

Legal text suggestions for DCP 198 and DCP 212

by Franck Latrémolière on Thursday 7 August 2014

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Drafting notes

Scope of changes

1. We have proposed changes in tracked-changes formats starting with the following five extracts of DCUSA version 6.2:
 - (a) Schedule 16, paragraphs 97 to 113.
 - (b) Schedule 16, paragraphs 117 to 123.
 - (c) Schedule 16, glossary entry for EHV Reduction Ratio.
 - (d) Schedule 17, paragraphs 25.1 to 25.15.
 - (e) Schedule 17, paragraph 25.17.
2. The Schedule 17 changes can be applied identically to Schedule 18.
3. Paragraphs 114 to 116 of Schedule 16 are out of scope because they relate to calculations done confidentially and outside the method M models.
4. Paragraph 124 and 125 of Schedule 16 and paragraphs 25.16, 25.18 and 25.19 of Schedule 17 and Schedule 18 are out of scope because they relate to the use of the method M results, not to the Method M model itself.
5. The references to IDNO Parties and to IDNO Party categories in paragraph 25.16 look wrong to me, but that might be a more widespread problem in Schedules 17 and 18, and it is not a Method M issue. There is one place in paragraph 25.17 where we have changed IDNO to LDNO, to improve consistency with Schedule 16.

Use of 2007/2008 data

6. We have specified that the RRP data and the allowed revenue data are for 2007/2008. Schedule 16 was previously silent, which could have been interpreted as an implicit reference to the most recent available data. Schedules 17 and 18 used the term “typically relating to the year 2007/2008”.

Additional tables in the legal text

7. We have added tables showing the precise rules applicable to each RRP expenditure component and to each category of network assets.
8. The alternative would have been to use phrases such as “The DNO Party allocates assets to network levels”. Using that text would probably place all DNOs in breach of the methodology, since the allocation in the model is in some respect internally inconsistent.
9. The solution that we have adopted, whilst verbose, ensures that DNOs can comply with the new legal text without making changes to calculations that have been the same since the introduction of Method M.

No circumvention of Ofgem’s 2009 approval condition

10. In contrast to the level of detail which we propose to include in the legal text for the classification of assets, the handling of RRP expenditure, and the year to use for RRP and allowed revenue, we have not specified in the legal text the way in which data have been sourced from FBPQ tables for unit MEAV and for net capex.
11. We have adopted this approach in order to avoid circumventing the conditions that Ofgem had placed on the approval of Method M in 2009. The original submission to Ofgem made explicit reference to the FBPQ. In its December 2009 letter confirming acceptance that the revisions made to the original submission met its conditions, Ofgem said:

We made it a condition of our November approval that DNOs had to remove the references to FBPQ data in the CDCM to allow EDF to fully review their input data and use alternative capital expenditure data which they considered appropriate. DNOs have successfully removed references to FBPQ data within the CDCM and replaced them with a reference to “forecast capex data which each individual DNO considers appropriate”. This has allowed EDF to utilise their more cost reflective input data within the CDCM.
12. We have retained the wording placing a duty on DNOs to find data “that each DNO Party considers appropriately represents” net capex or MEAVs. This is without prejudice to any argument that we, or anyone else, might have made or might wish to make in the future that some or all DNOs are not compliant with these requirements of the methodology.
13. An effect of this approach is that the legal text does not mention the “LR1” and “LR1 opt 3” options that are built into the Method M spreadsheets.

No additional text on the conversion between the DPCR3 and DPCR4 bases

14. We have retained the existing terse description of how the DPCR3 type presentation is derived from the DPCR4 type presentation (first sentence of paragraph 110, model sheet Calc-Allocation or Calc Final Allocation around rows 4 to 39). Whilst the text does not describe the calculations in the model, it does not conflict with it.
15. We chose the minimum-change option in this case because:
 - (a) We are not aware of any differences between DNOs' models in this area.
 - (b) We are not aware of any proposals to change the method of allocation.
 - (c) We do not know any good logic underpinning the formulas in the model.

Schedule 16, paragraphs 97 to 113, ~~version 6.2~~ proposed

97. For the purposes of price control disaggregation the network is split into five levels: LV services, LV mains, HV/LV, HV₂ and a single level covering EHV and 132kV.
98. The determination of discount percentages involves the following steps:
 - (a) ~~Allocation-Breakdown~~ of price control allowed revenue between operating expenditure, depreciation, and return on regulatory asset value.
 - (b) Allocation of each of these components of price control allowed revenue elements to network levels.
 - (c) Determination of a percentage allocation of total revenue per unit to network levels.
 - (d) Determination of the proportion of the LV mains deemed to be used by LV-connected embedded networks.
 - (e) ~~Allocation of 100% of the LV services to LV-connected embedded networks (the "[LV services allocation]").~~
 - (f) Determination of the proportion of the HV network deemed to be provided by HV-connected embedded networks with HV end users.
 - (g) Calculation of the discount percentage for each combination of boundary network level and end user network level.
 - (h) ~~Application of discount percentages to determine portfolio tariffs.~~

Allocation of price control revenue elements to network levels

99. ~~The calculation of percentage allocations of price control revenues to network levels is based on separate percentages by network level for the operating cost, depreciation and return on the regulatory asset value elements of the DNO Party's allowed revenue~~ Not used.

100. In order to determine the allocation to network levels of each element of price control revenue, the DNO Party uses the costs allocation drivers calculated from the following sources:

- (a) RRP data on units distributed and operating expenditure broken down by network level.
- (b) Data that each DNO Party considers appropriately represents the forecast of net capital expenditure and customer contributions for the period 2005/2006–2014/2015, broken down by network level.
- (c) Forecast data that each DNO Party considers appropriately represents the gross modern equivalent asset values (replacement costs) for various asset types.
- (d) The value of all notional assets calculated in each DNO Party’s EDCM model. This comprises the aggregate of:
 - (I) the sum of notional site-specific asset values of all network levels allocated to capacity for all customers in the DNO Party’s EDCM model;
 - (II) the sum of notional asset values at all network levels allocated to demand for all customers in the DNO Party’s EDCM model;
 - (III) the sum of sole use asset values allocated to demand for all customers in the DNO Party’s EDCM model; and
 - (IV) the sum of sole use asset values for generation only for all customers in the DNO Party’s EDCM model.
- (e) The CDCM notional asset values for each network level as referred to in paragraph 63 of this schedule.

Allocation of operating expenditure to network levels

~~101.—Data from the RRP are used to distinguish between direct and indirect costs, with direct costs coded by network level. For the purpose of this calculation, capital expenditure is included, net of customer contributions, but negative figures are replaced with zero. This analysis provides direct costs percentage for each network level, based on RRP data. The direct cost percentage for LV mains is denoted “[LV mains direct proportion]” and the direct cost percentage for HV is denoted “[HV direct proportion]”.~~

101. The DNO Party allocates operating expenditure in the 2007/2008 RRP by network level. The RRP already allocates some operating expenditure by network level. For categories of expenditure for which the table below reports “MEAV” in the column headed “Allocation key”, the DNO Party allocates, on the basis of modern equivalent asset values, the difference between total operating expenditure and the operating expenditure that is allocated to network levels.

Table: Allocation rules

	<u>Allocation key</u>	<u>Percentage capitalised</u>	<u>Direct cost indicator</u>
<u>Load related new connections & reinforcement (net of contributions)</u>	<u>MEAV</u>	<u>100.0%</u>	<u>1</u>
<u>Non-load new & replacement assets (net of contributions)</u>	<u>MEAV</u>	<u>100.0%</u>	<u>1</u>
<u>Non-operational capex</u>	<u>MEAV</u>	<u>23.5%</u>	<u>1</u>
<u>Faults</u>	<u>MEAV</u>	<u>23.5%</u>	<u>1</u>
<u>Inspections, & Maintenance</u>	<u>MEAV</u>	<u>23.5%</u>	<u>1</u>
<u>Tree Cutting</u>	<u>MEAV</u>	<u>23.5%</u>	<u>1</u>
<u>Network Policy</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Network Design & Engineering</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Project Management</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Engineering Mgt & Clerical Support</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Control Centre</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>System Mapping - Cartographical</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Customer Call Centre</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Stores</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Vehicles & Transport</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>IT & Telecoms</u>	<u>Do not allocate</u>	<u>52.57%</u>	
<u>Property Mgt</u>	<u>Do not allocate</u>	<u>52.57%</u>	
<u>HR & Non-operational Training</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Health & Safety & Operational Training</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Finance & Regulation</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>CEO etc</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Atypical cash costs</u>	<u>Do not allocate</u>		<u>1</u>
<u>Pension deficit payments</u>	<u>Do not allocate</u>	<u>57.7%</u>	<u>1</u>
<u>Metering</u>	<u>Do not allocate</u>		<u>1</u>
<u>Excluded services & de minimis</u>	<u>Do not allocate</u>		<u>1</u>
<u>Relevant distributed generation (less contributions)</u>	<u>Do not allocate</u>		<u>1</u>
<u>IFI</u>	<u>Do not allocate</u>		<u>1</u>
<u>Disallowed Related Party Margins</u>	<u>Do not allocate</u>		<u>1</u>
<u>Statutory Depreciation</u>	<u>Do not allocate</u>		<u>1</u>
<u>Network Rates</u>	<u>Do not allocate</u>		<u>1</u>
<u>Transmission Exit Charges</u>	<u>Deduct from revenue</u>		<u>1</u>
<u>Pension deficit repair payments by related parties</u>	<u>Do not allocate</u>		<u>1</u>
<u>Non activity costs and reconciling amounts</u>	<u>Do not allocate</u>		<u>1</u>

102. For the categories of expenditure for which the table reports “MEAV” under “the column “Allocation key”, the DNO Party allocates the difference between total and allocated operating expenditure ~~Indirect operating costs are allocated to network levels~~ on the basis of an estimate of modern equivalent asset value by network level. ~~The operating cost percentage for each level is a weighted average of the direct and indirect percentages.~~ Estimated gross modern equivalent asset values used for this purpose are derived from asset counts and gross

modern equivalent asset values (replacement costs) for various asset types. The DNO Party maps assets to network levels using the mapping shown in the table headed “Mapping of assets to network levels”, and calculates the share of MEAV allocated to each of the network levels. The estimated gross modern equivalent asset value at the EHV and 132 kV network level is adjusted by multiplying it by the EHV Reduction Ratio (see Glossary).

102A. The DNO Party adjusts the operating costs allocated to each network level — equal to the sum of the operating costs already allocated to network levels in the 2007/2008 RRP and the operating costs allocated in line with the previous paragraph — by multiplying, for each operating cost category, the allocated cost by one minus the capitalisation percentage specified in the table headed “Allocation rules”. On the basis of summing this adjusted allocation of operating costs across cost categories for each network level, the DNO Party calculates the share of operating costs of each network level. These are denoted as [Expensed proportions].

103. Transmission exit charges are not allocated to any of the voltage tiers. These charges are deducted from the allowed revenue (see paragraph 111).

Table: Mapping of assets to network levels

<u>Asset</u>	<u>Network level</u>
<u>LV mains overhead lines</u>	<u>LV mains</u>
<u>LV services overhead lines</u>	<u>LV services</u>
<u>LV overhead support</u>	<u>LV mains</u>
<u>LV mains underground cable, consac</u>	<u>LV mains</u>
<u>LV mains underground cable, plastic</u>	<u>LV mains</u>
<u>LV mains underground cable, paper</u>	<u>LV mains</u>
<u>LV services underground cable</u>	<u>LV services</u>
<u>LV pillar, indoors</u>	<u>LV mains</u>
<u>LV pillar, outdoors</u>	<u>LV mains</u>
<u>LV board, wall-mounted</u>	<u>LV mains</u>
<u>LV board, underground</u>	<u>LV mains</u>
<u>LV fuses, pole-mounted</u>	<u>LV mains</u>
<u>LV fuses, tower-mounted</u>	<u>LV mains</u>
<u>6.6/11 kV overhead line, open</u>	<u>HV</u>
<u>6.6/11 kV overhead line, covered</u>	<u>HV</u>
<u>20 kV overhead line, open</u>	<u>HV</u>
<u>20 kV overhead line, covered</u>	<u>HV</u>
<u>6.6/11 kV overhead support</u>	<u>HV</u>
<u>20 kV overhead support</u>	<u>HV</u>
<u>6.6/11kV underground cable</u>	<u>HV</u>
<u>20kV underground cable</u>	<u>HV</u>
<u>HV submarine cable</u>	<u>HV</u>
<u>6.6/11 kV circuit breaker pole-mounted</u>	<u>HV</u>
<u>6.6/11 kV circuit breaker ground-mounted</u>	<u>HV</u>
<u>6.6/11 kV switch pole-mounted</u>	<u>HV</u>
<u>6.6/11 kV switch ground-mounted</u>	<u>HV/LV</u>
<u>6.6/11 kV ring main unit</u>	<u>HV/LV</u>

<u>6.6/11 kV other switchgear, pole-mounted</u>	<u>HV</u>
<u>6.6/11 kV other switchgear, ground-mounted</u>	<u>HV</u>
<u>20 kV circuit breaker, pole-mounted</u>	<u>HV</u>
<u>20 kV circuit breaker, ground-mounted</u>	<u>HV</u>
<u>20 kV switch, pole-mounted</u>	<u>HV</u>
<u>20 kV switch, ground-mounted</u>	<u>HV/LV</u>
<u>20 kV ring main unit</u>	<u>HV/LV</u>
<u>20 kV other switchgear, pole-mounted</u>	<u>HV</u>
<u>20 kV other switchgear, ground-mounted</u>	<u>HV</u>
<u>6.6/11 kV transformer, pole-mounted</u>	<u>HV/LV</u>
<u>6.6/11 kV transformer, ground-mounted</u>	<u>HV/LV</u>
<u>20 kV transformer, pole-mounted</u>	<u>HV/LV</u>
<u>20 kV transformer, ground-mounted</u>	<u>HV/LV</u>
<u>33kV overhead pole line</u>	<u>EHV and 132kV</u>
<u>33kV overhead tower line</u>	<u>EHV and 132kV</u>
<u>66kV overhead pole line</u>	<u>EHV and 132kV</u>
<u>66kV overhead tower line</u>	<u>EHV and 132kV</u>
<u>33kV pole</u>	<u>EHV and 132kV</u>
<u>33kV tower</u>	<u>EHV and 132kV</u>
<u>66kV pole</u>	<u>EHV and 132kV</u>
<u>66kV tower</u>	<u>EHV and 132kV</u>
<u>33kV underground cable, non-pressurised</u>	<u>EHV and 132kV</u>
<u>33kV underground cable, oil</u>	<u>EHV and 132kV</u>
<u>33kV underground cable, gas</u>	<u>EHV and 132kV</u>
<u>66kV underground cable,non-pressurised</u>	<u>EHV and 132kV</u>
<u>66kV underground cable, oil</u>	<u>EHV and 132kV</u>
<u>66kV underground cable, gas</u>	<u>EHV and 132kV</u>
<u>EHV submarine cable</u>	<u>EHV and 132kV</u>
<u>33 kV circuit breaker, indoors</u>	<u>EHV and 132kV</u>
<u>33 kV circuit breaker, outdoors</u>	<u>EHV and 132kV</u>
<u>33 kV switch, ground-mounted</u>	<u>EHV and 132kV</u>
<u>33 kV switch, pole-mounted</u>	<u>EHV and 132kV</u>
<u>33 kV ring main unit</u>	<u>EHV and 132kV</u>
<u>33 kV other switchgear</u>	<u>EHV and 132kV</u>
<u>66 kV circuit breaker, indoors and outdoors</u>	<u>EHV and 132kV</u>
<u>66 kV other switchgear</u>	<u>EHV and 132kV</u>
<u>33 kV transformer, pole-mounted</u>	<u>EHV and 132kV</u>
<u>33 kV transformer, ground mounted</u>	<u>EHV and 132kV</u>
<u>33 kV auxiliary transformer</u>	<u>EHV and 132kV</u>
<u>66 kV transformer</u>	<u>EHV and 132kV</u>
<u>66 kV auxiliary transformer</u>	<u>EHV and 132kV</u>
<u>132kV overhead line pole conductor</u>	<u>EHV and 132kV</u>
<u>132kV overhead line tower conductor</u>	<u>EHV and 132kV</u>
<u>132kV pole</u>	<u>EHV and 132kV</u>
<u>132kV tower</u>	<u>EHV and 132kV</u>
<u>132kV tower fittings</u>	<u>EHV and 132kV</u>

<u>132kV underground cable, non-pressurised</u>	<u>EHV and 132kV</u>
<u>132kV underground cable, oil</u>	<u>EHV and 132kV</u>
<u>132kV underground cable, gas</u>	<u>EHV and 132kV</u>
<u>132 kV submarine cable</u>	<u>EHV and 132kV</u>
<u>132 kV circuit breaker, indoors and outdoors</u>	<u>EHV and 132kV</u>
<u>132 kV other switchgear</u>	<u>EHV and 132kV</u>
<u>132 kV transformer</u>	<u>EHV and 132kV</u>
<u>132 kV auxiliary transformer</u>	<u>EHV and 132kV</u>
<u>132 kV/EHV remote terminal unit, pole-mounted</u>	<u>EHV and 132kV</u>
<u>132 kV/EHV remote terminal unit, ground-mounted</u>	<u>EHV and 132kV</u>
<u>HV remote terminal unit, pole-mounted</u>	<u>HV</u>
<u>HV remote terminal unit, ground-mounted</u>	<u>HV</u>

Allocation of depreciation and return to network levels

104. Both the depreciation and return on capital elements of allowed revenue are allocated to network levels on the basis of net capital expenditure data derived from the appropriate capital expenditure forecast. All figures on net capital expenditure are aggregated over the 10-year period from 2005/2006 to 2014/2015, taking in actual data or forecasts for each year as available.

105. The DNO Party calculates the net capital expenditure split by LV, LV/HV, HV, and EHV and 132kV. For each of these four segments, ~~network level,~~ the relevant net capital expenditure is calculated by adding up expenditure on total condition based replacement (proactive and reactive replacement), ~~combined in the case of LV services, LV mains, HV- and EHV with~~ connections spend minus customer contributions (directs) for connections at that voltage level, general reinforcement capital expenditure at that voltage level, and fault reinforcement capital expenditure at that voltage level. The net capital expenditure at the EHV and 132kV network level is adjusted by multiplying it by the EHV Reduction Ratio (see Glossary).

106. Some of these net capital expenditure categories allow HV substation and transformer costs to be identified. These costs (and no other costs) are allocated to the HV/LV network level. The ratio of the expenditure in these categories on HV substations and transformers to the expenditure in these categories on other HV assets is denoted as [HV/LV capital expenditure ratio].

107. Some of the net capital expenditure categories do not separately identify HV substation/transformer costs and report a single figure for HV.: For these categories, the costs reported under HV ~~costs~~ are split between the HV/LV network and the HV network level so that the ratio of the amount allocated to the HV/LV network level to the costs reported under HV is equal to [HV/LV capital expenditure ratio]. ~~in the same proportion as for the other categories (where these costs are separately identified).~~

108. Generation-related capital expenditure is not included in the net capex attributable to each network level.

108A. The DNO Party splits the net capital expenditure allocated to LV by dividing it between the LV mains and the LV services network levels. It does this on the basis of the

ratio of net capital expenditure on total condition based replacement costs for each of those two network levels.

Determination of a percentage allocation of total revenue per unit to network levels

109. The percentage allocation of costs to network levels is determined as a weighted average of the percentage allocation for each of the elements of price control revenue, rescaled by units flowing.

110. The DNO Party determines a breakdown of price control allowed revenue over the period from 2005/2006 to 2009/2010 between (1) operating expenditure, (2) depreciation and (3) return on regulatory asset value. Each of these ~~3~~three components of price control allowed revenue is then allocated across each network level using the percentage cost drivers as calculated for each such network level in accordance with the provisions of paragraphs 99-108A above. ~~The resultant allocations of each of the three components of price control allowed revenue~~ are aggregated by network level to obtain a percentage per network level of total price control allowed revenue for the period 2005/2006 to 2009/2010.

111. ~~For the purpose of paragraph 110, the price control allowed revenue~~ for 2007/2008 (denoted as the “[Total allowed revenue]” in the price control disaggregation model) is adjusted by deducting from it for the relevant charging year is adjusted by deducting the [Revenue not to share]. The [Revenue not to share] comprises the aggregate of:

- (a) the net amount earned ~~or lost~~ by the DNO Party under price control financial incentive schemes for 2007/2008 (this may be a negative number); and
- (b) Transmission exit charges for 2007/2008.

112. This adjusted price control allowed revenue (~~denoted as stated in the model as the “[Total revenue to share]”~~) is then allocated to each network level using the weighted average percentage allocations calculated in accordance with paragraph 110. Before making this allocation however, the [Total revenue to share] must be further adjusted to deduct a portion of the price control allowed revenue that is to be recovered from EHV customers. This adjusted Total revenue to share is derived by deducting the following:

$$\frac{[\text{EHV Revenue}] * [\text{Total revenue to share}]}{[\text{Total allowed revenue}]}$$

Where:

Total allowed revenue = the price control allowed revenue

Total revenue to share = Total allowed revenue – Revenue not to share

EHV Revenue = the revenue to be recovered from EHV customers in 2007/2008 for the relevant charging year.

112A The revenue not to share must also be adjusted to deduct a portion of the price control allowed revenue that is to be recovered from EHV customers. This adjusted Revenue not to share is derived by deducting the following:

$$\frac{[\text{EHV Revenue}] * [\text{Revenue not to share}]}{[\text{Total allowed revenue}]}$$

Where

Revenue not to share = as per paragraph 111 above.

Total allowed revenue = the price control allowed revenue

EHV Revenue = the revenue to be recovered from EHV customers ~~in 2007/2008 for the relevant charging year.~~

113. The adjusted price control allowed revenues allocated to each network level are then rescaled by the estimated number of units flowing through each network level loss adjusted to LV. The result is denoted by [Revenue to share per unit], for each network level. The Revenue not to share is re-scaled by all units flowing into the DNO Party's EHV network loss adjusted to LV, the result is denoted as [Revenue not to share per unit]. ~~The resultant revenues, scaled by units flowing, are then normalised so that they add up to 100 per cent. The result of this calculation is a set of percentage allocations for each of the LV services, LV mains, HV/LV, HV and EHV network levels and the Revenue not to share.~~

113A. The DNO Party calculates the number of units flowing through each network level, loss-adjusted to LV in two steps.

113B. The first step is to calculate adjustment factors for each of the LV, HV and EHV and 132kV levels in respect of the units distributed at LV, at HV and at EHV and 132kV.

(a) For LV, HV, and EHV and 132kV networks, the adjustment factor is 1 (one) with respect to units distributed at LV.

(b) For LV and HV networks, the adjustment factor is 0 (zero) with respect to units distributed at HV, and with respect to units distributed at EHV and 132kV.

(c) For the EHV and 132kV network, the adjustment factor with respect to units distributed at HV is $(U + 0.5 * \text{Losses}) / (U + \text{Losses})$, and the adjustment factor with respect to units distributed at EHV and 132kV is $(U + 0.25 * \text{Losses}) / (U + \text{Losses})$, where U is the number of units distributed at LV plus half of the number of units distributed at HV plus a quarter of the number of units distributed at EHV and 132kV.

113C. The second step is to calculate, for each of the LV, HV and EHV and 132kV networks, the sum of the product of the three adjustment factors and the units distributed at each of LV, HV, and EHV and 132kV. This gives the number of units loss adjusted relative to LV flowing through each of the LV, HV, and EHV and 132kV networks. The number of units loss adjusted relative to LV flowing through the LV services, the LV mains and the HV/LV network levels are the same as the number flowing through the LV network.

113D. For each network level, the DNO Party calculates the percentage that the [Revenue to share per unit] represents of the sum of the [Revenue to share per unit] across all network levels and the [Revenue not to share per unit]. The results are denoted as [LV mains allocations], [LV services allocation], [HV/LV allocation], [HV allocation] and [EHV and 132kV allocation].

Calculation of direct proportions

113E. The DNO Party calculates the [HV direct proportion] and the [LV direct proportion] on the basis of the allocation of RRP operating expenditure across network levels set out in paragraphs 101 and 102 (before the adjustment for capitalisation rates is made).

(a) The [HV direct proportion] is the ratio of the sum of the operating expenditure allocated to the HV network level across the expenditure categories identified as “Direct costs” in the table headed “Allocation rules” to the sum of the operating expenditure allocated to the HV network level across all operating expenditure categories.

(b) The [LV direct proportion] is the ratio of the sum of the operating expenditure allocated to the LV services or the LV mains network levels across the expenditure categories identified as “Direct costs” in the table headed “Allocation rules” to the sum of the operating expenditure allocated to the LV services or LV mains networks level across all operating expenditure categories.

Schedule 16, paragraphs 117 to 123, ~~version 6.2~~proposed

Calculation of discount percentages

118. The discount percentages are determined as follows. ~~(where “[LV mains allocation]” is the percentage of total costs that are allocated to the LV mains network level).~~

119. For embedded networks with an LV boundary, the discount is equal to:

$$[\text{LV: LV discount}] = [\text{LV services allocation}] + ([\text{LV mains allocation}] * (1 - [\text{LV mains split}] * [\text{LV mains direct proportion}])).$$

120. For embedded networks with an HV boundary, three percentage discount figures are used:

~~121.~~ (a) The percentage discount applicable to tariffs for LV network end users is:

$$[\text{HV: LV discount}] = [\text{LV services allocation}] + [\text{LV mains allocation}] + [\text{HV/LV allocation}] + [\text{HV allocation}] * (1 - [\text{HV split}] * [\text{HV direct proportion}]).$$

~~122.~~ (b) The percentage discount applicable to tariffs for LV substation end users is:

$$[\text{HV: LV Sub discount}] = ([\text{HV/LV allocation}] + [\text{HV allocation}] * (1 - [\text{HV split}] * [\text{HV direct proportion}])) / (1 - [\text{LV mains allocation}] - [\text{LV services allocation}]).$$

~~123.~~ (c) The percentage discount applicable to tariffs for HV end users is:

$$[\text{HV: HV discount}] = \frac{[\text{HV allocation}] * (1 - [\text{HV split}] * [\text{HV direct proportion}])}{(1 - [\text{LV services allocation}] - [\text{LV mains allocation}] - [\text{HV/LV allocation}])}$$

Schedule 16, glossary entry for EHV Reduction Ratio, ~~version 6.2~~proposed

<p>EHV Reduction Ratio</p>	<p>A factor applied to the EHV network drivers in the price control disaggregation that reduces the allocation of costs to the EHV network level to account for revenues recovered from EDCM customers. The EHV Reduction Ratio is calculated as follows:</p>
<p>[EHV Reduction Rate] = [EHV and 132kV assets in the CDCM model] / ([EHV and 132kV assets in the CDCM model] + [All notional assets in the EDCM model])</p>	
	<p>where:</p> <p>EHV and 132 kV assets in the CDCM model = the sum of the notional values in £ of the EHV assets described in paragraph 100(e) of this schedule, namely—132kV, 132kV/EHV, EHV, EHV/HV, and 132kV/HV assets;</p> <p>all All notional assets in the EDCM model = the total notional value in £ of the assets described in paragraph 100(d) of this schedule; and</p> <p>EHV assets in CDCM model = the sum of notional asset values of EHV assets in the CDCM model.</p>

Schedule 17, paragraphs 25.1 to 25.15, ~~version 6.2~~proposed

25.1 The extended price control disaggregation model (the extended method M model) calculates discount percentages in a two-part process.

25.2 For the purposes of the first part of the process, the DNO Party’s network is split into ~~four~~ five levels: LV ~~services~~, LV mains, HV/LV, HV and EHV ~~and 132kV~~.

25.3 The first part of the price control disaggregation involves the calculation of ~~the percentages used to allocate separate percentages by network level of each element of~~ the DNO Party’s Allowed Revenue ~~to each network level. This is done for each element of~~ Allowed Revenue: the operating cost, depreciation and return on RAV elements. These are aggregated over the period 2005/2006 to 2009/2010 (the DPCR4 period).

25.4 In order to determine the allocation to network levels of each element of price control revenue, the following cost allocation drivers are used:

- Data submitted by the DNO Party to the Authority using the format prescribed in the regulatory reporting pack (RRP) on units distributed and operating expenditure broken down by network level (typically relating to the year 2007/2008).
- Data that each DNO Party considers appropriately represents the forecast of net capital expenditure and ~~Connectee~~ customer contributions for the period 2005/2006 to 2014/2015, broken down by network level.
- Forecast data that each DNO Party considers appropriately represents the gross modern equivalent asset values (replacement costs) for various asset types.

Allocation of operating expenditure by network level

25.5 The DNO Party allocates operating expenditure in the 2007/2008 RRP by network level. The RRP already allocates some operating expenditure by network level. For categories of expenditure for which the table below reports “MEAV” in the column headed “Allocation key”, the DNO Party allocates, on the basis of modern equivalent asset values, the difference between total operating expenditure and the operating expenditure that is allocated to network levels.

~~25.5—Data from the RRP are used to distinguish between direct and indirect costs, with direct costs coded by network level. For the purpose of this calculation, capital expenditure is included, net of Connectee contributions, but negative figures are replaced with zero. This analysis provides direct costs percentage for each network level.—~~

Table: Allocation rules

	<u>Allocation key</u>	<u>Percentage capitalised</u>	<u>Direct cost indicator</u>
<u>Load related new connections & reinforcement (net of contributions)</u>	<u>MEAV</u>	<u>100.0%</u>	<u>1</u>
<u>Non-load new & replacement assets (net of contributions)</u>	<u>MEAV</u>	<u>100.0%</u>	<u>1</u>
<u>Non-operational capex</u>	<u>MEAV</u>	<u>23.5%</u>	<u>1</u>
<u>Faults</u>	<u>MEAV</u>	<u>23.5%</u>	<u>1</u>
<u>Inspections, & Maintenance</u>	<u>MEAV</u>	<u>23.5%</u>	<u>1</u>
<u>Tree Cutting</u>	<u>MEAV</u>	<u>23.5%</u>	<u>1</u>
<u>Network Policy</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Network Design & Engineering</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Project Management</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Engineering Mgt & Clerical Support</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Control Centre</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>System Mapping - Cartographical</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Customer Call Centre</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Stores</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Vehicles & Transport</u>	<u>MEAV</u>	<u>52.57%</u>	

<u>IT & Telecoms</u>	<u>Do not allocate</u>	<u>52.57%</u>	
<u>Property Mgt</u>	<u>Do not allocate</u>	<u>52.57%</u>	
<u>HR & Non-operational Training</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Health & Safety & Operational Training</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Finance & Regulation</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>CEO etc</u>	<u>MEAV</u>	<u>52.57%</u>	
<u>Atypical cash costs</u>	<u>Do not allocate</u>		<u>1</u>
<u>Pension deficit payments</u>	<u>Do not allocate</u>	<u>57.7%</u>	<u>1</u>
<u>Metering</u>	<u>Do not allocate</u>		<u>1</u>
<u>Excluded services & de minimis</u>	<u>Do not allocate</u>		<u>1</u>
<u>Relevant distributed generation (less contributions)</u>	<u>Do not allocate</u>		<u>1</u>
<u>IFI</u>	<u>Do not allocate</u>		<u>1</u>
<u>Disallowed Related Party Margins</u>	<u>Do not allocate</u>		<u>1</u>
<u>Statutory Depreciation</u>	<u>Do not allocate</u>		<u>1</u>
<u>Network Rates</u>	<u>Do not allocate</u>		<u>1</u>
<u>Transmission Exit Charges</u>	<u>Deduct from revenue</u>		<u>1</u>
<u>Pension deficit repair payments by related parties</u>	<u>Do not allocate</u>		<u>1</u>
<u>Non activity costs and reconciling amounts</u>	<u>Do not allocate</u>		<u>1</u>

25.6 For the categories of expenditure for which the table reports “MEAV” under “the column “Allocation key”, the DNO Party allocates the difference between total and allocated operating expenditure on the basis of an estimate of modern equivalent asset value by network level. Estimated gross modern equivalent asset values used for this purpose are derived from asset counts and gross modern equivalent asset values (replacement costs) for various asset types. The DNO Party maps assets to network levels using the mapping shown in the table headed “Mapping of assets to network levels”, and calculates the share of MEAV allocated to each of the network levels. ~~Indirect operating costs are allocated to network levels on the basis of an estimate of MEAV by network level.~~

25.6A. The DNO Party adjusts the operating costs allocated to each network level — — equal to the sum of the operating costs already allocated to network levels in the 2007/2008 RRP and the operating costs allocated in line with the previous paragraph — by multiplying, for each operating cost category, the allocated cost by one minus the relevant capitalisation percentage reported in the table headed “Allcoation rules”. On the basis of summing this adjusted allocation of operating costs across cost categories for each network level, the DNO Party calculates the share of operating costs of each network level. These are denoted as [Expensed proportions].

25.7 ~~The operating cost percentage for each level is a weighted average of the direct and indirect percentages. Estimated gross modern equivalent asset values used for this purpose are derived from asset counts and the DNO Party’s unit cost forecasts wherever available.~~

Transmission exit charges are excluded from the allocation because it does not seem reasonable to allocate these charges to different network levels.

Table: Mapping of assets to network levels

<u>Asset</u>	<u>Network level</u>
<u>LV mains overhead lines</u>	<u>LV mains</u>
<u>LV services overhead lines</u>	<u>LV services</u>
<u>LV overhead support</u>	<u>LV mains</u>
<u>LV mains underground cable, consac</u>	<u>LV mains</u>
<u>LV mains underground cable, plastic</u>	<u>LV mains</u>
<u>LV mains underground cable, paper</u>	<u>LV mains</u>
<u>LV services underground cable</u>	<u>LV services</u>
<u>LV pillar, indoors</u>	<u>LV mains</u>
<u>LV pillar, outdoors</u>	<u>LV mains</u>
<u>LV board, wall-mounted</u>	<u>LV mains</u>
<u>LV board, underground</u>	<u>LV mains</u>
<u>LV fuses, pole-mounted</u>	<u>LV mains</u>
<u>LV fuses, tower-mounted</u>	<u>LV mains</u>
<u>6.6/11 kV overhead line, open</u>	<u>HV</u>
<u>6.6/11 kV overhead line, covered</u>	<u>HV</u>
<u>20 kV overhead line, open</u>	<u>HV</u>
<u>20 kV overhead line, covered</u>	<u>HV</u>
<u>6.6/11 kV overhead support</u>	<u>HV</u>
<u>20 kV overhead support</u>	<u>HV</u>
<u>6.6/11kV underground cable</u>	<u>HV</u>
<u>20kV underground cable</u>	<u>HV</u>
<u>HV submarine cable</u>	<u>HV</u>
<u>6.6/11 kV circuit breaker pole-mounted</u>	<u>HV</u>
<u>6.6/11 kV circuit breaker ground-mounted</u>	<u>HV</u>
<u>6.6/11 kV switch pole-mounted</u>	<u>HV</u>
<u>6.6/11 kV switch ground-mounted</u>	<u>HV/LV</u>
<u>6.6/11 kV ring main unit</u>	<u>HV/LV</u>
<u>6.6/11 kV other switchgear, pole-mounted</u>	<u>HV</u>
<u>6.6/11 kV other switchgear, ground-mounted</u>	<u>HV</u>
<u>20 kV circuit breaker, pole-mounted</u>	<u>HV</u>
<u>20 kV circuit breaker, ground-mounted</u>	<u>HV</u>
<u>20 kV switch, pole-mounted</u>	<u>HV</u>
<u>20 kV switch, ground-mounted</u>	<u>HV/LV</u>
<u>20 kV ring main unit</u>	<u>HV/LV</u>
<u>20 kV other switchgear, pole-mounted</u>	<u>HV</u>
<u>20 kV other switchgear, ground-mounted</u>	<u>HV</u>
<u>6.6/11 kV transformer, pole-mounted</u>	<u>HV/LV</u>
<u>6.6/11 kV transformer, ground-mounted</u>	<u>HV/LV</u>
<u>20 kV transformer, pole-mounted</u>	<u>HV/LV</u>
<u>20 kV transformer, ground-mounted</u>	<u>HV/LV</u>
<u>33kV overhead pole line</u>	<u>EHV and 132kV</u>
<u>33kV overhead tower line</u>	<u>EHV and 132kV</u>
<u>66kV overhead pole line</u>	<u>EHV and 132kV</u>
<u>66kV overhead tower line</u>	<u>EHV and 132kV</u>
<u>33kV pole</u>	<u>EHV and 132kV</u>

33kV tower	EHV and 132kV
66kV pole	EHV and 132kV
66kV tower	EHV and 132kV
33kV underground cable, non-pressurised	EHV and 132kV
33kV underground cable, oil	EHV and 132kV
33kV underground cable, gas	EHV and 132kV
66kV underground cable,non-pressurised	EHV and 132kV
66kV underground cable, oil	EHV and 132kV
66kV underground cable, gas	EHV and 132kV
EHV submarine cable	EHV and 132kV
33 kV circuit breaker, indoors	EHV and 132kV
33 kV circuit breaker, outdoors	EHV and 132kV
33 kV switch, ground-mounted	EHV and 132kV
33 kV switch, pole-mounted	EHV and 132kV
33 kV ring main unit	EHV and 132kV
33 kV other switchgear	EHV and 132kV
66 kV circuit breaker, indoors and outdoors	EHV and 132kV
66 kV other switchgear	EHV and 132kV
33 kV transformer, pole-mounted	EHV and 132kV
33 kV transformer, ground mounted	EHV and 132kV
33 kV auxiliary transformer	EHV and 132kV
66 kV transformer	EHV and 132kV
66 kV auxiliary transformer	EHV and 132kV
132kV overhead line pole conductor	EHV and 132kV
132kV overhead line tower conductor	EHV and 132kV
132kV pole	EHV and 132kV
132kV tower	EHV and 132kV
132kV tower fittings	EHV and 132kV
132kV underground cable, non-pressurised	EHV and 132kV
132kV underground cable, oil	EHV and 132kV
132kV underground cable, gas	EHV and 132kV
132 kV submarine cable	EHV and 132kV
132 kV circuit breaker, indoors and outdoors	EHV and 132kV
132 kV other switchgear	EHV and 132kV
132 kV transformer	EHV and 132kV
132 kV auxiliary transformer	EHV and 132kV
132 kV/EHV remote terminal unit, pole-mounted	EHV and 132kV
132 kV/EHV remote terminal unit, ground-mounted	EHV and 132kV
HV remote terminal unit, pole-mounted	HV
HV remote terminal unit, ground-mounted	HV

Allocation of depreciation and return to network levels

25.8 Both the depreciation and return on capital elements of Allowed Revenue are allocated to network levels on the basis of net capital expenditure data derived from the DNO Party's estimates and forecasts. All figures [on net capital expenditure](#) are aggregated over the

10-year period from 2005/2006 to 2014/2015, taking in actual data or forecasts for each year as available.

25.9 The DNO Party calculates the net capital expenditure split by LV, LV/HV, HV, and EHV and 132kV. For each of these four segments, ~~network level~~, the relevant net capital expenditure is calculated by adding up expenditure on total condition based replacement (proactive and reactive) replacement, combined in the case of LV, HV and EHV with connections spend minus ~~Connectee customer~~ contributions (directs) for connections at that voltage level, general reinforcement capital expenditure at that voltage level, and fault reinforcement capital expenditure at that voltage level.

25.10 Some of these net capital expenditure categories allow HV substation and transformer costs to be identified. These costs (and no other costs) are allocated to the HV/LV network level. The ratio of the expenditure in these categories on HV substations and transformers to the expenditure in these categories on other HV assets is denoted as [HV/LV capital expenditure ratio]. Some of the net capital expenditure categories do not separately identify HV substation/transformer costs. For these categories, the costs reported under HV are split between ~~allocated to~~ the HV/LV network and the HV network level so that the ratio of the amount allocated to the HV/LV network level to the costs reported under HV is equal to [HV/LV capital expenditure]. ~~in the same proportion as for the other categories (where these costs are separately identified).~~

25.11 Generation-related capital expenditure is not included in the net capex attributable to each network level.

25.11A. The DNO Party splits the net capital expenditure allocated to LV by dividing it between the LV mains and the LV services network levels. It does this on the basis of the ratio of net capital expenditure on total condition based replacement costs for each of those two network levels.

Determination of a percentage allocation of total revenue per unit to network levels

25.12 The allocation to each network level of each element of the DNO Party's Allowed Revenue is then aggregated by network level to create network level totals. These totals are then converted into network level percentages. The DNO Party allocates a measure of the price control revenue to each network level.

25.12A The DNO Party determines a breakdown of price control allowed revenue over the period from 2005/2006 to 2009/2010 between (1) operating expenditure, (2) depreciation and (3) return on regulatory asset value. Each of these three components of price control allowed revenue is then allocated across each network level using the percentage cost drivers as calculated for each such network level. The allocations of each of the three components of price control allowed revenue are aggregated by network level to obtain a percentage per network level of total price control allowed revenue.

25.13 The DNO Party uses ~~the~~ the network level percentages ~~are used~~ to allocate the DNO Party's Allowed Revenue less an amount denoted as [Revenue not to share]. The [Revenue not to share] is calculated as the sum of the ~~the~~ net amount earned ~~or lost~~ by the licensee under price control financial incentive schemes (this may be a negative number) and the ~~less~~ the DNO Party's total transmission exit charges. All three numbers relate to ~~a single year~~

~~(typically 2007/2008). The result of deducting [Revenue not to share] from the Allowed revenue is denoted as [Revenue to share].~~

25.14 The ~~Allowed~~ [Revenue to share] allocations are then rescaled by the estimated number of units flowing through each network level, ~~loss adjusted to LV. The result is denoted by [Revenue to share per unit], and normalised so that they sum to 100 per cent.~~ The ~~net amount earned or lost by the licensee under price control financial incentive schemes plus the DNO Party's total transmission exit charges (the unallocated part of the Allowed Revenue)~~ [Revenue not to share] is rescaled by the number of units flowing through the EHV network level, ~~loss adjusted to LV; the result is denoted as [Revenue not to share per unit].~~ ~~The result of this calculation is a set of percentages for each of the LV, HV/LV, HV and EHV network levels, and one percentage for the DNO Party's unallocated revenue.~~

~~25.14A The DNO Party calculates the number of units flowing through each network level, loss-adjusted to LV in two steps.~~

~~25.14B. The first step is to calculate adjustment factors for each of the LV, HV and EHV and 132kV levels in respect of the units distributed at LV, at HV and at EHV and 132kV.~~

~~(a) For LV, HV, and EHV and 132kV networks, the adjustment factor is 1 (one) with respect to units distributed at LV.~~

~~(b) For LV and HV networks, the adjustment factor is 0 (zero) with respect to units distributed at HV, and with respect to units distributed at EHV and 132kV.~~

~~(c) For the EHV and 132kV network, the adjustment factor with respect to units distributed at HV is $(U + 0.5 * \text{Losses}) / (U + \text{Losses})$, and the adjustment factor with respect to units distributed at EHV and 132kV is $(U + 0.25 * \text{Losses}) / (U + \text{Losses})$, where U is the number of units distributed at LV plus half of the number of units distributed at HV plus a quarter of the number of units distributed at EHV and 132kV.~~

~~25.14C. The second step is to calculate, for each of the LV, HV and EHV and 132kV networks, the sum of the product of the three adjustment factors and the units distributed at each of LV, HV, and EHV and 132kV. This gives the number of units loss adjusted relative to LV flowing through each of the LV, HV, and EHV and 132kV networks. The number of units loss adjusted relative to LV flowing through the LV services, the LV mains and the HV/LV network levels are the same as the number flowing through the LV network.~~

~~25.14D. For each network level, the DNO Party calculates the percentage that the [Revenue to share per unit] represents of the sum of the [Revenue to share per unit] across all network levels and the [Revenue not to share per unit]. The results are denoted as [LV mains allocations], [LV services allocation], [HV/LV allocation], [HV allocation], [EHV and 132kV allocation].~~

Calculation of direct cost proportion

~~25.14E. The DNO Party calculates the [EHV and 132kV direct cost proportion] on the basis of the allocation of RRP operating expenditure across network levels set out in paragraphs~~

25.5 and 25.6 (before the adjustment for capitalization rates is made). The [EHV and 132kV direct cost proportion] is calculated as the ratio of the sum of the operating expenditure allocated to the EHV and 132 kV network level across the expenditure categories identified as “Direct costs” in the table headed “Allocation rules” to the sum of the operating expenditure allocated to the EHV and 132kV network level across all operating expenditure categories.

EHV network level disaggregation

25.15 The second part of the price control disaggregation process is to split the percentage allocated to the ~~for~~ the EHV and 132kV network level, ~~in the above calculation~~ [EHV and 132kV allocation], into separate percentages for the following asset levels:

- 132 kV circuits (England and Wales only);
- 132kV/~~33kV~~-EHV substations (England and Wales only);
- ~~33 kV~~-EHV circuits; and
- ~~33kV~~EHV/HV substations

25.15A. The DNO Party splits [EHV and 132kV allocation] into separate percentages for the above assets levels on the basis of the share of the MEAV of the EHV and 132kV network level accounted for by the MEAV of the assets associated with each of the four asset levels. The DNO Party does this on the basis of the MEAV of the assets and of the mapping in the table below. The results of the allocation of [EHV and 132kV allocation] into percentage allocations for the different EHV and 132kV asset levels are denoted as [132kV allocation], [132kV/EHV allocation], [EHV allocation] and [EHV/HV allocation].

Table: MEAV EDCM mapping

<u>Asset</u>	<u>Asset level</u>
<u>6.6/11 kV circuit breaker pole-mounted</u>	<u>EHV/HV</u>
<u>6.6/11 kV circuit breaker ground-mounted</u>	<u>EHV/HV</u>
<u>20 kV circuit breaker, pole-mounted</u>	<u>EHV/HV</u>
<u>20 kV circuit breaker, ground-mounted</u>	<u>EHV/HV</u>
<u>33kV overhead pole line</u>	<u>EHV</u>
<u>33kV overhead tower line</u>	<u>EHV</u>
<u>66kV overhead pole line</u>	<u>EHV</u>
<u>66kV overhead tower line</u>	<u>EHV</u>
<u>33kV pole</u>	<u>EHV</u>
<u>33kV tower</u>	<u>EHV</u>
<u>66kV pole</u>	<u>EHV</u>
<u>66kV tower</u>	<u>EHV</u>
<u>33kV underground cable, non-pressurised</u>	<u>EHV</u>
<u>33kV underground cable, oil</u>	<u>EHV</u>
<u>33kV underground cable, gas</u>	<u>EHV</u>
<u>66kV underground cable, non Pressurised</u>	<u>EHV</u>
<u>66kV underground cable, oil</u>	<u>EHV</u>

<u>66kV underground cable, gas</u>	<u>EHV</u>
<u>EHV submarine cable</u>	<u>EHV</u>
<u>33 kV circuit breaker, indoors</u>	<u>132kV/EHV</u>
<u>33 kV circuit breaker, outdoors</u>	<u>132kV/EHV</u>
<u>33 kV switch, ground-mounted</u>	<u>132kV/EHV</u>
<u>33 kV switch, pole-mounted</u>	<u>132kV/EHV</u>
<u>33 kV ring-main-unit</u>	<u>132kV/EHV</u>
<u>33 kV other switchgear</u>	<u>EHV/HV</u>
<u>66 kV circuit breaker, indoors and outdoors</u>	<u>132kV/EHV</u>
<u>66 kV other switchgear</u>	<u>EHV/HV</u>
<u>33 kV transformer, pole-mounted</u>	<u>EHV/HV</u>
<u>33 kV transformer, ground mounted</u>	<u>EHV/HV</u>
<u>33 kV auxiliary transformer</u>	<u>EHV/HV</u>
<u>66 kV transformer</u>	<u>EHV/HV</u>
<u>66 kV auxiliary transformer</u>	<u>EHV/HV</u>
<u>132kV overhead line pole conductor</u>	<u>132kV</u>
<u>132kV overhead line tower conductor</u>	<u>132kV</u>
<u>132kV pole</u>	<u>132kV</u>
<u>132kV tower</u>	<u>132kV</u>
<u>132kV tower fittings</u>	<u>132kV</u>
<u>132kV underground cable, non-pressurised</u>	<u>132kV</u>
<u>132kV underground cable, oil</u>	<u>132kV</u>
<u>132kV underground cable, gas</u>	<u>132kV</u>
<u>132 kV submarine cable</u>	<u>132kV</u>
<u>132 kV circuit breaker, indoors and outdoors</u>	<u>132kV</u>
<u>132 kV other switchgear</u>	<u>132kV</u>
<u>132 kV transformer</u>	<u>132kV/EHV</u>
<u>132 kV auxiliary transformer</u>	<u>132kV/EHV</u>
<u>132 kV/EHV remote terminal unit, pole mounted</u>	<u>EHV/HV</u>
<u>132 kV/EHV remote terminal unit, ground mounted</u>	<u>EHV/HV</u>

Schedule 17, paragraph 25.17, ~~version 6.2~~ proposed

25.17 ~~For each combination of an end-user network level and a discount category, the relevant d~~Discounts ~~for demand end-users is~~ are determined ~~calculated~~ as follows:

For discount categories 0000, 132kV/EHV and HVplus

Discount percentage ~~=~~ is the lowest of 100 per cent and $P / (S + U)$

For discount category 132kV

Discount percentage ~~=~~ is the lowest of 100 per cent and $(P + ([\text{percentage for 132kV allocation}] * (1 - ([\text{network-Network length split for 132kV}] * [\text{EHV and 132kV direct cost proportion}])))) / (S + U)$

For discount category EHV

Discount percentage =
$$\frac{\text{is the lowest of 100 per cent and } (P + ([\text{percentage for EHV allocation}] * (1 - ([\text{network length split for EHV}] * [\text{EHV and 132kV direct cost proportion}]))))}{(S + U)}$$

Where:

Discount percentage is the discount applicable for each combination of discount category and end user type.

P is the sum of the allocation percentages for all network levels below the network level of the DNO Party – the DNO Party boundary up to and including the network level of the end user in the case of demand, and up to and excluding the network level of the end user in the case of generation.

S is the sum of the percentages for all network levels in the distribution network above and including the network level of the end user in the case of demand, and up to and excluding the network level of the end user in the case of generation.

U is the ratio of the sum of the DNO Party's total incentive revenue and the transmission exit charge, and the DNO Party's total Allowed Revenue including any incentive revenue and transmission exit charge.

~~[Network length split for 132kV] and [Network length split for EHV] is equal to 1 minus the ratio of the average length of circuits on relevant network level (EHV or 132kV) that is deemed to be provided by the IDNO Party to that provided by the host DNO Party. The values for the "network length split" for 132kV and EHV are currently set to 100 per cent.~~

~~[EHV and 132kV Direct cost proportion] is as calculated in paragraph 25.14E. the percentage share of direct costs in the sum of direct costs and indirect costs (excluding IT and telecoms and property management costs) at EHV. Negative costs will be excluded from the calculation.~~