Shared Transmission Network Services Prices in Victoria – 1 July 2023 to 30 June 2024

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Victorian Transmission Planning

AEMO
AUSTRALIAN ENERGY MARKET OPERATOR

Important notice

Purpose

AEMO has prepared this document to provide information about shared transmission network services prices in Victoria, as at the date of publication.

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Version control

Version	Release date	Changes
1	15/03/2023	Initial release
2	30/03/2023	Correction to Hazelwood and Moorabool System Strength Unit Prices

Contents

Tables

1 Shared transmission network services in Victoria prices

AEMO's Transmission Use of System (TUOS) charges recover the costs for providing shared prescribed transmission network services in Victoria. The TUOS prices are calculated in accordance with the National Electricity Rules (NER) and the revised AEMO's Pricing Methodology[1].

TUOS charges for 2023-24 is budgeted to be $650.2 million, which is $26.3 million (4.2%) higher compared to 2022-23.

The key drivers of the increase are:

- $57.4 million relating to higher transmission easement land tax.
- $20.8 million relating to higher AEMO's costs driven by various transmission activities such as Victoria to NSW Interconnector (VNI) West, and Western Renewable Link project (WRL), with an uplift in the AEMO's internal resource and capability to effectively deliver key responsibilities of the function.
- $9.3 million relating to an increase to AusNet's regulated revenue due to a higher inflation rate.
- Higher costs are partly offset by a return of prior year surplus of $44.6 million in FY24, which is $41.3 million higher compared to FY23 and a net Modified Load Export Charge (MLEC) receivable of $9.7 million in FY24. This is a change from a net payable in FY23 of $6.9 million, which resulted in a reduction of $16.5 million to the FY24 TUOS revenue requirement.

The shared transmission network services prices apply for the financial year 1 July 2023 to 30 June 2024 are:

- Locational charges
- Non-locational charges
- Common service charges
- System strength unit prices

More detail on the four components is provided below.

1.1 Prescribed TUOS services – locational

Locational charges reflect the cost of using the network at various locations. They are designed to encourage the most efficient use of the transmission network and are based on demand at times of greatest utilisation of the transmission network connection point. Locational prices are calculated at each connection point which reflects the long run marginal cost of transmission for that connection point. The locational charge is then calculated based on these locational prices.

As per AEMO's pricing methodology, 50% of the maximum allowed revenue for prescribed TUOS services is allocated to the locational component. The locational component is then adjusted by inter-regional Settlement Residue Auctions proceeds, negative inter-regional settlement residues and net payments and receipts between neighbouring transmission network service providers for use of their respective transmission networks (also referred to as MLEC).

[1] See http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Participant-information/Fees-and-charges.

Locational prices are, on average 4.4% lower in 2023-24 compared to 2022-23 driven by a $16.6 million downwards adjustment to locational cost related to MLEC, which is partly offset by higher network costs, lower estimated net settlement residue income and adjustment relating to the 2% price cap[2]. Refer to table 1 for prices.

1.2 Prescribed TUOS services – non-locational

Non-locational charges recover the balance of AEMO's annual revenue for providing the shared transmission network. The non-locational price is either an energy or capacity price, each of which has a common value across all locations.

As per AEMO's pricing methodology, 50% of the maximum allowed revenue for prescribed TUOS services is allocated to the non-locational component. The non-locational component is then adjusted by intra-regional settlement residue, prior year's under or over-recovery, AEMO's National Transmission Planner fees, and under or over-recovery of locational revenue as a result of applying the 2% price cap.

Non-locational prices are approximately 49% lower in 2023-24 (for both energy and capacity price) compared to 2022-23, driven by lower non-locational cost due to a return of prior year over recovery, higher estimation of intra-regional settlement residue income in 2023-24, slightly offset by higher network costs. Refer to table 2 for prices.

1.3 Prescribed common services

Common services include the cost of planning and operating the network, such as control buildings, protection systems, easements, and land tax. The common service price is either an energy or capacity price, each of which has a common value across all locations.

Common service prices are higher in 2023-24 (+21% to energy and +19% to capacity price), compared to 2022-23, driven by higher easement land tax payment, increase in network costs due to higher inflation rate and costs for various transmission activities such as Victoria to NSW Interconnector (VNI) West and Western Renewable Link project (WRL). Refer to table 2 for prices.

1.4 System strength transmission services

System strength transmission services include the cost to provide services to meet Victoria's forecast system strength requirement. The system strength requirement is to maintain minimum fault level and achieve stable voltage waveforms for projected inverter based resources. The System Strength Unit Price (SSUP) is set for each system strength node on the transmission network which is determined by the cost and service requirement at that particular system strength node.

The prices will apply from 1 July 2023 until amended in accordance with the National Electricity Rules and AEMO's Pricing Methodology. Table 3 details the unit price for the calculation of prescribed system strength charges for eligible connecting parties who choose not to remediate their full system strength impact on the network.

The Victorian Government has invested in two system strength projects (Koorangie BESS & Ararat Synchronous Condenser) as part of Stage 1 of the Renewable Energy Zone (REZ) Development Plan in the Murray River and Western Victoria REZs. These projects have been made available to meet Victoria's system strength requirement which has reduced the need for additional system strength services in Victoria to be procured thus enabling lower

[2] Refer to AEMO Pricing Methodology for more information on the 2% price cap - https://aemo.com.au/-/media/files/electricity/nem/participant_information/fees/2023/revised-pricing-methodology-for-1-july-2022-to-30-june-2027.pdf?la=en

SSUP for all system strength nodes, especially at Moorabool and Red Cliffs. This is expected to reduce the system strength charges new generators may pay as well as reduce the risk borne by TUOS customers in unrecovered system strength service costs allowable under the system strength investment framework. Refer to table 3 for prices.

2 Schedule of prices for 1 July 2023 to 30 June 2024

2.1 Locational prices

Table 1 Locational Prices

Connection Point	$/MW
Altona	16,262
Ballarat	23,571
Bendigo	24,636
Brooklyn	17,017
Brunswick	17,413
Cranbourne	13,709
Deer Park	22,872
East Rowville	13,484
Fishermans Bend	16,981
Fosterville	22,343
Geelong	18,606
Glenrowan	15,631
Heatherton	16,177
Heywood	28,202
Horsham	34,524
Keilor	15,609
Kerang	42,081
Loy Yang	15,571
Malvern	18,582

Connection Point	$/MW
Morwell	8,721
Mount Beauty	6,336
Portland Smelter	29,901
Red Cliffs	39,015
Richmond	15,941
Ringwood	13,576
Shepparton	20,657
South Morang	14,472
Springvale	13,488
Templestowe	14,596
Terang	38,009
Thomastown	14,018
Tyabb	16,632
Wemen	32,273
West Melbourne	15,829
Western Port	21,682
Wodonga	10,272
Yallourn PS G.5	8,638

2.2 Common service and non-locational prices

Table 2 Common Service and non-locational prices

(Either one of the following)	Common service price	Non-locational price
Energy price ($/MWh)	13.003	1.542
Capacity price ($/MW)	64,227	7,615

2.3 System Strength Unit Price

Table 3 System strength unit price

System Strength Node	Node Voltage (kV)	System Strength Unit Price ($/MVA/year)
Dederang	220	$3,627
Hazelwood	500	$4,493
Moorabool	220	$4,554
Red Cliffs	220	$4,388
Thomastown	220	$3,975

Prices in this table are firm and are not subject to rise and fall during the financial year.

2.4 TUOS pricing methodology

TUOS methodology

The 2023-24 TUOS prices have been determined in accordance with Chapter 6A of the National Electricity Rules (NER) and AEMO's Revised Pricing Methodology[3] for the period 1 July 2022 to 30 June 2027.

TUOS charges calculation method

These prices apply to metered usage at terminal stations. Terminal stations are where the assets owned by distribution businesses and other transmission-connected customers connect to the shared transmission network.

As per AEMO's Pricing Methodology, locational charges for 2023-24 are calculated at each terminal station by:

a) Identifying the half-hour period in each of the twelve months over the period from 1 July 2021 to 30 June 2022 when terminal station demand was highest.

b) Calculating the average of the twelve monthly connection point half-hour demands (in megawatts [MW]) at the time of the terminal station monthly maximum demand from paragraph (a).

c) Multiplying the locational price ($/MW) that applies to each terminal station by the demand calculated in paragraph (b).

Common service charges and non-locational charges for 2023-24 are either:

a) Energy price multiplied by metered energy at the connection point from 1 July 2021 to 30 June 2022; or

b) Capacity price multiplied by contract agreed maximum demand for the connection point referrable to that period. Capacity price is only available where a customer's agreement with AEMO nominates a fixed maximum demand and a penalty for exceeding that demand.

System strength unit price calculation method

The SSUP is a price per MVA which reflects the forecast long run average costs of providing System Strength Transmission Services at the relevant system strength node. It is calculated by dividing the total forecast long run capital and operating cost of providing an efficient quantity of system strength at a system strength node over a period of 10 years by the total forecast system strength hosting capacity provided by that system strength node over a period of 10 years.

GST is not applicable to TUOS and system strength charges.

[3] See https://www.aemo.com.au/energy-systems/electricity/national-electricity-market-nem/participate-in-the-market/fees-and-charges