

Roger Morgan
Senior Manager
Connections Policy
Office of Gas and Electricity Markets
9 Millbank
London SW1P 3GE

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Dear Roger

Standard Licence Condition 4F (SLC4F): Standards for the Provision of Non-Contestable Connection Services – Formal Licence Modification

This letter confirms that EDF Energy ('we') will not object to the proposed licence modifications. However, we are making representations in respect of certain aspects of SLC4F and the associated draft guidance document (Version 1 dated 13 July 2007). This letter sets out those representations.

Provision of Quotations for Complex Points of Connection at Higher Voltages in the London Distribution Area

Appendix 1 of SLC4F sets out time-based standards for the provision of quotations in respect of points of connection (POC) at different distribution voltage levels.

We note that, though the standards have been discussed with appropriate industry representatives, they are based neither on any objective analysis of historic DNO performance nor on any analysis of the business processes involved in producing a POC quotation.

In particular, the standards each allow for 10% of quotations to take longer than the target timescale in order to (we understand) allow for the additional time necessary to prepare quotations for complex connections. However, we have seen nothing to suggest that Ofgem has used any objective evidence to justify the 10% threshold either as an average industry-wide standard or more particularly in relation to the specific circumstances of each DNO (for example, in terms of its own expected ratio of simple and complex connections).

Our response to Ofgem's February 2007 paper on this matter highlighted our concern about the lack of historical data to underpin the new standards, and we proposed an initial 80% standard to take account of the uncertainty involved. Ofgem rejected our proposal in its letter of 13 July 2007.

Connecting large loads (or sources of generation) to the central London distribution network is more complex than at most other locations in Great Britain because of the interaction between high and low voltage circuits. It can therefore be expected that quotations in respect of such connections are likely to take significantly longer to prepare in LPN's area than would be the case for other DNOs (with the exception of a few other major urban centres, such as Liverpool, which also have complex networks). The complexity of the London network is explained further below.

EDF Energy Networks

Energy House, Hazelwick Avenue,
Three Bridges, Crawley, West Sussex.
RH10 1EX

edfenergy.com

The London network has, of course, evolved over time but is based fundamentally on the concept of high capacity EHV/HV substations, with 132/11kV transformation now being the standard arrangement. These substations supply 11kV feeder groups, the majority being configured as open rings that supply the general customer base either directly from local distribution substations (11kV:0.4kV) or from the associated low voltage network.

A unique feature is the interconnection, or meshing, of the LV network in the central higher load density zone. This interconnection occurs in load blocks, each such block being supplied by a discrete group of 11kV feeders, numbering typically between four and six, resulting in a block demand in the range of 15MVA to 25MVA. The advantage of this approach is that it gives a degree of resilience for the loss of an 11kV circuit, demand often being secured by virtue of interconnection between the feeders at the LV level. This arrangement has proved very resilient and has provided a high level of security to London.

The design does, however, impose certain constraints, chief among them being the need to supply all HV feeders in a feeder group from the same voltage source – which, in practical terms, means the same section of the HV busbar at the source substation. This is necessary to avoid spurious protection operations should a situation arise where individual feeders are fed from different busbars. This could occur if feeders in the same group are connected to different busbar sections that are then electrically separated as a result of emergency switching at the source substation.

Customers taking higher demands are more typically supplied from 11kV feeder groups that are not associated with distribution substations, such groups being run as closed rings with zoned unit-protection on each cable circuit. These groups typically comprise between three and five feeders meeting a demand of between 10MVA and 20MVA. As with the open-ring groups, it is necessary to connect these group feeders to the same voltage source if spurious protection operation is to be avoided under emergency busbar switching operations at the source substation (i.e. because of a transformer outage).

The nature of the London network is more fully described in the LPN Long Term Development Statement prepared in accordance with SLC25. This document is in the public domain and Ofgem should be familiar with its contents.

From this brief description of the network design, Ofgem should appreciate that the connection of large new demands or sources of generation needs to be carefully managed if busbar loading and fault level (in the case of generation) at the source substations is to be kept within rating under both normal and abnormal (N-1) conditions. The time required to undertake the detailed analysis needed before work is carried out has clearly not been allowed for in the proposed new SLC4F standards, which we believe are more relevant to networks that will generally only need relatively simple radial network extensions to afford connection.

In addition, for some larger and more complex connections in the London network area, a detailed load flow and/or fault analysis will need to be carried out before a quotation can be provided. The quotation may also require detailed route-proving works to be undertaken, particularly in the City of London, where there is very limited ground-space for new cables. It would clearly be unreasonable for the standards to apply in such and similar circumstances.

Final Works and Phased Energisation

Our non-objection to the proposed licence modification is on the understanding that the proposed standards for Final Works and Phased Energisation are subject to all conditions precedent being met at the time that the request is made. While the licence condition is clear on this point, the draft guidance is not. It is therefore essential that the guidance is brought into conformity with the legal clarity of the licence condition before the new arrangements come into force on 1 October.

EDF Energy will, of course, continue to be flexible in its arrangements in order to try to meet the timetable of the connections provider.

Provision of High Security Connections

The provision of quotations in respect of connections to a standard higher than is required by Engineering Recommendation P.2/6 typically requires significantly more work than allowed for in the standard. It is therefore reasonable for the standard not to apply in such circumstances.

We should like to stress the importance of the point we have made above about the clarity and integrity of the guidance that will sit alongside the new licence condition. Under the licence, we shall be required to act in accordance with the guidance – so the guidance must be correct, and must be fully consistent with the condition, from Day One.

If you have any questions about this letter, please do not hesitate to call me.

Yours sincerely

Paul Delamare

Head of Regulation and Compliance

EDF Energy Networks