



SP Transmission & Distribution

MODIFICATION REPORT

SP DISTRIBUTION

**Amendment Proposal COM-06-002
Clarification of Reinforcement Apportionment
Rules**

Date of Issue: 20th October 2006

For approval by the Authority



1. SCOPE

This report sets out the proposed modification to SP Distribution's Connection Charging Methodology, in respect of clarification of the Reinforcement Apportionment Rules.

2. ISSUE RECORD

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Issue Date	Issue No	Author	Amendment Details
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3. ISSUE AUTHORITY

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5. PROPOSED MODIFICATION

5.1 Proposed Changes to the Connection Charging Methodology

5.1.1 Introduction

SP Distribution is obliged under the SLC Condition 4B of our Distribution Licence to:

- review the Connection Charging Methodology at least once in every year;
- make such modifications to the Connection Charging Methodology as may be necessary for the purpose of better achieving the relevant objectives.

SP Distribution has reviewed its Connection Charging Methodology. The review was undertaken by taking account of the objectives set out in SLC4 Paragraph 3. One of the outcomes was to review the application of the reinforcement apportionment rules as identified in Ofgem's discussion note ISG dated 25th April 2006.

5.1.2 Background

Ofgem's discussion note identified a number of areas where DNO's should clarify their Connection Charging Methodology. These areas are;

- a) clarify whether the one voltage rule applies from the point of connection or the point of supply.
- b) clarify whether customers will be charged for previous reinforcement of the network.
- c) clarify whether for supply increases, the increase in a customer's capacity or the total new capacity is used in the apportionment rules.
- d) clarification when works are treated as reinforcement or extension of the network.

SP Distribution believes the current wording in Section 2.3.3 is sufficiently clear with regard to point (b) and no further amendments are necessary. The Connection Charging Methodology has however been clarified in respect of the other points.

5.2 Justification for Proposed Modification

The proposed modification change will allow the methodology to better meet the relevant objectives as set out in SLC4B Paragraph 3(a), (b), (c) and (d), which are:



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- a) that compliance with the connection charging methodology facilitates the discharge by the licensee of the obligations imposed on it under the Act and by this licence;
 - b) that compliance with the connection charging methodology facilitates competition in the generation and supply of electricity, and does not restrict, distort, or prevent competition in the transmission or distribution of electricity;
 - c) that compliance with the connection charging methodology results in charges which reflect, as far as is reasonably practicable (taking account of implementation costs), the costs incurred by the licensee in its distribution business; and
 - d) that, so far as is consistent with sub-paragraphs (a), (b) and (c), the connection charging methodology, as far as is reasonably practicable, properly takes account of developments in the licensee's distribution business.

The modification will achieve these objectives in the following manner:

- by clarifying the existing methodology in respect of the application of the apportionment of reinforcement costs in accordance with Ofgem's discussion note ISG 25th April 2006, the Connection Charging Methodology will better meet objective (b) and (c)

5.3 Implementation Date

This modification is proposed for implementation on 1st December 2006.

5.4 Proposed Changes to the Connection Charging Methodology

It is proposed that the Connection Charging Methodology be modified as follows;

The suggested wording in section 2.3 of the methodology statement, would be

'For the avoidance of doubt the point of connection and not the voltage of supply will determine the application of the one voltage rule.'

This clarification meets 'Areas for clarification' in Ofgem's discussion document ISG 25th April 2006 'what is the voltage of connection'

It is further intended that section 2.4.2 Speculative Developments for the purpose of section 2.3 further clarifies the treatment of reinforcement in this respect;



The suggested wording in section 2.4.2 of the methodology statement, would be

‘For the purpose of paragraph 2.3 contributions to previous reinforcement will be based on the required capacity and the point of connection of the development. No refund will be provided if the anticipated load does not materialise.’

In Section 2.3.1 we have clarified the application of reinforcement in respect of existing customers requesting a connection upgrade.

‘Where a customer requests an increase in capacity the increment of capacity will be used as the basis of apportioning cost.’

In Schedule 4 we have provided a practical example of the application of the treatment of existing customers requesting connection upgrade

‘Example 2 – Upgrade in supply

Customer requests increase in supply from 1MVA to 1.5MVA. Existing HV Network has sufficient capacity for increase. Therefore no works are required.

Existing 33kV network has been reinforced by the addition of a new 132/33kV Grid Transformer for which cost is recoverable from new/increased connections within a 5 year period, connected at 11kV and above to the existing SP Distribution network on a £/kVA basis subject to the one voltage rule.

Upstream reinforcement is calculated to be £70/kVA therefore past reinforcement cost is $500 \times £70 = £35,000$.

500kVA being the difference between the existing and increased capacity.

Customer Contribution is £35,000.’

This clarification meets ‘Areas for clarification’ in Ofgem’s discussion document ISG 25th April 2006 ‘How do the apportionment rules apply to existing customers requesting a connection upgrade’

In Schedule 4 we have provided practical examples of the Application of the reinforcement apportionment rules to clarify the circumstances in which connections to the network are charged for past reinforcement.



‘Example 1 – Adopted Primary substation 33kV point of connection.

A 33kV Primary substation is required for a new retail park with a capacity of 7MVA.

POC requested by ICP (Independent Connection Provider).

Primary substation and on-site network to be constructed by ICP and adopted by SP Distribution, therefore fully funded by the customer.

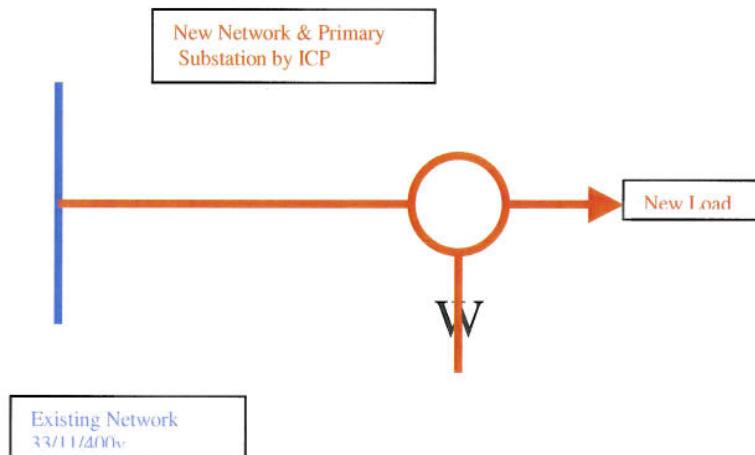
The Non Contestable connection charge is £90,000.

The existing network has been reinforced by the addition of a new 132kV Grid Transformer which provided 60MVA of capacity. The cost is recoverable within a five year period from new/increased connections connected at 33kV and above to the existing SP Distribution network on a £/kVA basis, subject to the one voltage rule.

Upstream reinforcement is calculated to be £65/kVA therefore reinforcement cost is $7000 \times £65 = £455,000$.

The New Primary substation is interconnected at 11kV to comply with P2/6.

<i>Connection Cost</i>	<i>£90,000</i>
<i>Past Reinforcement</i>	<i>£455,000</i>
<i>Total Customer Contribution is</i>	<i>£545,000</i>



Example 3 – Licensed 300kVA connection.

Customer requests a Licensed connection for a new LV supply of 300kVA.

A new 500kVA secondary substation is required.

Total Connection Cost is £50,000.

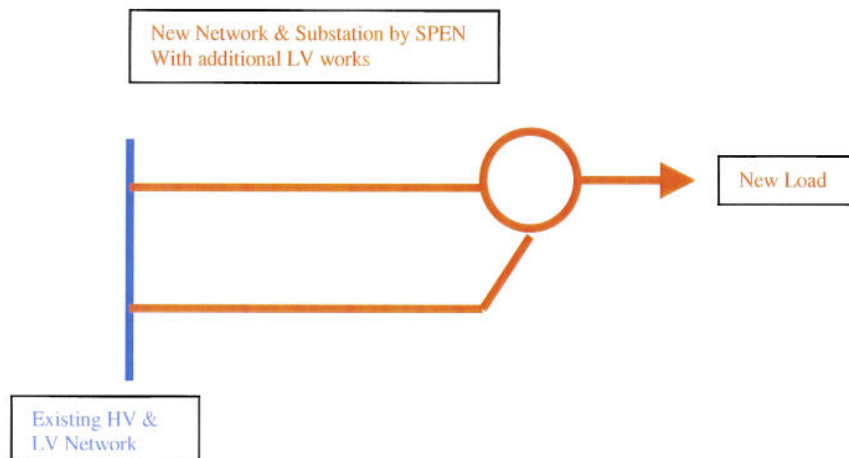
The LV network is in need of reinforcement therefore LV interconnection is required to utilise spare capacity in substation.



The customer only contributes his connection capacity of 300kVA with SP Distribution contributing for 200kVA plus additional LV interconnection cost £2000.

Connection Cost is therefore:

<i>Substation Installation</i>	<i>£50,000</i>
<i>Additional work by SP</i>	<i>£2,000</i>
<i>Apportioned 300/200</i>	<i>£30,000 Customer/£20,000 SP</i>
<i>Customer Contribution</i>	<i>£30,000</i>
<i>SP Contribution</i>	<i>£22,000</i>



Example 4 - Adopted Housing site 400kVA

New substation required for new housing site requiring a capacity of 400kVA. POC requested by ICP (Independent Connection Provider). Substation and on site network to be constructed by ICP and adopted by SP Distribution.

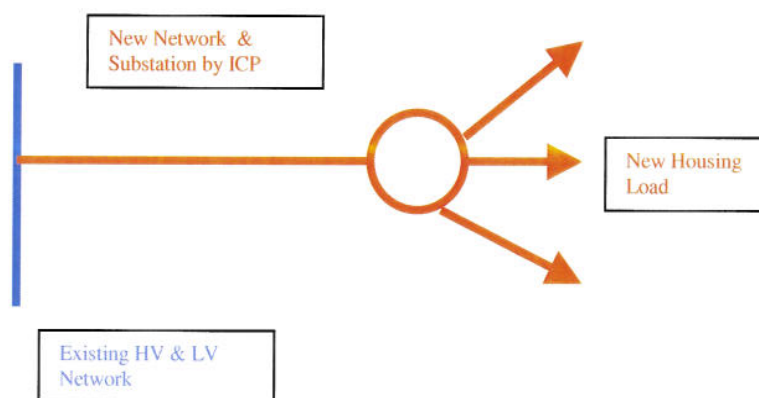
Non Contestable connection cost is £10,000.

Existing 11kV network has also been reinforced by the addition of a new 33/11kV Primary substation. The cost is recoverable from new/increased connections within a 5 year period, connected at LV and above to the existing SP Distribution network subject to the one voltage rule.

Upstream reinforcement is calculated to be £150/kVA therefore reinforcement cost is 400 x £150 = £60,000.

Connection Cost is therefore:

<i>Non Contestable cost</i>	<i>£10,000</i>
<i>Past 11kV Reinforcement</i>	<i>£60,000</i>
<i>Customer Contribution</i>	<i>£70,000</i>



It is proposed to delete all the existing Schedule 4 examples in favour of the greater clarity represented by the new examples.

5.5 Indicative Impact on the Connection Charges

The proposed change has no impact on the Connection Charges and is provided for clarity of the current application of reinforcement apportionment rules.

5.6 Impact on Other Industry Documents

No amendment is proposed to Industry Documents as this modification represents a minor change, it is not anticipated that this will have any impact and require any changes to contract documents.

5.7 Consultations

As this proposed modification is for the purpose of clarifying the application of the reinforcement apportionment rules in SP Distribution's Connection Charging Methodology, it does not necessitate an industry consultation.