Connection charging apportionment rules

1. Introduction

The connection charging apportionment rules came into effect on 1 April 2005 and replaced the 25% rule. The apportionment rules are detailed within the DNOs' connection charging methodology statements and describe how much of any reinforcement costs should be born by a connectee.

They include a security apportionment rule which covers situations where network reinforcement is required due to thermal or voltage criteria and also a fault level apportionment rule which is used to cover situations where reinforcement is required due to equipment fault level ratings being exceeded.

In both cases, where reinforcement is necessary due to a party connecting to the network, the connectee pays a share of the costs associated with the reinforcement. Their share is dependent on their capacity compared to the network capacity post the reinforcement.

Following one year of operation of the new rules and following a number of queries received from customers, developers, DNOs and consultants on their application and interpretation it is proposed to review whether they are working effectively. The purpose of the note is not to revisit the broad principles of the rules which have been agreed but to identify areas where greater clarification may be necessary.

2. Areas for clarification

- **When is network reinforcement not network reinforcement?**

There have been a number of situations highlighted to Ofgem where in one part of the country a developer requires a significant load (few MVA) to be connected to the existing network. These are often brown field developments as part of regeneration in large cities. The DNO's network in these cases may have very limited spare capacity and they propose to install a new primary substation (e.g. 33/11kV) to cater for the load. This primary substation may then be connected in to the existing 11kV network.

In some instances the developer / customer has been charged a share of the primary substation costs based on the apportionment rules while in other situations they have been charged the full cost. Network connections are often different but by being clear on the principle it may be possible to narrow down any grey areas.

Where there is a benefit to existing users and the existing network from the development then the cost should be shared between the new party and existing users as these works would reinforce the network. On this basis if the DNO links the primary substation in to offload their existing network it would seem appropriate to apportion the costs; if the primary is standalone then it should be charged in full.

- **What is the voltage of connection – voltage of supply or point of connection?**

The DNOs have, in general, detailed in their connection charging methodologies that reinforcement undertaken at more than one voltage level above the "voltage

of connection" will not be charged to the connectee. However the definition of the voltage of connection is not clear and could mean the voltage of supply to the customer or the point of connection to the existing network.

Depending on the connection these could be different and may drive significant differences in charges. It is expected that in most cases this will not be material as the main driver of cost is the capacity required while the point of connection is often driven by the nearest available network asset, however, there will always be exceptions.

The apportionment rules already limit the costs of any upstream reinforcements included within the connection charge due to increasing network capacities found at higher voltages. In addition, in the case of housing estate developments where the voltage of supply may well be LV but the size of the development could be significant and require an 11kV or 33kV connection, the point of connection approach may be more consistent. Such an approach may also provide a more level playing field for development of IDNOs.

However, a voltage of supply approach is likely to be more transparent to customers and may limit perverse incentives on developers.

- **In what circumstances can parties connecting to the network be charged for existing reinforcement?**

At the time of developing the apportionment rules it was recognised that it was important to minimise free rider problems. In response the DNOs' methodologies include a charge for a contribution to existing reinforcement assets. The ability to recover these costs within a connection charge is provided for by the electricity (connection charges) regulations, albeit constrained to a prescribed period of 5 years.

In this case there must be a first comer who has triggered the reinforcement to the DNO's network. Due to the incremental nature of the reinforcement it may be that there is headroom capacity created. It is this subsequent headroom that may be used by a second comer and recharged proportionately to them.

In the case where a DNO undertakes planned reinforcement due to general load growth in the area it is not clear that there is a legal basis for any recharge to a subsequent connectee who then utilises this head room capacity.

- **How do the apportionment rules apply to existing customers requesting a connection upgrade?**

In general, the DNO charging methodologies do not make a distinction between existing and new connecting parties in the application of the apportionment rules. Some of the methodology statements note that where a party asks for further capacity within a short period of time (5 years) of their original connection then the new and existing capacity will be considered in total if reinforcement is required.

There may though be a number of interpretations on how existing parties will be treated if they require further capacity after a prolonged period of connection. Options include using their increment of capacity as the basis of apportioning cost or using the total required capacity (new and existing). The former approach appears more consistent with the principles of the apportionment rules with the exception described above over the initial period to avoid perverse incentives.

3. Next steps

- We would welcome ISG views on:
  - The issues raised in this note;
  - Whether there are other issues associated with the apportionment rules that should be considered.

- We would welcome views from DNOs on:
  - their approach to these areas, where possible by providing examples / case studies;
  - Whether their connection charging methodology statements are consistent with their approach.

It is proposed to discuss these matters at the next ISG once further information from the DNOs is available.