W&Co 19 April 2012

DCP088 – Legal Drafting

NOTE – Change Proposal 88 comprises only the changes marked in redline and strikeout. Any text that is not marked in redline and strikeout that conflicts with changes that are the subject of other Change Proposals is subject to change in accordance with those Change Proposals.

SCHEDULE 16 – COMMON DISTRIBUTION CHARGING METHODOLOGY

Introduction

1. This Schedule 16 sets out the Common Distribution Charging Methodology (CDCM), which gives the methods, principles, and assumptions underpinning the calculation of Use of System Charges by each DNO Party (except where the DNO Party is acting as an LDNO).

2. The Schedule 16 comprises two main parts. Part 1 describes the cost allocation rules. Part 2 describes the tariff structures and their application.

3. In order to comply with this methodology statement when setting distribution Use of System Charges the DNO Party will populate and publish the CDCM model version '1010' as issued by the Panel on ~~01~~ xx ~~April~~ xxxxx 2011~~0~~.

4. The glossary at the end of this Schedule 16 contains definitions of terms and acronyms used in this Schedule 16. In the case of any conflict between the defined terms and acronyms set out in this Schedule 16 (on the one hand) and the definitions and rules of interpretation set out in Clause 1 of this Agreement (on the other), the defined terms and acronyms set out in this Schedule 16 shall prevail.

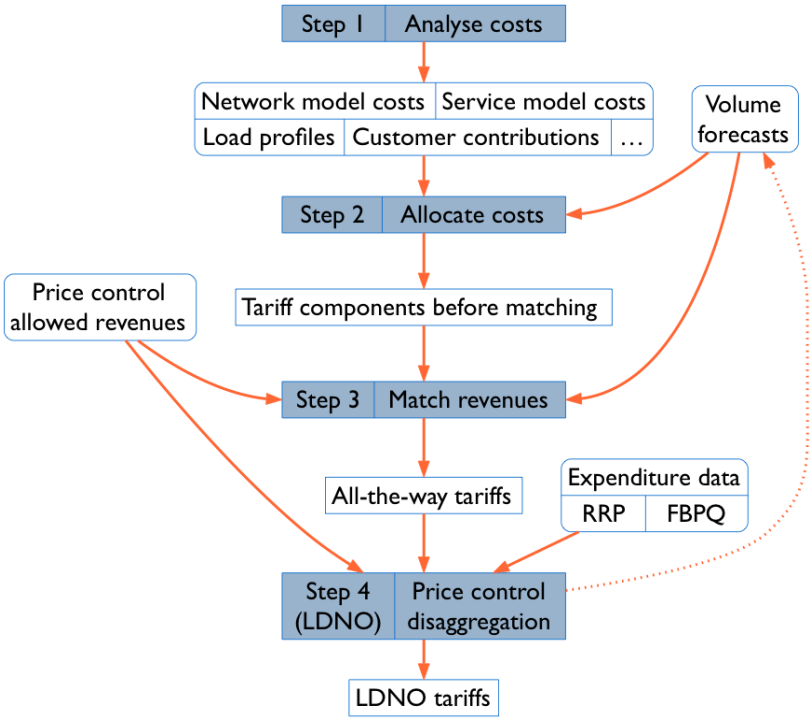
5. Algebraic formulae in this Schedule 16 use square brackets to clarify the calculations. For the avoidance of doubt, these square bracketed terms form an effective part of this Schedule 16.

Part 1 — Cost allocation

Main steps in the allocation

6. Figure 1 gives a general overview of how the four main steps in the methodology relate to each other.

Figure 1 Overview of the main steps in the methodology



7. Step 1 involves the gathering of information about the network, the costs of assets and operations, the users of the network, and the forecast level of use and level of allowed revenue in the ~~charging year~~tariff applicability period.

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8. Step 2 is the application of the cost allocation rules set out below. These rules are only for all-the-way tariffs and do not apply to LDNO tariffs.

9. Step 3 involves adjustments to the tariff components calculated in step 2 in order to match revenue recovered from the CDCM across the tariff applicability period to the amount of revenue allowed under the price control conditions.

10. Step 4 uses price control condition calculations, actual expenditure data and forecast expenditure data in order to determine discount percentages, which are then applied to all-the-way tariffs in order to produce LDNO tariffs.

11. Step 4 is independent from Steps 1 to 3. In practical terms, Step 4 must be performed first, as the discount percentages are used within Step 1 to combine volume forecasts for all-the-way and portfolio tariffs into a single composite dataset for each type of end user.

Overview of the tariff components

12. Each tariff comprises the tariff components listed in table 1.

Table 1 List of tariff components and restrictions on their application

Tariff component	*Unit*	*Restrictions*
One, two or three unit rates	p/kWh	No more than two unit rates for non half hourly settled demand.
Fixed charge	p/day	Not for unmetered supplies.
Capacity charge	p/kVA/day	Half hourly settled demand tariffs only.
Reactive power charge	p/kVArh	Half hourly settled tariffs only.

13. For users that are acting as LDNOs, tariffs are portfolio tariffs with the same tariff components as the corresponding all-the-way end user tariff, excluding reactive power charges (but prices for some tariff components may be calculated as zero).

14. Each component of each tariff is rounded to the nearest value with no more than three decimal places in the case of unit rates expressed in p/kWh and reactive power unit charges expressed in p/kVArh, and with no more than two decimal places in the case of fixed and capacity charges expressed in p/MPAN/day and p/kVA/day respectively.

Step 1: Analyse costs

15. The first step of the methodology involves the determination of costs or revenue allowances for various parts of the network, and the collection of information about the relevant characteristics of network users.

Network model asset values

16. The DNO Party specifies a network model, also known as a distribution reinforcement model (DRM) or a 500 MW model, in line with the requirements of this section.

17. In all cases, the network model determines the £/kW/year figure (based on simultaneous maximum load at each network level) corresponding to amortisation and return on capital for assets at the LV circuits, HV/LV and HV network levels.

18. For DNO Parties that do not rely on a separate EHV charging methodology, the network model also determines these costs at the EHV/HV and EHV network levels, and, in England and Wales, at the 132kV/EHV and 132kV network levels.

19. The network model consists of a costed design for an increment to the DNO Party's network.

20. At each network level, the model is sized to provide secure capacity to meet demand that, aggregated up to individual grid supply point (GSP) level, amounts to 500 MW of simultaneous maximum demand.

21. The model's design assumes a power factor of 0.95 and no embedded generation.

22. The assets included in the network model are modern equivalent assets of the kind that the DNO Party would normally install on new networks.

23. The nature, quantity and size of assets in the model is such as to meet demand and security to the DNO Party's design and planning standards, allowing for the use of standard size equipment and typical utilisation factors.

24. The proportion of assets of different types at each network level, e.g. overhead and underground circuits, reflects the mix of users and the topography in the DNO Party's Distribution Services Area.

25. The cost assumed for each asset type reflect total purchase and installation cost in the ~~charging~~ tariff applicability period~~year~~, using the DNO Party's normal procurement methods.

Diversity allowances

26. For each of the 132kV (except in Scotland), EHV and HV voltage levels, the DNO Party determines a diversity allowance between the transformation level above circuits at that voltage and the transformation level below circuits at that voltage.

27. Each diversity allowance represents the extent, expressed as a percentage, to which the sum of the maximum load across all substations below would exceed the corresponding sum for substations above.

28. The DNO Party also determines a diversity allowance between the GSP Group as a whole and the individual grid supply points.

Customer contributions under current connection charging policy

29. The DNO Party estimates the extent to which the assets at each network level used by each category of users would have been expected to be covered by customer contributions if they had been constructed under the ~~charging~~ tariff applicability period's ~~year's~~ connection charging policy.

30. The DNO Party groups users into categories, by network level of supply, for the purpose of making these estimates.

31. In the case of generators, the proportions relate to the notional assets whose construction or expansion might be avoided due to the generator's offsetting of demand on the network, and takes the same values as for a demand user at the same network level of supply.

Service model asset values

32. The DNO Party specifies a set of service models covering the range of typical dedicated assets operated for the benefit of individual HV and LV users of the network.

33. For each service model, the DNO Party estimates the number and types of connections that the model covers, and a total construction cost for the assets in the model.

34. For each tariff, the DNO Party identifies the extent to which each of the service models represents the relevant assets for an average user in that tariff.

35. A weighted average of service models is used if several service models apply to the same tariff.

36. In the case of unmetered supplies, service model assets are modelled on the basis of units delivered.

37. In the case of generation service models, the service models should reflect the additional costs of protection equipment for a typical generator in each category, for example the difference in cost between a fuse and a circuit breaker, or the cost of additional telecommunications equipment used for control purposes.

Transmission exit expenditure

38. The DNO Party prepares a forecast of expenditure on transmission exit charges in the ~~charging~~ tariff applicability period~~year~~.

Other expenditure

39. The DNO Party prepares a forecast of other expenditure for the ~~charging~~ tariff applicability period~~year~~, where other expenditure is defined as the sum of:

    a) 100 per cent of direct operating costs.

    b) 60 per cent of indirect costs (as defined in RRP guidance).

    c) 100 per cent of network rates.

Distribution time bands

40. The DNO Party determines three distribution time bands, labelled red, amber and green.

41. Distribution time bands are defined separately for Monday-Friday and for Saturday/Sunday. In each case, time bands are defined by reference to UK clock time only, and always begin and end on the hour or half hour. Each time band may be divided into any number of sections.

Load characteristics

42. The DNO Party estimates the following load characteristics for each category of demand users:

    a) A load factor, defined as the average load of a user group over the charging year, relative to the maximum load level of that user group. Load factors are numbers between 0 and 1.

    b) A coincidence factor, defined as the expectation value of the load of a user group at the time of system simultaneous maximum load, relative to the maximum load level of that user group. Coincidence factors are numbers between 0 and 1.

    c) In the case of multi-rate tariffs that are applied to non-half-hourly meter data or to fixed time bands that differ from the distribution time bands (if any), the estimated proportion of units recorded in each relevant time pattern regime that fall within each distribution time band.

43. In determining the load characteristics of each category of demand user the DNO Party will use reasonable endeavours to analyse meter and profiling data received for the most recent 3 year period for which data are available in time for use in the calculation of charges. The three elements of load characteristics – Load Factors, Coincidence Factors, and the estimated proportion of units recorded in each relevant time pattern regime that fall within each distribution time band – will be calculated individually for each of the 3 years and a simple arithmetic average will be calculated to be used in tariff setting.

44. For load factors and coincidence factors in the case of non half hourly settled customer classes, data adjusted for GSP Group correction factor are used.

45. For the estimated proportion of units recorded in each relevant time pattern regime that fall within each distribution time band, data are not adjusted for GSP Group correction factors.

46. Settlement data for non half hourly unmetered supplies are not used to determine load characteristics. Instead, the load factor and coincidence factor for this user class are set equal to the figures for pseudo half hourly LV unmetered supplies, if any. If no data are available for pseudo half hourly LV unmetered supplies in the relevant area, data for pseudo half hourly LV unmetered supplies from another area are used as a proxy.

Loss adjustment factors to transmission

47. For each network level, the DNO Party determines a single loss adjustment factor to transmission relating to Exit Points from its network at that level. These loss adjustment factors should be representative of average losses at the time of system simultaneous maximum load.

Peaking probabilities

48. The DNO Party determines a peaking probability in respect of each network level and each of the distribution time bands.

49. The peaking probability represents the probability that an asset at that network level would experience maximum load during that distribution time band. In deriving peaking probabilities the DNO Party will use reasonable endeavours to use the most recent 3 year period for which information is available in time for use in the calculation of charges. Peaking probabilities will be derived individually for each of the 3 years and a simple arithmetic average will be calculated to be used in tariff setting.

Power factor data

50. The DNO Party determines or estimates, for each network level, the average of the ratio of reactive power flows (kVAr) to network capacity (kVA), weighted by reactive power flow.

51. If data are not available for any network level, the DNO Party uses data for the nearest network level at which they are available.

Volume forecasts

52. The DNO Party forecasts the volumes chargeable to each tariff component under each tariff for the ~~charging~~ tariff applicability period ~~year~~ and for each previous tariff applicability period in the regulatory year.

53. The volume forecasts for portfolio tariffs are multiplied by the LDNO discount percentages determined in Step 4, and combined with the all-the-way volume forecasts for each end user type. These combined volume forecasts are used throughout Steps 2 and 3 of the methodology.

Forecast of price control allowed revenues

54. The DNO Party prepares a forecast of allowed revenue for the ~~charging~~ tariff applicability period ~~year~~in accordance with the requirements of the price control conditions and in a manner which is consistent with its volume forecasts.

Step 2: Allocate costs

Categories of costs

55. The cost and revenue allocation is driven by a representation of the different voltage and transformation levels in the network and by a distinction between the elements of cost related to assets and those related to operations.

56. Table 2 shows the network levels and categories of costs used in the model. In this Schedule 16, the acronym EHV refers to voltages of 22 kV and above, up to and excluding 132 kV. In the case of the Scottish Distribution Services Areas, the entries for the 132kV and 132kV/EHV network levels are zero as these voltages are part of the

transmission network. LV refers to voltages below 1 kV, and HV refers to voltages of at least 1kV and less than 22kV.

Table 2 Categories of unit costs in the model

Category	*Description*	*Unit*	*Levels*
Network assets	Amortisation and return on capital for networks or substations at each level, excluding assets that are deemed to be covered by customer contributions. This is expressed per kW of system simultaneous maximum load.	£/kW/year	132kV 132kV/EHV EHV EHV/HV 132kV/HV HV HV/LV LV circuits
Transmission exit	Expressed per kW of system simultaneous maximum load	£/kW/year	Transmission exit
Other expenditure	Other expenditure is attributed to levels and assets in the network following the rules set out below. The part allocated to network levels is expressed per kW of system simultaneous maximum load.	£/kW/year	132kV 132kV/EHV EHV EHV/HV 132kV/HV HV HV/LV LV circuits
	The part of other expenditure allocated to assets dedicated to one customer is expressed per user for each user type.	£/year	For each type of user

Annuitisation of network model asset values

57. Capital costs that are not covered by customer contributions are converted to annual costs using a level annuity with the annuity period and rate of return set out in table 3.

Table 3 Annuity rate of return and annuity period

Parameter	*Value*

Table 3 Annuity rate of return and annuity period

Parameter	*Value*
Annuity period	40
Annuity rate of return	6.9% until the 31 March 2011, and thereafter the "allowed pre- tax weighted average cost of capital" set by the Authority as part of the then most recent review of the charge restriction conditions applying under the DNO Party's Distribution Licence.

Determination of unit costs from network model

58. For each network level, the DNO Party determines the flow at time of system simultaneous maximum load, measured at Exit Points from the network level, that could be accommodated by the network model on the basis of a normal mix and diversity of loads for its network.

59. The asset value and unit cost for that network level are obtained by dividing the annuitised cost of purchasing and installing the assets in the network model by this exit flow at time of system simultaneous maximum load.

[network level assets £/kW] = [assets £]/[modelled exit flow at time of system simultaneous maximum load kW]

[network level £/kW/year] = [network level assets £/kW]*[annuity factor]

60. The modelled exit flow at peak time is obtained by combining the 500 MW at GSP sizing assumption, the diversity allowance between GSP and GSP Group, and the loss adjustment factor for the relevant network level.

Allocation of other expenditure

61. Estimated load at each network level is calculated from:

a) volume forecasts for each tariff;

b) the loss adjustment factors representative of the time of system simultaneous maximum load;

c) the load characteristics for users on each tariff, used to estimate the contribution of each user category to load at the time of system simultaneous maximum load.

62. For the purposes of this calculation, a generation user is taken to make a zero contribution to load at the network level corresponding to circuits at its Entry Point, and a full negative contribution to load at all network levels above its Entry Point. For demand users, account is taken of differences between the diversity allowance in the network model and the diversity of each customer group in order to ensure that the estimated load matches the volumes subject to charges in respect of each network level.

63. For each network level covered by the network model, a notional asset value is calculated by multiplying the unit asset cost by the estimated load:

[notional asset value £] = [network level assets £/kW]*[estimated load kW]

64. For each service model, a notional asset value is calculated by multiplying the unit asset value of that service model by the extent to which each user requires that model.

65. Other expenditure (excluding transmission exit charges) is allocated between network levels in the proportion given by these notional assets.

66. The result is combined with forecast transmission exit charges to give an annual expenditure figure for each network level and for each service model. These figures are converted into unit cost using the same rules as for costs and revenues from network assets and customer assets.

Allocation of costs on the basis of contribution to system simultaneous maximum load

67. All £/kW/year unit costs and revenue are used in the calculation of yardstick charges for each tariff.

68. For demand tariffs and portfolio tariffs related to demand users with a single unit rate, the contributions of each network level to the unit rate are calculated as follows:

[p/kWh from network model assets] = 100*[network level £/kW/year]*[user loss factor]/[network level loss factor]*[coincidence factor]/[load factor]*(1 – [contribution proportion])/[days in ~~charging~~ tariff applicability period~~year~~]/24

[p/kWh from operations] = 100*[transmission exit or other expenditure £/kW/year]*[user loss factor]/[network level loss factor]*[coincidence factor]/[load factor]/[days in ~~charging~~ tariff applicability period~~year~~]/24

69. These calculations are repeated for each network level.

70. In this equation, the user loss factor is the loss adjustment factor to transmission for the network level at which the user is supplied, and the network level loss factor is the loss adjustment factor to transmission for the network level for which costs are being attributed.

71. For generation users and portfolio tariffs for generation users, no contribution to the unit rate is calculated in respect of the network level corresponding to circuits at the Entry Point, and a negative contribution to the unit rate (i.e. a credit) comes from each network level above the Entry Point. That contribution is calculated as follows:

[p/kWh from network model assets] = –100*[network level £/kW/year]*[user loss factor]/[network level loss factor]*(1 – [contribution proportion])/[days in year]/24

[p/kWh from operations] = –100*[transmission exit or other expenditure £/kW/year]*[user loss factor]/[network level loss factor]/[days in tariff applicability period~~year~~]/24

72. For tariffs with several unit rates, the same principle is used but the ratio of the coincidence factor to the load factor is replaced with a coefficient calculated by the following procedure:

a) Calculate the ratio of coincidence factor to load factor that would apply if units were uniformly spread within each time band, based on the estimated proportion of units recorded in each relevant time pattern regime that fall within each distribution time band and the assumption that the time of system simultaneous maximum load is certain to be in the red distribution time band.

b) Calculate a correction factor for each user type as the ratio of the coincidence factor to load factor, divided by the result of the calculation above.

c) For each network level and each unit rate, replace the ratio of the coincidence factor to the load factor in the above formula with the ratio of coincidence factor (to network level asset peak) to load factor that would be apply given peaking probabilities at that network level if units were uniformly spread within each time band, multiplied by the correction factor.

Allocation of network costs to standing charges (fixed and capacity)

73. For demand users, other than unmetered users, standing charge factors are used to reduce unit charges and to attribute these costs or revenues to capacity charges (p/kVA/day) or fixed charges (p/day) instead.

74. The standing charge factors for non half hourly settled users are:

a) 100 per cent for the network level at which the end user is supplied.

b) Zero for any further network level.

75. The standing charge factors for half hourly settled users at LV Sub and HV Sub are:

a) 100 per cent for the transformation level at which the supply is made to the end user.

b) 100 per cent for circuits at the next voltage level.

c) Zero for any further network level.

76. The standing charge factors for other half hourly settled users are:

a) 100 per cent for the voltage level of supply of the end user.

b) 100 per cent for the next transformation level.

c) 20 per cent for circuits at the next voltage level (including 132kV for HV users to the extent that 132kV/HV transformation is used).

d) Zero for any further network level.

77. For each tariff, the unit rates are reduced to take account of the allocation of costs to capacity or fixed charges. This is achieved by multiplying the cost element for each relevant network level by (1 – [standing charge factor]).

78. For each demand user type, and for each network level, the unit cost to be attributed to capacity charges or fixed charges in respect of that network level is:

[p/kVA/day from network model assets] = 100*[standing charge factor]*[network level £/kW/year]*[user loss factor]/[network level loss factor]*(1 – [contribution proportion])/[days in year]/(1 + [diversity allowance])*[power factor in network model]

[p/kVA/day from transmission exit or other expenditure] = 100*[standing charge factor]*[transmission exit or other expenditure £/kW/year]*[user loss factor]/[network level loss factor]/[days in tariff applicability period~~year~~]/(1 + [diversity allowance])*[power factor in network model]

79. The power factor in network model parameter is set to 0.95.

80. The diversity allowance for the LV circuit level is defined as the amount by which the aggregate maximum demand load determined for that network level exceeds the estimated demand at the time of system simultaneous maximum load. The aggregate maximum demand is calculated by aggregating agreed import capacities for half hourly settled users and estimated capacities for non half hourly settled user groups.

81. For half hourly settled demand users, except unmetered users, the unit costs calculated by the formula above are allocated to the capacity charge.

82. Otherwise, the unit costs calculated by the formula above are allocated to the fixed charge.

83. For domestic users in profile classes 1 and 2, and for small business users in profile classes 3 and 4, LV costs are allocated to the fixed charge by estimating the proportion of LV network capacity used by these categories of users, and dividing the corresponding proportion of LV costs by the number of domestic and small business MPANs. Related MPANs are excluded from this calculation and are not subject to the resulting fixed charge.

84. For non half hourly settled demand users, except unmetered users, the relevant unit costs in p/kVA/day are converted to a fixed charge by multiplying them by the estimated maximum load per user of the user category (obtained from the volume forecast and load factor data) divided by the power factor in the network model.

Costs associated with LV customer and HV customer levels

85. Other expenditure allocated to the LV customer and HV customer network levels are included in the fixed charge for each tariff where there is such a tariff component.

86. In the case of unmetered supplies, these charges are spread across all units.

Costs associated with reactive power flows

87. For each tariff and each network level, the contribution to reactive power unit charges is obtained as follows:

a) Calculate what the contribution to a single unrestricted unit rate in p/kWh from each network level would be.

b) Take the absolute value.

c) Adjust for standing charge factors at the relevant network levels (for demand users only).

d) Multiply by the assumed power factor in the network model.

e) Multiply by the DNO Party's estimate of the average ratio of the reactive power flow (kVAr) to network load (kVA) at the relevant network level.

88. For the purpose of the calculation of reactive power unit charges, generation users are taken to make a full contribution to the reactive power flows in the network at their Entry Point and at each network level above their Entry Point.

Step 3: Match revenues

89. ~~The DNO Party uses its volume forecasts to estimate the revenues that would be raised by applying the tariff components derived from step 2,~~ The DNO Party estimates its relevant revenues for the tariff applicability period by:

(a) summing the forecast of volumes multiplied by tariff components for the current tariff applicability period, where the tariff components for the tariff applicability period being calculated are those derived from step 2,

(b) adding the revenue for any previous tariff applicability periods as estimated by the DNO (which may include reconciliation for prior years), and

~~(a)~~(c) excluding any revenues treated as excluded revenue under the price control conditions.

~~89.~~90. If any separate charging methodology is used alongside the CDCM, e.g. for EHV users, then the forecast revenues from these charges, excluding any revenues treated as excluded revenue under the price control conditions, are added to the total.

~~90.~~91. If the forecast of allowed revenue exceeds the estimate of relevant revenues for the tariff applicability period, then the difference is a shortfall. If the estimate of relevant revenues for the tariff applicability period exceeds the forecast of allowed revenue, then the difference is a surplus.

~~91.~~92. To allocate any shortfall or surplus, the DNO Party calculates the effect on demand tariffs for the tariff applicability period and on forecast revenues from these tariffs of adding £1/kW/year (relative to system simultaneous maximum load) to costs at the transmission exit level.

~~92.~~93. Using this estimate, the DNO Party determines a single adder figure in £/kW/year such that adding that amount to costs at the transmission exit level would eliminate the shortfall or surplus. The single adder is positive if there is a shortfall and negative if there is a surplus.

~~93.~~94. If this procedure would result in negative value for any tariff component, then the tariff component is set to zero and the single adder figure is modified to the extent necessary to match forecast and target revenue.

~~94.~~95. The final tariffs for demand for the tariff applicability period (before rounding and application of LDNO discounts) are determined on the basis of an allocation with the single adder included in costs. Tariffs for generation do not have any revenue matching element.

NOTE – paragraphs 96 to 178 are not included as no changes are proposed as part of Change Proposal 88.

Glossary of Terms used in this Schedule 16

In this Schedule 16, except where the context otherwise requires, the expressions in the left-hand column below shall have the meaning given to them in the right-hand column below:

Term	*Meaning*
allowed revenue	the DNO Party's "Combined Allowed Distribution Network Revenue" (as defined in the DNO Party's price control conditions).
all-the-way tariff	a tariff applicable to an end user rather than an LDNO.
boundary tariff	a tariff for use of the DNO Party's network by an LDNO where charges are based on boundary flows.
CDCM	the Common Distribution Charging Methodology.
charging year	the 12-month period ending on a 31st March for which charges and credits are being calculated.
coincidence factor	for a user category, aggregate load at the time of the DNO Party's system simultaneous maximum load divided by maximum aggregate load.
Common Distribution Charging Methodology	the methodology of that name with which the DNO Party is obliged to comply under its Distribution Licence.
contribution proportion	the proportion of asset annuities which are deemed covered by customer contributions. This is defined for each combination of a tariff and a network level.
customer contribution	capital charges payable by customers under the DNO Party's connection charging policy.
distribution time bands	the time bands described in paragraphs 40, 41 and 135.
diversity allowance	the extent, expressed as a percentage, to which the sum of the maximum load across all assets in the modelled network level is expected to exceed the simultaneous maximum load for the network level as a whole, as per paragraph 27.
DRM	distribution reinforcement model. This may refer either to a 500 MW network model or to a cost allocation method based on such a model.

Term	*Meaning*
EHV	EHV refers to nominal voltages of at least 22kV and less than 132kV; network elements with a nominal voltage of 132kV are excluded from EHV for the purpose of this Schedule 16.
embedded network	an electricity distribution system operated by an LDNO and embedded within the DNO Party's network.
end user	is a user, but excluding LDNOs.
Engineering Recommendation	one of the engineering recommendations referred to in the Distribution Code.
excluded revenue	revenue from "Excluded Services" (as defined in the price control conditions).
GSP	grid supply point: where the network is connected to a transmission network.
HV	nominal voltages of at least 1kV and less than 22kV.
kV	Kilovolt (1,000 Volts): a unit of voltage.
kVAr	Kilo Volt Ampere reactive: a unit of reactive power flow.
kVArh	Kilo Volt Ampere reactive hour: a unit of total reactive power flow over a period of time.
kW	Kilowatt (1,000 Watts): a unit of power flow.
kWh	Kilowatt hour: a unit of energy.
LDNO	a licensed distribution network operator, meaning an IDNO Party or DNO Party operating an electricity distribution system outside of its Distribution Services Area.
load factor	for a user category, average load divided by maximum aggregate load.
LV	nominal voltages of less than 1kV.
modern equivalent asset and **modern equivalent asset value**	is a reference to the cost of replacing an asset at the time of the calculation.

Term	*Meaning*
MPAN	the unique number identifying a particular Metering Point or Metering System.
MVA	Mega Volt Ampere (1,000 kVA): a unit of network capacity.
MW	Megawatt (1,000 kW): a unit of power flow.
MWh	Megawatt hour (1,000 kWh): a unit of energy.
network	the DNO Party's Distribution System within the DNO Party's Distribution Services Area.
network level	the network is modelled as a stack of circuit and transformation levels between supplies at LV and the transmission network. A network level is any circuit or transformation level in that stack. Additional network levels are used for transmission exit and for LV and HV customer assets.
network model	a costed design for a 500 MW extension to the DNO Party's network, as described in paragraph 16.
peaking probability	is the peaking probability described in paragraph 49.
power factor	the ratio of energy transported (kW) to network capacity used (kVA).
portfolio tariff	a tariff for use of the DNO Party's network by an LDNO where charges are based on flows out of/into the LDNO's electricity distribution system from its end users or further nested networks.
price control conditions	the charge restriction conditions contained as special conditions within the DNO Party's Distribution Licence.
profile class	has the meaning given to that expression in the Balancing and Settlement Code.
regulatory asset value	is the DNO Party's regulatory asset value as described in the Regulatory Instructions and Guidance issued by the Authority under the DNO Party's Distribution Licence.
tariff applicability period	means the relevant charging year, or (in the case of tariff changes part way through the charging year) either (as the context requires): (a) the remaining period of the charging year from which the revised tariffs are to apply; or (b) each of the successive periods from the start of the charging year until that (or a previous) tariff change.

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Term	*Meaning*
related MPAN	has the meaning given to the expression "Related Metering Points" in the Master Registration Agreement.
RRP	regulatory reporting pack, a dataset produced each year by each DNO Party for the Authority.
service model	a costed design for the typical dedicated assets of a category of network users.
standing charge	any fixed or capacity charge that does not depend on actual use of the network.
Supercustomer	in relation to billing, is billing by Settlement Class.
system simultaneous maximum load	the maximum load for the GSP Group as a whole.
time pattern regime or **TPR**	means a code that is used to identify the switching times of a meter register.
unit	where the context permits, the word unit refers to kWh.
unit rate	a charging or payment rate based on units distributed or units generated. Unit rates are expressed in p/kWh. Tariffs applied to multi-rate meters and/or using several time bands for charging have several unit rates.
user	refers to customers (whether demand customers or generators) and (where relevant) LDNOs.