AEMO
AUSTRALIAN ENERGY MARKET OPERATOR

Appendix A6. Tasmania

July 2025

Appendix to the 2025 Enhanced Locational Information Report

We acknowledge the Traditional Custodians of the land, seas and waters across Australia. We honour the wisdom of Aboriginal and Torres Strait Islander Elders past and present and embrace future generations.

We acknowledge that, wherever we work, we do so on Aboriginal and Torres Strait Islander lands. We pay respect to the world's oldest continuing culture and First Nations peoples' deep and continuing connection to Country; and hope that our work can benefit both people and Country.

'Journey of unity: AEMO's Reconciliation Path' by Lani Balzan

AEMO Group is proud to have launched its first Reconciliation Action Plan in May 2024. 'Journey of unity: AEMO's Reconciliation Path' was created by Wiradjuri artist Lani Balzan to visually narrate our ongoing journey towards reconciliation - a collaborative endeavour that honours First Nations cultures, fosters mutual understanding, and paves the way for a brighter, more inclusive future.

Important notice

Purpose

This report has been published to implement the Energy Security Board (ESB) 'enhanced information' transmission access reforms. The report is intended to support more informed investment and decision-making processes in the National Electricity Market, by collating public metrics and indicators that represent important locational characteristics of the power system. This report includes only publicly available information from existing AEMO, industry, and stakeholder publications.

AEMO publishes this *Enhanced Locational Information (ELI) Report* pursuant to its functions in section 49(2)(c) of the National Electricity Law. This publication is generally based on information available to AEMO as at 1 April 2025, unless otherwise indicated.

Disclaimer

AEMO has made reasonable efforts to ensure the quality of the information in this publication but cannot guarantee that information, forecasts and assumptions are accurate, complete or appropriate for your circumstances.

Modelling work performed as part of preparing this publication inherently requires assumptions about future behaviours and market interactions, which may result in forecasts that deviate from future conditions. There will usually be differences between estimated and actual results, because events and circumstances frequently do not occur as expected, and those differences may be material.

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Anyone proposing to use the information in this publication (which includes information and forecasts from third parties) should independently verify its accuracy, completeness and suitability for purpose, and obtain independent and specific advice from appropriate experts.

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Copyright

Version control

Version	Release date	Changes
1.0	09/07/2025	Initial release.

Contents

Figures

A6.1 Introduction

This appendix provides detailed locational indicators and metrics for Tasmania. This appendix contains the following information:

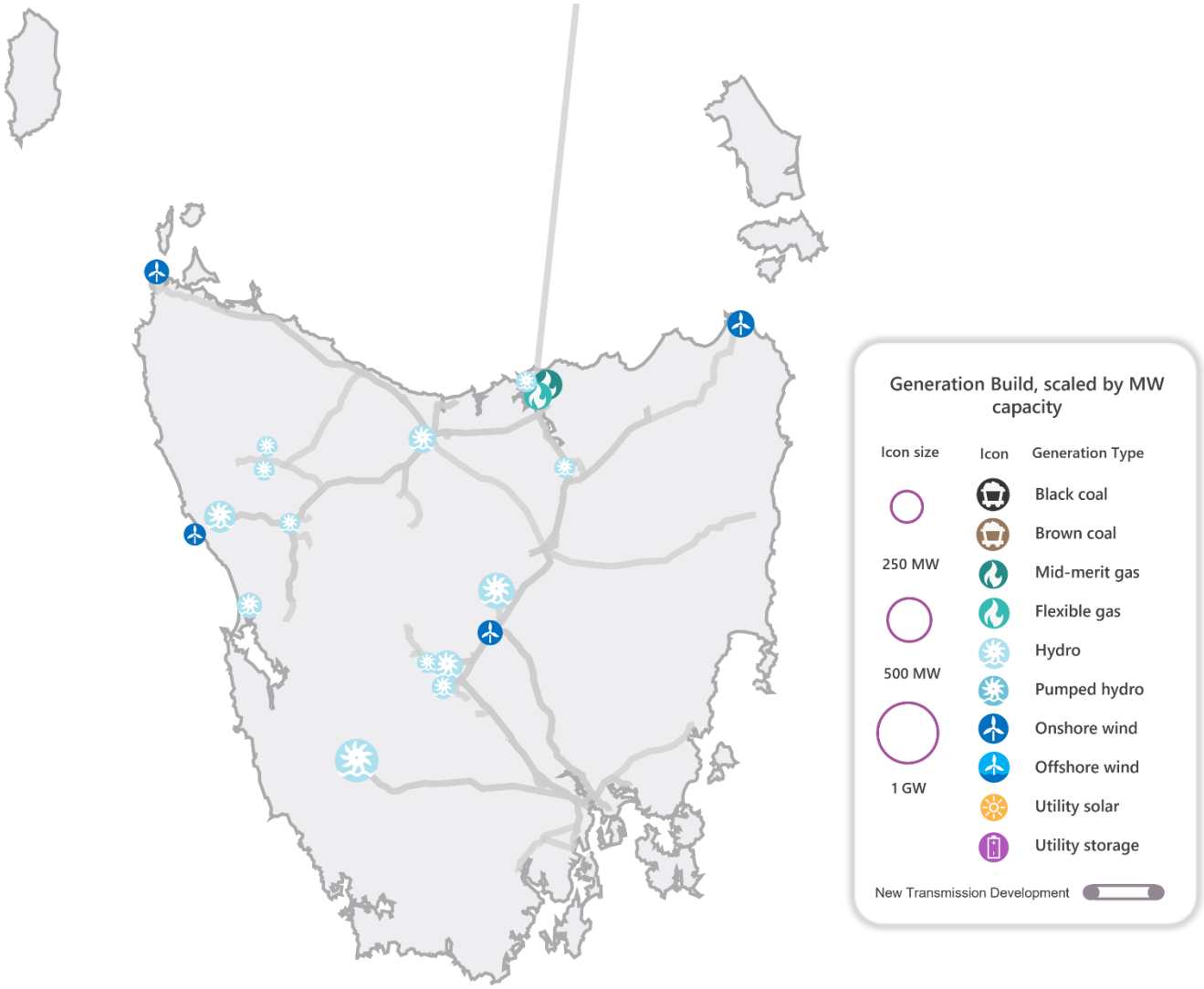
- The generation and storage capacity and annual generation energy production across Tasmania under the 2024 ISP *Step Change* projected build in 2024 (actual annual production) and 2025, 2030, and 2040 (Section A6.1).
- An overview map of the Tasmania region and associated REZs (Section A6.1)
- Detailed locational indicators and metrics for each REZ within Tasmania (Sections A6.4 to A6.8).

This appendix uses existing sources of publicly available information, including the Final 2024 ISP.

A6.2 Projected generation build

Figure 1 to **Figure 6** show the generation and storage capacity and annual generation energy production across Tasmania under the 2024 ISP *Step Change* projected build in 2024 (actual annual production) and 2025, 2030, and 2040[1].

Figure 1 Projected generation capacity (MW) and across Tasmania, under the 2024 ISP *Step Change* projected build, 2025



[1] Units smaller than 50 MW have been omitted from the capacity map, and those smaller than 125 GWh annually have been omitted from the energy production maps. Icon sizes do not represent area of land usage. Icon locations have been arranged for visual clarity. ISP projects have been placed within their relevant ISP sub-region or REZ but do not represent specific anticipated connection points.

Figure 2 Projected generation capacity (MW) and across Tasmania, under the 2024 ISP *Step Change* projected build, 2030

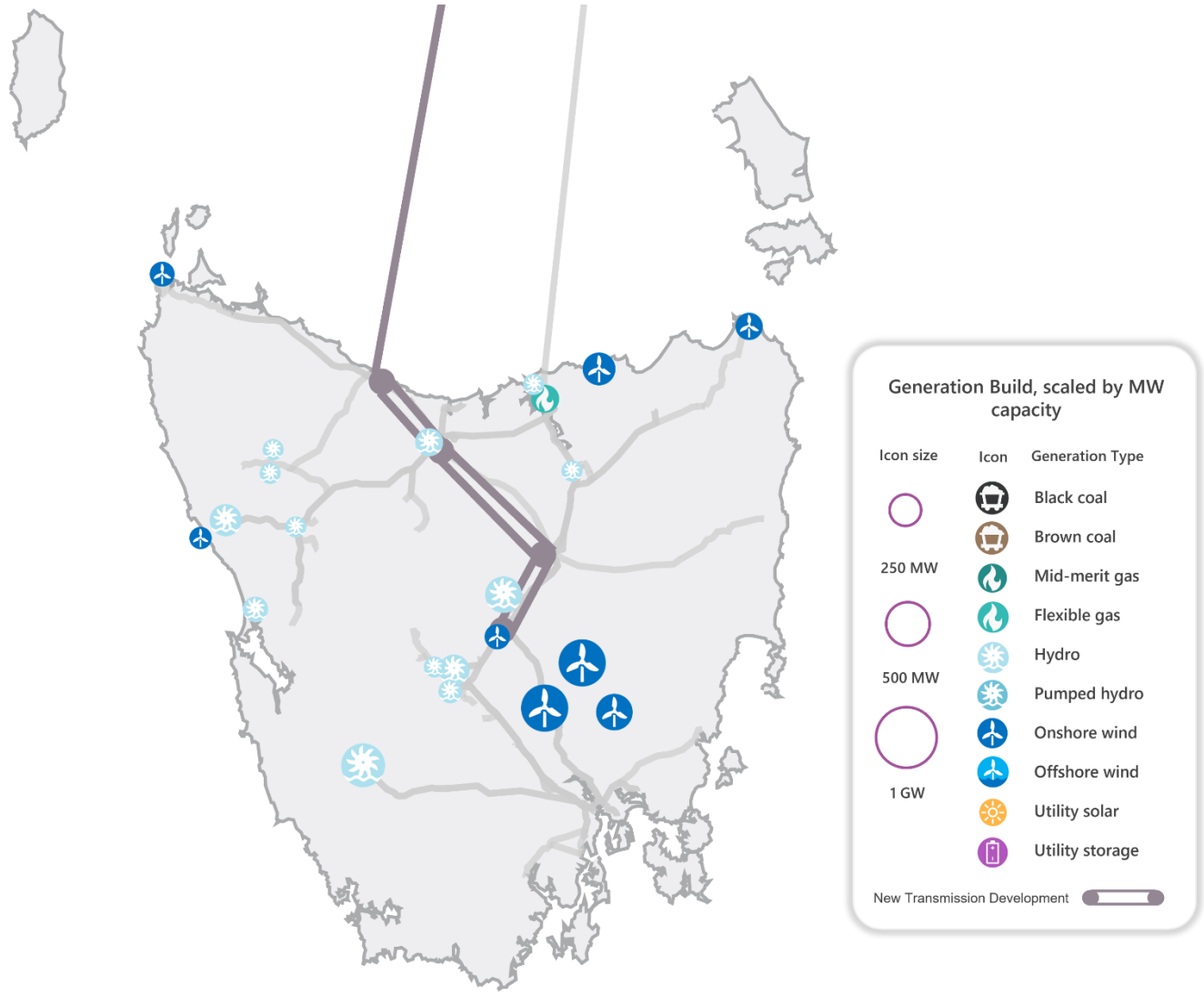


Figure 3 Projected generation capacity (MW) and across Tasmania, under the 2024 ISP *Step Change* projected build, 2040

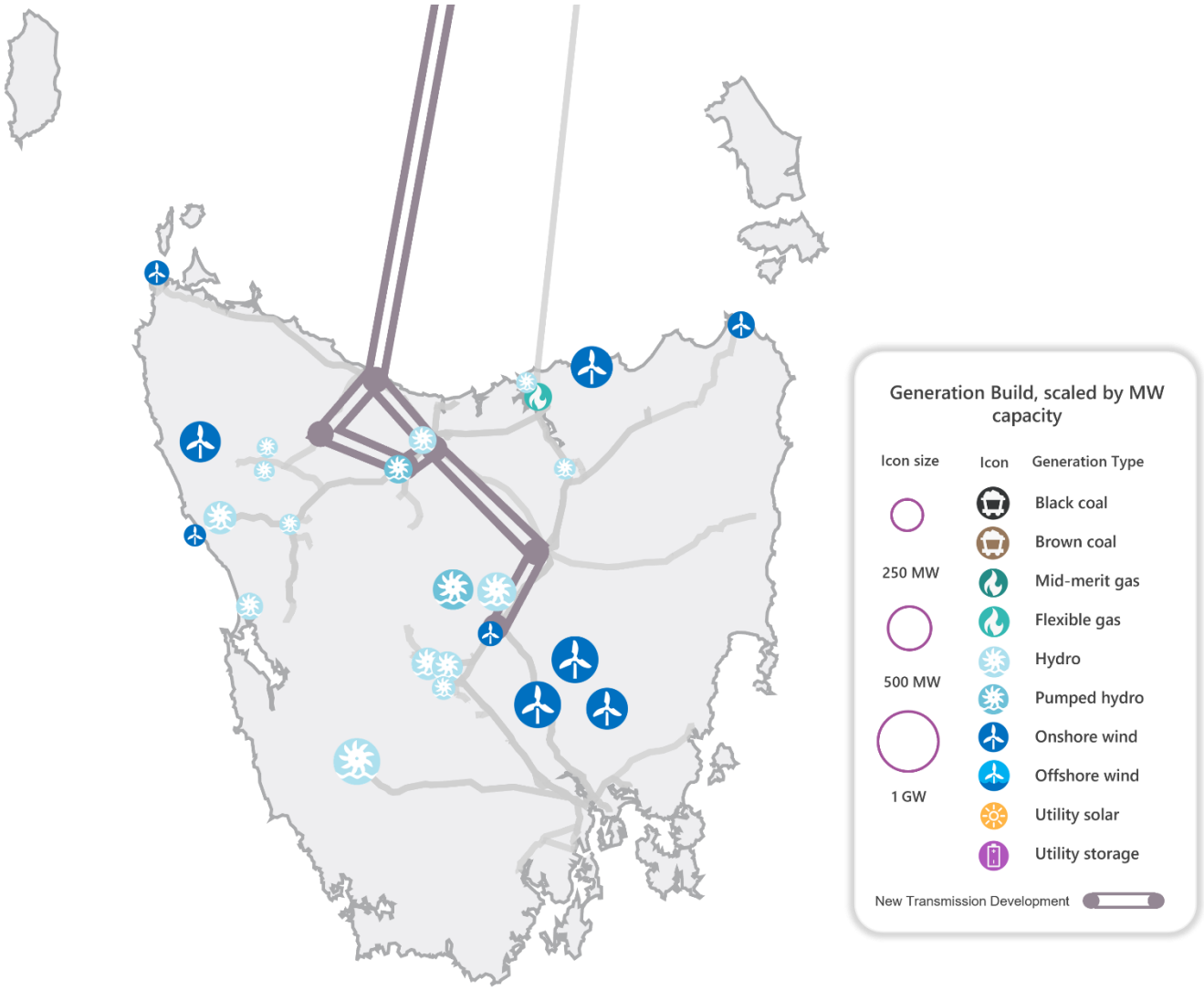
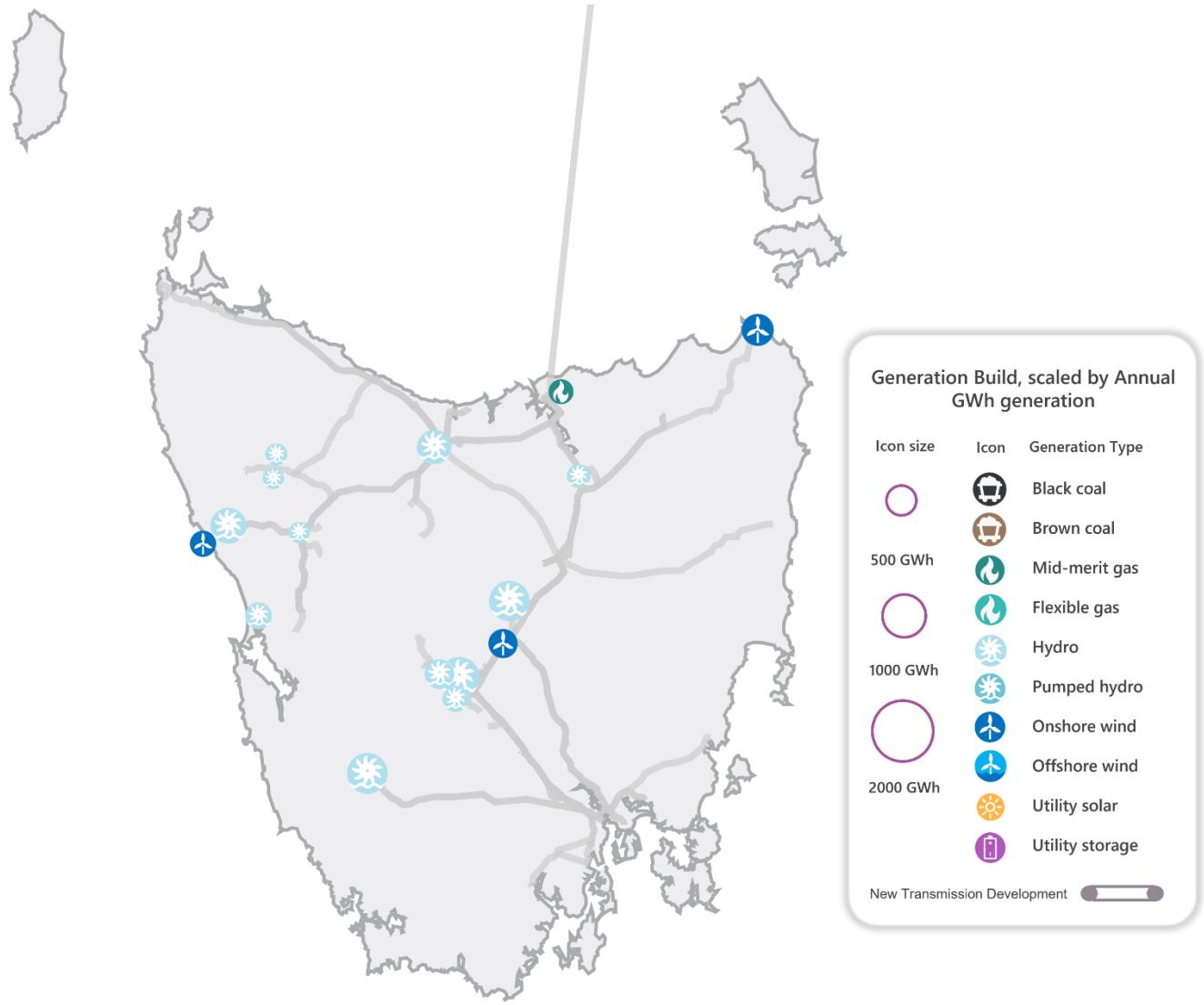


Figure 4 Annual generation energy production (MWh) across Tasmania, 2024



Note: This figure makes use of historical calendar year generation data and is hence presented for the year 2024. All other build figures make use of the 2024 ISP *Step Change* projected build.

Figure 5 Projected annual generation energy production (MWh) across Tasmania, under the 2024 ISP *Step Change* projected build, 2030

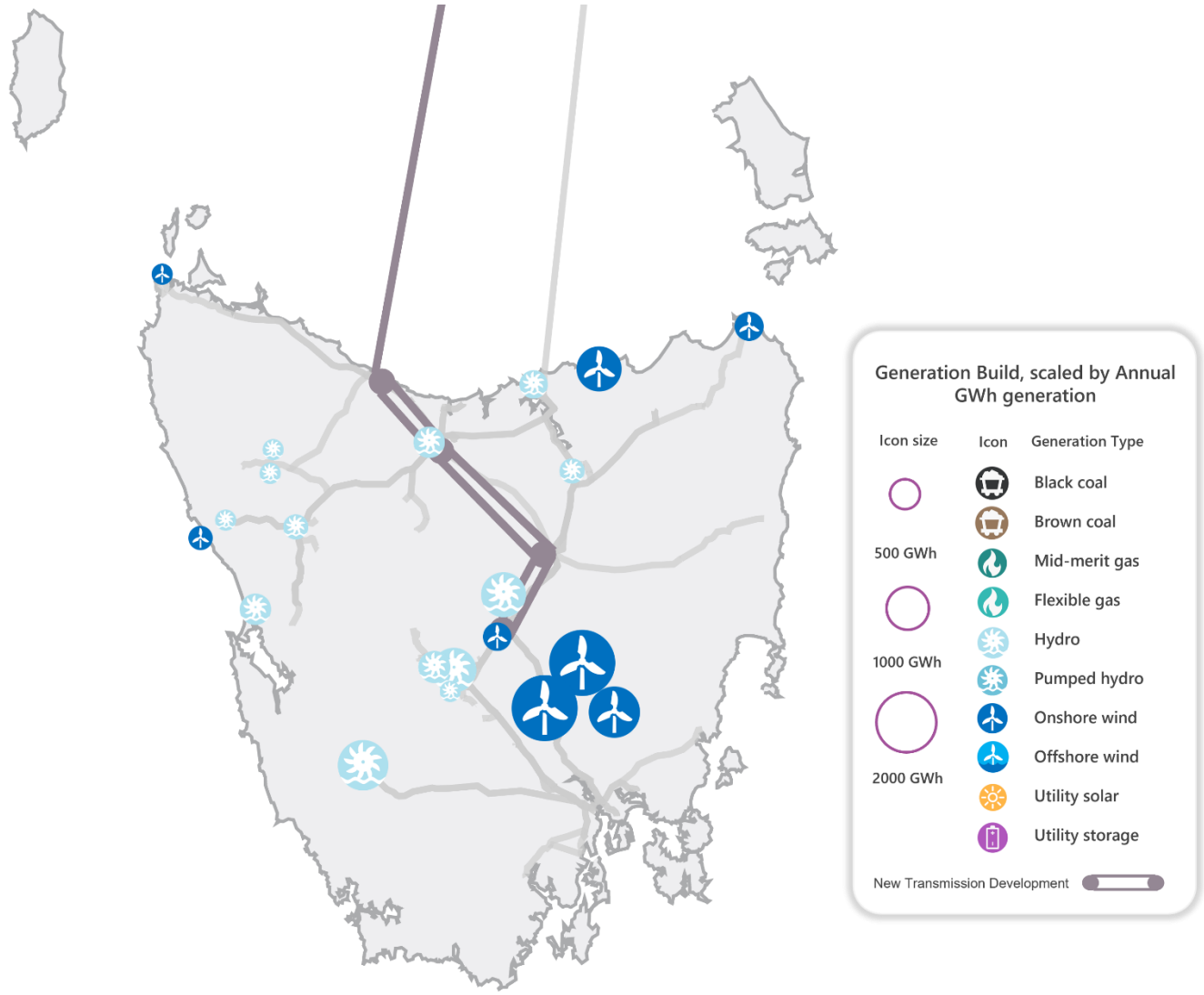
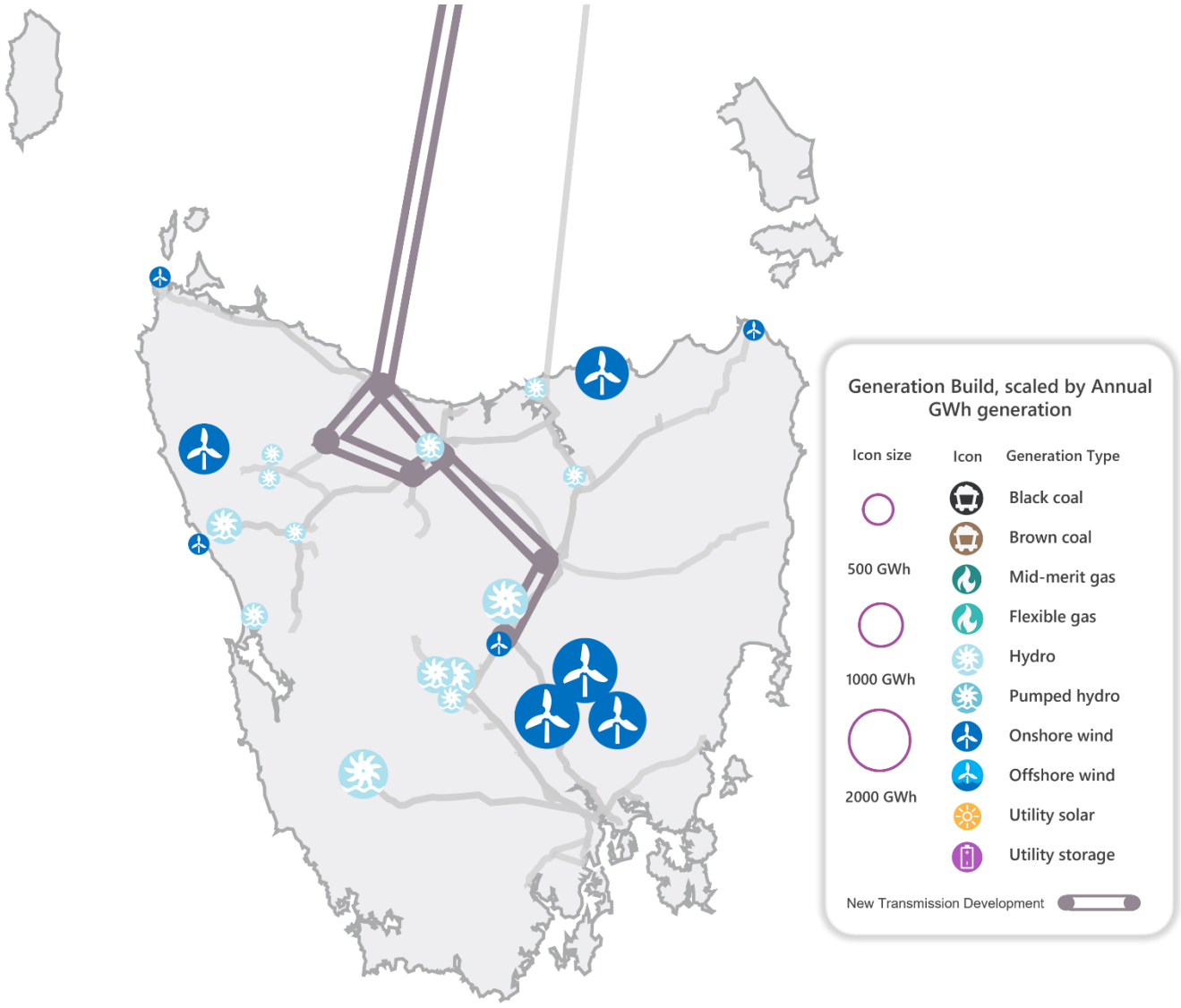


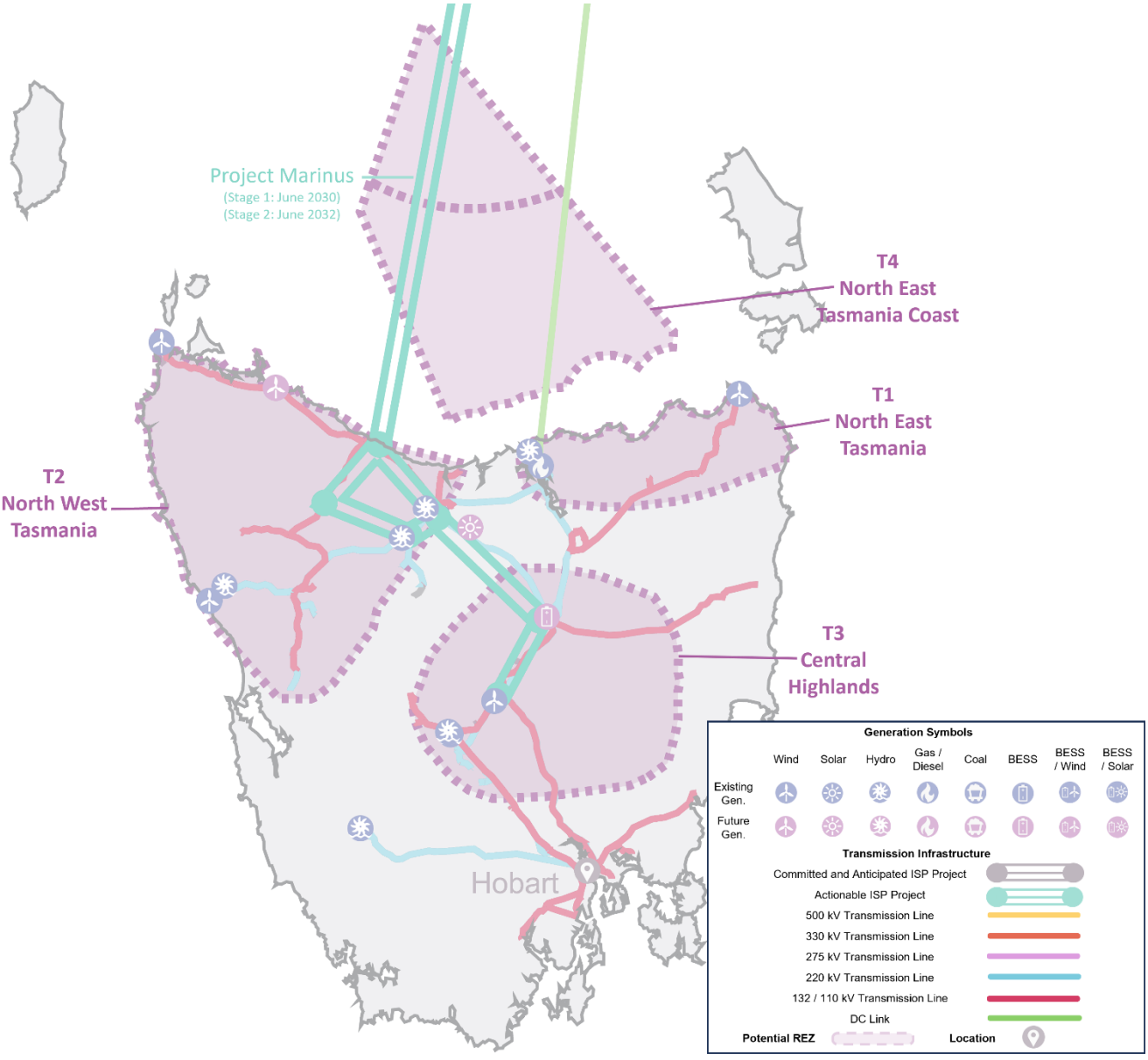
Figure 6 Projected annual generation energy production (MWh) across Tasmania, under the 2024 ISP *Step Change* projected build, 2040



A6.3 REZs overview

The following sections of this appendix provides detailed locational indicators and metrics for each REZ within Tasmania. **Figure 7** shows an overview map of the Tasmania region and associated REZs. Appendix A2 provides a guide to interpreting the REZ scorecards presented throughout the remainder of this appendix.

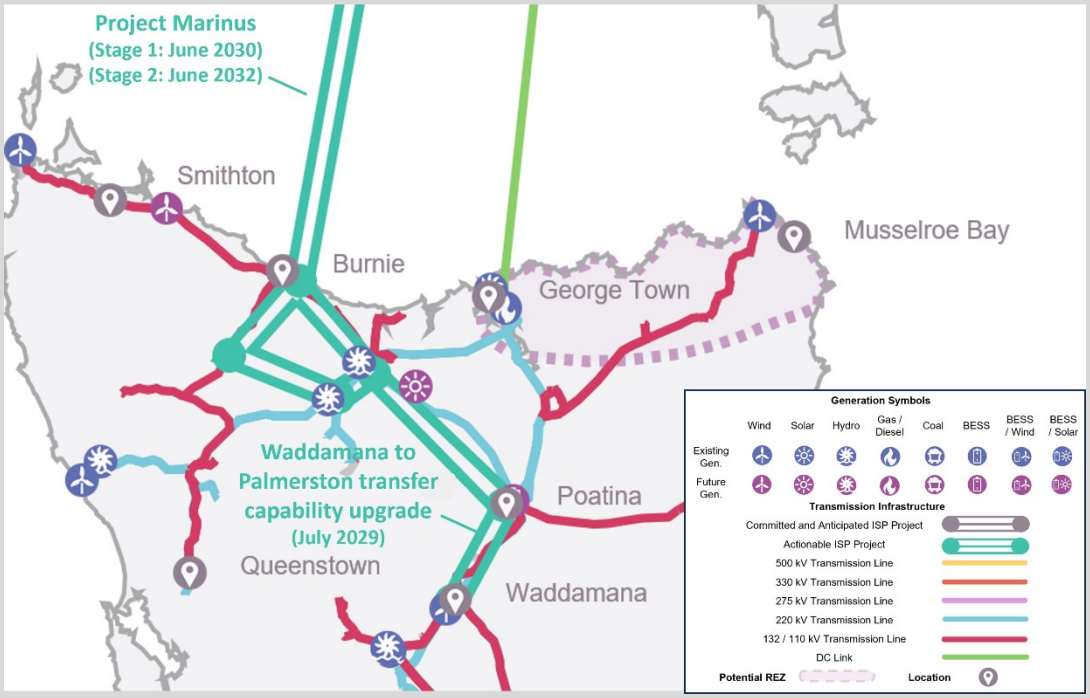
Figure 7 Overview of Tasmania region and REZs



A6.4 T1 – North East Tasmania

REZ information

North East Tasmania REZ map



Overview	Network Transfer Capability
This REZ has B grade wind resource quality. North East Tasmania is remote from the actionable Project Marinus and therefore upgrades are less influenced by its status.	Currently there is no capacity on the 110 kV network from Hadspen to Derby. There is approximately 400 MW of VRE resource capacity available within the vicinity of George Town. The capability of this zone to accommodate new generation is subject to the NET1 northeast Tasmania group constraint[2].

Jurisdictional body

TasNetworks is the jurisdictional planning body for this REZ.

Resource metrics

Resource	Solar			Wind		
Resource Quality	E			B		
Renewable Potential (MW)	300			1,400		
Demand Correlation	2029-30	2039-40	2049-50	2029-30	2039-40	2049-50
	F	F	F	B/C	B	B
Climate hazard						
Temperature score	A			Bushfire score	B	

[2] Additional augmentation is required in North East Tasmania when the combination of generation in T1 and T4 is greater than 1,600 MW in the 2024 ISP.

Marginal loss factors

Marginal Loss Factor			
Technology	**Voltage (kV)**	**2025-26 MLF**	
-	-	-	
Marginal Loss Factor Robustness			
MLF Robustness score	**2029-30**	**2034-35**	**2039-40**
	A	A	A

Congestion and curtailment

Congestion information – calendar year 2024			
Constraint ID	**Binding hours**	**Marginal value ($)**	**Most affected generation**
T^V_NIL_9	56.8	32,291.9	Generation contributing to northward flow on Basslink
T^V_NIL_BL_6	55.8	30,915.7	Generation contributing to northward flow on Basslink
T>T_NIL_110_1	282.9	839,950.4	Generation contributing to flow from Derby to Scottsdale Tee 110 kV
T>T_NIL_BL_IMP_5FF	2.0	199,611.2	Generation contributing to flow from Hadspen to Georgetown No. 2 220 kV on trip of the Hadspen – Georgetown No. 1 220 kV line
V^T_NIL_9	69.8	47,031.1	Generation contributing to southward flow on Basslink

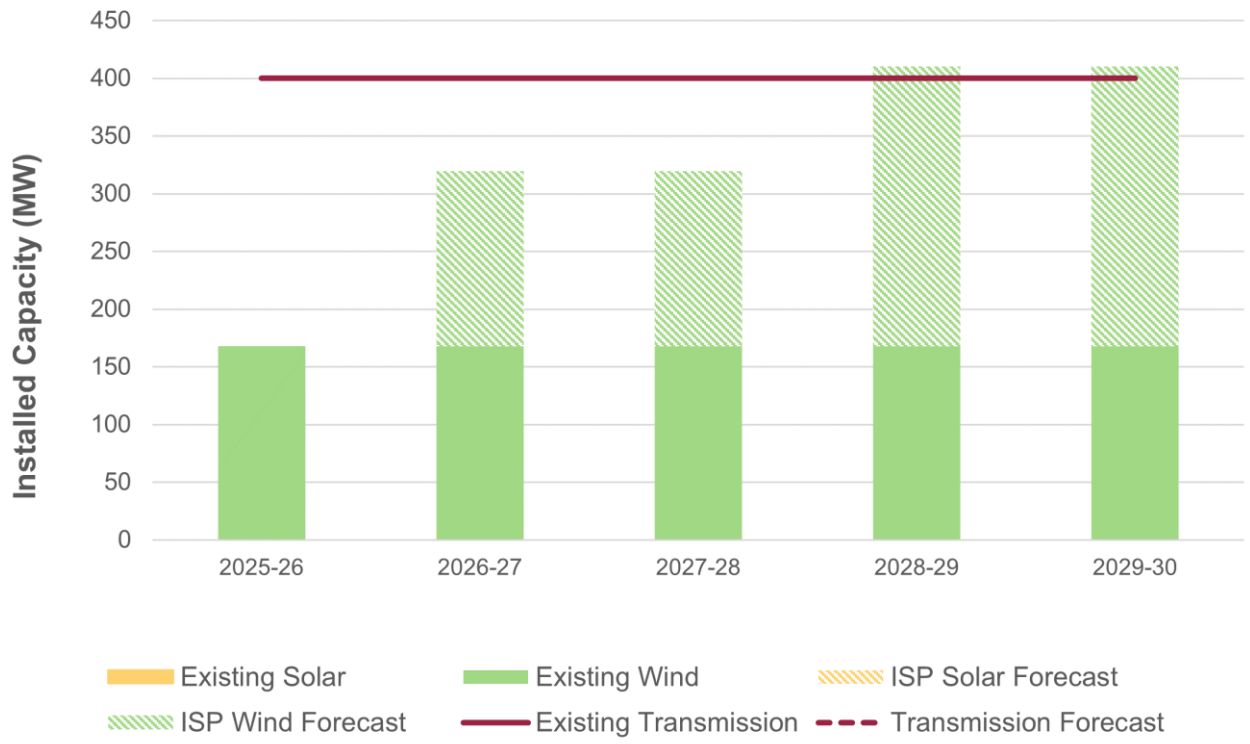
VRE semi-scheduled curtailment – calendar year 2024					
DUID	**Generator name**	**Maximum Capacity (MW)**	**Average curtailment (%)**	**Average curtailment (MW)**	**Curtailment (MWh)**
-	-	-	-	-	-
Historical hosting capacity indicator for 20% network spill threshold					
DUID	**Generator name**	**HHCI Wind (MW)**	**HHCI Wind + BESS (MW)**	**HHCI Solar (MW)**	**HHCI Solar + BESS (MW)**
-	-	-	-	-	-

VRE curtailment – ISP forecast						
Scenario	**2025-2026**		**2026-2027**		**2027-2028**	
	Curtailment (%)	**Economic offloading (%)**	**Curtailment (%)**	**Economic offloading (%)**	**Curtailment (%)**	**Economic offloading (%)**
Step Change	0	0	0	2	0	2

ISP forecast

ISP forecast												
VRE outlook	Solar PV (MW)						Wind (MW)					
	Existing/ committed/ anticipated	Projected					Existing/ committed/ anticipated	Projected				
		2025-2026	2026-2027	2027-2028	2028-2029	2029-2030		2025-2026	2026-2027	2027-2028	2028-2029	2029-2030
Step Change	-	-	-	-	-	-	168	-	152	152	242	242

Transmission access expansion for *Step Change*

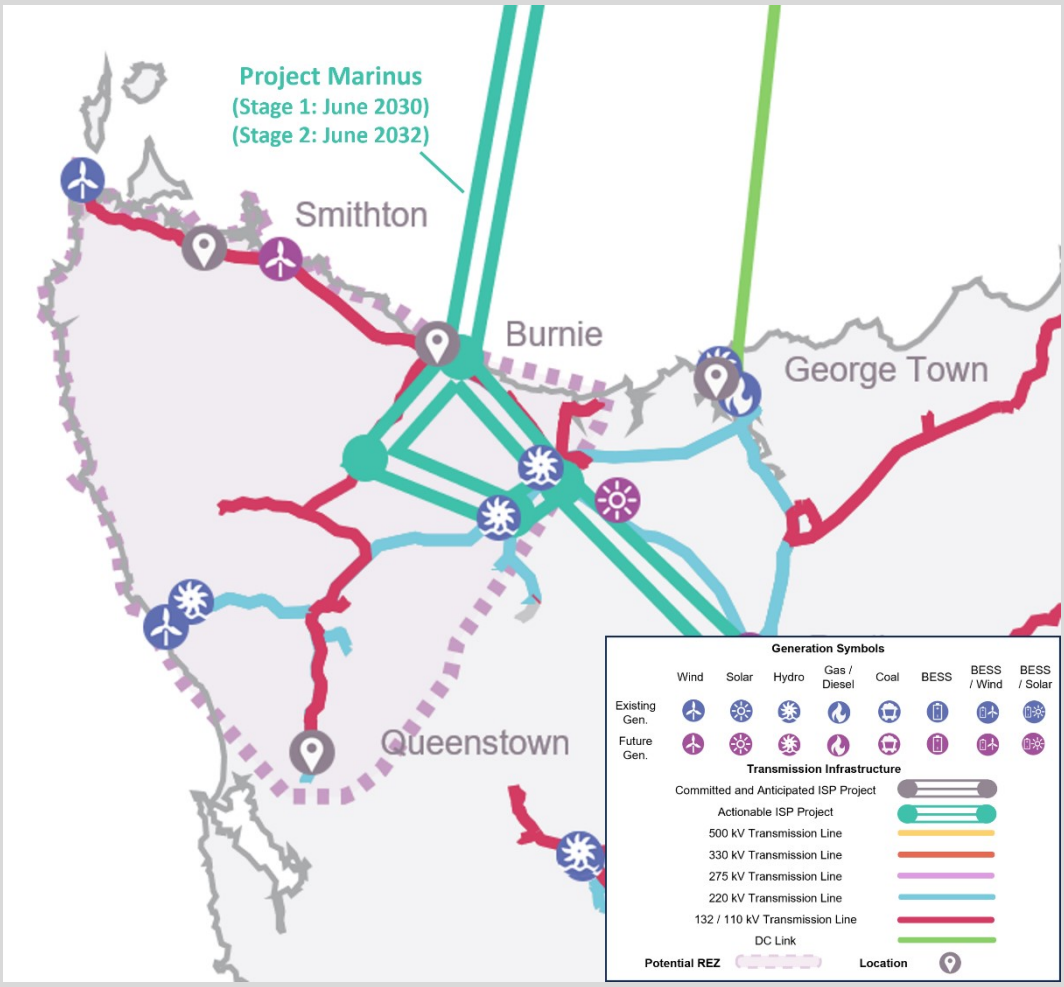


Committed, Anticipated, and Actionable Transmission Projects	Timing	Status	Additional REZ hosting capacity provided (MW)
-	-	-	-

A6.5 T2 – North West Tasmania

REZ information

North West Tasmania REZ map



Overview	Network Transfer Capability
This REZ has grade A wind resource quality and good pumped hydro resources. Timing of the North West Tasmania REZ augmentation options are highly dependent on Project Marinus. In May 2024, the Tasmanian Government released a proposed REZ Area for consultation for North West Tasmania, and AEMO will include outcomes of this consultation in subsequent studies[3].	The current total REZ transmission limit for existing (112 MW Granville Harbour Wind Farm) and new VRE before any network upgrade in North West Tasmania is approximately 277 MW for peak demand and summer typical conditions and 112 MW for winter reference condition. This REZ is affected by transient stability constraints for VRE connection at Farrell 220 kV substation. Future REZ generators are assumed to have a runback scheme in place to reduce generation output post contingency to within network capacity for lines currently covered by the Network Control System Protection Scheme (NCSPS), but not for new transmission lines.

Jurisdictional body

TasNetworks is the jurisdictional planning body for this REZ.

[3] See https://www.renewableenergyzones.tas.gov.au/.

Resource metrics						
Resource	**Solar**			**Wind**		
Resource Quality	F			A		
Renewable Potential (MW)	150			5,000		
Demand Correlation	**2029-30**	**2039-40**	**2049-50**	**2029-30**	**2039-40**	**2049-50**
	F	F	F	B	B	A
Climate hazard						
Temperature score	A			**Bushfire score**	A	

Marginal loss factors

Marginal Loss Factor		
Technology	**Voltage (kV)**	**2025-26 MLF**
Wind	220	0.9555
Marginal Loss Factor Robustness		
MLF Robustness score	**2029-30**	**2034-35**	**2039-40**
	E	B	B

Congestion and curtailment

Congestion information – calendar year 2024			
Constraint ID	**Binding hours**	**Marginal value ($)**	**Most affected generation**
T::T_NIL_1	637.6	311,416.9	Generation contributing to flow from Farrell to Sheffield 220 kV
T::T_NIL_3	21.3	15,240.1	Generation contributing to flow from Sheffield to Palmerston 220 kV

VRE semi-scheduled curtailment – calendar year 2024					
DUID	**Generator name**	**Maximum Capacity (MW)**	**Average curtailment (%)**	**Average curtailment (MW)**	**Curtailment (MWh)**
GRANWF1	Granville Harbour Wind Farm	111	0.1	0.0	367
Historical hosting capacity indicator for 20% network spill threshold[4]					
DUID	**Generator name**	**HHCI Wind (MW)**	**HHCI Wind + BESS (MW)**	**HHCI Solar (MW)**	**HHCI Solar + BESS (MW)**
GRANWF1	Granville Harbour Wind Farm	300	300	300	300

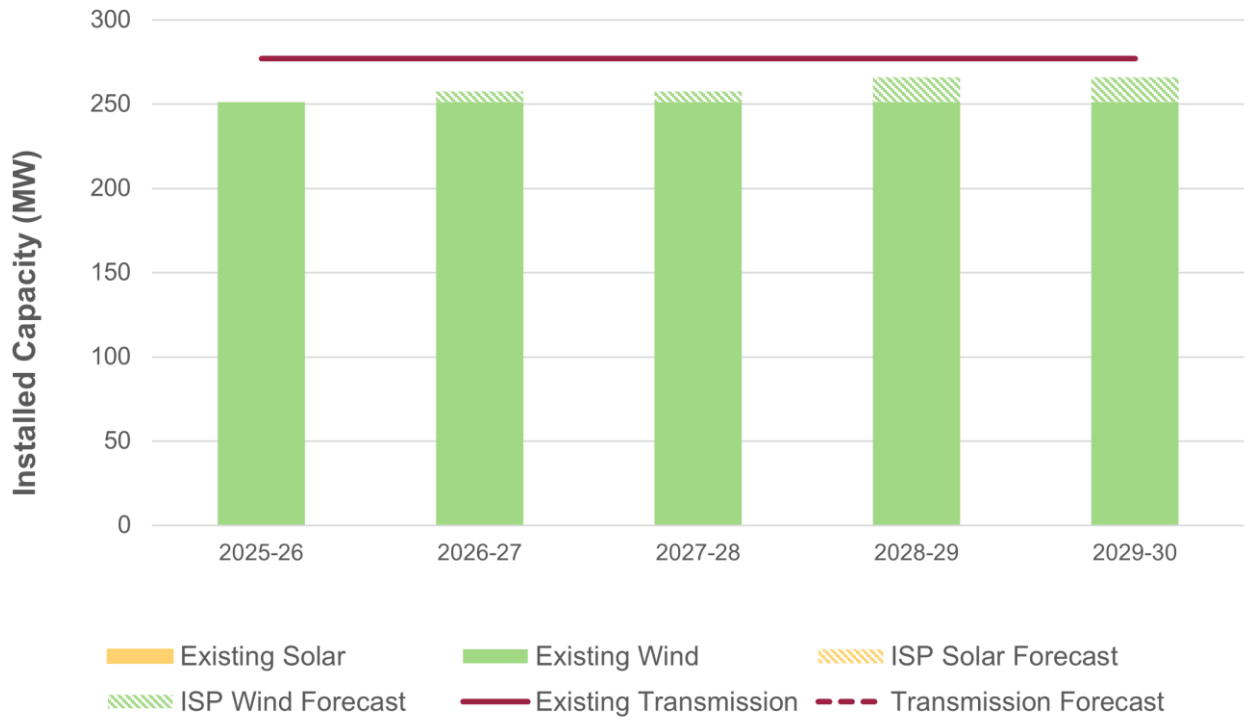
VRE curtailment – ISP forecast						
Scenario	**2025-2026**		**2026-2027**		**2027-2028**	
	Curtailment (%)	**Economic offloading (%)**	**Curtailment (%)**	**Economic offloading (%)**	**Curtailment (%)**	**Economic offloading (%)**
Step Change	0	0	0	2	0	2

[4] The maximum hosting capacity was set to 300 MW for these studies. See Appendix A2.5 for the detailed methodology and see 2025 ELI Report chart data for information on the reference generation profiles used in this analysis.

ISP forecast

ISP forecast												
VRE outlook	Solar PV (MW)						Wind (MW)					
	Existing/ committed/ anticipated	Projected					Existing/ committed/ anticipated	Projected				
		2025-2026	2026-2027	2027-2028	2028-2029	2029-2030		2025-2026	2026-2027	2027-2028	2028-2029	2029-2030
Step Change	-	-	-	-	-	-	251	-	6	6	15	15

Transmission access expansion for *Step Change*

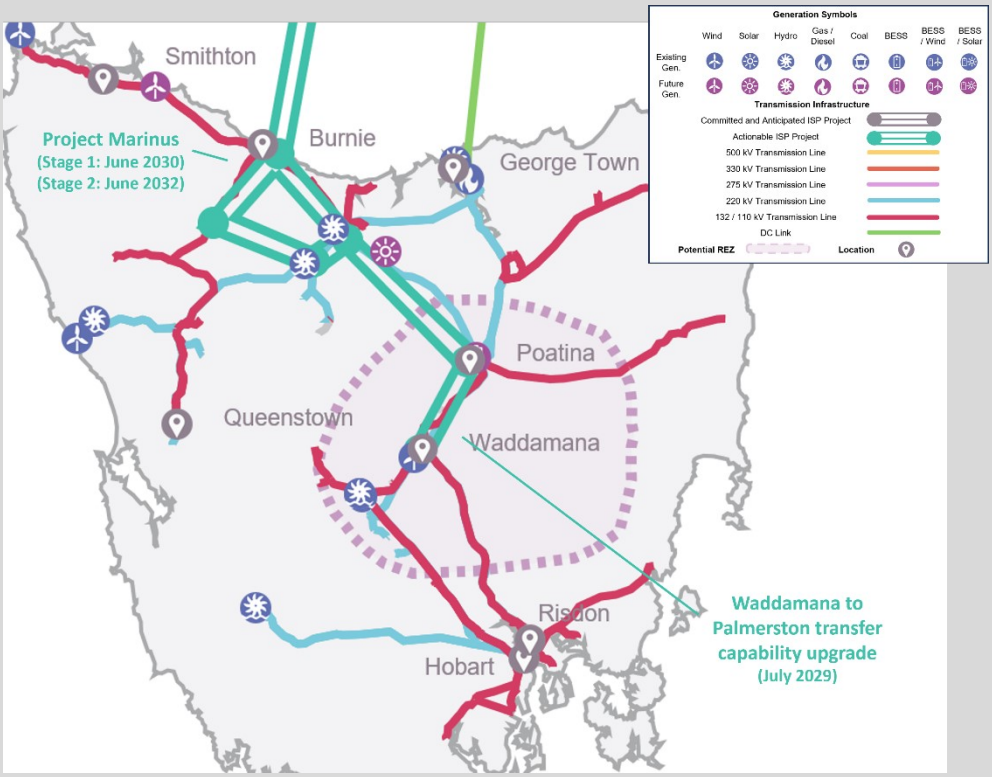


Committed, Anticipated, and Actionable Transmission Projects	Timing	Status	Additional REZ hosting capacity provided (MW)
-	-	-	-

A6.6 T3 – Central Highlands

REZ information

Central Highlands REZ map



Overview	Network Transfer Capability
This REZ has grade A wind resource quality and has good pumped hydro resources. It is located close to major load centres at Hobart. Timing of the Tasmania Central Highlands REZ augmentation options are influenced by the timing of Project Marinus augmentations.	The current total REZ transmission limit for existing (144 MW Wild Cattle Hill Wind Farm) and new VRE before any network upgrade in the Central Highlands is approximately 527 MW for peak demand and summer typical conditions and 668 MW for winter reference condition. VRE development opportunities are anticipated around the Waddamana substation. Note that a runback scheme is not considered for any new transmission lines.

Jurisdictional body

TasNetworks is the jurisdictional planning body for this REZ.

Resource metrics

Resource	Solar			Wind		
Resource Quality	F			A		
Renewable Potential (MW)	150			3,400		
Demand Correlation	2029-30	2039-40	2049-50	2029-30	2039-40	2049-50
	F	F	F	B	B	A/B

Climate hazard			
Temperature score	A	Bushfire score	D

Marginal loss factors

Marginal Loss Factor			
Technology	**Voltage (kV)**	**2025-26 MLF**	
Wind	220	0.9924	
Marginal Loss Factor Robustness			
MLF Robustness score	**2029-30**	**2034-35**	**2039-40**
	B	B	B

Congestion and curtailment

Congestion information – calendar year 2024			
Constraint ID	**Binding hours**	**Marginal value ($)**	**Most affected generation**
T::T_NIL_3	21.3	15,240.1	Generation contributing to flow from Sheffield to Palmerston 220 kV
T^T_NIL_BL_6	3.6	96,669.8	Generation in Southern Tasmania
T>T_NIL_BL_IMP_3FF	0.4	60,267.2	Generation contributing to flow from Palmerston to Hadspen No. 2 220 kV on trip of the Palmerston – Hadspen No. 1 220 kV line

VRE semi-scheduled curtailment – calendar year 2024					
DUID	**Generator name**	**Maximum Capacity (MW)**	**Average curtailment (%)**	**Average curtailment (MW)**	**Curtailment (MWh)**
CTHLWF1	Cattle Hill Wind Farm	144	0.0	0.0	159
Historical hosting capacity indicator for 20% network spill threshold[5]					
DUID	**Generator name**	**HHCI Wind (MW)**	**HHCI Wind + BESS (MW)**	**HHCI Solar (MW)**	**HHCI Solar + BESS (MW)**
CTHLWF1	Cattle Hill Wind Farm	300	300	300	300

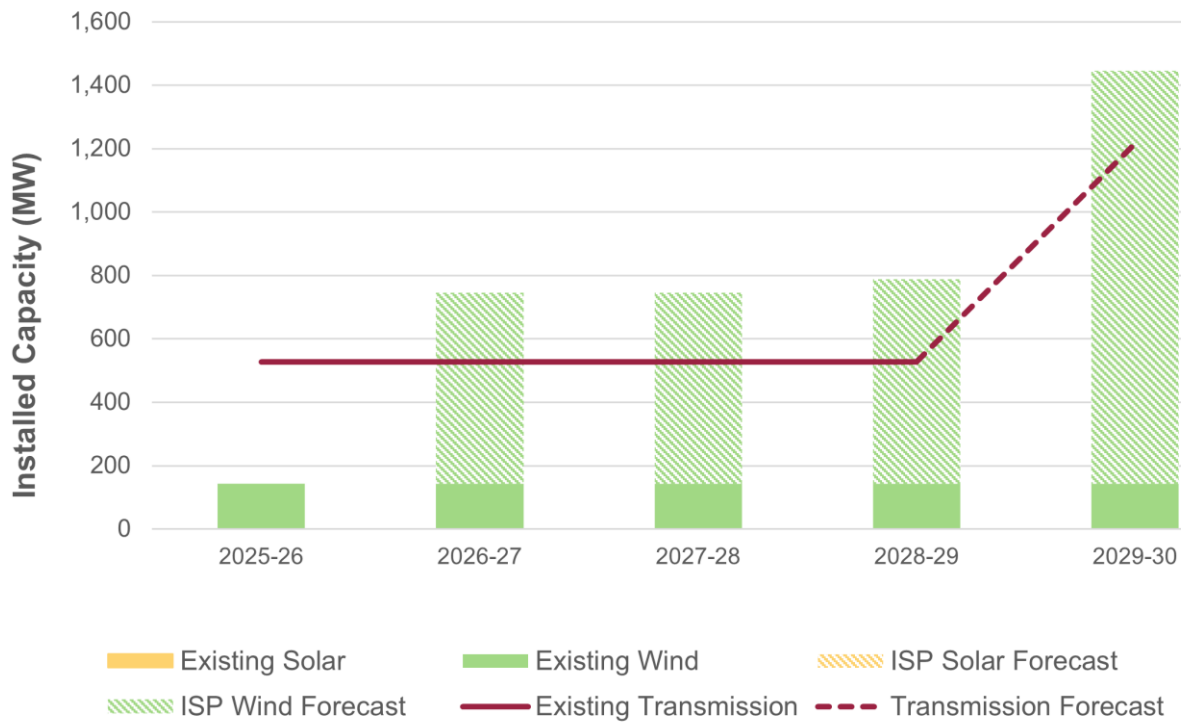
VRE curtailment – ISP forecast						
Scenario	**2025-2026**		**2026-2027**		**2027-2028**	
	Curtailment (%)	**Economic offloading (%)**	**Curtailment (%)**	**Economic offloading (%)**	**Curtailment (%)**	**Economic offloading (%)**
Step Change	0	0	1	3	1	2

[5] The maximum hosting capacity was set to 300 MW for these studies. See Appendix A2.5 for the detailed methodology and see 2025 ELI Report chart data for information on the reference generation profiles used in this analysis.

ISP forecast

ISP forecast												
VRE outlook	Solar PV (MW)						Wind (MW)					
	Existing/ committed/ anticipated	Projected					Existing/ committed/ anticipated	Projected				
		2025-2026	2026-2027	2027-2028	2028-2029	2029-2030		2025-2026	2026-2027	2027-2028	2028-2029	2029-2030
Step Change	-	-	-	-	-	-	144	-	601	601	644	1,301

Transmission access expansion for *Step Change*

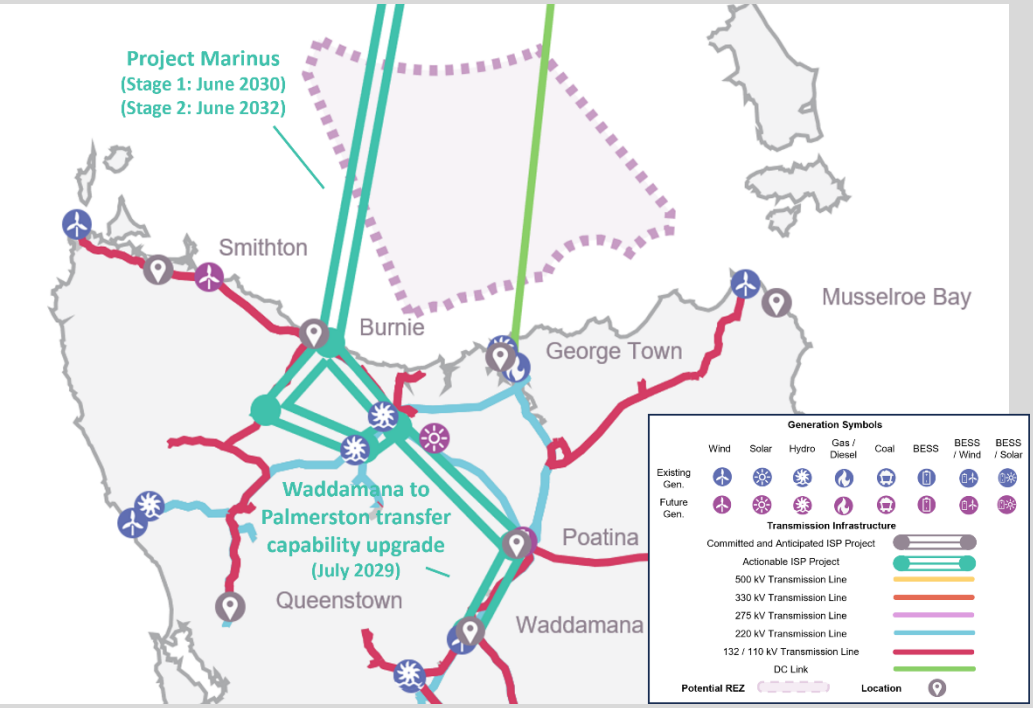


Committed, Anticipated, and Actionable Transmission Projects	Timing	Status	Additional REZ hosting capacity provided (MW)
Waddamana to Palmerston transfer capability upgrade (Option 1)	Proponent: July 2029 ISP Step Change: 2029-30	Actionable ISP	690

A6.7 T4 – North Tasmania Coast

REZ information

North Tasmania Coast REZ map



Overview	Network Transfer Capability
The North Tasmania Coast REZ has been identified for the offshore wind resource potential in relatively shallow waters close to shore, with a connection point close to existing 220 kV networks. There is interest from offshore wind proponents in this REZ but no proposed projects are sufficiently progressed to be considered as anticipated or committed by AEMO's criteria.	North West Tasmania Coast REZ connects to the 220 kV network within the North West REZ or North East REZ. Two potential connection points for this offshore REZ are in the vicinity of Burnie or George Town, and the REZ transmission network limit for each connection point is considered differently. For a connection to the 220 kV network in the vicinity of Burnie, the total REZ transmission network limit for existing and new VRE is included as part of the North West REZ limit of approximately 277 MW for peak demand and summer typical conditions and 112 MW for winter reference condition. For a connection to the 220 kV network in the vicinity of George Town, the total REZ transmission network limit for existing and new VRE is included as part of the North East Tasmania NET1 group constraint with a combined network limit of 1,600 MW for offshore wind and onshore VRE from T1.

Jurisdictional body

TasNetworks is the jurisdictional planning body for this REZ.

Resource metrics

Resource	Offshore Wind (fixed)			Offshore Wind (floating)		
Resource Quality	A			A		
Renewable Potential (MW)	14,400			26,150		
Demand Correlation	2029-30	2039-40	2049-50	2029-30	2039-40	2049-50
	B	B	A	B	B	A

Climate hazard

Temperature score	A	Bushfire score	A

Marginal loss factors

Marginal Loss Factor			
Technology	**Voltage (kV)**	**2025-26 MLF**	
-	-	-	
Marginal Loss Factor Robustness			
MLF Robustness score	**2029-30**	**2034-35**	**2039-40**
	-	-	-

Congestion and curtailment

Congestion information – calendar year 2024			
Constraint ID	**Binding hours**	**Marginal value ($)**	**Most affected generation**
-	-	-	-

VRE semi-scheduled curtailment – calendar year 2024					
DUID	**Generator name**	**Maximum Capacity (MW)**	**Average curtailment (%)**	**Average curtailment (MW)**	**Curtailment (MWh)**
-	-	-	-	-	-
Historical hosting capacity indicator for 20% network spill threshold					
DUID	**Generator name**	**HHCI Wind (MW)**	**HHCI Wind + BESS (MW)**	**HHCI Solar (MW)**	**HHCI Solar + BESS (MW)**
-	-	-	-	-	-

VRE curtailment – ISP forecast						
Scenario	**2025-2026**		**2026-2027**		**2027-2028**	
	Curtailment (%)	**Economic offloading (%)**	**Curtailment (%)**	**Economic offloading (%)**	**Curtailment (%)**	**Economic offloading (%)**
Step Change	-	-	-	-	-	-

ISP forecast

ISP forecast												
VRE outlook	**Solar PV (MW)**						**Wind (MW)**					
	Existing/ committed/ anticipated	**Projected**					**Existing/ committed/ anticipated**	**Projected**				
		2025-2026	**2026-2027**	**2027-2028**	**2028-2029**	**2029-2030**		**2025-2026**	**2026-2027**	**2027-2028**	**2028-2029**	**2029-2030**
Step Change	-	-	-	-	-	-	-	-	-	-	-	-

Transmission access expansion for *Step Change*			
There are no existing, committed, anticipated VRE projects for this REZ and the modelling outcomes, for all scenarios and the offshore wind sensitivities, did not project any additional VRE for this REZ. Therefore, no VRE curtailment or transmission expansion occurs in this REZ.			
Committed, Anticipated, and Actionable Transmission Projects	**Timing**	**Status**	**Additional REZ hosting capacity provided (MW)**
-	-	-	-

A6.8 Non-REZ

Congestion and curtailment

Congestion information – calendar year 2024			
Constraint ID	**Binding hours**	**Marginal value ($)**	**Most affected generation**
-	-	-	-

VRE semi-scheduled curtailment – calendar year 2024					
DUID	**Generator name**	**Maximum Capacity (MW)**	**Average curtailment (%)**	**Average curtailment (MW)**	**Curtailment (MWh)**
MUSSELR1	Musselroe Wind Farm	168	0.6	0.4	3,561
Historical hosting capacity indicator for 20% network spill threshold[6]					
DUID	**Generator name**	**HHCI Wind (MW)**	**HHCI Wind + BESS (MW)**	**HHCI Solar (MW)**	**HHCI Solar + BESS (MW)**
GORDON	Gordon	300	300	300	300
LI_WY_CA	Catagunya	300	300	300	300
MUSSELR1	Musselroe Wind Farm	17	45	64	165
POAT220	Poatina	300	300	300	300
REECE1	Reece	188	300	300	300
TARRALEA	Tarraleah	98	132	131	266
TREVALLN	Trevallyn	300	300	300	300

[6] The maximum hosting capacity was set to 300 MW for these studies. See Appendix A2.5 for the detailed methodology and see 2025 ELI Report chart data for information on the reference generation profiles used in this analysis.