

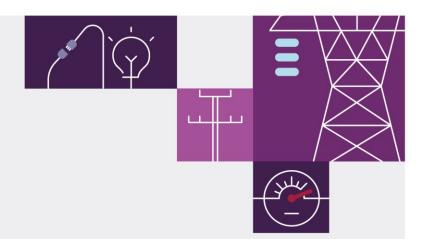
# Appendix 1. Additional resources

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.

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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.

# **Contents**

A1.1

Tables listing additional resources

Table	S	
Table 1	Sources of data and information used in the ELI Report	4
Table 2	Links to connections process resources	6
Table 3	Links to additional resources	6
Table 4	TAPRs and other planning documents	7

## A1.1 Tables listing additional resources

Table 1 Sources of data and information used in the ELI Report

Туре		Name	Provided by	Link
Energy policies and commitments	Summary of policies by jurisdictions in the Draft 2024 ISP	Addendum to the Draft 2024 ISP, April 2024 Section 4. Jurisdictional policies for renewable energy zones	AEMO	https://aemo.com.au/-/media/files/ stakeholder_consultation/consultations/ nem-consultations/2024/draft-2024- isp-addendum-consultation/addendum- to-draft-2024-isp.pdf?la=en
Network capability	Network congestion	NEM Constraint Report 2023 summary data, April 2024	AEMO	https://aemo.com.au/en/energy- systems/electricity/national-electricity- market-nem/system- operations/congestion-information- resource/statistical-reporting-streams
	Historical curtailment	Nemweb data	AEMO	https://aemo.com.au/en/energy- systems/electricity/national-electricity- market-nem/data-nem/market-data- nemweb
	Forecast curtailment	ISP underlying data	AEMO	Source data not published.
	Hosting capacity	Electricity Infrastructure Investment Act 2020 No 44	New South Wales Government	https://legislation.nsw.gov.au/view/html/ inforce/current/act-2020-044#sec.23
		CWO REZ Access Rights and Scheme Design Positions Paper, July 2022	New South Wales Government	https://www.energy.nsw.gov.au/sites/default/files/2022-08/cwo-rez-access-rights-and-scheme-design-positions-paper-220336.pdf
		The Draft Renewable Energy Zone (South West) Access Scheme Order, December 2023	New South Wales Government	https://www.energy.nsw.gov.au/sites/default/files/2023-12/Draft_Renewable_Energy_Zone_South_West_Access_Scheme_Order_2023_HSF_Draft_07122_3.pdf
		2023 Queensland Renewable Energy Zone Roadmap, July 2023	Queensland Government	https://www.epw.qld.gov.au/ data/ass ets/pdf_file/0019/36037/draft-2023- queensland-rez-roadmap.pdf
		TasNetworks Annual Planning Report 2023, November 2023	TasNetworks	https://www.tasnetworks.com.au/config/getattachment/c01e26ee-4c82-4dce-b0c5-8b4426fbd9d4/tasnetworks_annual_planning_report_2023.pdf
		2023 IASR Assumptions Workbook, September 2023	AEMO	https://aemo.com.au/-/media/files/ major-publications/isp/2023/2023-iasr- assumptions-workbook.xlsx?la=en
	Network augmentations	Transmission Augmentation Information Page, May 2024	AEMO	https://aemo.com.au/en/energy- systems/electricity/national-electricity- market-nem/nem-forecasting-and- planning/forecasting-and-planning- data/transmission-augmentation- information
		Draft 2024 ISP, December 2023 Section 5. Actionable and other network investments	AEMO	https://aemo.com.au/-/media/files/ stakeholder_consultation/consultations/ nem-consultations/2023/draft-2024- isp-consultation/draft-2024- isp.pdf?la=en
	Marginal loss factors (MLFs)	Marginal Loss Factors: Financial Year 2024-25, April 2024	AEMO	https://aemo.com.au/-/media/files/ electricity/nem/security_and_reliability/loss_factors_and_regional_boundaries/ 2024-25-financial-year/mlfs-for-the- 2024-25-financial-year.pdf?la=en

Туре		Name	Provided by	Link
System security	System strength	2023 System Strength Report, December 2023	AEMO	https://aemo.com.au/-/media/files/ electricity/nem/security_and_reliability/ system-strength-requirements/2023- system-strength-report.pdf?la=en
	Inertia	2023 Inertia Report, December 2023	AEMO	https://aemo.com.au/-/media/files/ electricity/nem/security_and_reliability/ system-strength-requirements/2023- inertia-report.pdf?la=en
	NSCAS	2023 NSCAS Report, December 2023	AEMO	https://aemo.com.au/-/media/files/ electricity/nem/security_and_reliability/ system-strength-requirements/2023- nscas-report.pdf?la=en
Reliability and energy adequacy	Unserved energy, reliability gaps, and locational reliability factors	Update to the 2023 Electricity Statement of Opportunities, May 2024	AEMO	https://aemo.com.au/- /media/files/electricity/nem/planning_a nd_forecasting/nem_esoo/2023/may- 2024-update-to-the-2023-electricity- statement-of-opportunities.pdf?la=en
	Operational demand	AEMO Forecasting Data Portal Publication: ESOO 2023 Version: 31/08/2023 00:00	AEMO	https://forecasting.aemo.com.au/
Wholesale price indicators	5-minute NEM regional reference prices	Aggregated price and demand data	AEMO	https://aemo.com.au/energy-systems/ electricity/national-electricity-market- nem/data-nem/aggregated-data
Generation and storage outlook	Existing and future generation projects	NEM generation maps Version: 22/12/12	AEMO	https://aemo.com.au/en/energy- systems/electricity/national-electricity- market-nem/participate-in-the- market/network-connections/nem- generation-maps
		April 2024 Generation Information	AEMO	https://aemo.com.au/en/energy- systems/electricity/national-electricity- market-nem/nem-forecasting-and- planning/forecasting-and-planning- data/generation-information
	Generation closure and withdrawal timeline	Draft 2024 Integrated System Plan, December 2023 Section 4. Transition to renewable generation	AEMO	https://aemo.com.au/-/media/files/ stakeholder_consultation/consultations/ nem-consultations/2023/draft-2024- isp-consultation/draft-2024- isp.pdf?la=en
	Long-term modelled outlook of generation and storage capacity	Draft 2024 ISP generation and storage outlook workbooks	AEMO	https://aemo.com.au/consultations/current-and-closed-consultations/draft-2024-isp-consultation
Weather and climate	Weather, climate, and resource quality	2023 IASR, July 2023	AEMO	https://aemo.com.au/-/media/files/ major-publications/isp/2023/2023- inputs-assumptions-and-scenarios- report.pdf?la=en

Table 2 shows useful resources for proponents seeking to connect a facility to the NEMError! Reference source not found..

Table 2 Links to connections process resources

Name Ty	уре	Provided by	Link
Connection Process Overview	Overview of the generator connection process in the NEM	AEMO	https://www.aemo.com.au/energy-systems/electricity/national-electricity-market-nem/participate-in-the-market/network-connections/transmission-and-distribution-in-the-nem
New South Wales Connection Process	Information on the connection process in the NEM provided	TransGrid	https://www.transgrid.com.au/about-us/network/network- connections
Queensland Connection Process	by the relevant TNSPs.	Powerlink	https://www.powerlink.com.au/network-connections
South Australia Connection Process		ElectraNet	https://www.electranet.com.au/what-we-do/solutions/connection-services/electranet-connections-process/
Tasmania Connection Process		TasNetworks	https://www.tasnetworks.com.au/transmission-connections
Victoria Connection Process		AEMO	https://www.aemo.com.au/energy-systems/electricity/national-electricity-market-nem/participate-in-the-market/network-connections/victorian-transmission-connections
Connections Reform Initiative	Information on the initiative to address concerns with delays and increasing complexity in connections to the NEM.	AEMO	https://aemo.com.au/consultations/industry-forums-and-working-groups/list-of-industry-forums-and-working-groups/connections-reform-initiative
Connections Scorecard	Generation connections statistics	AEMO	https://aemo.com.au/en/energy-systems/electricity/national- electricity-market-nem/participate-in-the-market/network- connections/connections-scorecard

Table 3 and Table 4 show useful additional resources provided by various parts of the industry.

Table 3 Links to additional resources

Name Ty	ре	Provided by	Link
ALTLIMITS	Network element ratings	AEMO	https://aemo.com.au/en/energy-systems/electricity/national- electricity-market-nem/data-nem/network-data/transmission- equipment-ratings
Congestion Information Resource – Statistical Reporting Streams	Statistical constraint information	AEMO	https://aemo.com.au/energy-systems/electricity/national- electricity-market-nem/system-operations/congestion- information-resource/statistical-reporting-streams
Network Opportunity Maps	Interactive map with future connections and network information	ENA	https://www.energynetworks.com.au/projects/network- opportunity-maps/accessing-the-network-opportunity-maps/
Network Maps Renewables	Interactive map	Rosetta Analytics	https://renewables.networkmap.energy/
New South Wales Infrastructure Investment Objectives (IIO) Report	10-year plan for generation in New South Wales	AEMO Services	https://aemoservices.com.au/our-role/infrastructure-investment-objectives-report
Queensland Energy and Jobs Plan	Plan for generation and network in Queensland	QLD Government	https://www.epw.qld.gov.au/ data/assets/pdf_file/0030/32988/ queensland-supergrid-infrastructure-blueprint.pdf

The Transmission Annual Planning Reports (TAPRs) often contain useful information, some of which has been drawn on for this report. Table 4 below provides a list of the TAPRs and other planning documents.

Table 4 TAPRs and other planning documents

Name Ty	уре	Provided by	Link	
2023 Transgrid TAPR	Annual Planning Report, with historical network performance, future network augmentation and assessments of hosting capacity Interactive map with future connections and network information	Transgrid	https://www.transgrid.com.au/tapr	
2023 Powerlink TAPR		performance, future	Powerlink	https://www.powerlink.com.au/planning-report/transmission-annual-planning-report-2023
2023 Victorian TAPR		capacity Interactive map with future	AEMO Victorian Planning	https://aemo.com.au/en/energy-systems/electricity/national- electricity-market-nem/nem-forecasting-and-planning/victorian- planning/victorian-annual-planning-report
2023 ElectraNet TAPR		ElectraNet	https://www.electranet.com.au/what-we-do/ network/transmission-annual-planning-reports/	
2023 TasNetworks TAPR		TasNetworks	https://www.tasnetworks.com.au/poles-and-wires/planning-and-upgrades/planning-our-network	
New South Wales Infrastructure Investment Objectives (IIO) Report	10-year plan for generation and network in New South Wales	AEMO Services	https://aemoservices.com.au/our-role/infrastructure-investment-objectives-report	
Network Investment Strategy	20-year plan for network infrastructure	EnergyCo	https://www.energyco.nsw.gov.au/industry/network-infrastructure-strategy-nsw	
Queensland Energy and Jobs Plan	Plan for generation and network in Queensland	QLD Government	https://www.epw.qld.gov.au/ data/assets/pdf_file/0030/32988/queensland-supergrid-infrastructure-blueprint.pdf	