Capital Contributions Forecasting Methodology

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Contents

1 Overview

This document sets out TasNetworks' approach to forecasting the capital contributions towards the cost of connection services (including network extension and augmentation) expected to be received from customers of the distribution network during the 2024-2029 regulatory control period. The forecasting methodology is consistent with TasNetworks' approved Connection Policy.

2 Regulatory requirements

There are no specific clauses in the National Electricity Rules (NER) relating to the methods to be used by distribution network service providers (DNSPs) to forecast capital contributions. However, clauses 5A.E and 6.21.2 of the NER set out principles that define the circumstances in which a DNSP may require a capital contribution from a customer and how those contributions are to be calculated. Clause 6.7A.1 also places a requirement on TasNetworks to develop a connection policy that sets out the nature of connection services offered to customers, the circumstances in which a retail customer or real estate developer may be required to pay a connection charge for the provision of connection services, and the applicable charges for those connection services. These requirements are addressed by TasNetworks in its approved *Distribution Connection Pricing Policy* and, therefore, are not the subject of this document.

3 Capital contributions forecasting model

TasNetworks relies on an in-house *Customer Initiated Capital Contribution* model (the CapCon model) to develop forecasts of the customer capital contributions expected to be received in relation to customer initiated connection services.

The CapCon model uses recent capital contributions and connections capital expenditure (capex) data, in combination with forecasts of connections capex, to estimate capital contributions in the future. To do this, the average percentage of connections-related capital expenditure recovered from customers over the two most recent financial years for which EOFY capital contributions and capex data is available is applied to forecasts of TasNetworks' capital expenditure on customer initiated connection services for each year of the forthcoming regulatory control period.

However, before the average historical cost recovery percentages are applied to forecasts of future connections capex, they are adjusted to reflect any differences in the charges applied to the network augmentation component of customer capital contributions between the review period and the forward estimates period. This is because, as well as the costs of connection, the capital contributions received from customers may recover the costs of network extension and augmentation. However, while customers pay for the full costs of extension, any capital contribution they make towards the cost of augmentation is derived by applying a unitised price to the extent by which the connecting customer's forecast maximum demand exceeds the augmentation threshold, which is defined in TasNetworks' Distribution Connection Pricing Policy. All else being equal, a variation in augmentation unit rates between periods will, therefore, give rise to different customer capital contributions, meaning that the forecasting of those capital contributions needs to take movements in augmentation unit rates into account.

4 Forecasting methodology

4.1 Connections capital expenditure forecasts

To forecast the amount of capital contributions that TasNetworks expects to receive towards the provision of connection services, first TasNetworks forecasts the total capital costs for customer connections that are expected to be incurred by TasNetworks in each year of a regulatory control period.

Forecasts of customer initiated connection capex are developed independently of the capital contributions forecasting process by TasNetworks' Network Planning area. The capital expenditure forecasts from Network Planning do not, however, include overheads, meaning that overheads need to be added to the base cost estimates provided by Network Planning, in order to develop the total connections capex forecasts for each year of the forward estimates period. The overhead rates applied to the base cost connections capex forecasts are provided by TasNetworks' Finance department.

The forecasts of connections-related capex for each financial year in the forward estimates period are prepared for six different Work-levels:

- Customer Initiated Major Works
- Customer Initiated Non-Major Works Commercial
- Customer Initiated Non-Major Works Irrigation
- Customer Initiated Non-Major Works Residential
- Customer Initiated Substations
- Customer Initiated Subdivisions

4.2 Historical connections capital expenditure

The CapCon model currently draws on historical connections capex across two consecutive financial years in order to calculate the percentage of connections capex which has been recovered through capital contributions. Data for the two most recent financial years for which EOFY data is available is used as the basis for this calculation.

However, while forecasts of connections capex are prepared for the six different Work-levels listed in section 4.1, the connections capex recorded in TasNetworks' finance system is recorded against just over thirty different categories of connection-related Standard Control Services (referred to as Functional categories). These Functional categories capture the expenditure on services such as underground and overhead supplies to permanently occupied residences, the installation of overhead cross-over poles, customer initiated extensions of the low voltage network and underground and overhead supplies to new subdivisions.

In order to derive the proportion of connections capex recovered from customers in the past and use that percentage to estimate the proportion of forecast capex that will be recovered in the future, historical capex data reported at a Functional category level has to be aggregated by Work-level. To do this, each functional category level is mapped to a Work-level, so that past capex across multiple Functional categories can be aggregated by Work-level. The aggregation of historical capex by Work level is performed within the CapCons model.

4.3 Historical capital contributions

As mentioned previously, in order to forecast capital contributions for the next regulatory control period, TasNetworks analyses historical capital contributions data, with the results of that analysis serving as the basis for forecasts of future capital contributions. The percentage of historical connections capex recovered through capital contributions is a key input into the forecasting of future capital contributions.

The capital contributions received from customers are allocated within TasNetworks' finance systems against the same Standard Control Service Functional categories against which connections capex is recorded. This means that in order to derive the proportion of connections capex recovered from customers in the past and use that percentage to estimate the proportion of forecast connections capex that will be recovered in the future, historical capital contributions reported at a Functional category level have to be aggregated by Work-level. This process is undertaken within the CapCon model.

4.4 Augmentation rate adjustment

As noted previously, as well as the costs of connection, the capital contributions received from customers recover the costs of network extension and augmentation. However, while customers pay for the full costs of network extension, they make a contribution towards the cost of augmentation that reflects the incremental increase in network capacity associated with servicing the connecting customer's estimated maximum demand (if that maximum demand is above the augmentation threshold prescribed in TasNetworks Distribution Connection Pricing Policy).

The cost of augmentation invoiced to the customer is calculated using augmentation unit rates applied to the extent by which the customer's maximum demand exceeds the augmentation threshold.

Augmentation unit rates may differ between regulatory control periods, meaning that the augmentation capex recovered through customer capital contributions in the past may not be an accurate indicator of the capital contributions towards the cost of augmentation that might be recovered through capital contributions in the future.

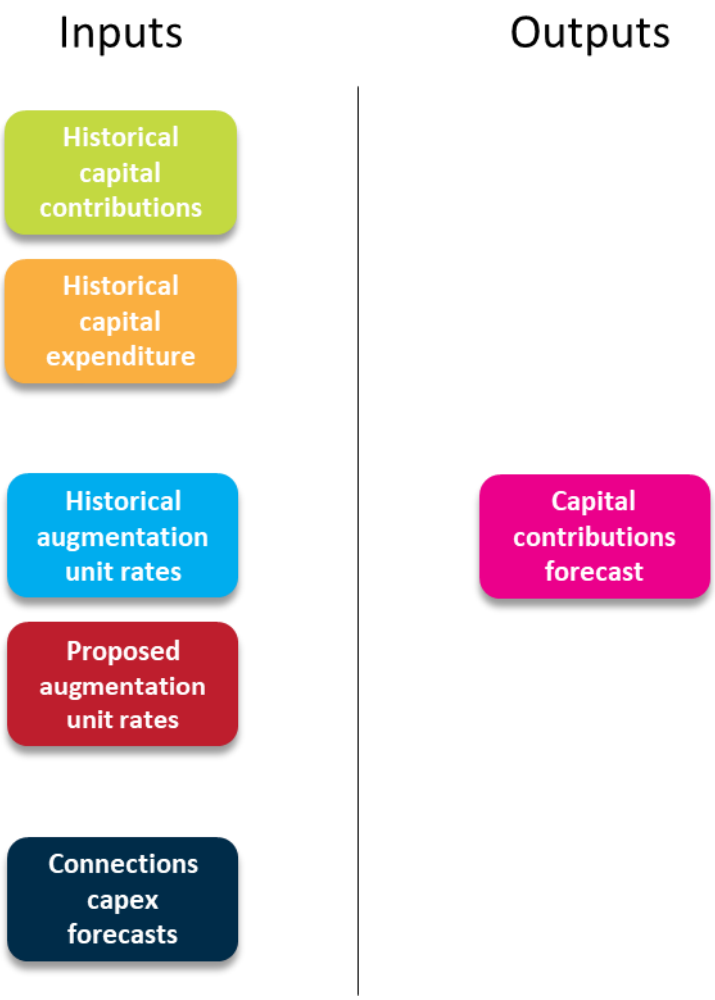
The CapCons model undertakes a comparison of the augmentation unit rates which informed the historical capital contributions received in the years which are being used to inform the model with the augmentation unit rates which are proposed for the forward estimates period (i.e. the forthcoming regulatory control period). The forecast of the augmentation component of capital contributions in the forward estimates period is then adjusted up or down to reflect the difference between the historical and proposed augmentation rates. This is effected through an adjustment to the raw historical ratio of capital contributions to connections capex.

It is this adjusted rate of historical connections capex recovery (through customer capital contributions) which is applied to forecasts of connections capex in the future to estimate the quantum of capital contributions that will be received in the future.

4.5 Other

TasNetworks develops its forecasts of capital contributions in real dollars (as at the commencement of the regulatory control period, consistent with the requirements of the PTRM). The forecast capital contributions in each regulatory year are then allocated across each regulatory asset class, based on historical allocations of actual capital contributions by asset class.

5 Capital contribution forecasting model schematic



6 References

- Distribution Connection Pricing Policy[1]
- Augmentation unit rate model user guide
- Augmentation unit rate model
- Customer initiated capital contribution model

[1] Distribution Connection Pricing Policy - 2022-23 Update (tasnetworks.com.au)