing and capability arrangements

Key dependencies and decision points for the project

Risk management framework and plan (see also section 2.6.3 - 'Risk management')

Established arrangements for post completion project review

Section 2.5

Labour and Indirect Costs Forecasting Methodology

Section 5 of Direct Capex Forecasting Methodology



#### **AER Guideline requirement**

#### Reference in Application

#### Procurement strategy, processes, and outcomes (section 2.5)

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

Outcomes of procurement activities

Tender Evaluation and Probity Report(s)

CPA-1

Section 3 of Direct Capex Forecasting Methodology

#### 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

Section 5 of Direct Capex Forecasting Methodology

Risk and Contingency Report

## Appendix A – Revenue application

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

On the basis of the Stage 1 construction and delivery 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 2.8, we are progressing a concessional finance arrangement in relation to the capex for the NWTD. The revenue outcome in this Application has been forecast without reference to concessional finance. When a concessional finance arrangement is agreed we 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 19 sets out the incremental revenue requirement for the NWTD Stage 1 construction and delivery and the revised total revenue requirement for the 2024-29 regulatory period. This has been calculated using the 2024-29 AER Determination (updated for NWTD early works and 2025-26 RoD) PTRM, which has been updated for the incremental forecast capex and opex outlined in this Application.

Table 19 Incremental revenue requirement (\$ million, nominal)

MAR (smoothed revenue)	2024-25	2025-26	2026-27	2027-28	2028-29	Total
2024-29 AER Determination (updated for NWTD early works and 2025-26 RoD)	163.38	172.96	183.10	193.84	205.21	918.50
Impact of Stage 1 construction and delivery works	-	-	8.21	17.78	27.97	53.96
Revised MAR	163.38	172.96	191.31	211.62	233.17	972.45

The rest of this appendix:

- identifies the weighted average cost of capital (WACC) and standard asset life assumptions; and
- sets out projected return on capital, regulatory depreciation, tax allowance, debt and equity raising costs, revenue requirements.

Indicative customer price impacts are shown in section 6 above.

### 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 20.

#### Table 20 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)	5.95%
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 construction and delivery 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 construction and delivery are set out in Table 21.

Table 21 Asset Lives

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 22 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 A.2.

Table 22 Incremental return on capital (\$ million, nominal)

Return on capital	2024-25	2025-26	2026-27	2027-28	2028-29	Total
2024-29 AER Determination (updated for NWTD early works and 2025-26 RoD)	99.67	107.25	113.94	117.27	121.52	559.65
Impact of Stage 1 construction and delivery	-	0.41	10.14	33.17	49.50	93.22
Revised return on capital	99.67	107.66	124.08	150.44	171.02	652.87

## A.4 Regulatory depreciation

Table 23 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 in CPA-1, the commissioning of the Stage 1 early works capex is assumed to be independent from the Stage 1 construction and delivery capex. The early works capex has been treated as commissioned at the expected end of early works (February 2026). The construction and delivery capex forecast for the current regulatory period has been treated as commissioned at the expected construction completion in June 2029. The remaining construction and delivery capex forecast for 2029-30 will be treated as commissioned in June 2030 at project finalisation.

Incremental regulatory depreciation is negative \$40.34 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. This outcome will reverse in future regulatory periods, leading to positive regulatory depreciation.

Table 23 Incremental regulatory depreciation (\$ million, nominal)

Regulatory depreciation	2024-25	2025-26	2026-27	2027-28	2028-29	Total
2024-29 AER Determination (updated for NWTD early works and 2025-26 RoD)	24.19	20.25	24.74	21.40	21.33	111.90
Impact of Stage 1 construction and delivery	-	(0.04)	(4.37)	(14.51)	(21.43)	(40.34)
Revised regulatory depreciation	24.19	20.21	20.37	6.89	(0.10)	71.55

Regulatory depreciation is equal to straight line depreciation less indexation on TasNetworks' opening RAB. Straight line depreciation commences once assets are commissioned. For construction and delivery expenditure, this is largely in 2028-29 (with capex incurred in 2029-30 also commissioned in the same year), so straight line depreciation on construction and delivery capex will commence in 2029-30, except for equity raising costs which have been calculated using the AER's standard approach in the PTRM. However, the adjustment for indexation on opening RAB is based on incurred expenditure so the indexation adjustment related to construction and delivery expenditure commences prior to straight line depreciation commencing. The impacts on straight line depreciation and indexation on the opening RAB are shown in Table 24 and Table 25.

Table 24 Incremental straight-line depreciation (\$ million, nominal)

Regulatory depreciation	2024-25	2025-26	2026-27	2027-28	2028-29	Total
2024-29 AER Determination (updated for NWTD early works and 2025-26 RoD)	69.56	68.22	75.50	73.22	74.31	360.81
Impact of Stage 1 construction and delivery	-	0.14	0.15	0.15	0.16	0.60
Revised straight line depreciation	69.56	68.36	75.65	73.37	74.47	361.41

Table 25 Incremental indexation on opening RAB (\$ million, nominal)

Regulatory depreciation	2024-25	2025-26	2026-27	2027-28	2028-29	Total
2024-29 AER Determination (updated for NWTD early works and 2025-26 RoD)	45.37	47.97	50.76	51.82	52.99	248.92
Impact of Stage 1 construction and delivery	-	0.19	4.52	14.66	21.58	40.94
Revised indexation on opening RAB	45.37	48.15	55.28	66.48	74.57	289.86

#### A.5 Tax allowance

Table 26 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 expenditure.

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

Table 26 Incremental tax allowance (\$ million, nominal)

Tax Allowance	2024-25	2025-26	2026-27	2027-28	2028-29	Total
2024-29 AER Determination (updated for NWTD early works and 2025-26 RoD)	4.13	2.75	2.77	3.02	3.75	16.42
Impact of Stage 1 construction and delivery	-	(0.18)	(0.05)	0.23	0.43	0.43
Revised tax allowance	4.13	2.58	2.72	3.25	4.18	16.86

## 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.
- Additional debt raising costs are forecast given the Stage 1 construction and delivery capex impacts RAB. The incremental debt raising costs are provided in Table 27.
- 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 per cent gearing), and split between distribution reinvestment and external equity raising sources; and
  - 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. However, the level of construction and delivery capex for the Project does provide for an equity raising allowance for the construction and delivery expenditure. The incremental equity raising costs are provided in Table 28.



Table 27 Incremental debt raising costs (\$ million, nominal)

Debt raising costs	2024-25	2025-26	2026-27	2027-28	2028-29	Total
2024-29 AER Determination (updated for NWTD early works and 2025-26 RoD)	0.91	0.96	1.02	1.04	1.06	4.99
Impact of Stage 1 construction and delivery	-	0.00	0.09	0.29	0.43	0.82
Revised debt raising costs	0.91	0.97	1.11	1.33	1.50	5.81

Table 28 Incremental equity raising costs (\$ million, nominal)

Debt raising costs	2024-25	2025-26	2026-27	2027-28	2028-29	Total
2024-29 AER Determination (updated for NWTD early works and 2025-26 RoD)	-	-	-	-	-	-
Impact of Stage 1 construction and delivery	6.86	-	-	-	-	6.86
Revised equity raising costs	6.86	-	-	-	-	6.86

## 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 construction and delivery capex.

## A.8 Revenue adjustment

There is no change to efficiency scheme outcomes and there is no revenue carry-over from the 2019-24 regulatory control period.

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

Table 29 details the incremental annual building block revenue requirements for the Project, based on forecasts provided above and developed using the PTRM.



Table 29 Incremental revenue requirements (\$ million, nominal)

	2024-25	2025-26	2026-27	2027-28	2028-29	Total
2024-29 AER Determination (updated for NWTD early works and 2025-26 RoD)						
Return on capital	99.67	107.25	113.94	117.27	121.52	559.65
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	3.15	(3.22)	(0.23)	0.91	0.60	1.21
Tax allowance	4.13	2.75	2.77	3.02	3.75	16.42
Unsmoothed revenue requirement	172.02	170.91	187.32	190.09	195.97	916.32
Impact of Stage 1 const	ruction and	delivery				
Return on capital	-	0.41	10.14	33.17	49.50	93.22
Regulatory depreciation	-	(0.04)	(4.37)	(14.51)	(21.43)	(40.34)
Opex	-	0.00	0.09	0.31	0.48	0.86
Revenue adjustments	_	-	-	-	<u>-</u>	-
Tax allowance	-	(0.18)	(0.05)	0.23	0.43	0.43
Unsmoothed revenue requirement	-	0.20	5.80	19.19	28.94	54.13
Revised revenue require	ment					
Return on capital	99.67	107.66	124.08	150.44	171.02	652.87
Regulatory depreciation	24.19	20.21	20.37	6.89	(0.10)	71.55
Opex	40.89	43.88	46.19	47.79	49.21	227.96
Revenue adjustments	3.15	(3.22)	(0.23)	0.91	0.60	1.21
Tax allowance	4.13	2.58	2.72	3.25	4.18	16.86
Unsmoothed revenue requirement	172.02	171.11	193.13	209.28	224.91	970.45

## A.10 Amended MAR (smoothed revenue)

The incremental unsmoothed revenue requirement shown in Table 29 has been smoothed from 2026-27 onwards, as 2025-26 revenue is already set from a revenue recovery perspective. The revised smoothed revenue requirement is shown in Table 30 below. TasNetworks will begin to recover the incremental revenue approved by the AER for the 2024-29 regulatory period from 2026-27, in accordance with our approved Transmission Pricing Methodology.

Table 30 Revised smoothed revenue requirement (\$ million, nominal)

Revenue (smoothed)	2024-25	2025-26	2026-27	2027-28	2028-29	Total
2024-29 AER Determination (updated for NWTD early works and 2025-26 RoD)	163.38	172.96	183.10	193.84	205.21	918.50
Impact of Stage 1 construction and delivery	-	-	8.21	17.78	27.97	53.96
Revised smoothed revenue requirement	163.38	172.96	191.31	211.62	233.17	972.45

Table 31 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 three years of the 2024-29 regulatory period being the remaining years over which the smoothed revenue requirement will be recovered.

Table 31 Revised X-factors (%)

X-factor	2024-25	2025-26	2026-27	2027-28	2028-29
2024-29 AER Determination (updated for NWTD early works and 2025-26 RoD)	-1.40	-3.12	-3.12	-3.12	-3.12
Impact of Stage 1 construction and delivery	-	-	-4.62	-4.63	-4.21
Revised smoothed revenue requirement	-1.40	-3.12	-7.75	-7.75	-7.33

## 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; and
- 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 the NWTD.

## B.1 NWTD technical scope

This section describes the technical scope of the 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 telecommunications and secondary assets required to provide protection and other communications functionality at the asset level, site level, and between sites; and
- 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 Principal's Project Requirements (PPR).



### **B.1.1** NWTD scope summary

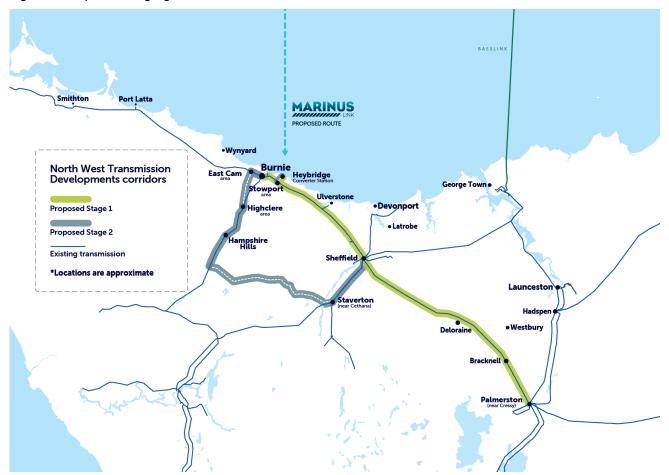
Table 32 presents a summary of the transmission lines, substations and switching stations impacted by upgrade or construction activities required to support Project Marinus as part of Stage 1 and/or Stage 2.

Table 32 Summary of NWTD scope (material works only)

Impacted Site	Site Status	NWTD Stage 1	NWTD Stage 2
Palmerston—Sheffield 220 kV transmission line ( <b>TL</b> )	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 4 presents a graphical overview of the north-west region of Tasmania, showing the NWTD corridors and proposed staging.

Figure 4 Proposed staging of NWTD



### **B.2** Transmission lines

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

- Stage 1:
  - construction of 80 km of new double-circuit 220 kV transmission line, including 179 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 82 new steel transmission towers and 25 dual-monopole structures
  - decommissioning and removal of 138 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 SH-BU 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 SH-BU 110 kV transmission line is required in two locations to support construction of the upgraded SH-BU 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)

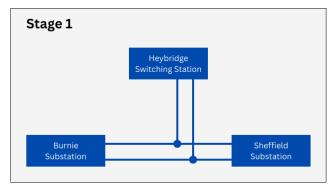
#### • Stage 1:

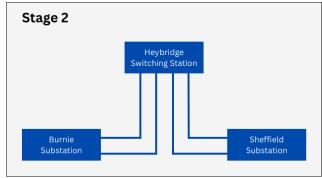
- new easement secured with 60 m width
- HB Spur East construction of 3 km of new double-circuit 220 kV transmission line, including nine (9) new steel transmission towers
- construction of HB Spur East will facilitate the connection of Heybridge Switching Station (and therefore Marinus Link) to SH-BU 220 kV transmission line and the broader north-west 220 kV transmission network via two 3-ended circuits:
  - Sheffield-Heybridge-Burnie (SH-HB-BU) No. 1 220 kV transmission circuit
  - SH-HB-BU 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 (SH-HB) No. 1 220 kV transmission circuit (via HB Spur East)
  - SH-HB No. 2 220 kV transmission circuit (via HB Spur East)
  - Heybridge-Burnie (**HB-BU**) No. 1 220 kV transmission circuit (via HB Spur West)
  - HB-BU No. 2 220 kV transmission circuit (via HB Spur West).

Figure 5 Transmission network configuration between Sheffield, Burnie, and Heybridge stations





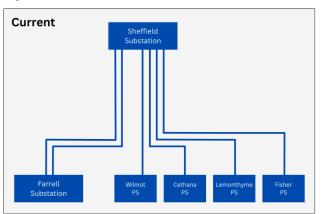
## B.2.5 Sheffield-Farrell 220 kV TL (SH-FA) and Mersey Forth Hydro Scheme

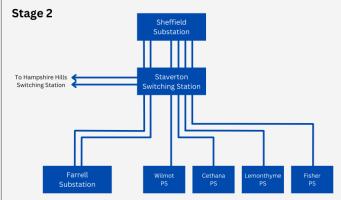
The scope of work described here for Stage 2 is indicative only and is subject to potential changes arising from the outcomes of Stage 1 of NWTD.

- 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 (SH-SV) No. 5 220 kV transmission circuit
    - SH-SV No. 6 220 kV transmission circuit
    - Staverton-Farrell (SV-FA) No. 1 220 kV transmission circuit
    - SV-FA 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
    - SH-SV No. 1 220 kV transmission circuit
    - SH–SV No. 2 220 kV transmission circuit
    - SH-SV No. 3 220 kV transmission circuit
    - SH-SV 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 75°C:
    - SH–SV No. 1 220 kV transmission circuit
    - SH-SV No. 2 220 kV transmission circuit
    - SH–SV No. 3 220 kV transmission circuit
    - SH-SV No. 4 220 kV transmission circuit.



Figure 6 Transmission network before and after construction of Staverton Switching Station





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

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 60 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 60 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 29 km 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). For efficiency and constructability, the GIS delivered in Stage 1 is sized to accommodate both Stage 1 and Stage 2 requirements.

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 breaker and half configuration
- single point of connection to MLCS via Converter Station #1 220 kV transmission circuit with double breaker connectivity by utilising Stage 2 future bays
- 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 #2 220 kV transmission circuit
- additional double-circuit connection to the transmission network via HB Spur West 220 kV 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
- duplicate busbar protection installations including integration into all existing 220 kV bays.

#### 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 (SH–WI), Sheffield–Cethana (SH–CE), Sheffield–Lemonthyme (SH–LM), and Sheffield–Fisher (SH–FI) 220 kV transmission lines between Sheffield and Staverton stations.

#### • Stage 1:

- extension of 220 kV buses A, B and E
- sectionalisation of the 220 kV Busbars
- installation of 14 live-tank 220 kV circuit breakers in a double-breaker configuration
- duplicate busbar protection installations including integration into all existing 220 kV bays
- 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 section B.2.5).

#### **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
- duplicate busbar protection installations including integration into all existing 220 kV bays.

#### • Stage 2:

- installation of two (2) live-tank 220 kV 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 220 kV transmission line
- reconfiguration of the connection to the SH-BU 220 kV 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 SH-FA, SH-WI, SH-CE, SH-LM, and SH-FI 220 kV transmission lines (additional information is provided in section B.2.5), while also connecting to the new SV-HH 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 B.2.7):
    - BU-HH 220 kV transmission line
    - SV-HH 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>45</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 (RIT) 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 NWTD 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 PACR by TasNetworks.

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

"A 1,500 MW HVDC interconnector, comprising two 750 MW symmetrical monopole HVDC interconnectors, plus associated AC network upgrades." 46

The PACR also elaborated on the scope of work for Option D.<sup>47</sup> This more detailed description is presented in Table 33, 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 33, it can be seen that the Project scope aligns with the scope of the RIT-T preferred option.

<sup>&</sup>lt;sup>47</sup> TasNetworks, Marinus Link – RIT-T Project Assessment Conclusions Report (June 2021), p.81.



<sup>&</sup>lt;sup>45</sup> National Electricity Law – Section 49(2).

<sup>&</sup>lt;sup>46</sup> TasNetworks, Marinus Link – RIT-T Project Assessment Conclusions Report (June 2021), p.51.

Table 33 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)
	AC network augmentations in Tasmania:	
	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.
AC assets	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; and
- Stage 2 a further 750 MW in both directions (total of 1,500 MW).

Appendix 5 of the 2024 ISP<sup>48</sup> 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 34, 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 34, it can be seen that the Project scope aligns with the scope described in the ISP.

Table 34 Scope of work as described in the ISP

Investment type	Development	Evidence of inclusion in NWTD
DC assets	<ul> <li>Stage 1</li> <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</li> </ul>	Out of Scope (to be addressed by Marinus Link)
	<ul> <li>A new 750 MW HVDC monopole converter station in Hazelwood area</li> </ul>	by Marinus Link)
	<ul> <li>Stage 2</li> <li>Additional 750 MW monopole HVDC link between Burnie area in Tasmania and Hazelwood area in Victoria</li> </ul>	Out of Scope
	<ul> <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>	(to be addressed by Marinus Link)
AC assets	Stage 1	
	A new 220 kV switching station at Heybridge adjacent to the converter station	Section B.3.1



<sup>&</sup>lt;sup>48</sup> AEMO 2024 ISP, Appendix 5. Network Investments, June 2024.

Investment type	Development	Evidence of inclusion in NWTD
	A new double-circuit 220 kV transmission line between Sheffield, Heybridge and Burnie	Sections B.2.2, B.2.3 and B.2.4
	A new 220 kV double-circuit line from Palmerston to Sheffield with decommissioning of the existing single-circuit line	Section B.2.1
	Decommission existing Sheffield – Burnie 220 kV line	Section B.2.2
	(Victoria) A new 500 kV connection from converter station in Hazelwood area	Out of Scope (to be addressed by Marinus Link)
	Stage 2	
	A new 220 kV switching station at Staverton	Section B.3.5
	A new double-circuit 220 kV transmission line from Staverton to Burnie via Hampshire	Sections B.2.6 and B.2.7
	Cut-in both Sheffield-Mersey Forth double-circuit 220 kV lines at Staverton	Sections B.2.5 and B.3.5
	Capacity increase of the four Sheffield-Staverton 220 kV transmission circuits	Section B.2.5
	(Victoria) A new 500 kV connection from converter station in Hazelwood area	Out of Scope (to be addressed by Marinus Link)

## Appendix C – Glossary

Abbreviation/Acronym	Definition
2024 ISP	The Australian Energy Market Operator's Final 2024 Integrated System Plan
AACE	Association for the Advancement of Cost Engineering International
AEMO	Australian Energy Market Operator
AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
Application	This contingent project application for construction and delivery costs associated with Stage 1 of the North West Transmission Developments
BU-HH	Burnie–Hampshire Hills
Capex	Capital expenditure
CBS	Community Benefits Sharing
CBSP	Community Benefits Sharing Program
CCA	Cradle Coast Authority
CEFC	Clean Energy Finance Corporation
CEO	Chief Executive Officer
CESS	Capital Expenditure Sharing Scheme
СРА	Contingent project application
CPA-1	TasNetworks' contingent project application for early works costs associated with Stage 1 of the North West Transmission Developments
CPA-2	TasNetworks' contingent project application for construction and delivery costs associated with Stage 1 of the North West Transmission Developments
D&A	Design and approvals

Abbreviation/Acronym	Definition
ECI	Early contractor involvement
EPC	Engineering, procurement and construction
EY	Ernst & Young
FID	Final investment decision
Genus	GenusPlus Group Ltd
GHD	GHD Advisory
GIS	Gas insulated switchgear
Guidelines	Capital Expenditure Incentive Guidelines for Electricity Network Service Providers
GWh	Gigawatt Hour
HB-BU	Heybridge-Burnie
HVAC	High voltage alternative current
HVDC	High voltage direct current
IASR	Inputs, Assumptions and Scenarios Report
ICAP	Independent Community Assessment Panel
ISP	Integrated System Plan
ISC	Infrastructure Sustainability Council
km	Kilometre
kV	Kilovolt
LLI	Long lead time items
Lol	Letter of Intent
m	Metre
MAR	Maximum allowed revenue
MLCS	Marinus Link Converter Station
MLPL	Marinus Link Pty Ltd



Abbreviation/Acronym	Definition
MoU	Memorandum of Understanding
MW	Megawatt
NEM	National Electricity Market
NER	National Electricity Rules
NPV	Net present value
NSP	Network Service Provider
NWTD	North West Transmission Developments
ODP	Optimal development path
Орех	Operating expenditure
PACR	Project Assessment Conclusions Report
PADR	Project Assessment Draft Report
PC	Practical completion
PM-SH	Palmerston–Sheffield
PPR	Principal's Project Requirements
Principal Contractor	GenusPlus Group Ltd
Project	North West Transmission Developments
PTRM	Post-Tax Revenue Model
RAB	Regulatory Asset Base
RIT	Regulatory Investment Test
RIT-T	Regulatory Investment Test for Transmission
RoD	Return on debt
SBP	Strategic Benefit Payment
SH-BU	Sheffield-Burnie
SH-CE	Sheffield-Cethana



Abbreviation/Acronym	Definition
SH-FA	Sheffield-Farrell
SH-FI	Sheffield-Fisher
SH-HB	Sheffield-Heybridge
SH-HB-BU	Sheffield-Heybridge-Burnie
SH-LM	Sheffield-Lemonthyme
SH-SV	Sheffield-Staverton
SH-WI	Sheffield-Wilmot
SLG	Stakeholder Liaison Group
SV-FA	Staverton–Farrell
SV-HH	Staverton-Hampshire Hills
TasNetworks	Tasmanian Networks Pty Ltd
TCD	Transmission Cost Database
TL	Transmission line
TPC	Tasmanian Planning Commission
WACC	Weighted average cost of capital



### www.tasnetworks.com.au

North West Transmission Developments Stage 1 (Construction) Official