NETWORKS

Best in Service, Best in Safety

Capital Contribution Policy

1 April 2015

Revision overview

Date	Version	Changes
1/3/13	1.0	Capital contribution policy released
1/3/14	2.0	Update of policy to incorporate a single fixed charge for standard connections.
4/12/2014	2.1	Update of policy incorporates definition improvements to the new connection in section 2, inclusion of a modelled example in section 4 and changes to the Rate Card in Appendix A.

TABLE OF CONTENTS

1. Purpose

The purpose of this policy is to provide a description of any potential capital contribution required by WEL Networks Ltd (WEL) when a customer requests a new or modified connection to WEL's electricity distribution network.

2. Scope

Capital contributions may be required for:

- New network connection points (requiring the creation of a new ICP)
- Modified connection points e.g. increases in capacity
- Subdivisions
- Relocation of network assets
- Undergrounding of overhead lines

WEL Networks Ltd reserves the right to vary terms and conditions on a case by case basis at its sole discretion.

3. Definitions

Capital contribution	An amount paid by a customer for construction of assets or enhancement of the network at the time of the construction or enhancement.
Controlling Authority	The body that owns the road over or under which WEL assets have been installed, usually a local authority or NZ Transport Authority.
ICP	Installation control point - the customer's point of connection to WEL's network. There is generally a meter at each ICP.
Rate Card	WEL's schedule of charges for capital contributions.
Upstream assets	Assets between a customer's point of connection and the national grid utilised to transport electricity to the customer's point of supply.

4. Model used to calculate capital contributions

Our model calculates a standard charge for standard domestic and small business customers. These are recorded in a "rate card", which is used to provide quotes to customers. The updated version of the rate card is attached as Appendix A.

The model also provides a framework for determining the specific charges for other new and modified connections including commercial and industrial connections.

To determine a capital contribution WEL takes into account a number of factors which include:

- The cost of maintaining and operating the new connection.
- Impact of the new connection on WEL's network and its share of maintaining that network.
- The expected future revenue from the new connection.

- A capital contribution will be determined depending on whether the future revenue from the new connection is sufficient to cover the long run marginal cost of the connection.

Following are the steps incorporated in our model and in the estimation of capital contributions:

1. Estimates the average replacement cost of assets that will be used by the new connection, including a share of upstream assets. The cost of installing the new connection (such as labour and services costs) is also estimated.
2. Estimates the annual average distribution revenue expected in the future from the new connection based on WEL's supply tariffs.
3. Estimates the annual average operational and maintenance costs of future supply based on the asset values.
4. Calculates the present value of the average surplus of future revenue (point 2) over future costs (point 3) – including an allowance for tax.
5. The charge to the customer (capital contribution) is the difference (if any) between the present value from point 4 and the average cost of assets including installation (from point 1).

Below is an example showing how the customer contribution was calculated for a new non standard connection (fuse capacity less than 110 kVA) recognised as a non domestic customer under WEL's current price schedule -

Steps in the Model	Description	Values
1	Cost of connection (cost of assets including a share of upstream assets, labour and services costs)	($18,452)
2	Present Value of the surplus (future revenue - future costs including an allowance for tax)	$14,597
3	Capital Contribution (Step 1 – Step 2)	($3,855)

Note – the values in the above example are for illustrative purposes only. The connection costs and the contributions required may vary from case to case.

The final amount of capital contribution required will be determined by WEL. For administrative efficiency, WEL periodically sets standard rates for some types of connections. If WEL determines that a standard rate applies, the customer will be notified accordingly and subject to payment of the notified amount, the connection will proceed. In addition to any capital contribution required to make a new or modified connection to WEL's network, the customer is responsible for their own electrical installation, including the provision and installation of the line or cable from the network connection point to their own premises or plant.

5. Standard Charges

WEL has established a standard charge for single and three phase domestic, small scale distributed generation and non domestic connections including residential subdivisions. The

rate and the guidelines to determine a standard connection are published in the Rate Card. Following application, WEL will assess each proposed connection and confirm if a standard charge applies.

6. Non Standard

Revenue associated with the future supply of electricity to a new connection must cover the cost of operating and maintaining a new connection, as well as an appropriate share of the cost of operating and maintaining upstream or shared assets. This future revenue must be sufficient to contribute to the upfront cost of assets associated with the new connection. WEL's intent is to require a capital contribution from a customer when the future revenue stream from the connection is not sufficient to cover the long run marginal cost of the new connection.

For single and three phase domestic, small scale distributed generation and non domestic connections (with fuse capacity of less than 110 kVA) that are found as not eligible for a standard charge a minimum contribution equivalent to a standard connection charge as published in the Rate Card will be applied.

For all other cases, WEL will determine a specific capital contribution that a customer will be required to pay for a connection based on an economic assessment of the total costs and revenues expected following the approach outlined above.

For unique or very large connections, WEL may further consider on a case by case basis whether it might be appropriate to set specific line charges (i.e. customer/asset specific price) which may involve establishing a non-standard price for a particular customer. A non-standard price will include an element that replaces a portion of the upfront capital cost. The purpose of asset specific pricing is to allow the customer to pay for the asset over a longer period to better match their utilisation of the connection to the network and WEL's services. Any amount determined will be economically equivalent to the charges that would have applied using WEL's standardised line charges and associated capital contribution.

7. Relocation of network assets

WEL will accommodate the relocation of existing assets where WEL determines relocation is environmentally sound, prudent and economically viable for WEL. Relocations will generally not increase WEL's revenues but may reduce costs through increasing the life and quality of the assets. In some instances WEL may view the relocation as asset renewal brought forward and only require a customer to pay WEL's cost for incurring the expenditure earlier than would otherwise have been the case. In summary, after taking into account the circumstances WEL will determine the costs payable to make the relocation economically viable consistent with the principle of the apportionment of costs in proportion to the benefits received between WEL and the customer requiring the relocation.

For relocation of network assets required by the local authority or other body that owns the road over or under which the assets are located (i.e. a controlling authority), the application of ss32-33 of the Electricity Act 1992 requires the sharing of the cost of the relocation between WEL and the controlling authority. As a result of this legislative requirement, WEL and the local controlling authorities have agreed to a simplified cost sharing model for relocations whereby WEL shares the cost equally with the relevant controlling authority.

8. Undergrounding of overhead lines

The principle applied in determining the required contributions for undergrounding of overhead lines is similar to the principle applied in assessing capital contributions for relocation of assets. WEL will determine the costs payable to make undergrounding of overhead lines economically viable taking into account the circumstances and by apportioning the costs in proportion to the benefits received between WEL and the customer.

WEL has determined that some of the cost of undergrounding is justified in terms of reducing overall costs. Hence, WEL has made a provision to pay 25% of the cost of undergrounding up to a total cost of $0.25m annually. WEL Energy Trust, (which owns WEL on behalf of the local community), has made an additional $0.25m available annually to subsidise undergrounding projects. This fund will pay a 25% contribution to the cost of projects. The remaining 50% contribution is to be paid by the customer. This subsidy is allocated to projects in the order they are received until it is exhausted.

9. Land and easements

Unless stated otherwise, the customer is responsible for providing any necessary land or easements at no cost to WEL.

10. Design variations

Our charges are based on our standard network design practice. Where the customer wishes to vary the design, WEL will accommodate this where possible provided the customer pays the difference between the actual cost and the cost of the standard design.

11. Consistency with the Electricity Authority's pricing principles

WEL's capital contribution policy and method is based on its interpretation of the Electricity Authority's pricing principles. This section sets out the Authority's principles (in the box below), reiterates WEL's interpretation and application of them, and outlines the extent to which the policy and the method are consistent with the pricing principles.

Electricity Authority's Distribution Pricing Principles:

a. Prices are to signal the economic costs of service provision, by:
   i. being subsidy free (equal to or greater than incremental costs, and less than or equal to standalone costs), except where subsidies arise from compliance with legislation and/or other regulation;
   ii. having regard, to the extent practicable, to the level of available service capacity, and;
   iii. signalling, to the extent practicable, the impact of additional usage on future investment costs.
b. Where prices based on 'efficient' incremental costs would under-recover allowed revenues, the shortfall should be made up by setting prices in a manner that has regard to consumers' demand responsiveness, to the extent practicable.
c. Provided that prices satisfy (a) above, prices should be responsive to the requirements and circumstances of stakeholders in order to:
   i. discourage uneconomic bypass;
   ii. allow for negotiation to better reflect the economic value of services and enable stakeholders to make price/quality trade-offs or non-standard arrangements for services, and;
   iii. where network economics warrant, and to the extent practicable, encourage investment in transmission and distribution alternatives (e.g. distributed generation or demand response) and technology innovation.
d. Development of prices should be transparent, promote price stability and certainty for stakeholders, and changes to prices should have regard to the impact on stakeholders.

WEL's policy to require a capital contribution from a customer when the future revenue stream from the connection is not sufficient to cover the long run marginal cost of the new connection is consistent with the Electricity Authority's pricing principles ('pricing principles'). Such a contribution reflects the economic cost of providing the service. This is consistent with principle (a).

WEL considers its approach to capital contributions to be consistent with pricing principle (c), as:

- The capital contribution is less than the stand-alone cost, and therefore discourages uneconomic by-pass;
- Whilst negotiation is not generally part of the process, customers are able to seek quotes from alternative contractors, and in some limited circumstances (described

above) customer specific prices are negotiated instead of an upfront capital contribution;
- Connection of innovative technologies is enabled where the economics support it.

WEL considers that its approach to capital contributions is transparent, and the use of the rate card ensures consistency and is administratively efficient. This is consistent with principles (d) and (e).

12. How are the costs of the project determined?

For the rate card contributions, WEL has used the average historic cost of customer specific assets, and replacement costs of upstream shared assets.

Where an asset is shared, WEL allocates a proportion of the asset cost based on its assessment of the average customer's capacity requirements. This is consistent with WEL's network design.

For specific connections, WEL estimates the connection specific cost of assets and allocates a proportion of shared asset costs based on the size and demand of the new connection.

13. Who must undertake the work?

WEL generally engages its internal staff to connect customers and extend its network. However, where WEL resources are not available, WEL may engage external contractors to complete the works to WEL standards and under WEL's supervision.

Customers may use suitably qualified external contractors to undertake some aspects of new connections on a case-by-case basis. Further information on this is available by phoning or emailing WEL's customer services team on (07) 850 3100 or customer@wel.co.nz.

APPENDIX A - Connection Rate Card (effective 1 April 2015)

Category	Guidelines	Connection charge
Domestic, Small Scale Distributed Generation and Small Business (< 110 kVA)	**Standard connections –** Following are the guidelines to qualify for a standard connection charge: - Connections with fuse capacity of less than 110 kVA that qualify for price categories 1153 and 1154 (Domestic customers) with some consideration for price categories 1200 (Non Domestic), 1250 and 1251 (Small Scale Distributed Generation customers). Note - For further details on the different price categories please refer to our latest price schedule at www.wel.co.nz - Connection must be within close proximity to existing 11kV network. - Connection must be in the road reserve. Exclusions: - Upgrades and relocations. - Connections requiring dedicated spur lines of material length. - Rural utilities e.g. milking shed, irrigation and water pumps. For all connections WEL reserves the right to apply its discretion to determine if a standard charge applies.	$1,530 (excl. GST) per connection/lot.
	Non-standard connections – - All connections with fuse capacity of less than 110 kVA that do not qualify as a standard connection.	A minimum of $1,530 (excl.GST) per connection/lot.
All other connections (>=110 kVA)	Priced on application.	To be advised.