

MODIFICATION TO THE USE OF SYSTEM CHARGING METHODOLOGY FOR DISTRIBUTION SYSTEMS

Under Standard Condition 13 of the Electricity Distribution Licence

UoS Mod 28 -

Modification Request on changes to the Use of System Charging Methodology to provide interim IDNO charges.

Organisation's Name:		EDF Energy Networks (EPN) plc EDF Energy Networks (LPN) plc EDF Energy Networks (SPN) plc (collectively "EDF Energy Networks")
Details of Proposer:		
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Date:	6 th July 2009	
Description of the Proposed Modification:		
<p>EDF Energy Networks proposes to modify its Use of System Charging Methodology for its Distribution Systems to provide tariffs and a method of applying these tariffs specifically for Licensed Independent Distribution Network Operators (IDNO) connected to our distribution system.</p> <p>These IDNO tariffs will mirror the tariffs applied to existing settlement metered customers. They will contain a price reduction which has been calculated to reflect the services that would be provided by EDF Energy Networks [if it had adopted the networks], but which are now being provided by an IDNO instead. With this in mind the costs we have incorporated, and the method of allocation, are those that would be faced if EDF Energy Networks were providing the downstream business of adopting new network assets and the likely change in those costs during the period of this interim charging methodology. This method is consistent with the requirements of efficiency and competition policy.</p> <p>The price reduction will be calculated using cost data from the regulatory reporting pack. The reduced tariffs will be applied using a portfolio approach based on the metered volume at the boundary between our network and that of the IDNO.</p>		
A clear explanation of how the proposed change better meets the relevant objectives:		
<p>We believe that our proposal for IDNO tariffs better meets the relevant objectives on the grounds of Cost Reflectivity and Competition.</p> <p>Cost Reflectivity</p> <p>Relevant objective 13.3(c), requires "that compliance with the 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".</p> <p>EDF Energy Networks currently charges embedded networks for use of its systems on the basis of its 'normal' UoS tariffs. Many embedded networks serve predominantly domestic loads, which may have different load characteristics than medium or large non-domestic users. Our methodology for setting use of system charges uses an allocation of reinforcement costs which is based on load characteristics (coincidence and load factors)</p>		

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of each customer type. It has been suggested that applying medium or large non-domestic user tariffs to embedded networks is not consistent with the principles of our cost allocation methodology, and may not be cost reflective.

The proposal provides for a cost reduction to be applied to the all the way charges based on the identification and allocation of the costs in the regulatory reporting pack. These costs reflect the services that would be provided by EDF Energy Networks [if it had adopted the networks], but which are now being provided by IDNO instead. This enables the IDNO to receive charges based on the all the way charges less the costs of an equally efficient operator providing the services. The proposal therefore better meets the relevant objective 13.(c).

Competition

Relevant objective 13.3(b), requires “that compliance with the 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”.

The introduction of IDNO tariffs using a reduction that is applied to EDF Energy Networks all the way tariffs remove the potential mismatch that can occur between the existing charges applied to the IDNO and the relative price cap charges that the IDNO charges their end users. This reduction provides for an equally efficient operator to have sufficient margin to fund their network provision. The proposal therefore better meets the relevant objective 13.(b).

Additional Information

Further details on the proposal are contained in the attached file – “EDF Energy Networks charging methodology change proposal for interim IDNO charging”.

Proposed wording for the methodology statement and (if applicable) the charging statement:

After the section “Use of System Methodology – Site-Specific Charges for Demand and Generation” the following new section will be added...

“Use of System Methodology – HV/LV Boundary charges for Licensed Independent Distribution Network Operators

Rationale

Charges for Independent Distribution Network Operators (IDNOs) are based on utilising boundary metering data and IDNO customer (settlements) metering data to provide a partial ‘self-billing’ approach to boundary tariffs.

We will calculate charges based on boundary metered data and the percentage unit split of the IDNO’s customer metered consumption, based on D0030 and D0275 data flows. For each of its own ‘All the Way’ (ATW) tariffs, the IDNO will provide the percentage of total units sold and the number of MPANs. Where appropriate the IDNO will also provide the sum of the capacity for HH metered sites connected to their network.

This methodology calculates a price reduction percentage that is applied to applicable published end user ATW tariffs. The price reduction is calculated using cost data from the regulatory reporting pack.

This ‘portfolio’ approach enables the amount of margin that embedded network operators can compete for, to be identifiable in respect of each putative end user.

The portfolio approach requires the provision of data about the users on embedded networks in order to

calculate charges for the use of our distribution system. This approach requires the cooperation of IDNOs to provide aggregated data on their end users. We acknowledge that IDNOs will need to support this approach by providing data and there is no standard requirement for them to do so.

This proposal continues to utilise existing data flows from boundary meters, provided using the standard D0275 data flow format.

Model Inputs

The model utilises Regulatory Reporting Pack (RRP) information to allocate costs to the different voltage levels on our network.

The Model

The model calculates a reduction percentage, which is applied to the ATW tariffs, to produce new embedded network tariffs using a three-step procedure.

The first step is to allocate costs from users between the different levels of our network, using a top-down allocation method based primarily on data from the regulatory reporting pack (RRP). This is described below.

The outputs from that first step are:

- (a) A percentage of total costs attributed to LV service cables, denoted by the symbol [LV services %].
- (b) A percentage of total costs attributed to the LV network, denoted [LV %].
- (c) A percentage of total costs attributed to the HV/LV transformation [HV/LV %].

These percentages of total costs continue at each level of the network to GSP.

For LV connected embedded networks the second step is to determine the proportion of the DNO's LV network that is typically used by an embedded network, relative to the amount of LV network used by a typical domestic customer.

This proportion is based on statistical information about:

- (a) the amount of DNO LV main to the embedded network connection per IDNO end user, and
- (b) the average DNO LV network length per DNO end user.

The output from the second step is a single percentage, denoted [LV split %], representing the proportion of the LV network that, on average, LV-connected embedded networks use, relative to the amount of DNO LV network.

For LV connected embedded networks the third step is to combine the two percentages above in order to determine the reduction to apply in the calculation of embedded network tariffs. The formula is:

$$[\text{LV Reduction \%}] = [\text{LV services \%}] + (1 - [\text{LV split \%}]) * [\text{LV \%}]$$

The formula used to apply this reduction to our existing LV tariff component is:

$$[\text{Embedded network tariff component}] = [\text{Tariff component}] * (1 - [\text{Reduction \%}])$$

For LV Substation and HV connections the percentage of total costs attributed to the LV network is allocated in full.

$$[\text{LV Substation Reduction \%}] = [\text{LV services \%}] + [\text{LV \%}]$$

$$[\text{HV Reduction \%}] = [\text{LV services \%}] + [\text{LV \%}] + [\text{HV/LV \%}]$$

Format of Tariffs

The DNO's charges to IDNOs are based on the application of a percentage reduction to the published DNO ATW

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tariffs using a ‘portfolio’ billing approach, whereby IDNOs supply aggregated data based on their SVA data. The form of the aggregated data allows EDF Energy Networks to allocate the boundary metered consumption to the appropriate ATW reduced tariff.

The IDNO takes its NHH D0030 and HH D0275 data and provides the number of MPANs on each of their tariffs and the percentage split of consumption by tariff time pattern regime for NHH metered sites and by time band for HH metered sites. The IDNO also provides the sum of the chargeable capacity for HH metered sites. The IDNO provides the data separately by LV, LV Sub and HV connection voltage.

DNO charges to IDNOs will then be based on:

- (a) The applicable settlement registered end user tariff, (the ATW tariff), less the IDNO Voltage of Connection Reduction.
- (b) A capacity charge, where applicable, in the ATW tariff.
- (c) A reactive charge, where applicable, in the ATW tariff.”

Illustrative charge, where the proposal results in changes, and details of which customers will be affected by the change:

The charges that will apply to IDNOs will be the relevant published ATW tariff less the tariff reduction from the following table applied to the IDNOs portfolio of end user data.

	EPN			LPN			SPN		
Boundary connection voltage ›	LV	LV Sub	HV	LV	LV Sub	HV	LV	LV Sub	HV
LV ATW connection	23.3	26.1	30.4	16.9	21.0	26.8	17.7	19.9	26.4
LV Sub ATW connection (Only EPN)		11.1	15.4						
HV ATW connection			11.1			7.8			7.7

The impact of these reductions is detailed in the attached spreadsheet containing sample sites – EDF Energy Networks Interim IDNO Tariff Analysis.xls.

A timetable for the implementation of the modification and charge changes:

The modified version of the use of system methodology statement will apply from the 1st September 2009 unless within 28 days of this submission the Authority veto the proposal or give notice that they intend to consult. If the Authority consult then the modified version of the connection methodology statement will apply from the 1st December 2009 unless within 3 months, of giving notice that they intend to consult, the Authority veto the proposal.

We are aware that the industry desired date for implementation of this modification was 1st April 2009. Unless the Authority indicates otherwise we will seek to apply this methodology retrospectively from 1st April 2009, subject to the IDNOs providing the necessary data.

Details/copies of any responses received to consultation carried out prior to submission to the Authority:

The proposed modifications are intended as an interim solution further to their development at the joint DNO/IDNO working group. We have presented and discussed aspects of this methodology at the IDNO/DNO working group meetings which are convened by Ofgem. Ofgem has encouraged distributors to bring forward proposals.