

Modification proposal:	EDF Energy Networks¹ ("EDF") Electricity Distribution Use of System Charging Methodology: Interim² IDNO tariffs		
Decision:	The Authority ³ directs that this proposal be not vetoed ⁴		
Target audience:	DNOs, IDNOs, Suppliers, Generators and other interested parties		
Date of publication:	21 December 2009	Implementation Date:	1 April 2009 ⁵

Background to the proposal

EDF has licence obligations⁶ to have in place three charging statements: the statement of use of system ("UoS") charging methodology, the statement of UoS charges and statement of connection charging methodology and charges. The statement of UoS charging methodology outlines the method by which distribution UoS charges are calculated. EDF has a requirement to keep the methodology under review and bring forward proposals to modify the methodology that it considers better achieves the relevant objectives.⁷

The Authority has been encouraging Distribution Network Operators ("DNOs") to modify their charging methodology to bring forward specific IDNO tariffs which better reflect the costs IDNOs impose on their distribution network. In July 2008 a DNO/IDNO working group was established with the aim of developing more appropriate charging arrangements for IDNOs. All DNOs other than EDF have had modifications to their charging methodology 'not vetoed' this year⁸. Ofgem vetoed a proposed modification to EDF's IDNO charging methodology on 5 August 2009.⁹

EDF's proposal

On 27 November EDF submitted a modification proposal to their use of system charging methodology which sought to introduce interim IDNO tariffs¹⁰.

¹ EDF Energy Networks own three electricity distribution licensees – Eastern, London and Southern Power Networks. This letter applies to the three licensees.

² In this case the 'Interim' methodology would apply from 1 April 2009 until 1 April 2010 when the common distribution charging methodology (CDCM) is due to be implemented.

³ The terms 'the Authority', 'Ofgem' and 'we' are used interchangeably in this document. Ofgem is the Office of the Gas and Electricity Markets Authority.

⁴ This document is notice of the reasons for this decision as required by section 49A of the Electricity Act 1989.

⁵ EDF have chosen to introduce this proposal retrospectively. They have provided evidence to Ofgem that this will have no impact on the UoS charges of other customers.

⁶ Standard licence conditions (SLC) 13 -14.

⁷ The relevant objectives for the UoS charging methodology, as contained in paragraph 3 of SLC 13 of EDF's licences are:

- (a) that compliance with the UoS charging methodology facilitates the discharge by the licensee of the obligations imposed on it under the Electricity Act 1989 and its licence;
- (b) that compliance with the UoS charging methodology facilitates competition in 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 UoS charging methodology results in changes which reflect, as far as is reasonably practicable (taking into account of implementation costs), the costs incurred by the licensee and its distribution business; and
- (d) that, so far as is consistent with sub-paragraphs (a), (b) and (c), the UoS charging methodology, as far as is practicable, properly takes account of developments in the licensee's distribution business.

⁸ These decisions can be found on Ofgem's website at:

<http://www.ofgem.gov.uk/Networks/ElecDist/Policy/DistChrgMods/Pages/DistChrgMods.aspx>

⁹ Ofgem's decision can be found at:

<http://www.ofgem.gov.uk/Networks/ElecDist/Policy/DistChrgMods/Documents1/Final%20EDF%20interim%20IDNO%20decision.pdf>

¹⁰ EDF's proposal can be found on Ofgem's website at:

<http://www.ofgem.gov.uk/Networks/ElecDist/Policy/DistChrgMods/Documents1/EDF%20Energy%20Networks%20-%20UoS%20Mod%20Proposal%2029%20-%2027112009.pdf>

At present EDF charge IDNOs on the same basis as commercial customers. These charges are calculated using a distribution reinforcement model ("DRM"). The DRM models the costs of adding 500MW of simultaneous demand to EDF's network. This produces an incremental cost per network level. These costs are allocated to customer classes on the basis of their contribution to maximum demand. These costs are then scaled up or down by a fixed percentage to ensure that EDF recover their allowed revenue. In the past the Authority has asked DNOs to bring forward IDNO specific tariffs¹¹.

EDF's proposal provides tariffs and a method of applying these tariffs specifically for IDNOs connected to its distribution network. These tariffs will mirror the tariffs applied to customers connected only to EDF's network. They contain a price reduction which has been calculated to reflect the services that would be provided by EDF, but which are now being provided by an IDNO instead. The price reduction is calculated using cost data from forecast Capital Expenditure (Capex) plans and the regulatory reporting pack (RRP), applicable to the relevant EDF network area. The methodology is based on the price control disaggregation model developed and submitted as part of the Common Distribution Charging Methodology (CDCM) by all the Distribution Service Providers.

The tariffs will be applied using a portfolio approach¹² based on the metered volume at the boundary between EDF's networks and an IDNO network. The proposal covers high voltage (HV) and low voltage (LV) connected IDNO networks and allows IDNOs to choose to continue to be charged on an appropriate existing tariff subject to them providing applicable settlement standard metering data.

Decision not to consult

In April, the Authority consulted on WPD's cost allocation methodology, which is very similar to that which EDF now proposes. Equally, the Authority recently not vetoed interim proposals from ENW, SSE¹³ and SP which adopt a very similar cost allocation model. Given the earlier consultation on WPD's proposals and the precedent set by our recent decisions on ENW's and SP's proposals we consider that there would be little merit in consulting upon principles contained in EDF's proposal, particularly as the views of industry on the proposed cost allocation methodology are well known. We would also stress that once the modification proposal comes into effect, EDF will continue to offer their current commercial tariff to IDNOs meaning that IDNOs can continue on the current arrangements if they so wish.

Furthermore, as discussed in more detail below, we consider the methodology behind the new tariffs to be a significant step forward on IDNO charging and the Authority considers that consulting again on this methodology would be an unnecessary delay to the introduction of these new tariffs. As stated above we would ask parties to note that EDF, along with all other DNOs, have submitted a methodology very similar to this proposal to Ofgem as part of the common distribution charging methodology (CDCM).

The Authority's decision

The Authority has decided to not veto EDF's proposal. In coming to our decision the Authority has considered the proposed modification against the relevant objectives and the Authority's wider statutory duties. In reaching its decision the Authority has had particular regard to the significant shortcomings of EDF's current IDNO charging methodology. Therefore while the Authority has some concerns about the data inputs used in EDF's proposal, we consider that the overall methodology better meets the relevant objectives for the reasons outlined below. The Authority expects EDF to actively consider how it can improve its charging methodology in regard to IDNOs and would stress that it is for EDF to ensure its own compliance with the Competition Act 1998 and EC competition law in its implementation of the proposed

¹¹ Please see the Authority's decision letter on WPD's IDNO charging modification of December 2007: <http://www.ofgem.gov.uk/Networks/ElecDist/Policy/DistChrgMods/Documents1/WPD%20006%20IDNO%20charging%20decision%20letter%20wales.pdf>

¹² Portfolio billing represents a move away from charging IDNOs a single tariff based on the total consumption at the boundary point and looks applies a customer specific tariff based on the consumption of each customer connected to the IDNO network.

¹³ <http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=613&refer=Networks/ElecDist/Policy/DistChrgMods>

methodology. It should be noted that the processes and legal tests in relation to modifications and the Competition Act 1998 investigation are separate and distinct. Therefore, this decision does not limit or prejudice any findings which the Authority may make in relation to investigations under the Competition Act 1998.

The Authority's reasons

The reasons for the Authority's decisions are set out below.

Relevant objective (b) – That compliance with the methodology facilitates competition in the generation and supply of electricity and does not restrict, prevent or distort competition in the transmission or distribution of electricity.

EDF stated that it currently charges embedded networks for use of its systems on the basis of its 'normal' use of system tariffs. Many embedded networks serve predominantly domestic loads, which may have different load characteristics than medium or large non-domestic users. EDF's current methodology for setting use of system charges uses an allocation of reinforcement costs which is based on load characteristics (coincidence and load factors) of each customer type. EDF recognised that applying medium or large non-domestic user tariffs to embedded networks may not be consistent with the principles of its cost allocation methodology, and may not be cost reflective. Therefore, EDF considered that its proposal would help meet relevant objective (b). The Authority agrees with this assertion and provides specific comments on aspects of EDF's proposal below. As noted above, while overall the Authority considers that EDF's proposals better meets the relevant objective (b), we have concerns over the input data used for this methodology, in particular for the LPN region and would ask EDF to urgently review these.

1. Use of total costs to calculate the IDNO discount on the 'all the way' charge

EDF's current IDNO charging methodology is based on incremental costs which are allocated to customer classes on the basis of their contribution towards peak demand. IDNOs are currently classified as commercial customers and so have the incremental costs allocated to them on the basis of the load profile of a commercial customer. These costs are then scaled to meet allowed revenue.

EDF proposes to move away from this incremental charging methodology to a methodology which identifies the total costs associated with the part of its network equivalent to that which the IDNO provides. The Authority agrees with this approach. An IDNO must duplicate some of the fixed costs which a DNO incurs in order to compete in the market. For example call centres, billing systems, staff costs. If charges to IDNOs are based on scaled incremental costs, there is potential to restrict, prevent or distort competition in distribution as the IDNO (under relative price control¹⁴ and the terms of their charging methodologies¹⁵) can only charge the same end tariff as their respective host DNO and therefore may not recover its fixed costs. A cost allocation to IDNOs which does not include fixed costs runs the risk of leaving the IDNO unable to recover these costs. Consequently, in the long term the IDNO may be forced to exit the market.

More generally, as EDF's proposal broadly uses the same methodology as for the CDCM, the advantages of this methodology discussed in Ofgem's consultation¹⁶ and decision¹⁷ documents for the CDCM in better achieving relevant objective (b) also apply to EDF's proposal.

The Authority therefore considers that EDF's proposal to move away from charging IDNOs on a scaled incremental cost approach towards a total cost approach better achieves relevant objective (b).

¹⁴ This is a price cap which states that IDNOs can't charge domestic customers a higher tariff than the host DNO.

¹⁵ All IDNOs have a charging methodology in place which states that they will replicate all host DNO tariffs.

¹⁶ http://www.ofgem.gov.uk/Networks/ElecDist/Policy/DistChrgs/Documents1/Ofgem_CDCM_consultation%20280909_1.pdf

¹⁷ [http://www.ofgem.gov.uk/Networks/ElecDist/Policy/DistChrgs/Documents1/CDCM%20decision%20doc%20201109%20\(2\).pdf](http://www.ofgem.gov.uk/Networks/ElecDist/Policy/DistChrgs/Documents1/CDCM%20decision%20doc%20201109%20(2).pdf)

2. Portfolio billing

IDNO sites may contain a variety of end user customer classes. At present, EDF levy a boundary charge on each IDNO site. This is a single tariff on which the consumption of the entire site is charged. IDNOs have stated that this can result in a mismatch in tariff structure between what they pay at the boundary to DNOs and what they can recover (under RPC and the terms of their charging methodologies) from end users connected to their network. For example in some cases, IDNOs are required to pay a capacity element in their boundary charge which they can't recover from their end users. A portfolio billing approach allows EDF to produce a specific IDNO tariff for each end user which is connected to the IDNO network. This tariff structure mirrors that of the 'all the way' charge which IDNOs can recover from their end customers. These tariffs are then aggregated to produce an IDNO bill. The Authority considers that this prevents any mismatch of tariff structure and ensures that the cost methodology which EDF proposes is used to provide a fixed discount for every IDNO end customer.

EDF's modification proposal makes reference to IDNOs providing EDF with data extracted from D0030 and D0275 settlement flows. The Authority acknowledges that use of this data is currently the subject of modification P246 to the balancing and settlement code (BSC)¹⁸. However the Authority notes that EDF's proposal allows IDNOs to make an estimate of this data.

This tariff structure ensures a fixed income for IDNOs per each end customer type. This provides certainty in the market and allows IDNOs to make longer term planning and investment decisions on the basis of the net DUoS income¹⁹ they will receive from each of their end customers. The Authority therefore considers that this aspect of the proposal better meets relevant objective (b).

3. Inputs used in EDF's charging methodology

The Authority has concerns that the inputs used by EDF within the framework of the CDCM method may not be appropriate, and this could lead to the methodology producing outputs which may restrict, prevent or distort competition. The Authority would note particular concern with regard to the inputs used for LPN's tariffs, although it also applies to EPN and SPN's tariffs. As set out in the CDCM decision document this arises in part from limitations to the CDCM method, which the Authority has required be changed through a conditional approval of the CDCM. However, even after this change has been made all DNOs, including EDF, need to consider on a continuing basis whether the inputs they are using within their charging methodology are the most appropriate available to ensure that tariffs do not restrict, distort or prevent competition. Hence the Authority has concluded that EDF's proposal restricts, distorts and prevents competition less than their current methodology and thus on the narrow test of the relevant objectives, better meets objective (b).

Relevant objective (c) – That compliance with the methodology results in charges which reflect as far as is reasonably practical (taking into account implementation costs) the costs incurred by the licensee in its distribution business.

EDF stated that it currently charges embedded networks for use of its systems on the basis of its 'normal' use of system tariffs. Many embedded networks serve predominantly domestic loads, which may have different load characteristics than medium or large non-domestic users. EDF's current methodology for setting use of system charges uses an allocation of reinforcement costs which is based on load characteristics (coincidence and load factors) of each customer type. EDF recognised that applying medium or large non-domestic user tariffs to embedded networks may not be consistent with the principles of its cost allocation methodology, and may not be cost reflective. Therefore, EDF considered that its proposal would help meet relevant objective (c). The Authority agrees with this assertion and provides specific comments on aspects of EDF's proposal below. As noted above, while overall the Authority

¹⁸ See P246 consultation on Elexon's website: <http://www.elexon.co.uk/consultations/default.aspx>

¹⁹ By net DUoS income, we refer to the difference between the income the IDNO recovers from its end customers and that which it has to pay the DNO for use of their upstream network.

considers that EDF's proposals better meets the relevant objective (c), we consider that there may be further improvements that EDF can make to the inputs to its charging methodology.

1. Creation of new specific IDNO tariffs for IDNO sites

The Authority considers that IDNO sites will place different costs on EDF's network than a standard commercial customer as IDNO sites tend to be predominately domestic and have load profiles more similar to those of a domestic, rather than commercial customer. It is therefore appropriate that EDF develops and implements tariffs to reflect these differences in order to send correct economic signals to users of their network. Consequently, the development of specific IDNO tariffs based on identifying the total costs of operating EDF's equivalent IDNO network better reflect the costs which IDNOs place on EDF's network. As such the Authority considers that the proposal better achieves relevant objective (c) in terms of the methodology reflecting the costs incurred by the licensee.

2. Cost allocation methodology

The Authority appreciates that the allocation of total price control revenue to network levels involves making a number of judgements on the drivers used to allocate costs. This is the case even within the overall framework of the CDCM methodology that EDF has used for this proposal. For example, we consider that EDF's use of forecast capex data to allocate capital costs to network level should provide IDNOs with the same return on assets as EDF would have received on its network, *ceteris paribus*. The Authority would stress that this aspect of the methodology is only as cost reflective as the input forecast capex data used. DNOs need to ensure that their input data is as accurate and up-to-date as reasonably possible, including for example, allocating costs appropriately between cost drivers. The Authority notes the extra work which EDF has undertaken in this area since the submission of the CDCM. However, we consider that there may be further improvements to this input which EDF could make. If EDF do not consider this to be the case then we would expect further extensive evidence that their input data and consequential output tariffs are cost reflective and do not prevent, restrict or distort competition in distribution.

As the Authority has previously noted with proposals from other DNOs, we are not wholly convinced by EDF's choice of Modern Equivalent Asset Value ("MEAV") as a cost driver to allocate the indirect costs between network levels. Whilst we welcome EDF's proposal that indirect costs require a different cost driver from direct costs, we consider that indirect costs represent a diverse range of activities whose cost does not vary linearly with MEAV. We consider this is an aspect of EDF's proposal which they may want to consider further when reviewing this methodology in the future.

Our decision

The Authority has decided to **not veto** the modification to the UoS charging methodology statement. It is important to note that our decision letter relates to the methodology rather than the quantification of elements produced by the methodology. It is for EDF to ensure its own compliance with the Competition Act 1998 and EC competition law in its implementation of the proposed methodology. It should be noted that the processes and legal tests in relation to modifications and the Competition Act 1998 investigation are separate and distinct. Therefore, this decision does not limit or prejudice any findings which the Authority may make in relation to investigations under the Competition Act 1998.

If you have any questions relating to the issues discussed in this letter please contact Mark Askew at mark.askew@ofgem.gov.uk or on 0207 901 7022.

Yours faithfully,

Rachel Fletcher,
Partner, Distribution

Annex 1 – Summary of EDF’s proposal

EDF’s proposal calculates the total costs associated with operating the LV network, LV/HV substation and HV network in the following way. They take the 5 year allowed income set at the last distribution price control review (DPCR4) and divide it between operating costs, depreciation and return. EDF then allocate all three sets of costs to network levels using cost drivers. For operating costs, EDF use regulatory reporting pack (RRP) data detailing the attribution of direct costs²⁰ across network levels. EDF then allocate the indirect costs²¹ to network levels according to the proportion each network level contributes towards the total modern equivalent asset value (MEAV) of its network²². The known allocation of direct costs is added to the MEAV allocation of indirects to produce an overall allocation of operating costs for each network level. This allocation is divided by units flowing through each network level in order to make it comparable to tariffs. This final allocation is applied to the £million sum of operating costs from the DPCR4 settlement.

For depreciation and return costs, EDF take the amounts from DPCR4 and allocate it to network levels according to the proportions of forecast net capex spend between network levels. This forecast net capex spend is taken from modified forecast business plan questionnaire (FBPQ) data which is provided to Ofgem as part of the DPCR5 projections. FBPQ data includes a number of underlying assumptions which companies have to make. As stated above, in our decision document on the CDCM²³ (which uses an almost identical methodology to that used here) we had concerns over the assumptions EDF had used and hence the percentage of capital costs in each voltage tier within their FBPQ data. EDF have consequently made changes to these assumptions and they outline these in their modification report²⁴. These include a breakdown of load related LV capex costs, non load related data from table NL1 of EDF original FBPQ submission, ESQCR expenditure which EDF originally omitted and general reinforcement data which reduces EHV and 132kV capex.

This allocation in this forecast capex data is again divided by the units flowing through each network level to produce an allocation which is comparable to a tariff. The network level allocations for operating costs, depreciation and return are then averaged and applied to in-year allowed revenue less in year pension deficit payments and any incentive income (positive or negative) earned in that year. EDF have aligned incentive revenue to the forecast for the charging year to align it with the incentive revenue which is recovered via ‘all the way’ charges. This produces a proportion of allowed revenue associated with operating each network level which forms the basis of a discount on EDF’s end user charge²⁵.

EDF use this discount to calculate portfolio tariffs. These portfolio tariffs reflect the average use of EDF’s LV main. EDF assumes that the costs associated with the LV main represent those associated with the direct operating costs. Consequently, they calculate the average use of the LV main per IDNO end user compared to the average use of the LV main per end their own end customer.

$$\frac{\text{Average length of EDF network per IDNO end user}}{\text{Average Length of EDF network per end user}}$$

This calculation provides a figure of 18.6% for EPN, 31.3%% for LPN and 18.4% for SPN. EDF reduces the percentage discount associated with the direct operating costs by these

²⁰ Direct operating costs are those associated directly with the operation of the network and include such activities as fault repair, tree cutting and maintenance.

²¹ Indirect costs are those associated with indirectly with the operation of the network and include activities such as IT, customer call centres and staff costs.

²² EDF chose to not allocate network rates by MEAV which are consequently allocated pro rata to all other costs. EDF allocate transmission exit charges solely to the EHV network on the basis that it is demand at this level which drives the level of exit charges.

²³[http://www.ofgem.gov.uk/Networks/ElecDist/Policy/DistChrgs/Documents1/CDCM%20decision%20doc%20201109%20\(2\).pdf](http://www.ofgem.gov.uk/Networks/ElecDist/Policy/DistChrgs/Documents1/CDCM%20decision%20doc%20201109%20(2).pdf)

²⁴<http://www.ofgem.gov.uk/Networks/ElecDist/Policy/DistChrgMods/Documents1/EDF%20Energy%20Networks%20-%20UoS%20Mod%20Proposal%2029%20-%2027112009.pdf>

²⁵ EDF applies the discount to a different end user charge depending upon the classification of the IDNO site as domestic or non domestic.

percentages. This produces the following discounts on LV end user tariffs for an LV connected IDNO.

EPN – 26.3%
 LPN – 20%
 SPN – 27.9%

EDF has also calculated an HV split to represent the proportion of the HV network which EDF provide for IDNO HV end customers. EDF have calculated that they operate 90% of the network in these circumstances. Therefore, the IDNO is allocated 10% of the HV network costs. Furthermore, EDF have allocated this 10% of HV network costs to IDNO HV tariffs where the end user is connected at LV.

EDF apply these tariffs on a portfolio basis so that they mimic the structure of EDF's all the way tariffs for;

- Domestic unrestricted IDNO end customers
- Domestic two rate IDNO end customers
- Non domestic unrestricted IDNO end customers
- Non domestic two rate IDNO end customers
- LV half hourly IDNO end customers

In order to achieve these tariffs, EDF will require IDNOs to supply aggregated data for each tariff based on their settlement data or estimates of this data. This data will allow EDF to allocate the boundary meter consumption to the appropriate all the way tariff. IDNOs will also need to provide data on the number of MPANs on each tariff and the split of consumption of customer type per time pattern regime alongside the aggregate capacity of any HH customers on their network. An example is provided in the modification report and is outlined again here for clarity.

LDNO A – Data for LV connected networks in DNO B area				
Consumption Month	dd/mm/yyy to dd/mm/yyyy		Settlement run	SF
Tariff	Time Period	No. MPANs	Chargeable Capacity (kVA)	Percentage Energy
Domestic Unrestricted	Standard	500		33%
Domestic Two Rate	Day	200		9%
Domestic Two Rate	Night			17%
Business Unrestricted	Standard	20		10%
Business Two Rate	Day	10		4%
Business Two Rate	Night			6%
Low Voltage Half Hourly	Fixed	2	350	
Low Voltage Half Hourly	Night			4%
Low Voltage Half Hourly	Winter Peak			1%
Low Voltage Half Hourly	Winter Shoulder			2%
Low Voltage Half Hourly	Summer Peak			2%
Low Voltage Half Hourly	Other			12%
Check Total				100%

EDF will continue to allow IDNOs to remain on their existing commercial tariffs if they so wish.