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# REVENUE METHODOLOGY FOR VICTORIA'S ELECTRICITY TRANSMISSION SYSTEM.

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## 1. Introduction

AEMO is responsible for planning and investing in augmentations to Victoria's electricity Transmission Network and connecting new generators and loads to the system. AEMO is required to develop and publish a revenue methodology that sets out how it calculates its Victorian electricity Transmission Use of System (TUOS) charges for network users.

This document:

- Establishes how AEMO calculates the amount to be recovered from its TUOS charges
- Discusses and outlines the allocation of costs between different service categories
- Describes how any under and over recovery of revenue in a particular year will be treated
- Details how AEMO will report its annual charges.

## 2. The Victorian Electricity Transmission System

The Victorian electricity transmission system consists of various transmission lines and transformers that link power stations to the distribution system. The transmission network operates at voltages of 500 kV, 330 kV, 275 kV, and 220 kV. The 500 kV transmission network primarily transports bulk electricity from generators in the Latrobe Valley in Victoria's east, to the major load centre of Melbourne, and then onto the major smelter load and interconnection with South Australia in the west. Strongly meshed 220 kV transmission lines supply the metropolitan area and major regional cities of Victoria.

The 330 kV transmission lines connect Victoria with the Snowy and New South Wales regions of the National Electricity Market (NEM), while transmission at 275 kV provides the interconnection with South Australia. Recent developments have connected two high voltage direct current (DC) interconnectors to the Victorian transmission network. One of the DC links forms the second connection with South Australia (Murraylink) while the other brings Tasmania into the NEM by connecting it with Victoria (Basslink).

The electricity transmitted through the transmission system is transformed to lower voltages at terminal stations, where it then supplies the distribution system. The total value of the system is around \$2 billion and the total circuit distance of major transmission lines is approximately 6,000 kilometres.

Figure 1 below provides a map of the existing Victorian electricity transmission network.



#### Figure 1

### 3. **Providing Services**

AEMO does not own any element of the transmission system. Rather, it procures, through contracts, individual services from network and non-network asset owners and provides bundled system services to network users through agreements.

Transmission services can be provided to users in one of two ways via negotiated services or prescribed services. The difference between the elements and the charging are represented in Chart 1 below.

Chart 1 AEMO's Victorian Transmission Charging Components



#### 3.1 Negotiated Services

In some cases services are identified by an individual or small group of dedicated users. Typically this will be for a new generator looking to connect to the transmission system or large loads. In these cases any charges associated with those services will be recovered from that user. All costs incurred by AEMO in negotiating any augmentations will be charged to that party. These services are defined as negotiated transmission services and the charges from these services are excluded from the calculation of AEMO's TUOS charges.

#### 3.2 Prescribed Services

All other services are determined by identifying future requirements. This requires an analysis of the existing service capabilities, future demand projections, generation connection locations, technological advancements, policy drivers and economic considerations.

If this analysis identifies a shortfall in the existing capability of the transmission system new services will be identified and procured only if the benefits of procuring the service exceed

the cost. This cost-benefit analysis will be subjected to a public consultation process to enable all network users to understand why they are likely to incur additional charges and for network and non-network asset owners to identify and submit innovative and efficient solutions to meet the identified needs. In this way any additions to the system are identified and provided in the most economic manner and the increased capability of the system best meet consumers needs. These services are defined as prescribed transmission services.

Prescribed services are recovered from network users through Transmission Use of Service (TUOS) charges. Most TUOS charges are allocated to distribution businesses with some allocated to large customers directly connected to the transmission system.

Prescribed services are the subject of this revenue methodology.

## 4. Calculating Prescribed Revenue Requirements

AEMO's revenue requirement consists of the following elements:

- Australian Energy Regulator (AER) regulated revenue for Victoria;
- Augmentations
- Planning and procurement costs<sup>1</sup>;
- Accumulated surplus or deficit

Each of these is discussed in turn.

#### 4.1 Australian Energy Regulator (AER) determined regulated revenue

The majority of AEMO's charges are determined via the AER's revenue regulatory arrangements. There are currently two network asset owners in Victoria whose revenues are determined by the AER, SP AusNet and Murraylink.

Under these arrangements the network asset owner's revenue is determined after it submits a proposal to the AER, typically every five years, for sufficient revenue to enable it to continue providing existing transmission services to AEMO.

Following a public consultation process the AER will establish a revenue allowance for the five year period.

Further detail on its approach and the revenue allowances can be found on the AER's website.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Planning costs include connection costs that cannot be allocated to a defined user and do not include AEMO's national planning functions.

<sup>&</sup>lt;sup>2</sup> www.aer.gov.au

REVENUE METHODOLOGY FOR THE VICTORIAN ELECTRICITY TRANSMISSION NETWORK

#### 4.2 Augmentations

Where an augmentation is identified, there is an opportunity for multiple parties to build, own and/or operate elements of the transmission system.

A project will be constructed as a contestable process if:

- the capital cost of the augmentation is reasonably expected to exceed \$10 million and
- it can be provided as a distinct and definable service and will not have a material adverse effect on an incumbent network asset owner.

The cost of a new augmentation will be charged to AEMO for the remainder of the asset's life under a contract entered into with AEMO.

However, there are circumstances where AEMO will not be able to use competitive tendering provisions to procure new services. These include:

- if the cost to deliver the service is likely to be below \$10 million, or
- the service cannot be provided separably from existing services, or
- if AEMO deems that the delay in implementation arising from the contestability process would prejudice system security or it cannot economically or practicably be implemented

In these instances AEMO will negotiate directly with the network asset owner to whom the new service is required to be connected.

The terms of these contracts are typically for 30 years or in line with the technical life of the assets involved. The charges largely reflect the annualised cost of the service being provided.

In the case of the augmentation being provided by an asset owner who is subject to AER regulated revenue, the assets may be rolled into their regulated asset base (RAB) at the commencement of the next revenue period subject to AER approval. Alternatively it can continue to be charged under contract.

#### 4.3 Planning and Procurement costs

AEMO performs numerous energy market roles and functions. As such, its systems and processes need to be structured to enable the revenue and expenses for each function to be recorded and reported on separately.

In respect of allocating costs between its different functions, AEMO has adopted the principle that allocation must be:

- fair and reasonable
- practical to implement and maintain
- based on the accrual basis of accounting and is in accordance with applicable Australian Accounting Standards
- based on a full cost recovery basis
- consistent with all of its legal requirements.

Where practicable, costs will be directly allocated to the function that the cost relates to.

Where it is not practicable to allocate costs directly to a function, AEMO will use an allocation methodology that is consistent with the principles outlined above.

The methodology used to allocate indirect costs will be based on the number of AEMO full time equivalent employees (FTEs) working in each of the different functions.

It is on this basis that indirect costs will be allocated to functions. The allocation of indirect costs to functions will be completed on a monthly basis.

The allocation of FTEs to functions will be formally reviewed at least annually.

AEMO's operating costs relating to this role are accounted for separately from AEMO's other functions based on the approach outlined above.

The operating costs for this role are categorised as follows:

- Labour
- Contractors
- Consulting
- Fees Agency, Licence and Audit
- IT and Telecommunications expenses
- Occupancy expenses
- Depreciation and Amortisation expenses
- Other Expenses

AEMO receives additional revenue (over and above the TUOS revenue) in performing this role. This revenue may include settlement residue receipts, interest earned on cash held and income for services provided in relation to connection applications.

AEMO deducts this additional revenue from the amount to be recovered from TUOS charges.

#### 4.4 Over recovery or under recovery from previous year

AEMO takes into account any expected accumulated surplus or deficit from the previous year in determining the amount to be recovered from TUOS charges.

If an accumulated surplus is expected in the current year, its revenue requirement for the forthcoming year is reduced. Conversely, if an accumulated deficit is expected in the current year the revenue requirement for the forthcoming year is increased. This adjustment ensures that AEMO's revenue requirement is calculated on a full cost recovery and no operating surplus basis.

## 5. Reporting on this Revenue Methodology

On an annual basis, prior to the commencement of the forthcoming year, AEMO will publish a report that outlines the forecast revenue, costs and accumulated surplus or deficit for the current year and the budgeted revenue, costs and accumulated surplus or deficit for the forthcoming year.

This information will be published on AEMO's website and all network customers will be advised in writing prior to the commencement of the forthcoming year.