Relationship between revenue and price setting

TasNetworks is a regulated business with most of our revenue set by the Australian Energy Regulator (AER). The AER sets the maximum allowed revenue for each year of the current determination period (typically five years).

We determine a pricing methodology each year that must be approved by the AER. The pricing methodology is used to turn the revenue allowance into prices for our customers.

The revenue cap and pricing methodology processes are both regulated by the National Electricity Rules (Rules).

This factsheet provides an overview of the process we use to set prices which collect our approved revenue cap.

Figure 1: Revenue and price setting processes
How we set transmission prices

The pricing process, outlined in Figure 3, outlines how we develop prices aimed at recovering our allowed revenue each year.

Transmission businesses are asset intensive, therefore, prices for transmission services are largely allocated based on asset values in the following categories:

- **Connection assets** — Assets that connect generators, loads and other networks to the shared transmission network
- **Shared network assets** — Assets that transmit electricity between generation and load customers and serve many customers
- **Other assets** — Assets that support the operation of our network and our business such as control centres, office buildings and IT systems. These assets provide **common services** to all customers

Prescribed transmission services are split into four service categories and prices are developed for each category of service:

- **Entry services** — Connection services provided to generators (this is the only service category that applies to generators)
- **Exit services** — Connection services provided to our distribution network and load customers who are directly connected to the shared transmission network
- **Common transmission services** — Services that provide equivalent benefits to all users without any differentiation based on their location
- **Transmission use of system services (TUOS)** — Services that provide benefits to users depending on their location within the transmission system and that are shared to a greater or lesser extent by all users across the transmission system

Our revenue allowance has a number of underlying components as shown in Figure 2.

**Figure 2: Revenue building blocks**

<table>
<thead>
<tr>
<th>Component</th>
<th>Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum allowed revenue</td>
<td>Return on capital x Regulated Asset Base + Return of capital + Operating expenditure + Tax</td>
</tr>
<tr>
<td>Return on capital</td>
<td>Weighted average cost of capital x Regulated Asset Base</td>
</tr>
<tr>
<td>Return of capital</td>
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</tr>
<tr>
<td>Operating expenditure</td>
<td>Operating (non-capital expenditure)</td>
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### ALLOCATION OF CHARGES FOR TRANSMISSION SERVICES

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A four step process to determine transmission prices

**Step 1: Revenue allocation**

The annual revenue allowance is split between:

- **Non-asset related common service costs** – These include costs for the overall functioning of our transmission business such as administration
- **Revenue to be allocated by asset values** – The remainder of the revenue allowance is allocated by asset values

**Step 2: Asset value by service allocation**

The revenue to be allocated by asset values involves determining:

- The value of transmission system assets providing each category of prescribed transmission services relative to the total value of assets used in providing prescribed transmission services (asset value by service allocation)

The asset value used for this process is the replacement cost so any difference in the ages of assets does not affect the allocation.

**Step 3: Revenue requirement**

The revenue requirement for each category of service is based on the asset value by service allocation. The **TUOS revenue requirement** is split into the following charges (approximately 50% is split into each as is required by the Rules):

- **Locational** – Locational TUOS charges are based on the underlying assessed usage of the network
- **Non-locational** – Non-locational TUOS charges are not related to usage

The **common service** revenue requirement is an exception as it includes the asset value by service allocation as well as other non-asset related common service costs.
Step 4: Charges

- **Entry charges** – A fixed annual charge to generators for connection services

- **Exit charges** – A fixed annual charge to load customers directly connected to the transmission network for connection services. Our distribution network is classed as one directly connected transmission customer for the purposes of this charge

- **TUOS locational charge** – The TUOS locational charge is based on a locational price that is calculated for each connection. Prices are based on agreed contract maximum demand ($/MW per month)

Apart from Tasmanian based customers, the locational TUOS charge is also recovered by:

- **Inter-regional charges** – When Victorian customers use electricity that is generated in Tasmania they incur the costs of transporting the electricity across our transmission network. Similarly, when Tasmania imports electricity, Tasmanian customers must pay the Victorian transmission network business for the use of their network. The net result of these charges is deducted or added to the amount of revenue we collect from our customers. Historically, Tasmania has been a net recipient of inter-regional charges which has resulted in reduced revenue collection from our customers.

- **TUOS non-locational charge** – The TUOS non-locational charge is based on postage stamped prices. Prices are based on agreed contract maximum demand ($/MW per month) or historic energy usage ($/MWh)

The initial allocation for the non-locational TUOS charge is reduced by:

- The forecast value of **intra-regional settlement residues** – These are a forecast of the over-recoveries by the Australian Energy Market Operator (AEMO) for electricity purchases in the National Electricity Market (NEM). The extra money AEMO collects each year is paid to transmission businesses and passed back to customers via transmission pricing. The amount varies from year to year.

- Any **over- or under-recovery** of revenue by us in previous years. Over- or under-recoveries generally arise when circumstances change after prices are set or when there are discrepancies between forecast and actual data. This amount also varies from year to year.

- **Common service charge** – The common service charge recovers the value of asset-related and other common service costs. The common service charge is based on postage stamped prices. Prices are based on agreed contract maximum demand ($/MW per month) or historic energy usage ($/MWh).

Postage stamped pricing means the price per unit is the same for all connection points and for all customers.

Connections through the distribution network

The pricing process outlined in this factsheet is relevant to customers connected directly to the transmission network. Customers who are connected to the distribution network also pay transmission charges based on the same methodologies, however the way distribution customers pay transmission charges depends on the way it is passed on from the distributor to the retailer.