31 January 2023

RIN.07: Connections expenditure

Ausgrid's 2024-29 Regulatory Proposal

Empowering communities for a resilient, affordable and net-zero future.

Ausgrid

Contents

1. Introduction

1.1 This document's purpose

This document represents Ausgrid's written response to the Reset Regulatory Information Notice (Reset RIN), issued to Ausgrid by the AER on 31 January 2023. The purpose of this response is to address the requirements on Connections Expenditure.

1.2 This document in context

This attachement is in addressing the requirements of Connection Expenditure Item 4.4.6 (a and b) and item 4.4.7 (a,b and c).

1.3 Related documents

Document	Description	Relevant sections
Table 2.5 - SCS	Connection Forecast - SCS	4.4.6
Table 2.5 – SCS Customer Contribution	Connection Forecast – SCS Customer Contribution	4.4.7

1.4 Document overview

	Connections expenditure
2.1	Addressing Item 4.4.6 - Provide and describe the methodology and assumptions used to prepare the forecasts of connection works including: (a) Estimation of connection unit costs for each customer type; and (b) Connection volumes for each customer type.
2.2	Addressing Item 4.4.7 - Ausgrid must provide its estimation of customer contributions based upon the estimated life and revenue to be recovered from connection assets, including: (a) the expected life of the connection; and (b) the average consumption expected by the customer over the life of the connection; (c) any other factors that influence the expected recovery of the Ausgrid network use of system charge to customers.

2. Connections Expenditure

2.1 Ausgrid Funded Connection Forecast

Provide and describe the methodology and assumptions used to prepare the forecasts of connection works including:

(a) Estimation of connection unit costs for each customer type; and

(b) Connection volumes for each customer type.

Approach

Given that customer connections activity is characterised by reasonably large volumes of low value projects, a top-down forecasting approach was adopted to forecast capital expenditure for customer connections. In summary, the key steps in the approach are:

- Analysing historical connection jobs to develop basic unit costs using past connection job volumes by customer type, connection type and recorded costs
- Developing forecast expenditure by using the forecast connection numbers by customer type, connection type and the relevant unit costs.

A small number of major connection projects are identified as part of the sub-transmission planning process. Ausgrid is generally approached by major customers at least three years prior to their desired connection date. These projects involve works required to facilitate subtransmission connections (33kV or higher) and are modelled in the same way as Ausgrid's own major capital projects. A probabilistic approach is used to the forecasting of these projects which takes into account the stage at which the application has reached. Projects with certified design and/or signed connection offers are given a probability of 80% or higher of proceeding. Projects at an earlier stage are given probabilities of proceeding ranging from 5-20%.

Volume Forecast

The forecast of connection volumes is based on a projection of the volume of recent completed connections projects. The volume of connection projects include those undertaken as part of Ausgrid's Connection Program as well as individual, major subtransmission projects. Projects are identified on the basis of their internal financial status as at the end of the financial year (i.e. either practically or financially completed). Detailed analysis of the Connection Program is used to quantify the volume of connection projects. Projects have been categorised between residential and commercial connections and size of connection.

The base data for the volume forecast is the average number of projects created and completed over the last three years (FY20 – FY22). Forecast volumes were then projected on the basis of an established relationship between construction and connection activity. Australian Construction Industry Forum (ACIF) forecasts of construction activity (November 2021) are used to project forecasts of connection projects.

Major sub-transmission projects are identified as part of the sub-transmission planning process as described above.

Expenditure Forecast

Average historical costs for projects in the past three years (FY20-FY22) were used to estimate unit project costs on the basis of cost data categorised by:

- Customer type (Residential, Commercial)
- Asset type
- Cost type (Labour, Contracted Services and Material).

For major projects, expenditure forecasts are prepared on the same basis as other major projects and adjusted for the probability of proceeding on the same basis as discussed above.

2.2 Customer Contributions Connection Forecast

Ausgrid must provide its estimation of customer contributions based upon the estimated life and revenue to be recovered from connection assets, including:

(a) the expected life of the connection; and

(b) the average consumption expected by the customer over the life of the connection;

(c) any other factors that influence the expected recovery of the Ausgrid network use of system charge to customers.

Ausgrid operates within a contestable connections framework. All contributions are in the form of contributed or gifted assets. The value of these contributions is estimated on the basis of independent cost estimates that are updated annually for changes in cost.

The methodology used to forecast contestable Customer Contributions (in the form of contributed assets) is consistent with the approach used to forecast Ausgrid funded connections standard control service expenditure as follows. The model used to forecast the value of contributed assets can be provided if required.

Forecasts contributions of high-voltage and low-voltage assets are based on 2021/2022 contributions and projected forward on the basis of independent forecasts of construction activity - Australian Construction Industry Forum (ACIF) forecast.

Forecasts of sub-transmission contributed assets are based on known or anticipated projects which are forecast using the same approach as for major replacement and augmentation projects.

See Attachment workbook, Connection Forecast – SCS Customer Contribution, Table 2.1.7 for the quantum of capital contributions.