**DCP 266 Proposed Legal Text**

Rather than calculating an IDNO percentage discount by comparing the avoided cost (p/kWh) with the total cost (p/kWh) in the PCDM, instead the IDNO percentage discount should compare the avoided cost (p/kWh) in the PCDM with the ATW CDCM cost (p/kWh). This will ensure that for any given level of DNO total cost (allowed revenue), the absolute p/kWh discount available to IDNOs will be aligned with the avoided p/kWh cost calculated in the PCDM and will remain stable regardless of any changes to the CDCM methodology for ATW tariffs.

Proposed Legal Text:

The legal text for this change may be quite complex and require further review by the working group. The text below is a suggestion which can be further developed within the working group:

**Schedule 16**

**Determination of an ~~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 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 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.

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

(a) the net amount earned by the DNO Party under price control financial incentive schemes ~~2007/2008~~ for the charging year (this may be a negative number); and

(b) Transmission exit charges ~~2007/2008~~ for the charging year.

112. This adjusted price control allowed revenue (denoted as [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. The [Adjusted Total revenue] to share is derived as follows:

[Adjusted total revenue to share] = [Total revenue to share] – [EHV Revenue] \* [Total revenue to share] / [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 ~~2007/2008~~ in the 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. The [Adjusted Revenue not to share] is derived as follows:

[Adjusted revenue not to share] = [Revenue not to share] – [EHV Revenue] \* [Revenue not to share] / [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 ~~2007/2008~~ in the 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 in the charging year, 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].

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

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

* For units distributed at LV, the adjustment factor is 1 (one).
* For units distributed at HV, the adjustment factor is 0 (zero) in respect of the LV level, and (U + 0.5\*Losses) / (U + Losses) in respect of the other levels, 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.
* For units distributed at EHV, the adjustment factor is 0 (zero) in respect of the LV and HV levels, and (U + 0.25\*Losses) / (U + Losses) in respect of the EHV and 132kV level, where U is defined as above.

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 to LV) flowing through each of the LV, HV, and EHV and 132kV networks. The number of units, loss adjusted 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 p/kWh allocation of costs ~~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 p/kWh allocations], [LV services p/kWh allocation], [HV/LV p/kWh allocation], [HV p/kWh allocation] and [EHV and 132kV p/kWh 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). Before this calculation is performed, any negative figure is set to zero.

* 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.
* 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.

**LV mains split**

114. The DNO Party determines the proportion of the LV mains which LV-connected embedded networks are deemed to use by:

(a) determining the total length of its LV mains used by LV-connected licensed embedded networks;

(b) dividing that total length by the number of end users on LV-connected licensed embedded networks; and

(c) dividing the result by the average length of LV mains by LV end user on the DNO Party’s own LV network.

115. The result of this calculation is denoted “[LV mains split]”.

**HV split**

116. The DNO Parties will procure that the Nominated Calculation Agent estimates the typical proportion of the HV network which is provided by the DNO Party in the case of HV loads supplied through an HV-connected LDNO. This estimate will be based on sample data, and the average used will be the same for all DNO Parties.

117. The proportion is denoted “[HV split]”, and is represented as:



**Calculation of discount p/kWh ~~percentages~~**

118. The discount p/kWh ~~percentages~~ are determined as follows.

119. For embedded networks with an LV boundary, ~~the~~ a p/kWh discount is equal to:

[LV: LV discount] = [LV services p/kWh allocation] + ([LV mains p/kWh allocation]\*(1 – [LV mains split]\*[LV direct proportion])).

120. For embedded networks with an HV boundary, three p/kWh ~~percentage~~ discount figures are used.

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

[HV: LV discount] = [LV services p/kWh allocation] + [LV mains p/kWh allocation] + [HV/LV p/kWh allocation] + [HV p/kWh allocation]\*(1 – [HV split]\*[HV direct proportion]).

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

[HV: LV Sub discount] = ([HV/LV p/kWh allocation] + [HV p/kWh allocation]\*(1-[HV split]\*[HV direct proportion]))~~/(1-[LV mains allocation] – [LV services allocation])~~.

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

[HV: HV discount] = [HV p/kWh allocation]\*(1 – [HV split]\*[HV direct proportion])~~/ (1 – [LV services allocation] – [LV mains allocation] - [HV/LV allocation])~~

**Application of discounts ~~percentages~~ to determine portfolio tariffs**

121. ~~Not used.~~For each all-the-way CDCM tariff an average p/kWh is calculated by dividing the total revenue collected from all tariff components of that all-the-way tariff by the total all-the-way volume associated with that tariff. For this purposed the Domestic Two Rate and Domestic Restricted tariffs will be aggregated and the Small Non-Domestic Two Rate and Small Non-Domestic Restricted tariffs will be aggregated.

122. ~~Not used.~~For each all-the-way CDCM tariff a discount percentage is calculated by dividing the appropriate IDNO p/kWh discount (which is dependent on the IDNO level of connection and the voltage of connection of the end user) by the appropriate all-the-way CDCM tariff p/kWh calculated in 121 above.

123. Not used.

124. For demand users, the discount percentages calculated in 122 are applied to all tariff components in all-the-way tariffs in order to determine embedded network portfolio tariffs.

125. For generation users, the unit rate element (p/kWh) is not discounted, reflecting the modelling assumption that generation benefits are seen at the voltage level above the Exit Point, and therefore the embedded LDNO simply “passes on” the benefits seen at the DNO Party level. The fixed charge element (p/day) is discounted at 100 per cent, as this tariff component in the all-the-way tariff recovers costs associated with the allocation of other expenditure to service assets, which are not provided by the DNO Party.