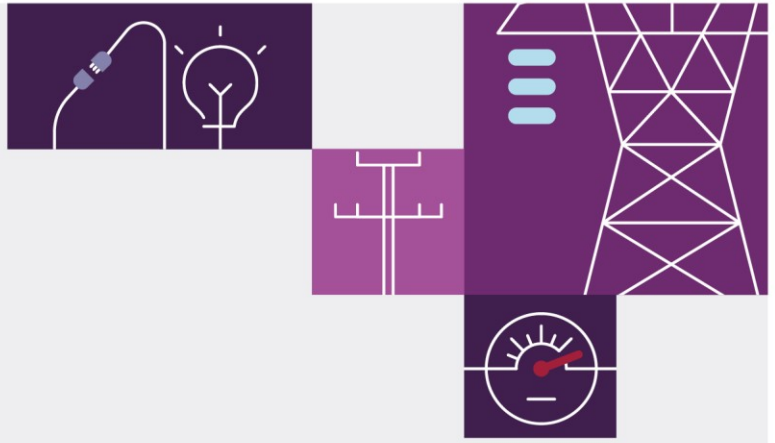


Appendix 3. New South Wales

June 2024

Appendix to the 2024 Enhanced Locational
Information Report





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 30 April 2024, 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.

This publication does not include all of the information that an investor, participant or potential participant in the National Electricity Market might require, and does not amount to a recommendation of any investment.

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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Version control

Version	Release date	Changes
1.0	07/06/2024	Initial release.

AEMO acknowledges the Traditional Owners of country throughout Australia and recognises their continuing connection to land, waters and culture. We pay respect to Elders past and present.



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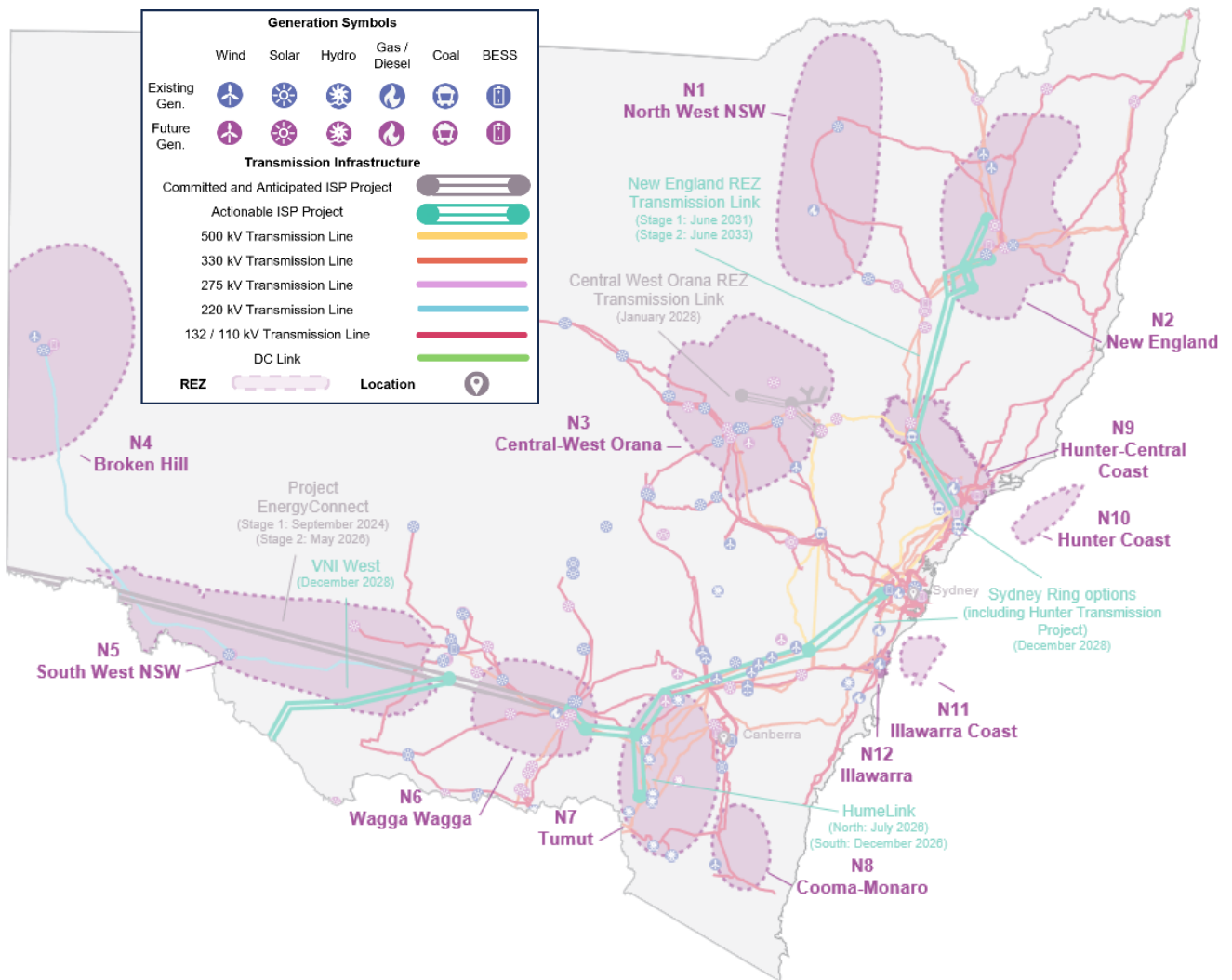
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A3.1 Introduction

This appendix provides detailed locational indicators and metrics for each REZ within New South Wales. Figure 1 provides an overview map of the New South Wales region and associated REZs. Appendix A2 provides a guide to interpreting the REZ scorecards presented throughout this appendix.

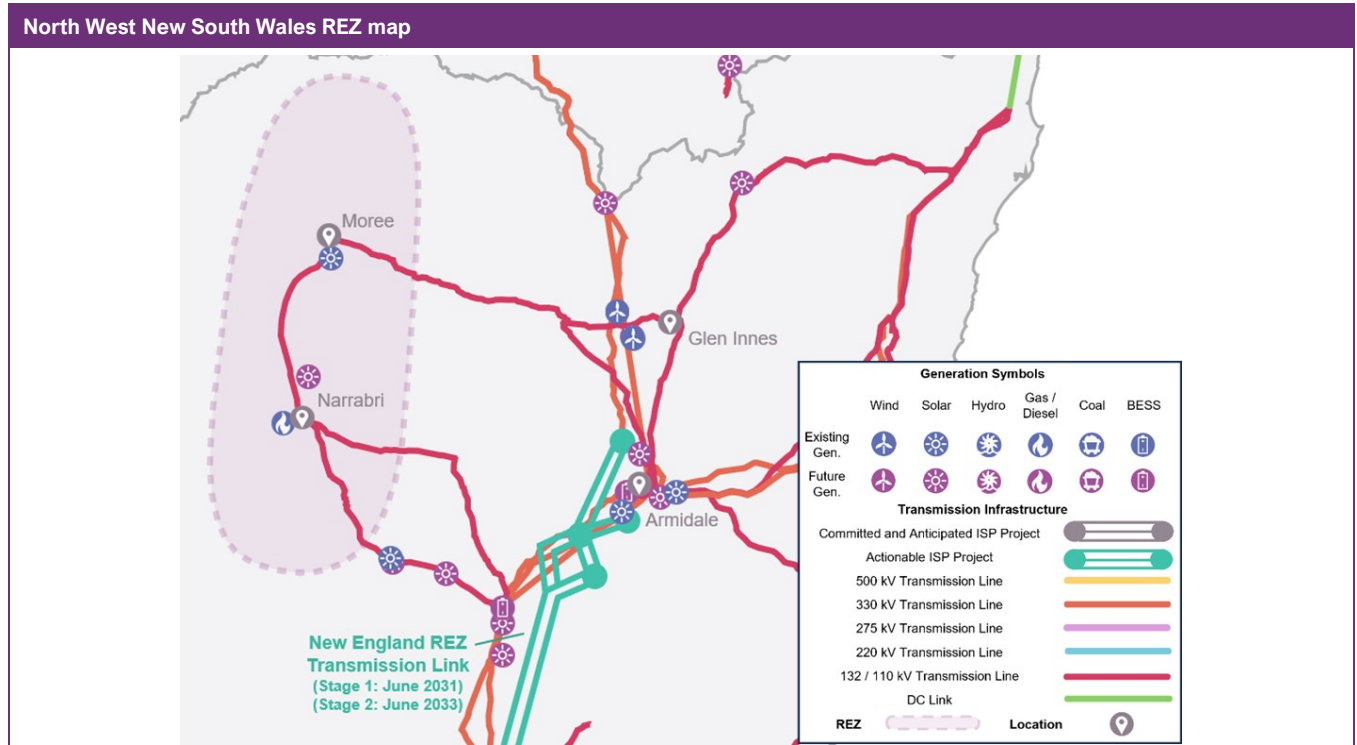
This appendix uses existing sources of publicly available information which includes the Draft 2024 ISP. Some of this information may change with the publication of the Final 2024 ISP in June 2024.

Figure 1 Overview of New South Wales region and REZs



A3.2 N1 – Northwest New South Wales

REZ information



Overview	Network Transfer Capability
The North West New South Wales (NWNSW) REZ is located to the west of the existing QNI. While this zone has B grade solar resource quality, the wind resource is estimated to be mostly inadequate for wind farm development.	The existing 132 kV network is weak and would require significant network upgrades to accommodate VRE greater than the transmission network transfer capability of approximately 170 MW.

Jurisdictional body
 The NWNSW REZ’s jurisdictional planning body is Transgrid. It is not presently declared under the *Electricity Infrastructure Investment Act*.

Generation Hosting capacity or access rights
 There is no hosting capacity provided by the jurisdictional planning body. AEMO will work with the relevant parties to understand the hosting capacity for future publications.

Resource metrics			
Resource	Solar		Wind
Resource Quality	B		E
Renewable Potential (MW)	6,385		-
Climate hazard			
Temperature score	D		Bushfire score
			E

Marginal loss factors

Marginal Loss Factor		
Technology	Voltage (kV)	2024-25 MLF
Solar	66	0.8086
	132	0.8394

Congestion and curtailment

Congestion information – calendar year 2023			
Constraint ID	Binding hours	Marginal value (\$)	Most affected generation
N>NIL_969	1,644.8	19,375,989.8	Generation contributing to flow from Gunnedah to Tamworth 132 kV

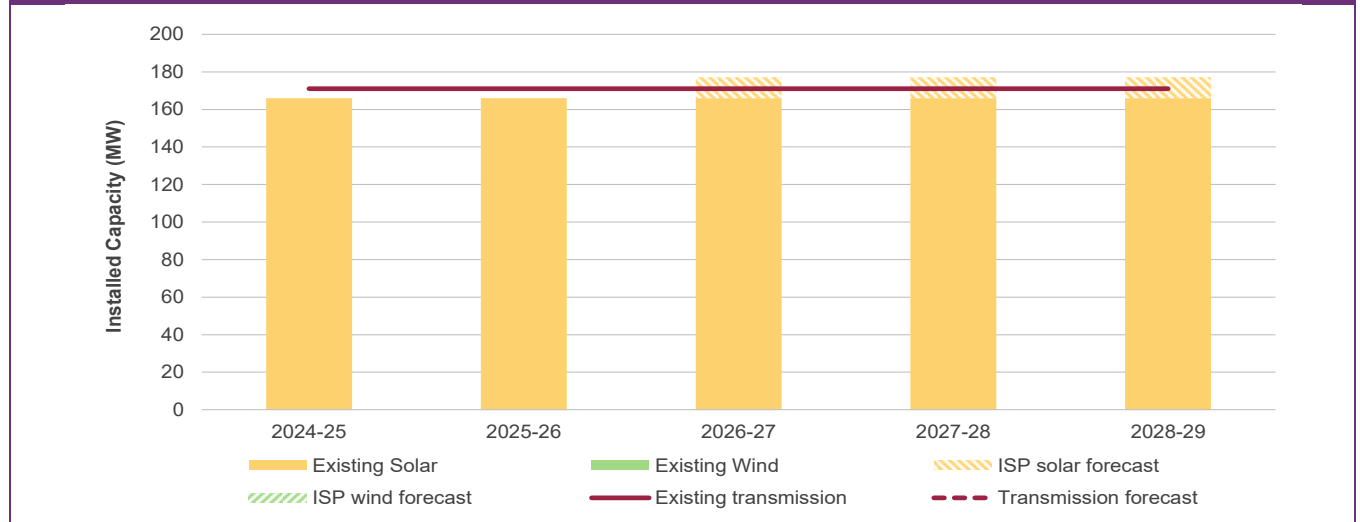
VRE semi-scheduled curtailment – calendar year 2023					
DUID	Generator name	Maximum Capacity (MW)	Average curtailment (%)	Average curtailment (MW)	Curtailment (MWh)
GNDHSF1	Gunnedah Solar Farm	110	11.6	3.8	33,417
MOREESF1	Moree Solar Farm	56	0.1	0.0	77

VRE curtailment and economic offloading – ISP forecast						
Scenario	2025		2026		2027	
	Curtailment	Economic offloading	Curtailment	Economic offloading	Curtailment	Economic offloading
Step Change	-	7%	-	4%	-	14%

ISP forecast

ISP forecast												
VRE outlook	Solar PV (MW)						Wind (MW)					
	Existing/committed/anticipated	Projected					Existing/committed/anticipated	Projected				
		2025	2026	2027	2028	2029		2025	2026	2027	2028	2029
Step Change	166	-	-	11	11	11	-	-	-	-	-	-

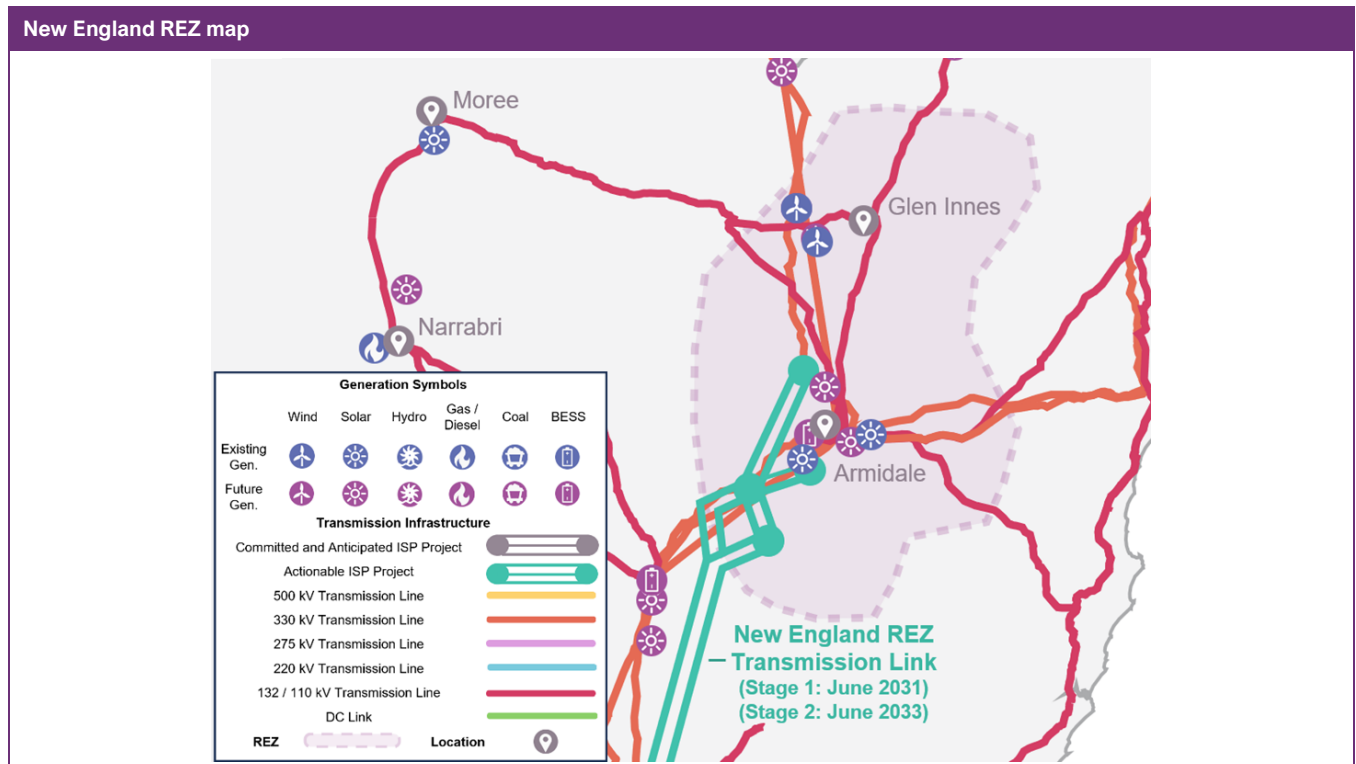
Transmission access expansion for Step Change



Committed, Anticipated, and Actionable Transmission Projects	Timing	Status	Increase in network transfer capability
-	-	-	-

A3.3 N2 – New England

REZ information



Overview		Network Transfer Capability
<p>New England REZ is located to the east of and along the existing QNI¹. The capacity of this REZ is supported by extensive Northern New South Wales – Central New South Wales corridor network options and it will be part of New England REZ infrastructure development. This REZ has C grade solar and wind resource quality in close proximity to the 330 kV network. Interest in the area includes large-scale solar and wind generation as well as pumped hydro generation.</p>		<p>The existing network transfer capability is listed in the ISP as 577 MW². Following completion of the committed QNI Minor upgrade, N2 is limited by transient and voltage stability on the circuits between Bulli Creek, Sapphire and Dumaresq. Thermal limits on the 330 kV circuits between Armidale, Tamworth, Muswellbrook and Liddell can also restrict flows on this network</p>
Jurisdictional body	Reference	Function
EnergyCo	<i>NSW Electricity Infrastructure Investment Act 2020</i> ³	The New England REZ was formally declared in November 2021 under the <i>Electricity Infrastructure Investment Act 2020</i> ⁹ . EnergyCo was appointed as the Infrastructure Planner for the Central-West Orana REZ.
EnergyCo	Network Infrastructure Strategy ⁴	EnergyCo’s strategy to coordinate New South Wales network infrastructure to connect new generation and storage in New South Wales’ five REZs.
AEMO Services	Long Term Energy Service Agreement (LTESA) Tenders ⁵	AEMO Services (appointed as Consumer Trustee) conducts tenders for projects generation, storage, firming infrastructure that can be recovered from consumers, in accordance with the Infrastructure Investment Objectives (IIO) Report.

¹ Options shown are a subset of the Central New South Wales to Northern New South Wales flow path options.

² See ‘Build Limits’ tab of the Draft 2024 Inputs and Assumptions Workbook, at <https://aemo.com.au/-/media/files/major-publications/isp/2023/2023-iasr-assumptions-workbook.xlsx?la=en>.

³ See <https://legislation.nsw.gov.au/view/html/inforce/current/act-2020-044#sec.23>.

⁴ See <https://www.energyco.nsw.gov.au/industry/network-infrastructure-strategy-nsw>.

⁵ AEMO Services Tenders, at <https://aemoservices.com.au/tenders>.

Generation Hosting capacity or access rights				
There is no hosting capacity provided by the jurisdictional planning body. AEMO will work with the relevant parties to understand the hosting capacity for future publications.				
Resource metrics				
Resource	Solar		Wind	
Resource Quality	C		C	
Renewable Potential (MW)	2,985 ⁶		7,400	
Climate hazard				
Temperature score	C		Bushfire score	E

Marginal loss factors

Marginal Loss Factor		
Technology	Voltage (kV)	2024-25 MLF
Solar	132	0.8453 - 0.8668
	330	0.8901
Wind	132	0.8453
	330	0.9012

Congestion and curtailment

Congestion information – calendar year 2023			
Constraint ID	Binding hours	Marginal value (\$)	Most affected generation
N>>NIL_86_85_S	71.6	48,249.4	Generation contributing to flow from Armidale to Tamworth 330 kV on trip of Uralla-Tamworth 330 kV line
N>>NIL_85_86_S	38.1	32,859.8	Generation contributing to flow from Uralla to Tamworth 330 kV on trip of the Armidale-Tamworth 330 kV line
N>>NIL_86_8U_S	24.7	12,328.7	Generation contributing to flow from Armidale to Tamworth 330 kV on trip of the Armidale-Uralla 330 kV line

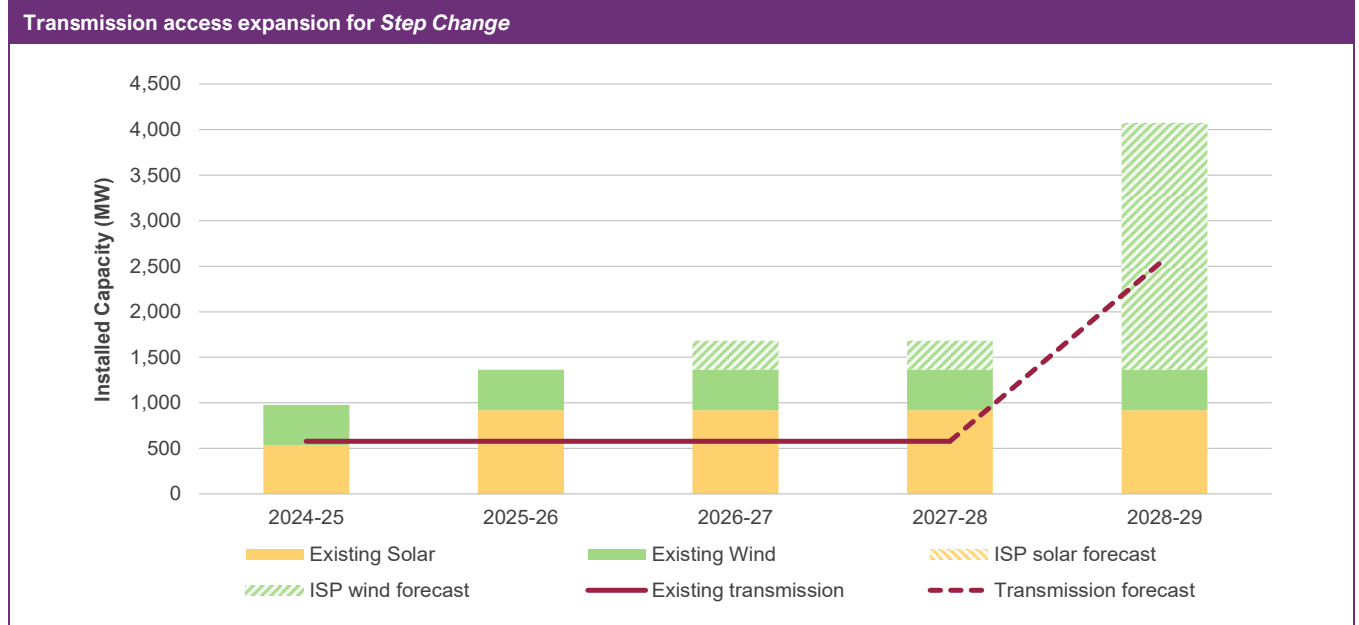
VRE semi-scheduled curtailment – calendar year 2023					
DUID	Generator name	Maximum Capacity (MW)	Average curtailment (%)	Average curtailment (MW)	Curtailment (MWh)
METZSF1	Metz Solar Farm	115	0.1	0.0	292
NEWENSF1	New England Solar Farm	200	4.1	1.2	10,401
NEWENSF2	New England Solar Farm – Stage 2	200	4.2	1.7	14,947
SAPHWF1	Sapphire Wind Farm	270	0.0	0.0	38
WRSF1	White Rock Solar Farm	20	0.2	0.0	62
WRWF1	White Rock Wind Farm	172	0.8	0.4	3,612

⁶ New England REZ solar outlook exceeds the expected renewable solar potential based on the geographical size and resource quality. The modelling allows for additional solar above this solar resource limit, but the additional solar capacity incurs a land use penalty factor of \$0.29 million/MW. Even with this penalty applied, the ISP model still projects additional solar capacity in *Step Change* by 2049-50.

VRE curtailment – ISP forecast						
Scenario	2025		2026		2027	
	Curtailment	Economic offloading	Curtailment	Economic offloading	Curtailment	Economic offloading
Step Change	1%	6%	10%	17%	8%	20%

ISP forecast

ISP forecast												
VRE outlook	Solar PV (MW)						Wind (MW)					
	Existing/ committed/ anticipated	Projected					Existing/ committed/ anticipated	Projected				
		2025	2026	2027	2028	2029		2025	2026	2027	2028	2029
Step Change	920	-	-	-	-	-	442	-	-	300	300	2,700

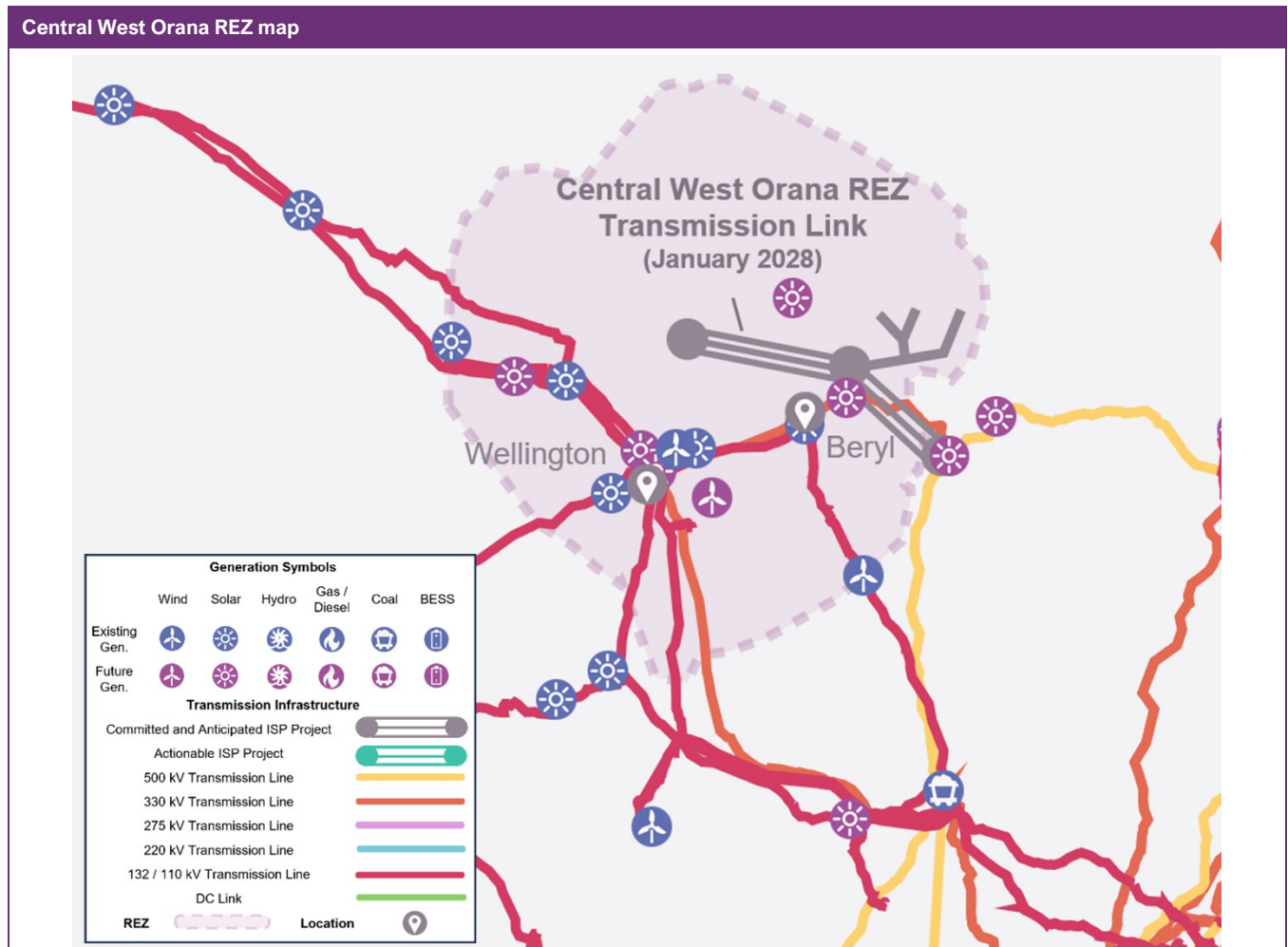


Committed, Anticipated, and Actionable Transmission Projects	Timing	Status	Increase in network transfer capability
New England REZ Transmission Link	June 2031 ⁷	Actionable NSW	2,000 MW

⁷ Part 1 and Part 2 in service timings advised by proponent are June 2031 and June 2033, respectively. Under the Draft 2024 ISP Step Change scenario, the project is modelled with a timing of July 2028.

A3.4 N3 – Central West Orana

REZ information



Overview		Network Transfer Capability
<p>Central-West Orana REZ has been identified by the New South Wales Government as the state’s first pilot REZ⁸. The Central-West Orana REZ was declared on 5 November 2021 under the <i>NSW Electricity Infrastructure Investment Act 2020</i> (the Act) with a minimum of 3,000 MW of additional transmission network capacity within the Central West New South Wales region of the state. REZ design and community engagement is currently progressing, and the initial addition of transmission network capacity is now planned to be 4,500 MW. The Central-West Orana REZ Access Scheme was declared under the Act on 23 December 2022.</p>		<p>The existing network transfer capacity is 900 MW. This is set to increase with several network augmentations.</p> <p>The Central West Orana Transmission Link will increase the network transfer capability 3000 MW for generators which connect to the 330/500kV network</p> <p>The Hunter Transmission Project 1.0 (Central New South Wales (CNSW) to Sydney Newcastle Wollongong (SNW) Option 1) is required to address network constraints between CNSW and SNW to further increase the network transfer capability by 1,500 MW for a total network transfer capability of 5,400 MW for the Central-West Orana REZ.</p>
Jurisdictional body	Reference	Function
EnergyCo	<i>NSW Electricity Infrastructure Investment Act 2020</i> ⁹	The Central-West Orana REZ was formally declared in November 2021 under the <i>Electricity Infrastructure Investment Act 2020</i> ⁹ . EnergyCo was appointed as the Infrastructure Planner for the Central-West Orana REZ ⁸ .

⁸ EnergyCo, *Central-West Orana Renewable Energy Zone*, at <https://www.energyco.nsw.gov.au/cwo-rez>.

⁹ See <https://legislation.nsw.gov.au/view/html/inforce/current/act-2020-044#sec.23>.

EnergyCo	Network Infrastructure Strategy ¹⁰	EnergyCo's strategy to coordinate NSW network infrastructure to connect new generation and storage in New South Wales' five REZs.
AEMO Services	Long Term Energy Service Agreement (LTESA) Tenders ¹¹	AEMO Services (appointed as Consumer Trustee) conducts tenders for projects generation, storage, firming infrastructure that can be recovered from consumers, in accordance with the Infrastructure Investment Objectives (IIO) Report.

Generation Hosting capacity or access rights

New South Wales uses aggregate maximum capacity to indicate the amount of renewable generation they are targeting to connect in CWO. The initial aggregate maximum capacity for Central-West Orana REZ is 5.84 GW based on a curtailment of 4.37%¹². This has not been broken down by technology, and is for the whole REZ not individual connection points. This assumes the Central-West Orana Option 1¹³ is in service.

Resource metrics

Resource	Solar	Wind
Resource Quality	C	C
Renewable Potential (MW)	6,850	3,000 ¹⁴

Climate hazard

Temperature score	C	Bushfire score	E
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Marginal loss factors

Marginal Loss Factor		
Technology	Voltage (kV)	2024-25 MLF
Solar	66	0.8969 - 0.9616
	132	0.9096 - 0.9835
Wind	132	0.9518 - 1.0205

Congestion and curtailment

Congestion information – calendar year 2023			
Constraint ID	Binding hours	Marginal value (\$)	Most affected generation
N>NIL_94T	1,703.3	23,990,532.1	Generation contributing to flow from Molong to Orange North 132 kV
N>NIL_94K_1	1,253.6	12,452,679.3	Generation contributing to flow from Suntop to Wellington 132 kV
N>NIL_94T_947	26.2	204,223.1	Generation contributing to flow from Molong to Orange North 132 kV on trip of the Wellington-Orange North 132 kV line

¹⁰ See <https://www.energyco.nsw.gov.au/industry/network-infrastructure-strategy-nsw>.

¹¹ AEMO Services Tenders, <https://aemoservices.com.au/tenders>.

¹² See <https://www.energy.nsw.gov.au/sites/default/files/2022-08/cwo-rez-access-rights-and-scheme-design-positions-paper-220336.pdf>.

¹³ New 500 kV and 330 kV transmission lines from the existing network at Wollar to Merotherrrie, with extensions to Elong Elong and Uarbry to enable the delivery of 4,500 MW of additional network capacity. See 2023 IIO, at https://aemoservices.com.au/-/media/services/files/publications/iio-report/2023/2023-iio-report-december_final.pdf?la=en.

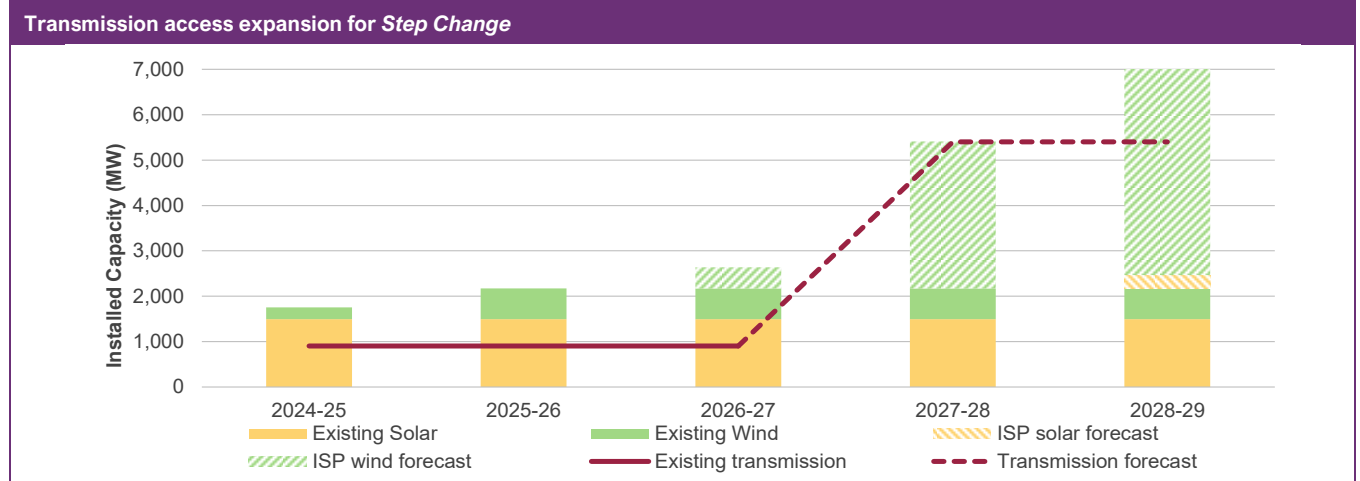
¹⁴ Central-West Orana REZ wind outlook exceeds the expected renewable wind potential based on the geographical size and resource quality. The modelling allows for additional wind above this wind resource limit, but the additional wind capacity incurs a land use penalty factor of \$0.29 million/MW. Even with this penalty applied, the ISP model still projects almost double this renewable wind potential in all scenarios by 2029-30.

VRE semi-scheduled curtailment – calendar year 2023					
DUID	Generator name	Maximum Capacity (MW)	Average curtailment (%)	Average curtailment (MW)	Curtailment (MWh)
BERYLSF1	Beryl Solar Farm	87	0.2	0.1	494
BODWF1	Bodangora Wind Farm	111	0.1	0.0	199
FLYCRKWF	Flyers Creek Wind Farm	140	0.9	0.0	54
GOONSF1	Goonumbla Solar Farm	69	16.3	3.0	26,087
MANSLR1	Manildra Solar Farm	46	39.4	4.5	39,600
MOLNGSF1	Molong Solar Farm	30	50.7	4.4	38,863
NEVERSF1	Nevertire Solar Farm	105	0.7	0.2	1,736
NYNGAN1	Nyngan Solar Plant	102	0.3	0.1	626
SUNTPSF1	Suntop Solar Farm	150	7.8	3.2	27,936
WELLSF1	Wellington Solar Farm	170	0.3	0.2	1,404

VRE curtailment – ISP forecast						
Scenario	2025		2026		2027	
	Curtailment	Economic offloading	Curtailment	Economic offloading	Curtailment	Economic offloading
Step Change	8%	14%	10%	14%	11%	18%

ISP forecast

ISP forecast												
VRE outlook	Solar PV (MW)						Wind (MW)					
	Existing/ committed/ anticipated	Projected					Existing/ committed/ anticipated	Projected				
		2025	2026	2027	2028	2029		2025	2026	2027	2028	2029
Step Change	1,496	-	-	-	-	300	673	-	-	450	3,250	4,550

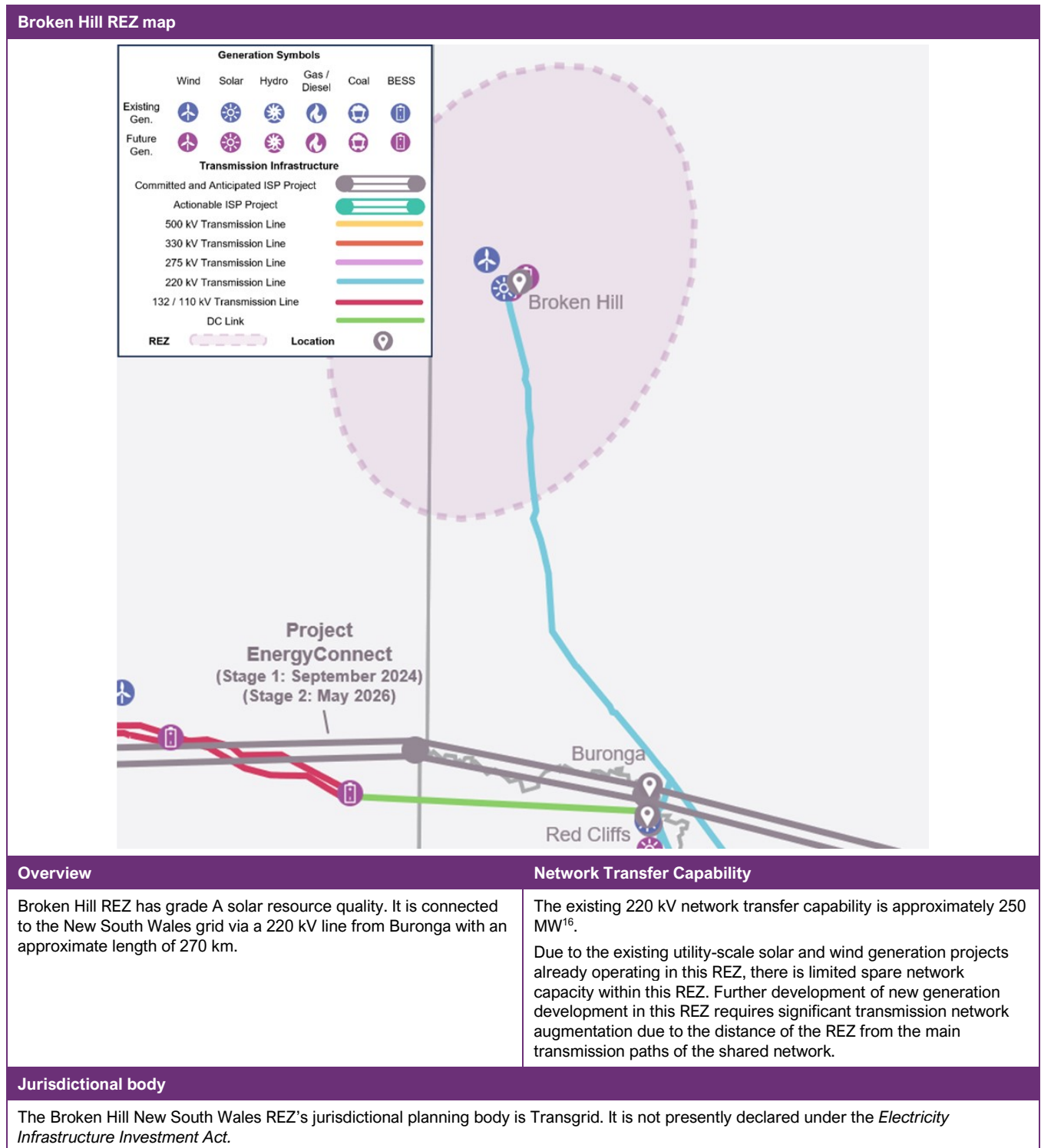


Committed, Anticipated, and Actionable Transmission Projects	Timing ¹⁵	Status	Increase in network transfer capability
Central West Orana Transmission Link	January 2028	Anticipated	3 000 MW
Hunter Transmission Project	December 2028	Actionable New South Wales	1,500 MW

¹⁵ Under the Draft 2024 ISP Step Change scenario, Central West Orana Transmission Link and Hunter Transmission Project are modelled in 2027-28.

A3.5 N4 – Broken Hill

REZ information



Overview

Broken Hill REZ has grade A solar resource quality. It is connected to the New South Wales grid via a 220 kV line from Buronga with an approximate length of 270 km.

Network Transfer Capability

The existing 220 kV network transfer capability is approximately 250 MW¹⁶.

Due to the existing utility-scale solar and wind generation projects already operating in this REZ, there is limited spare network capacity within this REZ. Further development of new generation development in this REZ requires significant transmission network augmentation due to the distance of the REZ from the main transmission paths of the shared network.

Jurisdictional body

The Broken Hill New South Wales REZ's jurisdictional planning body is Transgrid. It is not presently declared under the *Electricity Infrastructure Investment Act*.

¹⁶ See 'Build Limits' tab of the Draft 2024 Inputs and Assumptions Workbook, at <https://aemo.com.au/-/media/files/major-publications/isp/2023/2023-iasr-assumptions-workbook.xlsx?la=en>.

Generation Hosting capacity or access rights				
There is no hosting capacity provided by the jurisdictional planning body. AEMO will work with the relevant parties to understand the hosting capacity for future publications.				
Resource metrics				
Resource	Solar		Wind	
Resource Quality	A		D	
Renewable Potential (MW)	8,000		5,100	
Climate hazard				
Temperature score	E		Bushfire score	C

Marginal loss factors

Marginal Loss Factor		
Technology	Voltage (kV)	2024-25 MLF
Solar	22	0.7784
Wind	220	0.8050

Congestion and curtailment

Congestion information – calendar year 2023			
Constraint ID	Binding hours	Marginal value (\$)	Most affected generation
-	-	-	-

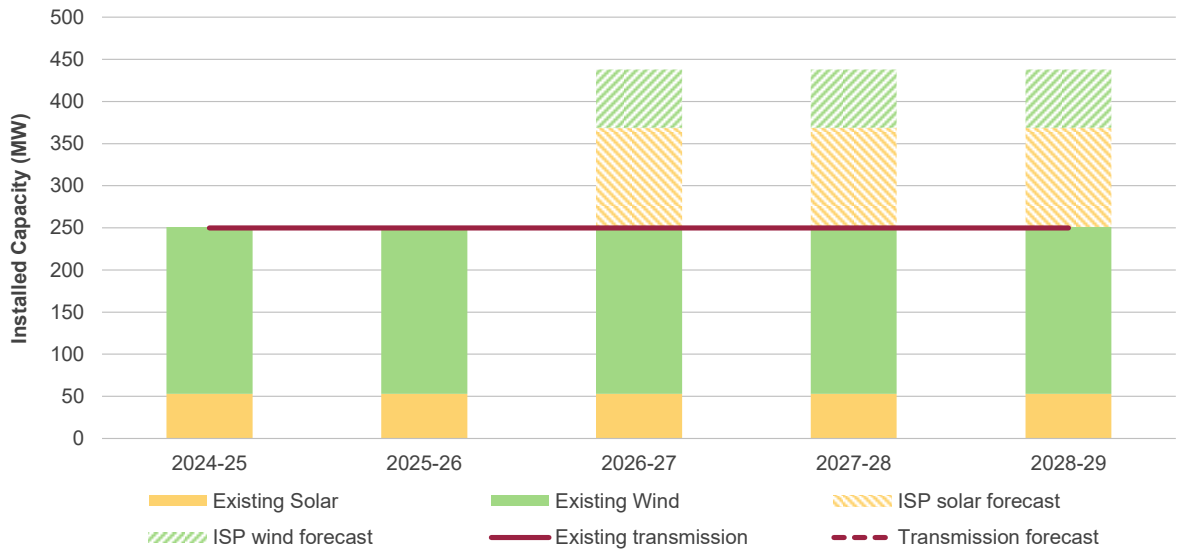
VRE semi-scheduled curtailment – calendar year 2023					
DUID	Generator name	Maximum Capacity (MW)	Average curtailment (%)	Average curtailment (MW)	Curtailment (MWh)
BROKENH1	Broken Hill Solar Plant	53	8.3	1.1	9,681
STWF1	Silverton Wind Farm	198	2.0	1.4	12,102

VRE curtailment – ISP forecast						
Scenario	2025		2026		2027	
	Curtailment	Economic offloading	Curtailment	Economic offloading	Curtailment	Economic offloading
Step Change	-	3%	-	2%	1%	10%

ISP forecast

ISP forecast												
VRE outlook	Solar PV (MW)						Wind (MW)					
	Existing/ committed/ anticipated	Projected					Existing/ committed/ anticipated	Projected				
		2025	2026	2027	2028	2029		2025	2026	2027	2028	2029
Step Change	53	-	-	100	100	100	198	-	-	50	50	50

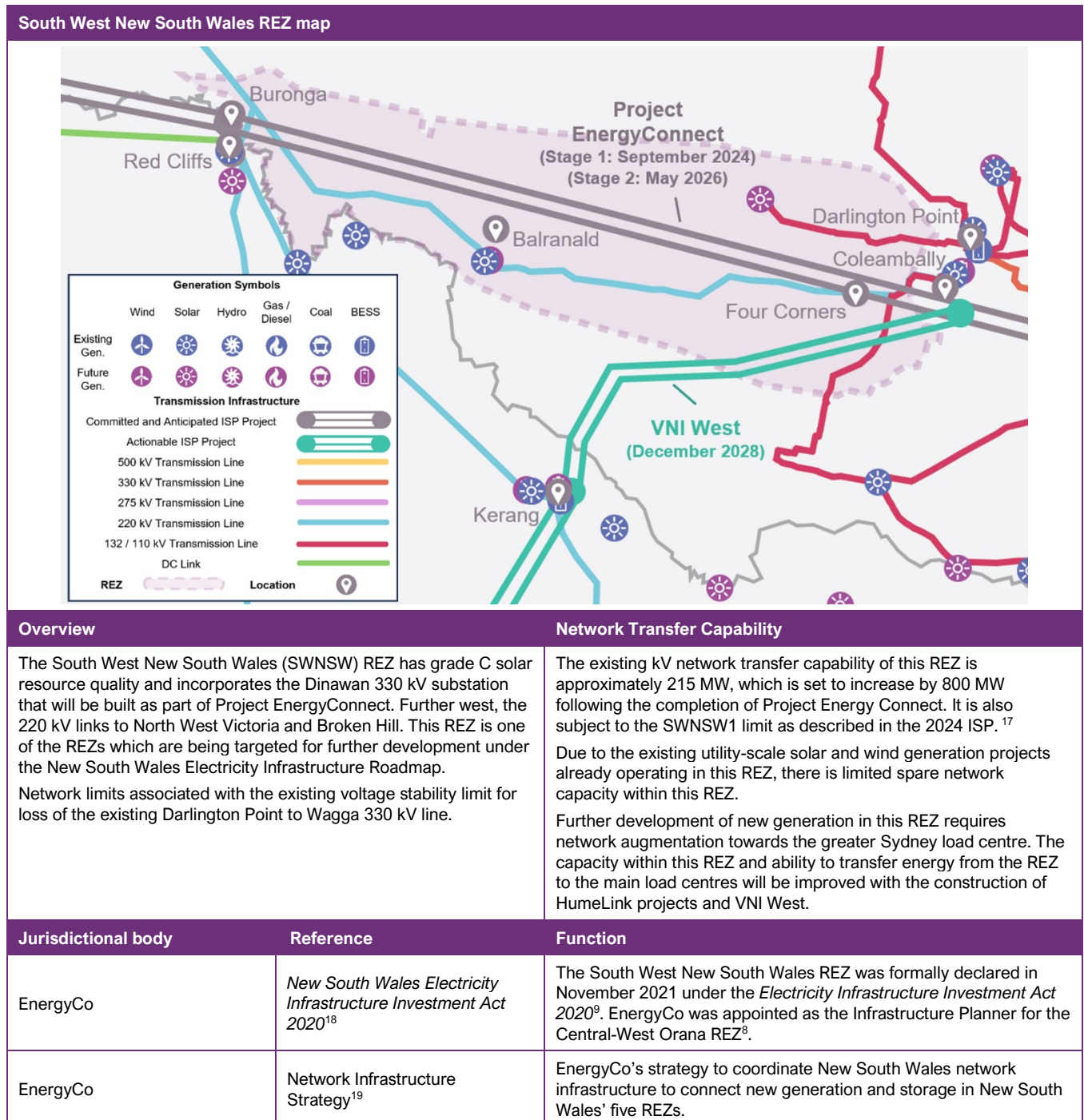
Transmission access expansion for Step Change



Committed, Anticipated, and Actionable Transmission Projects	Timing	Status	Increase in network transfer capability
-	-	-	-

A3.6 N5 – South West New South Wales

REZ information



¹⁷ See 'Build Limits' tab of the Draft 2024 Inputs and Assumptions Workbook, at <https://aemo.com.au/-/media/files/major-publications/isp/2023/2023-iasr-assumptions-workbook.xlsx?la=en>.

¹⁸ See <https://legislation.nsw.gov.au/view/html/inforce/current/act-2020-044#sec.23>.

¹⁹ See <https://www.energyco.nsw.gov.au/industry/network-infrastructure-strategy-nsw>.

AEMO Services	Long Term Energy Service Agreement (LTESA) Tenders ²⁰	AEMO Services (appointed as Consumer Trustee) conducts tenders for projects generation, storage, firming infrastructure that can be recovered from consumers, in accordance with the Infrastructure Investment Objectives (IIO) Report.	
Generation Hosting capacity or access rights			
<p>New South Wales uses aggregate maximum capacity to indicate the amount of renewable generation the state is targeting to connect in SWNSW REZ. There are two aggregate maximum capacities provided, one for the entire REZ, and one for the Buronga network elements, which are part of the SWNSW REZ.</p> <p>The initial aggregate maximum capacity for SWNSW REZ is 3,980 MW based on a curtailment of 3.86%²¹. Note at the time of publication this is a draft number and subject to change. This has not been broken down by technology. This assumes the Project Energy Connect and HumeLink are in service.</p> <p>The Buronga network elements²² have an individual initial aggregate maximum capacity cap of 1,270 MW based on a curtailment of 3.86%²³.</p>			
Resource metrics			
Resource	Solar		Wind
Resource Quality	C		E
Renewable Potential (MW)	2,256		3,900
Climate hazard			
Temperature score	E		Bushfire score D

Marginal loss factors

Marginal Loss Factor		
Technology	Voltage (kV)	2024-25 MLF
Solar	22	0.7793
	132	0.8367 - 0.8979
	220	0.7774

Congestion and curtailment

Congestion information – calendar year 2023			
Constraint ID	Binding hours	Marginal value (\$)	Most affected generation
N^^N_NIL_X5_xxx	1,041.3	7,527,221.4	Generation contributing to flow from Balranald to Darlington Point 220 kV on trip of the Bendigo-Shepparton or Bendigo-Kerang 220 kV lines
V>>NIL_WBBA_RCBSS	27.7	200,185.0	Generation contributing to flow from Waubra to Ballarat 220 kV on trip of the Red Cliffs-Buronga 220 kV line
V^^SML_NSWRB_2	17.3	54,310.2	Generation in North West Victoria

²⁰ AEMO Services Tenders, at <https://amoservices.com.au/tenders>.

²¹ SW REZ Access Scheme Declaration, see section 8 and section 9, at https://www.energy.nsw.gov.au/sites/default/files/2023-12/Draft_Renewable_Energy_Zone_South_West_Access_Scheme_Order_2023_HSF_Draft_071223.pdf.

²² This includes the network elements from the Buronga substation to the Dinawan substation, but excluding the Dinawan substation. See Dictionary section of SW REZ Access Scheme Declaration.

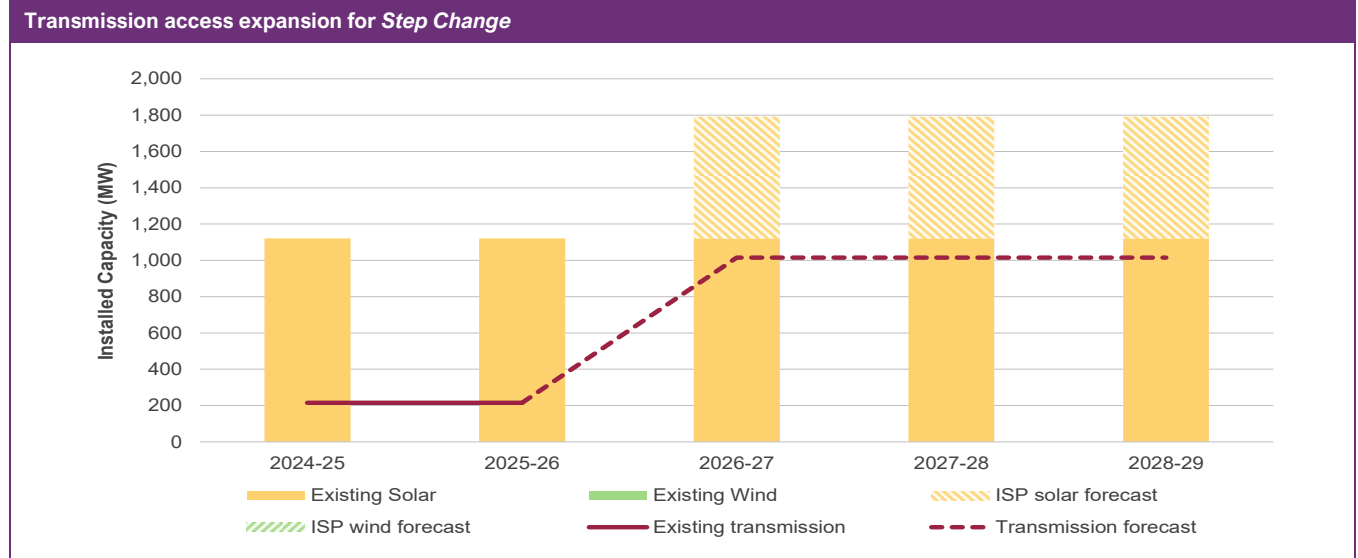
²³ SW REZ Access Scheme Declaration, see section 8 and section 9.

VRE semi-scheduled curtailment – calendar year 2023						
DUID	Generator name	Maximum Capacity (MW)	Average curtailment (%)	Average curtailment (MW)	Curtailment (MWh)	
CRWASF1	Corowa Solar Farm	30	5.9	0.5	3,948	
LIMOSF11	Limondale Solar Farm 1	220	13.2	7.7	67,418	
LIMOSF21	Limondale Solar Farm 2	29	11.0	0.9	7,477	
SUNRSF1	Sunraysia Solar Farm	200	12.5	6.8	59,214	

VRE curtailment – ISP forecast						
Scenario	2025		2026		2027	
	Curtailment	Economic offloading	Curtailment	Economic offloading	Curtailment	Economic offloading
Step Change	3% ²⁴	33%	1%	30%	-	22%

ISP forecast

ISP forecast												
VRE outlook	Solar PV (MW)						Wind (MW)					
	Existing/committed/anticipated	Projected					Existing/committed/anticipated	Projected				
		2025	2026	2027	2028	2029		2025	2026	2027	2028	2029
Step Change	1,121	-	-	650	650	650	-	-	-	-	-	-



Committed, Anticipated, and Actionable Transmission Projects	Timing ²⁵	Status	Increase in network transfer capability
Project EnergyConnect – Stage 2	May 2026	Committed	800 MW
HumeLink	July 2026 ²⁶	Actionable ISP	800 MW
VNI West	December 2028	Actionable ISP	900 MW

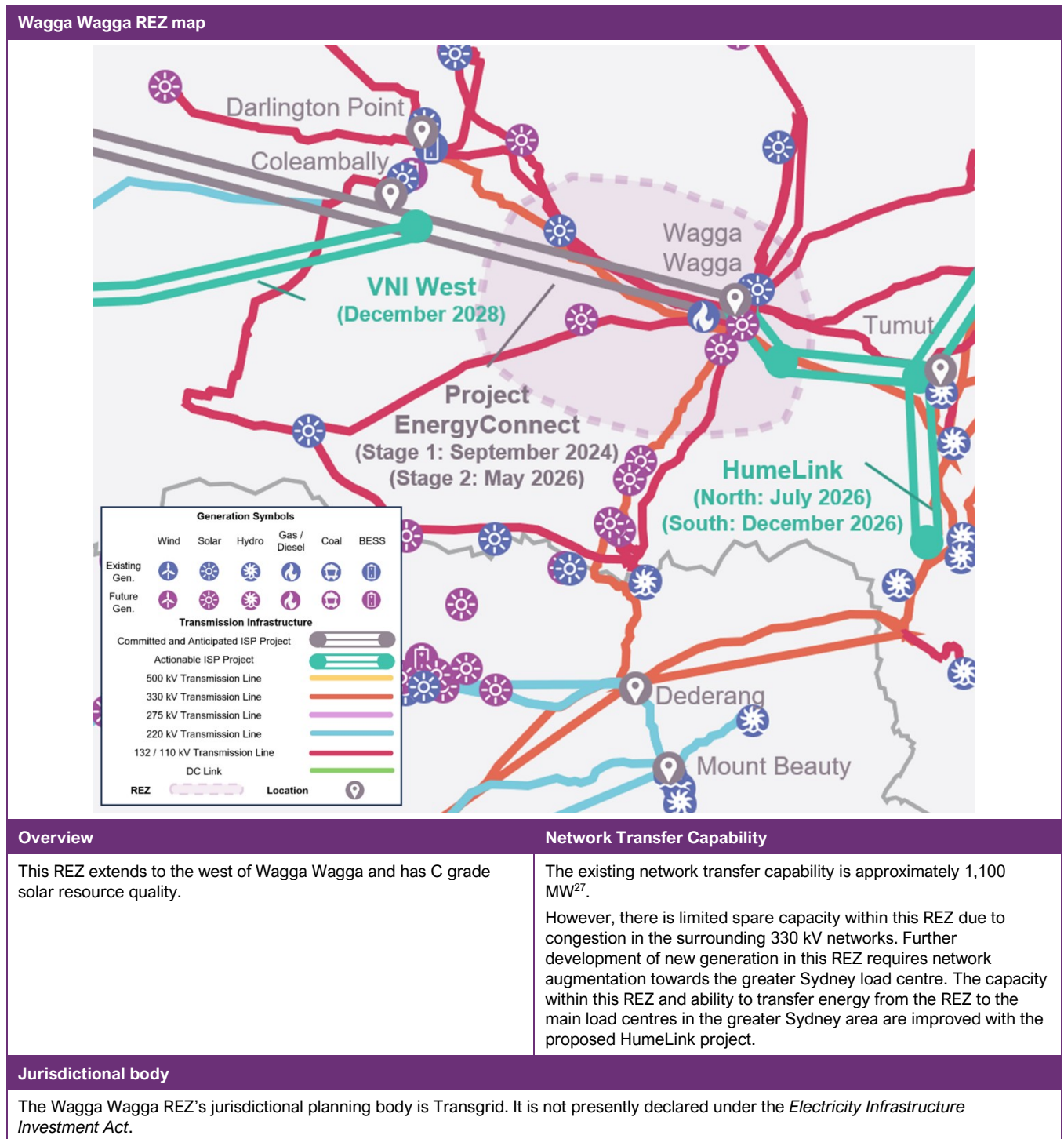
²⁴ Forecast VRE curtailment for N5 doesn't include the existing 132 kV network generators.

²⁵ Under the Draft 2024 ISP Step Change scenario, Project EnergyConnect – Stage 2 is modelled in July 2026, HumeLink in July 2029, and VNI West in July 2029.

²⁶ Northern and southern circuits in service timings advised by proponent are July 2026 and December 2026, respectively.

A3.7 N6 – Wagga Wagga

REZ information



Overview

This REZ extends to the west of Wagga Wagga and has C grade solar resource quality.

Network Transfer Capability

The existing network transfer capability is approximately 1,100 MW²⁷.

However, there is limited spare capacity within this REZ due to congestion in the surrounding 330 kV networks. Further development of new generation in this REZ requires network augmentation towards the greater Sydney load centre. The capacity within this REZ and ability to transfer energy from the REZ to the main load centres in the greater Sydney area are improved with the proposed HumeLink project.

Jurisdictional body

The Wagga Wagga REZ's jurisdictional planning body is Transgrid. It is not presently declared under the *Electricity Infrastructure Investment Act*.

²⁷ See 'Build Limits' tab of the Draft 2024 Inputs and Assumptions Workbook, at <https://aemo.com.au/-/media/files/major-publications/isp/2023/2023-iasr-assumptions-workbook.xlsx?la=en>.

Generation Hosting capacity or access rights				
There is no hosting capacity provided by the jurisdictional planning body. AEMO will work with the relevant parties to understand the hosting capacity for future publications.				
Resource metrics				
Resource	Solar		Wind	
Resource Quality	C		E	
Renewable Potential (MW)	1,028		1,000	
Climate hazard				
Temperature score	D		Bushfire score	D

Marginal loss factors

Marginal Loss Factor		
Technology	Voltage (kV)	2024-25 MLF
Solar	66	0.8720
	132	0.8446 - 0.8752

Congestion and curtailment

Congestion information – calendar year 2023			
Constraint ID	Binding hours	Marginal value (\$)	Most affected generation
N>>NIL_9XX_051	914.2	12,652,924.1	Generation contributing to flow from Burrinjuck to Yass 132 kV, Wagga to Yass 132 kV or Wagga North to Murrumburrah 132 kV on trip of the Wagga-Lower Tumut 330 kV line
N>NIL_9R6_9R5	605.3	5,386,845.1	Generation contributing to flow from Wagga North to Wagga 132 kV on trip of the Wagga North-Wagga 330 kV line
N>NIL_997_99A	517.1	4,496,412.3	Generation contributing to flow from Corowa to Albury 132 kV on trip of the Finley-Uranquinty 132 kV line
N>NIL_9R6_991	438.6	4,338,900.6	Generation contributing to flow from Wagga North to Wagga 132 kV on trip of the Wagga North-Murrumburrah 132 kV line
N::N_NIL_63	95.4	730,216.3	Generation contributing to flow from Darlington Point to Wagga Wagga 330 kV
N>N-NIL_JUTX_LV	77.2	446,880.0	Generation exporting from 66 kV through the 132/66 kV Junee transformer
N>NIL_9R4_99A	50.4	173,462.9	Generation contributing to flow from Finley to Mulwala 132 kV on trip of Finley-Uranquinty 132 kV line
N>NIL_997/2_99A	32.1	103,509.7	Generation contributing to flow from Mulwala to Corowa 132 kV on trip of the Finley-Uranquinty 132 kV line
N>NIL_99U	31.3	251,869.8	Generation contributing to flow from Sebastopol to Wagga North 132 kV
N>NIL_99F	15.3	76,017.4	Generation contributing flow from Narrandera to Uranquinty 132 kV

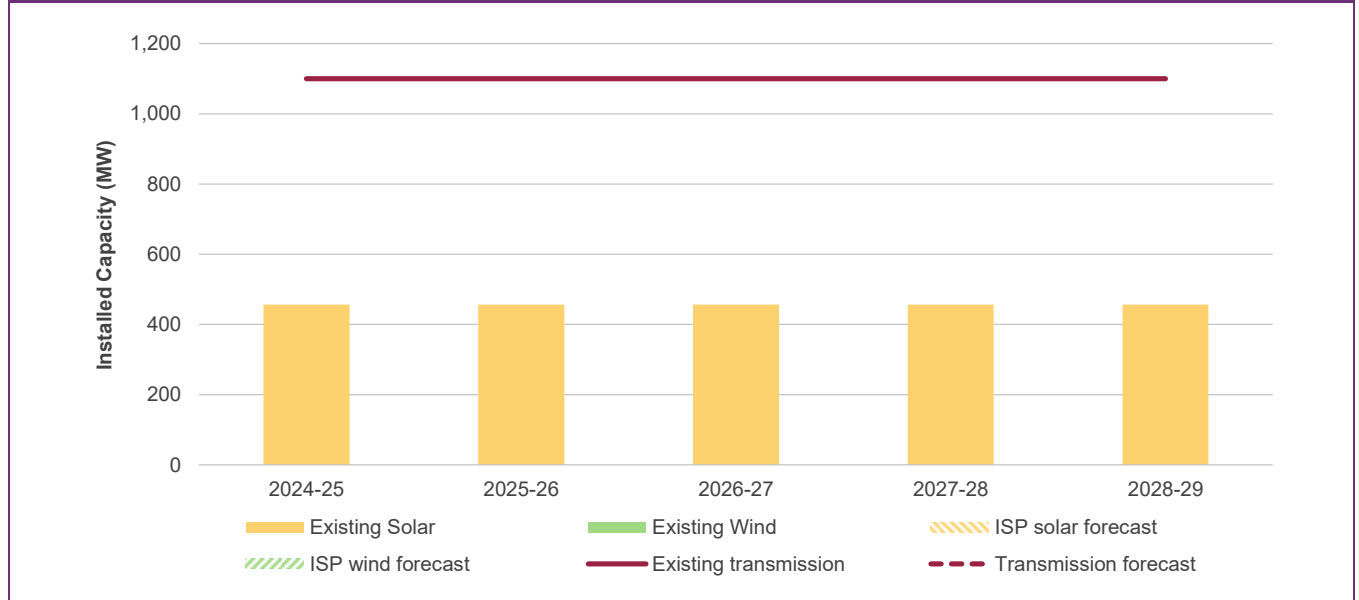
VRE semi-scheduled curtailment – calendar year 2023						
DUID	Generator name	Maximum Capacity (MW)	Average curtailment (%)	Average curtailment (MW)	Curtailment (MWh)	
AVLSF1	Avonlie Solar Farm	190	2.7	0.9	5,736	
BOMENSF1	Bomen Solar Farm	100	10.2	2.4	20,831	
JUNEESF1	Junee Solar Farm	30	9.0	0.7	6,206	
SEBSF1	Sebastopol Solar Farm	90	11.1	2.7	23,856	
WAGGNSF1	Wagga North Solar Farm	48	10.7	1.0	8,484	

VRE curtailment – ISP forecast						
Scenario	2025		2026		2027	
	Curtailment	Economic offloading	Curtailment	Economic offloading	Curtailment	Economic offloading
Step Change	-	1%	-	-	-	6%

ISP forecast

ISP forecast												
VRE outlook	Solar PV (MW)						Wind (MW)					
	Existing/ committed/ anticipated	Projected					Existing/ committed/ anticipated	Projected				
		2025	2026	2027	2028	2029		2025	2026	2027	2028	2029
Step Change	456	-	-	-	-	-	-	-	-	-	-	-

Transmission access expansion for Step Change

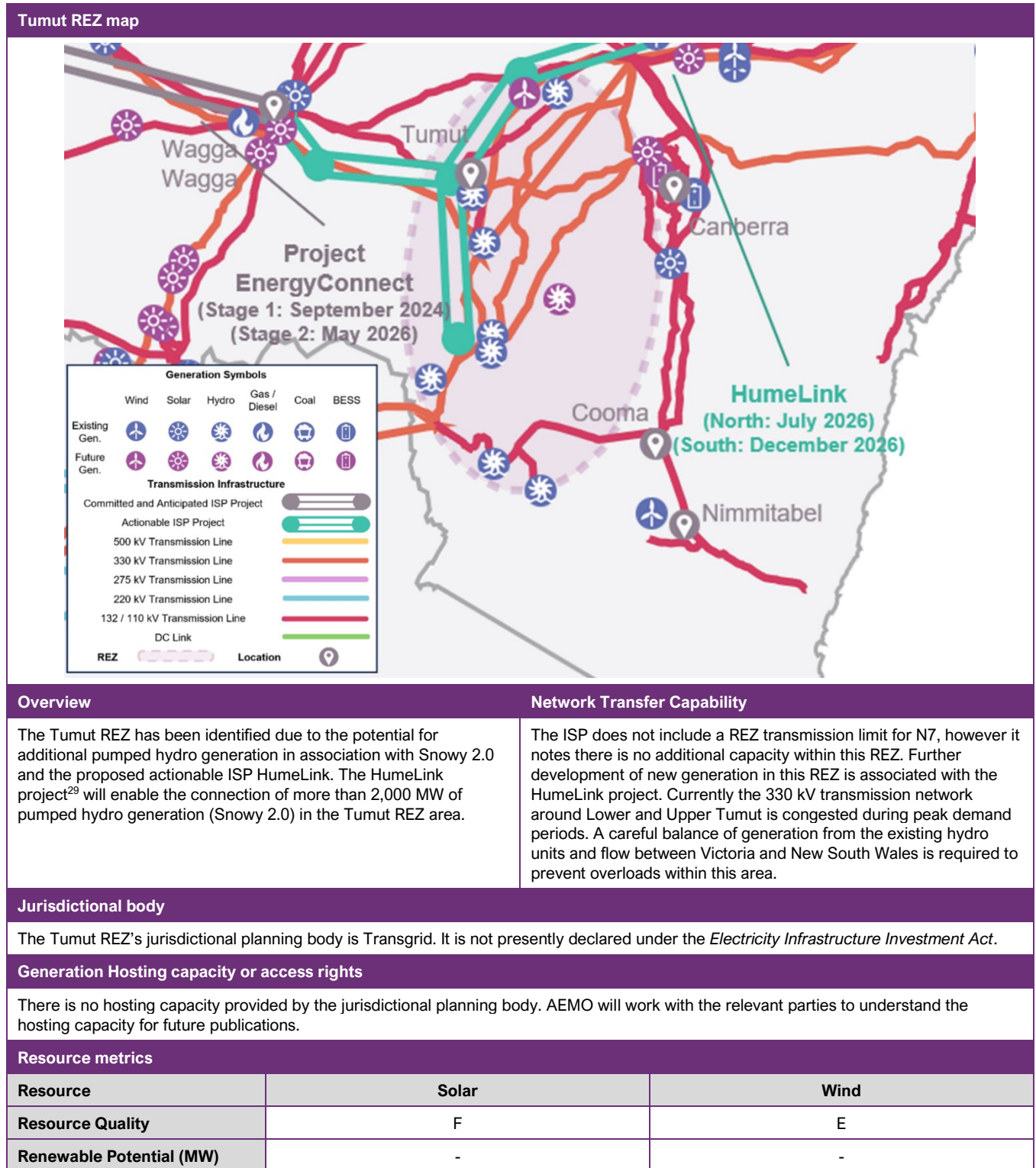


Committed, Anticipated, and Actionable Transmission Projects	Timing	Status	Increase in network transfer capability
HumeLink	July 2026 ²⁸	Actionable ISP	1,500 MW

²⁸ Northern and southern circuits in service timings advised by proponent are July 2026 and December 2026, respectively. Under the Draft 2024 ISP Step Change scenario, the project is modelled with a timing of July 2029.

A3.8 N7 – Tumut

REZ information



²⁹ Transgrid, HumeLink project, at <https://www.transgrid.com.au/HumeLink>.

Climate hazard			
Temperature score	C	Bushfire score	E

Marginal loss factors

Marginal Loss Factor		
Technology	Voltage (kV)	2024-25 MLF
-	-	-

Congestion and curtailment

Congestion information – calendar year 2023			
Constraint ID	Binding hours	Marginal value (\$)	Most affected generation
N>>NIL_9XX_051	914.2	12,652,924.1	Generation contributing to flow from Burrinjuck to Yass 132 kV on trip of the Wagga-Lower Tumut 330 kV line
V>>N_NIL_65_66	37.6	18,106.7	Generation contributing to flow from Murray to Upper Tumut 330 kV on trip of Murray-Lower Tumut 330 kV

VRE semi-scheduled curtailment – calendar year 2023					
DUID	Generator name	Maximum Capacity (MW)	Average curtailment (%)	Average curtailment (MW)	Curtailment (MWh)
-	-	-	-	-	-

VRE curtailment – ISP forecast						
Scenario	2025		2026		2027	
	Curtailment	Economic offloading	Curtailment	Economic offloading	Curtailment	Economic offloading
<i>Step Change</i>	-	-	-	-	-	-

ISP forecast

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

Transmission access expansion for *Step Change*

There is no existing, committed, anticipated VRE projects for this REZ and the modelling outcomes, for all scenarios, did not project any additional VRE for this REZ. Therefore, no VRE curtailment or transmission expansion occurs in this REZ.

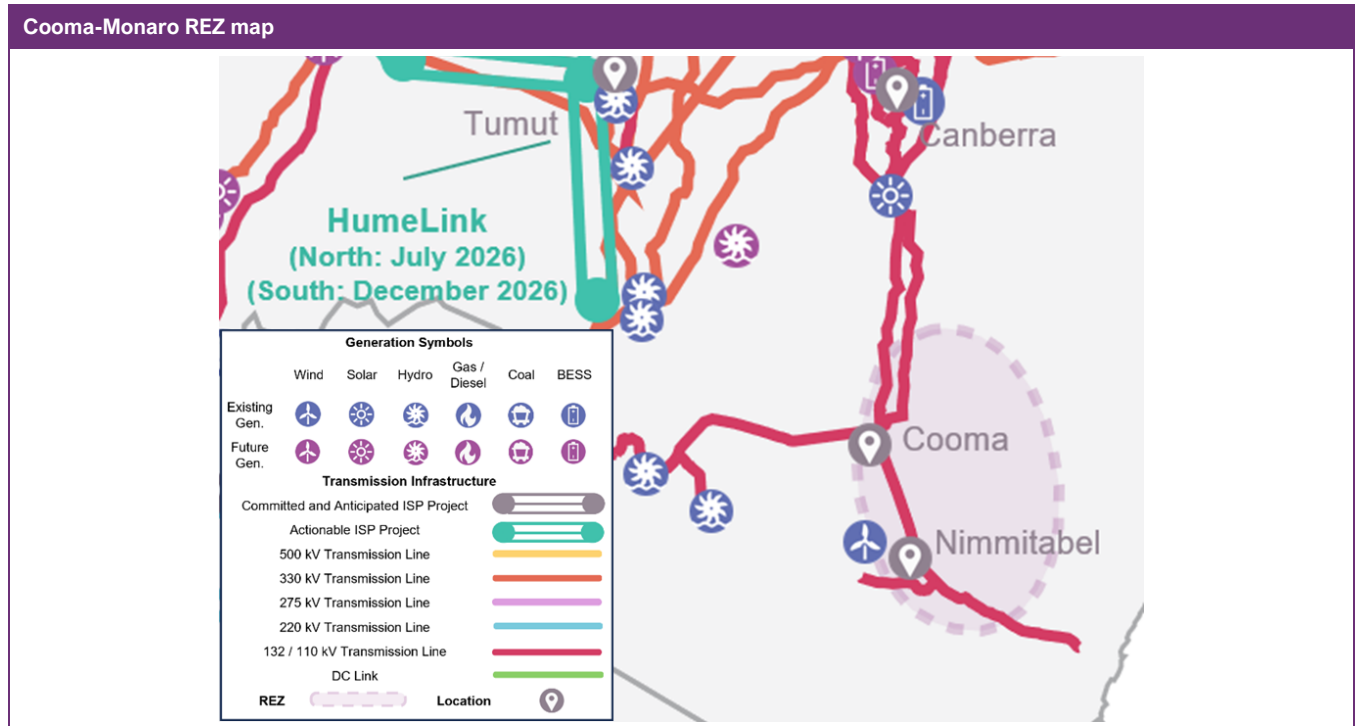
Committed, Anticipated, and Actionable Transmission Projects	Timing	Status	Increase in network transfer capability
HumeLink	July 2026 ³⁰	Actionable ISP	2,200 MW ³¹

³⁰ Northern and southern circuits in service timings advised by proponent are July 2026 and December 2026, respectively. Under the Draft 2024 ISP *Step Change* scenario, the project is modelled with a timing of July 2029.

³¹ Total REZ network limit increase in N6 and N7 combined.

A3.9 N8 – Cooma-Monaro

REZ information



Overview		Network Transfer Capability	
The Cooma-Monaro REZ has been identified for its pumped hydro potential. This REZ has B grade wind resource quality.		The existing 132 kV network transfer capability connecting Cooma-Monaro REZ to Canberra, Williamsdale and Muryang is 350 MW ³² .	
Jurisdictional body			
The Cooma REZ’s jurisdictional planning body is Transgrid. It is not presently declared under the <i>Electricity Infrastructure Investment Act</i> .			
Generation Hosting capacity or access rights			
There is no hosting capacity provided by the jurisdictional planning body. AEMO will work with the relevant parties to understand the hosting capacity for future publications.			
Resource metrics			
Resource	Solar		Wind
Resource Quality	F		B
Renewable Potential (MW)	-		300
Climate hazard			
Temperature score	B		Bushfire score
			E

Marginal loss factors

Marginal Loss Factor		
Technology	Voltage (kV)	2024-25 MLF
Wind	132	0.9344

³² See ‘Build Limits’ tab of the Draft 2024 Inputs and Assumptions Workbook, at <https://aemo.com.au/-/media/files/major-publications/isp/2023/2023-iasr-assumptions-workbook.xlsx?la=en>.

Congestion and curtailment

Congestion information – calendar year 2023			
Constraint ID	Binding hours	Marginal value (\$)	Most affected generation
-	-	-	-

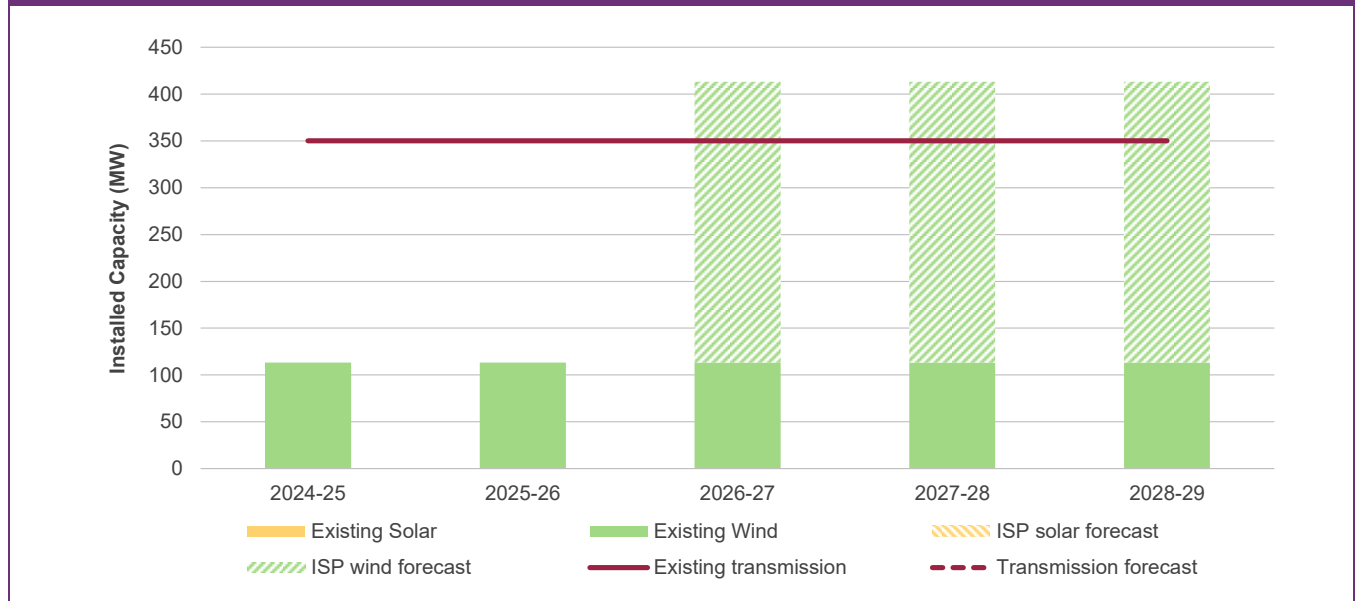
VRE semi-scheduled curtailment – calendar year 2023					
DUID	Generator name	Maximum Capacity (MW)	Average curtailment (%)	Average curtailment (MW)	Curtailment (MWh)
BOCORWF1	Boco Rock Wind Farm	113	0.3	0.1	812

VRE curtailment – ISP forecast						
Scenario	2025		2026		2027	
	Curtailment	Economic offloading	Curtailment	Economic offloading	Curtailment	Economic offloading
Step Change	-	1%	-	-	1%	8%

ISP forecast

ISP forecast												
VRE outlook	Solar PV (MW)						Wind (MW)					
	Existing/ committed/ anticipated	Projected					Existing/ committed/ anticipated	Projected				
		2025	2026	2027	2028	2029		2025	2026	2027	2028	2029
Step Change	-	-	-	-	-	-	113	-	-	300	300	300

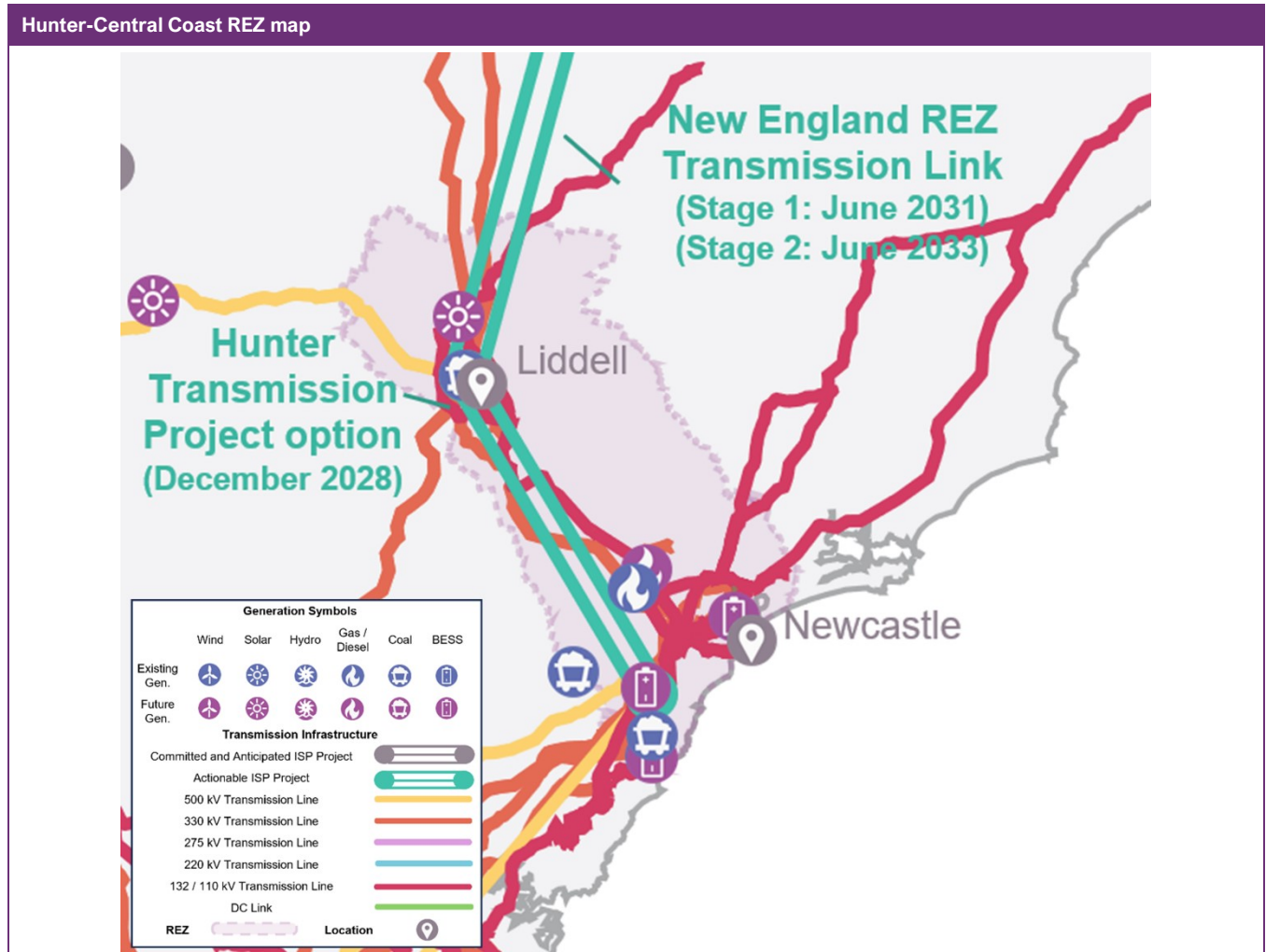
Transmission access expansion for Step Change



Committed, Anticipated, and Actionable Transmission Projects	Timing	Status	Increase in network transfer capability
-	-	-	-

A3.10 N9 – Hunter-Central Coast

REZ information



Overview		Network Transfer Capability
<p>The Hunter-Central Coast (HCC) REZ has been identified to assist industries to decarbonise and access renewable energy with a mix of solar, onshore and offshore wind energy projects. The REZ was declared on 9 December 2022 with 1,000 MW of intended network capacity. EnergyCo has been appointed the Infrastructure Planner for the REZ. The capacity of the Hunter Central Coast REZ is likely to increase over time with the retirement of coal-fired power stations, re-purposing of mining land and growth of offshore wind.</p>		<p>This REZ is intended to supply Sydney-Newcastle-Wollongong (SNW) and it is assumed that supply to SNW would also include high southbound flows from Northern New South Wales (NNSW) to Central New South Wales (CNSW). The REZ transmission limit is considered in the ISP to be 400 MW to reflect this condition.</p>
Jurisdictional body	Reference	Function
EnergyCo	NSW Electricity Infrastructure Investment Act 2020 ³³	Hunter Central Coast REZ was formally declared in November 2021 under the <i>Electricity Infrastructure Investment Act 2020</i> . EnergyCo was appointed as the Infrastructure Planner for the Central-West Orana REZ ⁸ .

³³ See <https://legislation.nsw.gov.au/view/html/inforce/current/act-2020-044#sec.23>.

EnergyCo	Network Infrastructure Strategy ³⁴	EnergyCo’s strategy to coordinate New South Wales network infrastructure to connect new generation and storage in New South Wales’ five REZs.
AEMO Services	Long Term Energy Service Agreement (LTESA) Tenders ³⁵	AEMO Services (appointed as Consumer Trustee) conducts tenders for projects generation, storage, firming infrastructure that can be recovered from consumers, in accordance with the Infrastructure Investment Objectives (IIO) Report.

Generation Hosting capacity or access rights

There is no hosting capacity provided by the jurisdictional planning body. AEMO will work with the relevant parties to understand the hosting capacity for future publications.

Resource metrics

Resource	Solar	Wind
Resource Quality	D	D
Renewable Potential (MW)	516	1,400

Climate hazard

Temperature score	A	Bushfire score	E
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Marginal loss factors

Marginal Loss Factor		
Technology	Voltage (kV)	2024-25 MLF
-	-	-

Congestion and curtailment

Congestion information – calendar year 2023

Constraint ID	Binding hours	Marginal value (\$)	Most affected generation
-	-	-	-

VRE semi-scheduled curtailment – calendar year 2023

DUID	Generator name	Maximum Capacity (MW)	Average curtailment (%)	Average curtailment (MW)	Curtailment (MWh)
-	-	-	-	-	-

VRE curtailment – ISP forecast

Scenario	2025		2026		2027	
	Curtailment	Economic offloading	Curtailment	Economic offloading	Curtailment	Economic offloading
<i>Step Change</i>	-	-	-	-	5%	10%

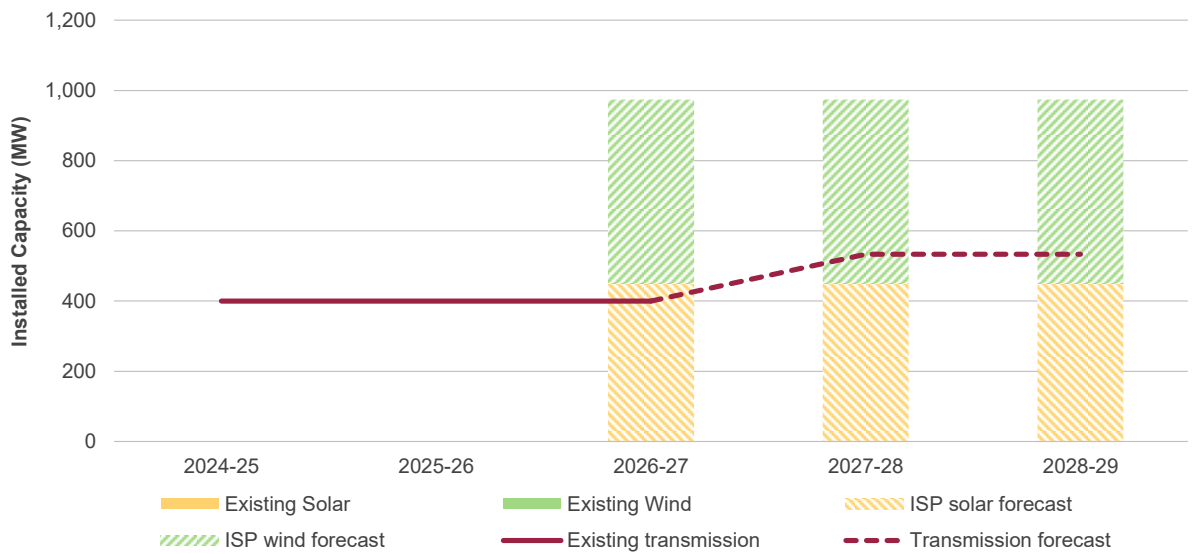
³⁴ See <https://www.energyco.nsw.gov.au/industry/network-infrastructure-strategy-nsw>.

³⁵ AEMO Services Tenders, at <https://aemoservices.com.au/tenders>.

ISP forecast

ISP forecast												
VRE outlook	Solar PV (MW)						Wind (MW)					
	Existing/ committed/ anticipated	Projected					Existing/ committed/ anticipated	Projected				
		2025	2026	2027	2028	2029		2025	2026	2027	2028	2029
Step Change	-	-	-	450	450	450	-	-	-	550	550	550

Transmission access expansion for Step Change



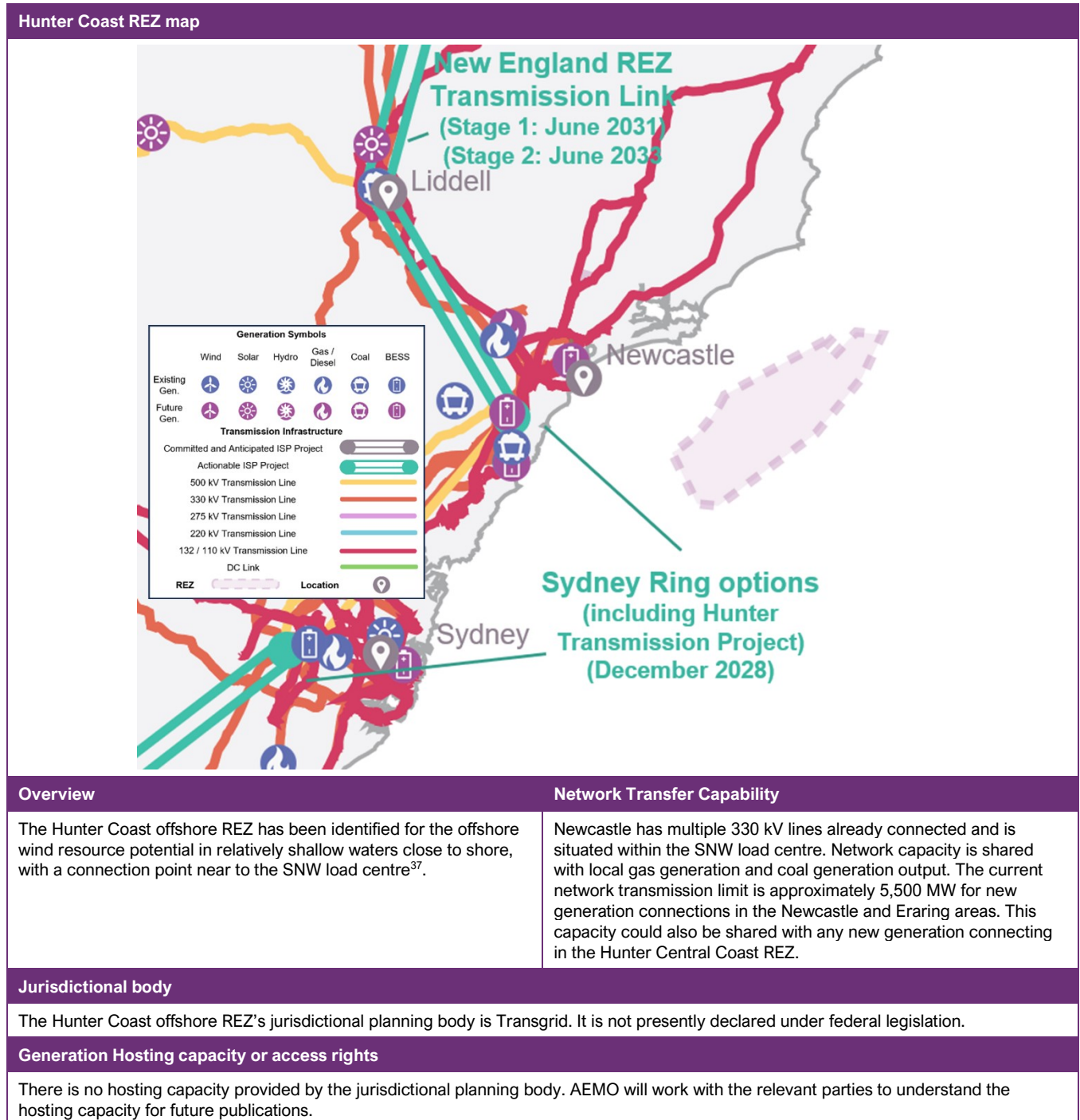
Note: The network expansion for N9 comes from the linearisation of the REZ build in the Draft 2024 ISP³⁶.

Committed, Anticipated, and Actionable Transmission Projects	Timing	Status	Increase in network transfer capability
-	-	-	-

³⁶ See Section 2.4.6 of the ISP Methodology, at https://www.aemo.com.au/-/media/files/stakeholder_consultation/consultations/nem-consultations/2023/isp-methodology-2023/isp-methodology_june-2023.pdf?la=en.

A3.11 N10 – Hunter Coast

REZ information



Overview

The Hunter Coast offshore REZ has been identified for the offshore wind resource potential in relatively shallow waters close to shore, with a connection point near to the SNW load centre³⁷.

Network Transfer Capability

Newcastle has multiple 330 kV lines already connected and is situated within the SNW load centre. Network capacity is shared with local gas generation and coal generation output. The current network transmission limit is approximately 5,500 MW for new generation connections in the Newcastle and Eraring areas. This capacity could also be shared with any new generation connecting in the Hunter Central Coast REZ.

Jurisdictional body

The Hunter Coast offshore REZ’s jurisdictional planning body is Transgrid. It is not presently declared under federal legislation.

Generation Hosting capacity or access rights

There is no hosting capacity provided by the jurisdictional planning body. AEMO will work with the relevant parties to understand the hosting capacity for future publications.

³⁷ Federal Government, *Hunter offshore wind zone declaration*, at <https://www.dceew.gov.au/energy/renewable/offshore-wind/areas/hunter#:~:text=on%20Wind%20Turbines-,Area%20in%20the%20Pacific%20Ocean%20off%20%E2%80%8Cthe%20Hunter%20%E2%80%8Cdeclared%20suitable,development%20on%2012%20July%202023>.

Resource metrics			
Resource	Offshore Wind (fixed)		Offshore Wind (floating)
Resource Quality	E		B
Renewable Potential (MW)	-		7,420
Climate hazard			
Temperature score	A		Bushfire score E

Marginal loss factors

Marginal Loss Factor		
Technology	Voltage (kV)	2024-25 MLF
-	-	-

Congestion and curtailment

Congestion information – calendar year 2023			
Constraint ID	Binding hours	Marginal value (\$)	Most affected generation
-	-	-	-

VRE semi-scheduled curtailment – calendar year 2023					
DUID	Generator name	Maximum Capacity (MW)	Average curtailment (%)	Average curtailment (MW)	Curtailment (MWh)
-	-	-	-	-	-

VRE curtailment – ISP forecast						
Scenario	2025		2026		2027	
	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	2027	2028	2029		2025	2026	2027	2028	2029
Step Change	-	-	-	-	-	-	-	-	-	-	-	-

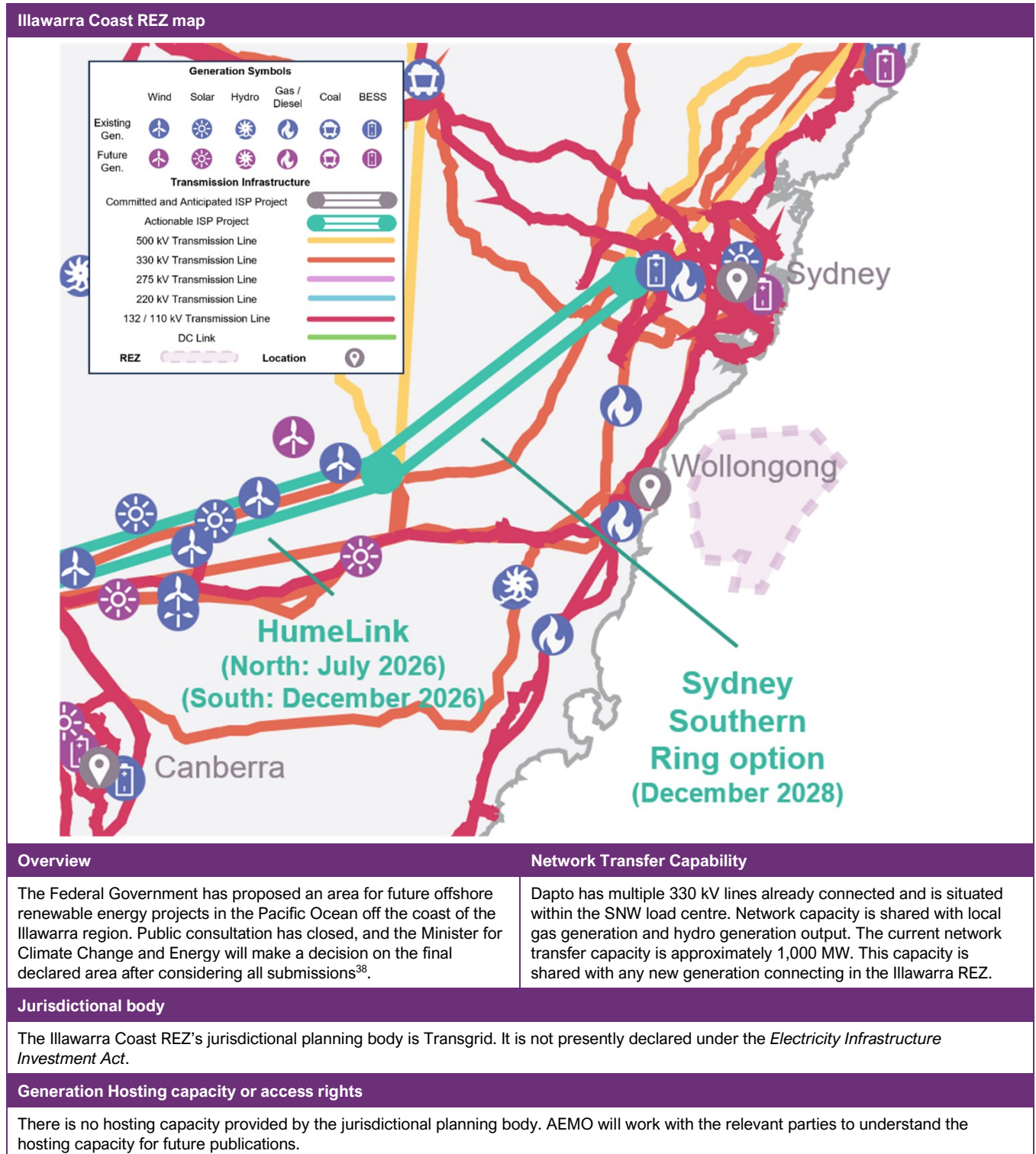
Transmission access expansion for Step Change

There are no existing, committed, anticipated VRE projects for this REZ and the modelling outcomes for all scenarios 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	Increase in network transfer capability
-	-	-	-

A3.12 N11 – Illawarra Coast

REZ information



³⁸ See <https://www.dcceew.gov.au/energy/renewable/offshore-wind/areas/illawarra>.

Resource metrics			
Resource	Offshore Wind (fixed)		Offshore Wind (floating)
Resource Quality	B		B
Renewable Potential (MW)	148		5,696
Climate hazard			
Temperature score	C		Bushfire score C

Marginal loss factors

Marginal Loss Factor		
Technology	Voltage (kV)	2024-25 MLF
-	-	-

Congestion and curtailment

Congestion information – calendar year 2023			
Constraint ID	Binding hours	Marginal value (\$)	Most affected generation
-	-	-	-

VRE semi-scheduled curtailment – calendar year 2023					
DUID	Generator name	Maximum Capacity (MW)	Average curtailment (%)	Average curtailment (MW)	Curtailment (MWh)
-	-	-	-	-	-

VRE curtailment – ISP forecast						
Scenario	2025		2026		2027	
	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	2027	2028	2029		2025	2026	2027	2028	2029
Step Change	-	-	-	-	-	-	-	-	-	-	-	-

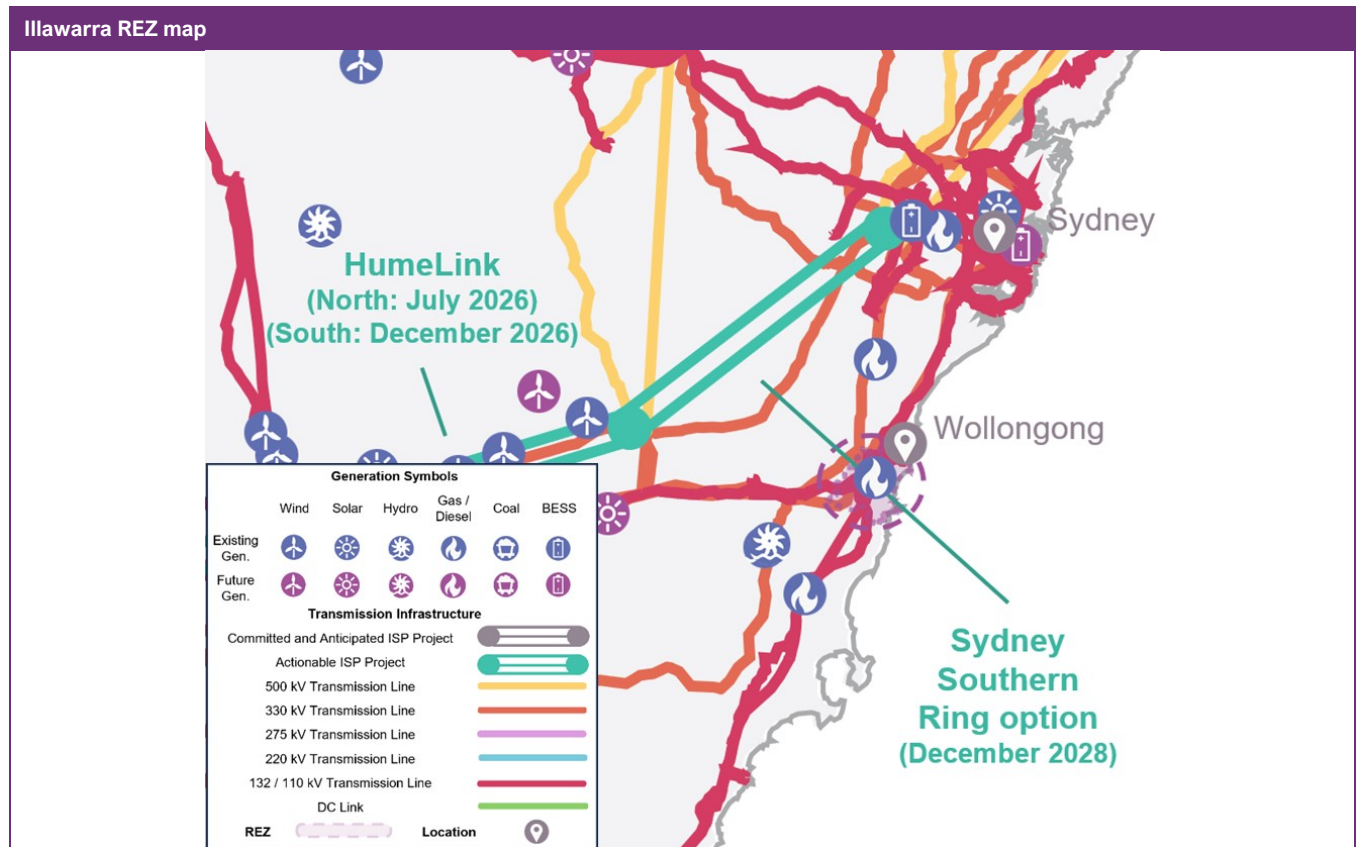
Transmission access expansion for Step Change

There are no existing, committed, anticipated VRE projects for this REZ and the modelling outcomes for all scenarios 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	Increase in network transfer capability
-	-	-	-

A3.13 N12 – Illawarra

REZ information



Overview		Network Transfer Capability
<p>The Illawarra REZ was declared on 27 February 2023 with 1,000 MW of intended network capacity, and EnergyCo has been appointed the Infrastructure Planner for the REZ, under the <i>Electricity Infrastructure Investment Act 2020</i> (NSW). Community consultation has been initiated by EnergyCo, following an earlier Registration of Interest that highlighted potential for wind (onshore and offshore), solar, energy storage, pumped hydro, hydrogen production, and green steel manufacturing.</p>		<p>Dapto has multiple 330 kV lines already connected and is situated within the SNW load centre. Network capacity is shared with local gas generation and hydro generation output. The intended network capacity for this REZ is approximately 1,000 MW.</p>
Jurisdictional body	Reference	Function
EnergyCo	<i>NSW Electricity Infrastructure Investment Act 2020</i> ³⁹	Illawarra REZ was formally declared in November 2021 under the <i>Electricity Infrastructure Investment Act 2020</i> . EnergyCo was appointed as the Infrastructure Planner for the Illawarra REZ ⁸ .
EnergyCo	Network Infrastructure Strategy ⁴⁰	EnergyCo's strategy to coordinate New South Wales network infrastructure to connect new generation and storage in New South Wales' five REZs.
AEMO Services	Long Term Energy Service Agreement (LTESA) Tenders ⁴¹	AEMO Services (appointed as Consumer Trustee) conducts tenders for projects generation, storage, firming infrastructure that can be recovered from consumers, in accordance with the Infrastructure Investment Objectives (IIO) Report.

³⁹ See <https://legislation.nsw.gov.au/view/html/inforce/current/act-2020-044#sec.23>.

⁴⁰ See <https://www.energyco.nsw.gov.au/industry/network-infrastructure-strategy-nsw>.

⁴¹ AEMO Services Tenders, at <https://aemoservices.com.au/tenders>.

Generation Hosting capacity or access rights				
There is no hosting capacity provided by the jurisdictional planning body. AEMO will work with the relevant parties to understand the hosting capacity for future publications.				
Resource metrics				
Resource	Solar		Wind	
Resource Quality	F		E	
Renewable Potential (MW)	-		-	
Climate hazard				
Temperature score	-		Bushfire score	-

Marginal loss factors

Marginal Loss Factor		
Technology	Voltage (kV)	2024-25 MLF
-	-	-

Congestion and curtailment

Congestion information – calendar year 2023			
Constraint ID	Binding hours	Marginal value (\$)	Most affected generation
-	-	-	-

VRE semi-scheduled curtailment – calendar year 2023					
DUID	Generator name	Maximum Capacity (MW)	Average curtailment (%)	Average curtailment (MW)	Curtailment (MWh)
-	-	-	-	-	-

VRE curtailment – ISP forecast						
Scenario	2025		2026		2027	
	Curtailment	Economic offloading	Curtailment	Economic offloading	Curtailment	Economic offloading
<i>Step Change</i>	-	-	-	-	-	-

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

Transmission access expansion for <i>Step Change</i>			
There are no existing, committed, anticipated VRE projects for this REZ and the modelling outcomes for all scenarios 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	Increase in network transfer capability
-	-	-	-

A3.14 Non-REZ

Congestion and curtailment

Congestion information – calendar year 2023			
Constraint ID	Binding hours	Marginal value (\$)	Most affected generation
N>>NIL_964_84_S	807.2	774,024.1	Generation contributing to flow from Port Macquarie to Herron Creek 132 kV on trip of the Tamworth-Liddell 330 kV line
N>NIL_PKTX_LV	612.8	2,775,237.5	Generation exporting from 66 kV through the 132/66 kV Parkes transformers
V^^N_NIL_1	585.0	435,325.3	Generation in South-West NSW, North-West VIC and North-East VIC
N>NIL_LSDU	151.3	126,566.5	Generation contributing to flow from Lismore to Dunoon 132 kV on trip of the parallel line
N>NIL_MBDU	108.6	36,654.5	Generation contributing to flow from Mullumbimby to Dunoon 132 kV on trip of a parallel line
N>NIL_9ML	77.7	756,776.9	Generation contributing to flow from Crudine Ridge to Ilford Tee 132 kV
N>>NIL_33_34	75.4	324,979.9	Generation contributing to flow from Bayswater to Liddell 330 kV on loss of parallel Bayswater-Liddell 330 kV line
N>>NIL_84_88_S	74.9	48,258.5	Generation contributing to flow from Tamworth to Liddell 330 kV on trip of Tamworth-Muswellbrook 330 kV line
N^^V_NIL_1	65.5	49,574.6	NSW generation, via limitation of NSW to VIC transfer
N>Q-NIL_757_758	54.7	16,189.9	Generation contributing to northward flow on the Terranora - Mudgeeraba 110 kV lines
N>NIL_901	53.3	291,034.5	Generation contributing to flow from West Wyalong to Temora 132 kV
N^^V_NIL_ARWBBA	38.0	13,576.1	Generation in North West VIC
N>NIL_COTX_LV	30.5	125,153.7	Generation exporting from 22 kV through the 22/132 kV Corowa transformers
N>>NIL_88_84_S	25.9	18,228.5	Generation contributing to flow from Tamworth to Muswellbrook 330 kV on trip of the Tamworth-Liddell 330 kV line
N>>NIL_998	22.7	681,432.5	Generation contributing to flow from Cowra to Forbes 132 kV
N>NIL_9GL	16.6	159,934.1	Generation contributing to flow from Bango 973 to Yass 132 kV
N>NIL_9GM	14.3	98,687.7	Generation contributing to flow from Bango 999 to Yass 132 kV
N>NIL_999	10.8	566,130.0	Generation contributing to flow from Bango 999 to Cowra 132 kV
N>>NIL_84_83_OPEN	9.3	63,221.3	Generation contributing to flow from Liddell to Tamworth 330 kV on trip of the Liddell-Muswellbrook 330 kV line
N>>NIL_4	7.6	86,989.4	Generation contributing to flow from Collector to Marulan 330 kV
N>>NIL_5_61_N	4.6	70,751.6	Generation contributing to flow from Yass to Marulan 330 kV on trip of the Crookwell-Bannaby 330 kV line

VRE semi-scheduled curtailment – calendar year 2023					
DUID	Generator name	Maximum Capacity (MW)	Average curtailment (%)	Average curtailment (MW)	Curtailment (MWh)
BANGOWF1	Bango 973 Wind Far0m	155	2.2	0.8	6,721
BANGOWF2	Bango 999 Wind Farm	83	2.6	0.7	5,998
COLEASF1	Coleambally Solar Farm	150	2.1	0.8	7,025
COLWF01	Collector Wind Farm 1	219	0.5	0.3	2,433
CROOKWF2	Crookwell 2 Wind Farm	91	0.5	0.2	1,390
CRURWF1	Crudine Ridge Wind Farm	138	0.5	0.2	1,807
DARLSF1	Darlington Point Solar Farm	275	4.0	2.7	23,801
FINLYSF1	Finley Solar Farm	133	5.4	1.8	15,334
GULLRSF1	Gullen Range Solar Farm	10	0.3	0.0	61
GULLRWF1	Gullen Range Wind Farm	161	0.4	0.2	1,888
GULLRWF2	Gullen Range Wind Farm 2	107	0.7	0.3	2,256
GUNNING1	Gunning Wind Farm	47	0.9	0.2	1,373
HILLSTN1	Hillston Sun Farm	85	1.4	0.4	3,159
JEMALNG1	Jemalong Solar Project	50	3.1	0.4	3,842
PARSF1	Parkes Solar Farm	51	13.8	2.0	17,513
RYEPARK1	Rye Park Renewable Energy	384	0.5	0.1	386
TARALGA1	Taralga Wind Farm	106	0.1	0.0	185
WOODLWN1	Woodlawn Wind Farm	48	0.1	0.0	168
WSTWYSF1	West Wyalong Solar Farm	90	8.8	1.8	15,456
WYASF1	Wyalong Solar Farm	53	26.1	2.2	10,870