

## **EDF ENERGY NETWORKS**

#### Use of system charging methodology change proposal for interim IDNO charging.

- 1. 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 (IDNOs) connected to our distribution system.
- 2. These tariffs will mirror the tariffs applied to existing settlement metered customers. The tariffs for IDNOs will contain a price reduction which has been calculated to reflect the DNO's cost of providing services that will instead be provided by the IDNO. The price reduction will be calculated using data from the Regulatory Reporting Pack (RRP). 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.
- 3. EDF Energy Networks propose implementation from the first day of the month following a non-veto. We will seek agreement with IDNOs to implement the proposals from the original intended date of implementation, this being 1<sup>st</sup> April 2009. This paper provides for the formal modification submission.
- 4. This proposal covers high voltage (HV) and low voltage (LV) connected IDNO networks and for the avoidance of doubt this proposal would not exclude IDNOs applying to be charged on an appropriate existing tariff subject to the applicable settlement standard metering data being provided.

# Summary

- 5. This approach builds on the work that has been discussed at the Ofgem facilitated IDNO/DNO boundary charging workgroups and introduces an element of self billing. Our approach calculates a price reduction that reflects the services that would be provided by EDF Energy Networks, but which are now being provided by IDNO instead. We believe that this approach better meets the objectives than our current methodology.
- 6. In developing this proposal the application of the methodology has been split into three distinct areas:
  - (a) Cost allocation
  - (b) Boundary metering
  - (c) Allocation of charges to IDNO aggregated data

# Cost allocation

7. The cost allocation and reduction will be consistent with the need to promote competition. DNO cost data is primarily allocated into three cost categories (1, Operating



expenditure and faults, 2, Capital expenditure on asset replacement, 3, Capital expenditure on general reinforcement) and across network voltage levels based on the allocation of costs in the RRP which are directly allocated. This enables the costs incurred by the DNO at each voltage level, and the costs that would be incurred by an IDNO connecting at HV and LV, to be identified separately.

- 8. The proportion of overall costs represented by the costs attributable to the level at which the IDNO connects is used to calculate a percentage reduction that can be applied to existing DNO 'All The Way' (ATW<sup>1</sup>) tariffs to provide IDNO specific tariffs. The percentage reduction to be applied is calculated for both LV and HV points of connection and would then be applied to the appropriate published ATW tariff.
- 9. The percentage reduction when applied to the DNO's ATW tariff is used as a proxy for the costs that an equally efficient downstream provider of the services would face if they where to provide that part of the downstream service.

# Boundary metering data

10. Charges will be based on boundary metered consumption. Boundary metering data will need to be supplied in industry standard D0275 format as the basis of billing for units distributed to IDNOs. The data will be supplied by the IDNO on a per site basis.

# Allocation of charges on the basis of IDNO aggregated data

- 11. We propose to implement DNO to IDNO charges based on the application of a percentage reduction to the published DNO ATW charges using a 'portfolio' billing approach, i.e., combining the various tariffs applicable to the IDNO. In order to achieve this approach we will need the support of IDNOs to supply aggregated data based on their SVA data.
- 12. The aggregated SVA data will allow EDF Energy Networks to allocate the boundary metered consumption to the appropriate ATW tariff, which will then be reduced. The IDNO will take their NHH D0030 and HH D0275<sup>2</sup> data and provide 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 will also support this approach by providing the sum of the chargeable capacity for HH metered sites. IDNOs will need to provide the data separately by LV and HV connection voltage.
- 13. Charges will be based on:
  - (a) The applicable settlement registered end user tariff, (ATW tariff), less the IDNO Voltage of Connection Reduction.
  - (b) A capacity charge, where applicable, in the ATW tariff.

<sup>&</sup>lt;sup>1</sup> All the way tariffs are a generic term given to end user tariffs which have a settlement registered MPAN.

<sup>&</sup>lt;sup>2</sup> Some IDNOs may use D0036 data files in this context the two flows are interchangeable.



(c) A reactive charge, where applicable, in the ATW tariff.

# *Rationale for the use of boundary tariffs*

- 14. Our approach to applying charges is based on utilising boundary metering data and IDNO customer metering data to provide a partial 'self-billing' (see paragraph 67) approach to boundary tariffs.
- 15. We will calculate charges based on boundary metered data and the percentage unit split of the IDNOs customer metered consumption, based on D0030 and D0275 data flows. For each of their ATW tariffs, the IDNO will provide the number of MPANs served on the tariff and the percentage of total units delivered by the IDNO that are delivered on each tariffs time band. Where appropriate they will also provide the sum of the agreed capacity for HH metered sites connected to their network.
- 16. The main advantage of this 'portfolio' approach is that the amount of margin that embedded network operators can compete for would be clearly identifiable in respect of each putative end user. This reduces the risk that some new developments might have been unable to benefit from competition between potential network operators simply because of discrepancies in tariff structures between our standard ATW charges and the charges that we levy on embedded networks for use of our distribution system.
- 17. The portfolio approach places the onus on IDNOs to provide the data on their customers. We acknowledge that IDNOs will need to support this approach by providing data and there is no standard requirement for them to do so.
- 18. The DNOs' joint work on an enduring method for setting embedded network charges (as part of the Common Distribution Charging Methodology project) is focused on calculating embedded network charges that would be applied on a portfolio basis.

# *Cost Allocation – LV connections*

19. This section describes the method that we have used to allocate our LV costs to network level.

#### Data sources

- 20. In order to allocate our LV costs to network levels, we have collected the following data from the most recent RRP submission (for the year 2007/2008):
  - (a) Total distribution operating expenditure and faults excluding network rates and transmission exit charges.
  - (b) Operating expenditure and faults, coded by network level
  - (c) Capital expenditure on asset replacement, coded by network level.



- (d) Capital expenditure on general reinforcement, coded by network level
- (e) Units distributed at each voltage level and total distribution losses.
- (f) Transmission exit charges, Pension deficit payments.
- 21. Additional data collected includes network efficiency incentive and innovation funding incentive.
- 22. We have also calculated our average income per unit distributed (p/kWh) from users supplied at LV. This is used as a proxy for total cost of providing a total distribution network.

#### Allocation of source data to an expenditure matrix

- 23. We have allocated (a) to network levels in the same proportions as (b).
- 24. For (d) and some items of (c) RRP data does not distinguish between substation and network levels. In these cases, we have allocated expenditure between these levels in the same proportion as the (c) for which disaggregated data are available.
- 25. We have estimated the number of units flowing through each level of our network, using the data (e).
- 26. We have allocated Pension deficit, network efficiency incentive and innovation funding incentive values to GSP in order for these costs to remain effectively un-allocated to network levels.
- 27. The pension deficit and incentive income is taken from the RRP and regulatory returns for the year 2007/2008. Placing these costs at GSP has the effect of allocating these costs equally to all users who use the GSP, therefore spread across all users. In a similar way costs wholly allocated to LV are only spread to LV users and not for example allocated to HV users.
- 28. We have converted the expenditure coded or allocated to network levels from £ million to p/kWh, using the estimated number of units flowing through each level of our network. This gives us a matrix of p/kWh figures by network level and by expenditure category.
- 29. The network levels in the expenditure matrix are:
  - (a) LV service cables
  - (b) LV network
  - (c) HV/LV substations
  - (d) HV network



- (e) EHV/HV substations (excluding 132kV assets)
- (f) EHV network (excluding 132kV assets)
- (g) 132kV/EHV substations
- (h) 132kV network
- (i) GSP (transmission exit charges and other non-allocated costs)
- 30. The cost we use are then allocated into three expenditure categories in the expenditure matrix these are:
  - (a) Operating Expenditure and Faults (OpEx),
  - (b) Capital Expenditure on Asset Replacement (CapEx AR)
  - (c) Unallocated cost / RAV related income (including Capital Expenditure on General Reinforcement).
- 31. We use this information to establish the cost of the services that would be provided by EDF Energy Networks but which are now being provided by an IDNO instead. The business an IDNO is providing is the operation and maintenance, and future replacement of network assets following their adoption of those assets. For the purpose of this methodology it has been noted that these adopted assets are new and will not require replacement for a period of circa 40 years. Additionally, it is unlikely that there will be any reinforcement driven by organic growth and only customer driven and funded reinforcement will be made to these assets during the period of this methodology.

#### Operating Expenditure and Faults

- 32. Total OpEx costs are indentified from the RRP. These are allocated to network level at the same proportions as the subset of OpEx which are coded to network level. The resultant data provides the total OpEx costs allocated to network levels. We believe that it is appropriate to use the coded OpEx costs as the driver to allocate the remaining non-coded OpEx cost. The main business activity that we are allocating costs that an IDNO is providing is the provision of operation and maintenance it is therefore this activity that should be used as the driver so that the cost allocation is not distorted by drivers of cost that an IDNO is not performing.
- 33. Some additional coded costs are allocated to the GSP level of the cost matrix. These costs include; exit charges, network efficiency incentives and innovation funding incentives. These are included at GSP level so that they are allocated to all users. We believe these costs should form part of the cost of the core business. If these costs were to be allocated to the lower voltage levels they would have the effect of allowing a less efficient network operator to provide the network services and this would have a detrimental effect on end users. This method would also provide for the DNO to recover



these costs only from DNO end users and this would have the effect of increasing the ATW charges to all users.

- 34. We then convert the OpEx cost matrix from £M to p/kWh by dividing the £M by the flow of units at each network level. We also calculate the percentage split by network level by dividing the p/kWh at each network level by the total OpEx p/kWh.
- 35. This then provides for three items of OpEx information: percentage split by network level, p/kWh split by network level and p/kWh total.

# Capital Expenditure on Asset Replacement

- 36. Total CapEx AR is indentified from the RRP. These are allocated to network level at the same proportions as the subset of CapEx AR which is coded to network level. Fully Coded CapEx AR is use to drive the allocation of partly coded CapEx AR. We believe that using the coded CapEx AR is an appropriate proxy for allocating the non-coded CapEx AR as the non-coded CapEx AR is less than 20% of the total allocation.
- 37. We then convert the CapEx AR cost matrix from £M to p/kWh by dividing the £M by the flow of units at each network level. We also calculate the percentage split by network level by dividing the p/kWh at each network level by the total CapEx AR p/kWh.
- 38. We then multiply the cost matrix by 20.56%. This factor comes from the following calculation, which assumes that £100 of observed CapEx AR is a proxy for steady state depreciation of the network required to serve LV customers. Each £100 of depreciation implies a capital expenditure of £4,000 to maintain the LV network, assuming a 40 year life). In the case of an adopted asset (such as a greenfield site taken over by an IDNO), this capital expenditure takes place in 40 years' time. The levelised (annualised) cost of £20.56 per annum has the same discounted present value as this capital expenditure. It includes an allowance for both the cost of depreciation and the cost of capital (i.e. any required rate of return).

Item	Row	LV Costs £ of observed CapEx AR
Annual CapEx on Asset		
Replacement	(1)	£100.00
Annual Depreciation @ a rate of:	(2)	2.50%
Implied Capital Expenditure	(3)=(1)/(2)	£4,000.00
Discount Rate	(4)	6.90%
Discount period	(5)	40
Levelised costs	(6)=pmt((4),(5),0,(3))	£20.56
Ratio of levelised costs to annual capex	7)=(6)/(1) in %	20.56%



- 39. We would not expect a 'like for like' business that is adopting new assets to have a need to replace those assets in within the timeframe of this methodology. Therefore only provision for future replacement has been made.
- 40. This then provides for three items of CapEx AR information: percentage split by network level, p/kWh split by network level and p/kWh total.

# Unallocated cost / RAV related income

- 41. An 'average revenue per LV unit supplied' is calculated. This is calculated by dividing the total LV revenue by the total LV units. This value acts as a proxy for the allowed revenue collected from LV customers. We believe that it is appropriate to use LV revenue in the calculation of the network level price reduction. The price reduction is used against IDNO ATW tariffs where the vast majority (>98% est.) of these tariffs are for LV connections.
- 42. The unallocated cost / RAV related income (p/kWh) is calculated by taking the average revenue per LV unit supplied and subtracting the OpEx p/kWh and the CapEx p/kWh. This unallocated cost / RAV related income is then allocated to the overall cost matrix at GSP so that the cost is faced by all users. In this context, the unallocated costs (p/kWh) represent the total difference between the ATW LV tariff (in p/kWh) and the costs (in p/kWh) allocated directly to each voltage level. This method is consistent with the requirements of efficiency and competition policy.

# Reduction percentage allocated to network level

43. The final step is to summate the costs from the three categories to provide an overall reduction percentage at each voltage level. How this is allocated to provide an IDNO tariff is described in the proposal.

# Conclusion - Cost Allocation

- 44. We believe that in creating the expenditure matrix we are appropriately allocating all the costs necessary to provide services at the various voltage levels and that this would enable the operation of an equivalent downstream business providing the services for that particular section of the network. Effectively these allocated costs are the costs that we are avoiding through an alternative business providing these services.
- 45. We further believe that it would be inappropriate to allocate some costs to specific network levels. We have therefore allocated these costs (Pension deficit, network efficiency incentives and innovation funding incentive) to GSP so that they are not included as cost of providing a downstream business. Incorporating these costs at a downstream level would put the costs at that level above what is required of an efficient provider and have the effect of raising charges to all users. This treatment also ensures that the difference between the boundary charge and the ATW charge should not be influenced by the success or otherwise of incentive schemes.



- 46. We are aware of the Gas and Electricity Markets Authority's decision on WPD's proposal regarding pension deficit<sup>3</sup>. We follow WPD's consideration of these costs and their justification for not allocating them into the lower voltage levels. As WPD mention, these are costs that are protected by statute, and therefore they should form part of the cost of the core business. If these costs were to be allocated to the lower voltage levels this would have the effect of allowing a less efficient network operator to provide the network services and this would have a detrimental effect on end users. It would also mean that the DNO would have to recover these costs only from DNO end users by raising charges and this would have the effect of increasing the all the way charges to all users.
- 47. The following diagram highlights the allocation of costs for an LV connected IDNO.



# Cost Allocation – HV connections

- 48. In the case of IDNOs connected to our HV network, we have set tariffs by reference to LV tariffs, and calculated the reduction percentage on the following basis:
  - (a) IDNOs pay for costs allocated to the GSP, 132kV, EHV, EHV/HV and HV levels.
  - (b) IDNOs do not pay for any costs allocated to the HV/LV, LV or LV service cable network levels.
- 49. The rationale for this allocation is that, although IDNOs connected at HV will generally use the HV network to a similar extent as an average non-IDNO user, it is assumed that the IDNO will have made a full contribution through connection charges towards any extension to the HV network.

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http://www.ofgem.gov.uk/networks/elecdist/policy/distchrgmods/documents1/decision%20letter%20wpd%20wa les%20issued%20050609.pdf



# Proposed allocation of costs to network levels

50. We propose to use the following figures to define the cost allocation between voltage levels:

Table 1 - Propose	d percentage	allocation
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	EPN	LPN	SPN
LV service cable percentage of LV cost (A)	11.1	7.8	7.7
LV network percentage of LV cost (B)	15.0	13.2	12.2
HV/LV transformation percentage of LV cost (C)	4.3	5.8	6.5
HV network percentage of LV cost (D)	10.3	4.3	17.3

- 51. The spreadsheets used for calculating these values contain business sensitive data. These sheets are provided to Ofgem for this proposal but are to be kept confidential to Ofgem and EDF Energy Networks. The spreadsheets are "RRP EDF EPN – IDNO interim methodology.XLS", "RRP EDF LPN – IDNO interim methodology.XLS" and "RRP EDF SPN – IDNO interim methodology.XLS"
- 52. The respective values can be found in sheet "Drivers and Summary" Row 52.

# Allocation of LV and HV network cost reduction

53. The LV and HV network cost reduction for an IDNO connecting to the network is reduced to take into consideration the use of the DNOs network at the connection voltage. This is to allow for the proportion of the connection voltage assets that are provided by the DNO. If an IDNO connects at a substation then the IDNO will not use the network and would benefit by receiving all the network reduction.

# Allocation of LV network cost reduction

- 54. The approach used for calculating the LV network cost reduction adjuster is based on the use of average network lengths per connected customer. It assumes that LV networks are wholly radial in design and therefore currently does not consider situations where LV networks are interlinked.
- 55. The distance between the HV/LV substation and the connection boundary for a sample of IDNO LV connected sites is collected along with an estimate of the number of IDNO MPANs. These values are then averaged to provide an average DNO to IDNO LV main per end IDNO user.



- 56. The average distance for the DNO LV main per DNO MPAN is calculated from DNO network data.
- 57. The LV network cost reduction adjuster is calculated by Average DNO to IDNO main per IDNO MPAN / Average DNO main per DNO MPAN.
- 58. We do not include IDNOs who are connected directly to a substation in the calculation of the average length of LV main per IDNO end user in our regions. IDNOs who are connected directly to a substation do not use the LV main. These substation connections will receive the full LV main reduction, so should not be included in the calculation to determine the proportion of the DNO network used.

#### Table 2 – Allocation of LV network cost adjuster

	EPN	LPN	SPN
Average DNO to IDNO main/IDNO MPAN (metres)	2.55	3.17	2.54
Average DNO main/DNO MPAN (metres)	13.71	10.14	13.82
LV Network cost reduction adjuster (%) (E)	18.6%	31.3%	18.4%

Note: These values may change as additional data becomes available.

# Allocation of HV network cost reduction

- 59. The design of HV networks is inherently different to LV. The HV network is designed as an interlinked ring main and therefore a connection to the HV main will utilise the entire HV main, either in one direction under normal running conditions or in the other under N-1 conditions, from the nearest ring main unit.
- 60. Therefore, for the purpose of an interim methodology we propose to offer no reduction to costs of the HV network other than that which has been allowed in the cost allocation.

# *Proposed allocation of cost reduction to network levels less connection voltage cost adjuster*

61. The network cost adjuster percentages are then reduced to take into consideration the network provided by the DNO.

# Table 3 - Proposed reduction percentage less cost adjuster

	EPN	LPN	SPN
LV network percentage of LV cost less network cost adjuster (F) = $(1-E) * B$	12.2	9.1	10.0



# Proposed allocation of reductions to all the way charges

62. The allocation of the reductions to the all the way charges will be as detailed in the following table. This table provides the level of discount for each connection point based on the IDNO connection point.

	EPN			LPN			SPN	SPN		
Boundary connection voltage >	LV	LV Sub	HV	LV	LV Sub	HV	LV	LV Sub	ΗV	
Formulae										
LV ATW connection	A+F	A+B	A+B +C							
LV Sub ATW connection (Only EPN)		A	A+C							
HV ATW connection			А							
Values										
LV ATW connection	23.3	26.1	30.4	16.9	21	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	

- 63. The LV sub ATW tariff is currently only available as an all the way tariff in the EPN area. Therefore we do not have any LV sub ATW tariffs in the LPN or SPN area to offer a price reduction on. The Common Distribution Charging Methodology will deliver substation tariffs for all our regions.
- 64. The reduction applied to ATW charges where an IDNO is connected at HV depends on the connection voltage of the ATW tariff. ATW tariffs for LV connected end users within an IDNO HV connected network will get a 30.4%, 26.8% and 26.4% reduction in the EPN, LPN and SPN areas respectively. ATW tariffs for LV substation connected end users within an IDNO HV connected network will get a 15.4% reduction in the EPN area, (no equivalent all the way tariff in LPN or SPN). ATW tariffs for HV connected end users within an IDNO HV connected network will get an 11.1%, 7.8% and 7.7% reduction in the EPN, LPN and SPN areas respectively. These lower values at the HV and LV substation all the way



connection voltages reflect that there are less costs in the ATW tariff and that the IDNO is not providing the HV/LV substation and LV network provision to these end users.

# Allocation of charges to IDNO aggregated data

- 65. The principles outlined above, building upon the output of the DNO/IDNO Working Group, are used to establish a DNO to IDNO tariff based upon a reduction to the ATW tariff. There remains, however, the need to develop and implement a viable billing solution for this approach.
- 66. As this is intended to be an interim approach it is sensible to consider an appropriate implementation solution that does not have excessive implementation costs. We consider than an appropriate solution that utilises the existing available data infrastructure that could be implemented at relatively low start up cost is appropriate and would be based upon:
  - (a) The existing boundary metering that has been installed on the DNO-IDNO boundary.
  - (b) The access to settlement data, particularly D0030 and D0275 flows that go directly to IDNOs coupled with IDNOs' knowledge of their own customers.
  - (c) The proposition by IDNOs to perform self billing by analysing this settlement data.
- 67. We describe this solution as partial self billing and its operation is described below.
- 68. From each months settlement final (SF) data the IDNO would prepare an analysis of their settlement data received through D0030 and D0275 data flows, supplemented with appropriate additional information required from the IDNOs' own billing systems. This 'consumption month' data would be provided by DNO to IDNO connection voltage (i.e. HV or LV) and contain the following information:
  - (a) The number of Energised Traded MPANs on each tariff offered by the IDNO.
  - (b) The percentage of the total amount of energy attributable to each unit rate on each tariff offered by the IDNO.
  - (c) The total chargeable capacity of the IDNOs' customers.
  - (d) The total chargeable kVArh of the IDNOs' customers.

This data will be supplied to EDF Energy Networks within 45 days from the end of the consumption month. EDF Energy Networks will estimate missing data in the absence of IDNO provided data, in this event we intend to utilise the remedies provided for under section 21.2 in DCUSA.



69. The consumption month data will be sent to EDF Energy Networks as a simple spreadsheet. An example of what this might look like is provided in Table 5:

#### Table 5

IDNO A – Data for LV connected networks in DNO B area							
Consumption Month	ddmmyyy to ddmr	nyyyy	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%		

- 70. This analysis can be produced by the IDNO relatively simply from settlements data and is much simpler and less costly than, for example, re-processing the D0030 file and sending it to the DNOs.
- 71. The use of percentage energy in place of actual consumption data means that it would not be necessary for the IDNO to generate billing for each reconciliation run if the movement across the tariffs is not significant. This is similar to the work that the IDNO would have to undertake for a self billing proposal and is probably simpler.



- 72. EDF Energy Networks would then combine this self billing data from the IDNO with the metering data obtained from the boundary metering points. This would allow the calculation of the actual DNO/IDNO DUOS bill by taking the actual meter reading of the units distributed by the DNO to the IDNO, splitting it by the percentage allocation and then applying the IDNO tariff. This will ensure that the units charged for by the DNO to the IDNO fall into the same proportions as the units billed by the IDNO to suppliers and that fixed and capacity charges are based upon the quantities billed by the IDNO.
- 73. An example of the boundary metering values that will be summated from the D0275 data is provided in Table 6.

IDNO A – Boundary metered data for LV connected networks in DNO B area				
Inset Network ID	Consumption (kWh)			
Network M	30,000			
Network N	60,000			
Network O	10,000			
Network P	40,000			
Total	140,000			

#### Table 6

74. The IDNO data in Table 5 is then combined with the boundary metered data in Table 6 to provide a DNO/IDNO boundary charge bill. An example of this for LV connected IDNO networks is provided in Table 7.

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## Table 7

# IDNO A – Bill summary for LV connected networks in DNO B area

# Billing period: 1<sup>st</sup> October 2009 – 31<sup>st</sup> October 2009

### Total boundary consumption: 140,000 kWhs

				Charges reduction	Charged value (£)		
Tariff	Time Period	No. MPANs	Chargeable Capacity (kVA)	Percentage Energy	Fixed charge (p/day)	Unit/ Capacity Charge (p/kWh or p/kVA)	
Domestic Unrestricted	Standard	500		33%	4.00	0.600	897.2
Domestic Two Rate	Day	200		9%	4.00	0.850	355.10
Domestic Two Rate	Night			17%		0.300	71.40
Business Unrestricted	Standard	20		10%	6.00	0.600	121.20
Business Two Rate	Day	10		4%	6.00	0.500	46.60
Business Two Rate	Night			6%		0.200	16.80
Low Voltage Half Hourly	Fixed	2	350		45.00	150.000	552.90
Low Voltage Half Hourly	Night			4%		0.020	1.12
Low Voltage Half Hourly	Winter Peak			1%		1.000	14.00
Low Voltage Half Hourly	Winter Shoulder			2%		0.200	5.60
Low Voltage Half Hourly	Summer Peak			2%		0.060	1.68
Low Voltage Half Hourly	Other			12%		0.040	6.72
Total				100%			2,090.32

75. The data provided by IDNO A in this LV example would be repeated for their HV connected networks and the charges for the HV connected networks would have the HV reduction applied.

<sup>&</sup>lt;sup>4</sup> Example data



- 76. The advantages of such an approach include:
  - (a) Cost allocation based on IDNO/DNO working group charging methodology discussions.
  - (b) Speedy implementation with low set up costs.
  - (c) Division of the work between DNOs and IDNO utilising part of the IDNOs self billing proposal.
  - (d) Simple migration onto the long term boundary data and charging structures.
  - (e) Flexibility of implementation by IDNO based on their own IT infrastructure.
  - (f) Retention of boundary metering data as the definitive measure of Units Distributed.
- 77. This proposal is without prejudice to the Common Distribution Charging Methodology that is being developed collaboratively by the DNOs in consultation with other stakeholders (see http://2009.energynetworks.org/structure-of-charges/ for information or to find out how to join the working groups).

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