



**POWER NETWORKS
CAPITAL CONTRIBUTIONS
PRINCIPLES AND METHODS
STATEMENT**

EFFECTIVE FROM 1 JULY 2014

Power and Water Corporation
GPO Box 1921 Darwin Northern Territory 0801
March 2013

Introduction

This Statement of Principles and Methods sets out the high level principles that the Power Networks division of Power and Water Corporation will apply in levying Capital Contributions on Network Users in Regulated Areas. These high level principles have been incorporated into the Power Networks Capital Contributions Policy.

The Capital Contributions Policy and Statement of Principles and Methods have been developed in accordance with the *Electricity Networks (Third Party Access) Act* (Act) and the Electricity Networks (Third Party Access) Code (Code) contained within the Act. Power Networks considers that the revised Capital Contributions Policy is consistent with the Code, and complies with the capital contributions requirements in chapter 8 of the Code.

The Capital Contributions Policy must be referred to in all Access Agreements entered into between Power Networks and a Network User.

Clause 80(2) of the Code states that:

"An access applicant or network user may be required to make a capital contribution towards the extension of connection equipment or network system assets only if the network provider can demonstrate that the extension is not commercially viable without that capital contribution."

Power Networks only requires a Formal Access Agreement for Large Individual Network Users and Generator Users. The terms and conditions of supply to all other Network Users are set out in Power Networks' Standard Form Agreement.

Objectives

The high level objectives of the Capital Contributions Policy are:

- To provide appropriate economic pricing signals to Network Users that reflect the true cost of connection to Power Networks' electricity networks or any new or upgraded Network Access Services;
- To ensure the commercial viability of connections made to Power Networks' electricity networks, in order to provide a return to the shareholders commensurate with the required investment; and
- To ensure more equitable outcomes for both new and existing Network Users.

This is consistent with the network pricing objectives laid down in clause 74 of the Code, the capital contributions principles outlined in clause 80 of the Code, and the high level pricing objectives outlined in the Networks Pricing Principles and Methods Statement (1 July 2009 to 30 June 2014) of cost reflective pricing signals, simplicity, stability, and equity.

General Principles

In accordance with the requirements of clause 80(4) of the Code, Power Networks will limit the amount of any Capital Contribution to that required to make a new or upgraded connection commercially viable.

The general test of commercial viability will be whether the cost of the Dedicated Connection Assets plus a proportionate share of the cost of augmenting Upstream Shared Assets can be recovered through regulated tariffs that apply to existing Network Users or to the Network User in question over a period of time, offset by the shared network costs in recognition of the attribution of incremental network tariff revenue to the costs of the existing network.

Application of Capital Contributions

Network Users are grouped into four classes of network connection, for the purpose of application of the Capital Contributions Policy, as follows:

1. Developer;
2. Large Individual Network User;
3. Small Individual Network User; and
4. Generator User.

The arrangements for calculating Capital Contributions follow the same principles but differ in detail according to the class of connection to the network. These arrangements are summarised below.

Capital Contribution Calculation

In accordance with the requirements of clause 80(4) of the Code, the maximum amount of a Capital Contribution will be the shortfall in the viability of the required works, based on the present value of the costs associated with the connection, less the present value of the projected future tariff revenues earned from the connection offset by the shared network costs. That is:

$$\text{Capital Contribution} = PV(\text{attributed costs of connection}) - [PV(\text{expected revenue}) \text{ less shared network costs}]$$

Where:

(a) The “attributed costs of connection” is calculated as:

- The full capital cost of the (optimal) Connection Assets and the Network System Assets dedicated to an individual Network User; and
- An apportionment of the incremental costs of any new shared (optimal) Connection Assets and Upstream Shared Assets that are designated to that particular connection and would not have been incurred within Power Networks ordinary planning horizon but for that connection having occurred.

At Power Networks’ discretion, where projected operating and maintenance expenses attributed to the connection:

- Are significant; and
- Have not been allowed for within the current Regulatory Control Period,

an “operating and maintenance expense” may be included in the Capital Contribution calculation, based on the projected efficient operating and maintenance expense of the Connection Assets and Network System Assets dedicated to the Network User.

(b) The “expected revenue” is determined based on:

- The “customer tariff” that is actually charged or chargeable to the Network User, which may be different to the general network tariff schedule in circumstances where a discount for that particular Network User has been negotiated;
- The projected incremental future electricity consumption in kWh and demand in kVA (where applicable) by the Network User attributable to the new works.

(c) The “shared network costs” is the attribution of incremental network tariff revenue from the Network User to the costs of the existing shared network, calculated as 50% of the PV of “expected revenue”.

1. Developers

Developers will be responsible for all connection assets dedicated to that development from the connection point to the shared network (as defined by Power Networks).

Connection assets will be constructed by the Network User and gifted to Power Networks. The developer will be responsible for Power Networks' costs including design certification, contract inspection, final connection and commissioning costs. The design, project management and construction associated with these works must meet Power Networks' standards and be performed by accredited consultants and contractors (Accredited Service Providers).

If augmentation is required to the upstream shared assets, this will be constructed and funded by Power Networks and included in the regulated asset base, unless the work required is outside of Power Networks Planning Horizon.

If the shared network works are beyond the Planning Horizon, then the Network User will be required to contribute the full cost of the new installed capacity required to service its load.

If the shared network works are within the Planning Horizon, but are outside the commencement date of the next Regulatory Control Period, then the Network User will be required to pay the cost of advancement of the works.

A prudential guarantee may be sought to protect Power Network's investment in upstream assets that are designated to that particular development.

2. Large Individual Network Users

Large Individual Network Users are Network Users that satisfy either of the below criteria:

- A high voltage connection and a projected (or actual) demand of 4MVA or greater; or
- Is connected to (or seeking connection to) a dedicated supply that is different or remote or separate from the remainder of the supply network.

The identification of these Network Users will be at the sole discretion of Power Networks.

All Large Individual Network Users seeking the provision of Network Access Services will be required to enter into a Formal Access Agreement with Power Networks, unless otherwise agreed by both parties.

The Capital Contribution required from Large Individual Network Users will be calculated as the shortfall in the viability of the required works, based on the present value of the costs associated with the connection, less the present value of the projected future tariff revenues earned from the connection offset by the shared network costs. That is:

PV (Dedicated Connection Asset cost)

plus PV (proportion of cost to augment Upstream Shared Assets)

less PV (expected revenue) less shared network costs.

A prudential guarantee may be sought.

3. Small Individual Network Users

Small Individual Network Users are Network Users that have a low voltage connection and/or a projected (or actual) demand less than 4MVA.

The Capital Contribution required from Small Individual Network Users will be determined using the same shortfall approach outlined above for Large Individual Network Users.

If significant costs are likely to be incurred in augmenting the Connection Assets or Upstream Shared Assets to accommodate the Network User's proposed demand, a prudential guarantee may be sought from the Network User.

4. Generator Users

All Generator Users seeking the provision of Network Access Services will be required to enter into a Formal Access Agreement with Power Networks, unless otherwise agreed by both parties. In negotiating the Access Agreement, Power Networks and the Generator User will agree upon the scope of works and any Capital Contribution required to enable the provision of Network Access Services, including any Dedicated Connection Assets and augmentation to the Upstream Shared Assets.

Power Networks may fund on a proportional basis network assets with a capacity above the optimal size required by the Generator User where other Network Users may benefit from the connection or augmentation works.

Cost Sharing

Capital contributions will be shared amongst Subsequent New Network Users that benefit from the works on which the Original Network User paid the contribution. The Original Network User will be required to pay Power Networks the full Capital Contribution amount for the network extension and will receive rebates from Subsequent New Network Users connecting to the extension within five years of the original works completion.

For the purposes of sharing Capital Contributions, an Original Network User is the first Network User that makes a Capital Contribution towards works associated with a new or upgraded connection service. A Subsequent New Network User is any Network User that:

- Seeks a new or upgraded Connection Service at a Connection Point;
- Benefits from the works upon which an Original Network User paid a Capital Contribution; and
- Applies within five years of the Original Network User making the Capital Contribution.

The rebate will be based on the proportion of utilisation of the Original Network User's works. For a distribution network extension, this will be calculated based on distribution line lengths and Network Users' loads.

Power Networks will pay the rebate to the current owner of the premises (at that time) to which the Original Network User's works were connected. The current owner of the property may or may not be the Original Network User, as the property may have been sold between the connection of the Original Network User and the connection of the Subsequent New Network User.

Cost sharing will only apply to Network Users directly connected to the same extension or "branch". Network Users within each branch do not share costs or receive rebates from Network Users within any other branch, with the exception of the first Network User within each subsequent branch.

Developers are not eligible to receive rebates. Rebates paid by Developers are regarded as payments on behalf of the occupants of the Development and no further rebates are required from those occupants when they apply for connection of load.

Above Standard Services

If a Network User requires any above standard Connection Assets or Network System Assets (for example, additional connection assets, undergrounding, provision of three phase supply), and where Power Networks is engaged to perform the upgrading works, the Network User will pay for the entire cost of the work upfront, consistent with the charging methodology approved by the Regulator for Alternative Control Services - Quoted Services. This methodology is set out in the Regulator's Approval Instrument for Power Networks' Network Access Tariffs, as per the following link:

http://www.nt.gov.au/ntt/utilicom/electricity/networks_pricing.shtml.