

Andrew Pace
Electricity North West Ltd

Friday, 07 May 2010

By email

Dear Andrew,

Consultation on amendments to the service model assumptions for ENW's Unmetered Supplies tariffs (23 April 2010)

Thank you for the opportunity to respond to your consultation into changes to the CDCM model with respect to unmetered charges¹.

Service model costs

Paragraph 3.2 shows a revised total asset cost of £607/connection, this is still considerably higher than the other Distributors. Is this the 'gross cost' of the connection or the 'net cost', after the deduction of customer contribution to having the connection made? If it is not the 'net cost' how are the customer contributions accounted for in the CDCM model? Clearly these costs will vary across the country and continue to vary with further competitive connections.

Q1 Typical lamp wattage

Paragraph 4.5 indicates the lack of 'looped services' in the ENW area. However, the number of 'exit points' will always be less than the number of items of connected unmetered equipment as multiple items are often connected to a single service cut-out. Examples of multiple items connected to a single cut-out include:

- a sign light attached to a lighting column
- a double arm lighting column
- supplies to feeder pillars (which *are* common in certain Distribution areas)
- traffic island supply positioned at the side of the road (for safety) with two bollards, a post-top lamp in the middle of the road, and
- traffic signal installation where each 'signal head', controller & sensors are each counted as items.

¹ www.enwLtd.co.uk/ofgem.htm

At one time, customer inventory submissions differentiated between 'exit points' and the 'number of items' this has not been required for many years, although some of our customers still provide the information, which indicates an average of 1.33 item per exit point.

Paragraph 5.2 quotes a 70W lamp using standard gear, for a number of years most lighting authorities have been installing 70W using 'electronic' gear which has become more reliable, has lower losses, resulting in lower charges and CO₂ impact. Nominal 70W SON lamp with electronic ballast has a circuit watts of 79W.

Power Data Associates is now the largest Meter Administrator in the country, calculating the settled energy consumed by over 2 million of the 7.6 million installed lighting units across Britain, including a significant customer in the ENW area. Across the whole portfolio we see a demand of 164MW and 2 million items, giving an average demand of 80 watts per unmetered item².

Paragraph 5.3 appears to have an error, using the figures quoted the average demand is 9.7W not, the 97W quoted. This would suggest that the demand figure is ten times too low. Using your number of items and our load factor (see below) the figures, $(73,006,000 \times 365 \times 24 \times 49\%) / 754,390 = 415\text{kWh/item/year}$.

Q2 – DCUSA contradiction

Paragraph 5.4 demonstrates a clear contradiction as the unmetered consumption across the country clearly includes lighting, signs, bollards, traffic signal equipment, as well as various communications equipment. The CDCM unmetered tariffs apply to all this varied unmetered equipment and therefore they should all be considered when deriving the unmetered tariffs. I suggest it indicates poor drafting in the DCUSA document.

Q3 – Burning Hours

The 70/35 lux cell is the most common photocell currently used in the country. The Elexon NHH burning hours for a dusk-dawn electronic photocell range across different GSP Groups, between 4078 to 4187 (ENW area is quoted as 4127 hours/year), with an average of 4122 hours/year. The bulk of the unmetered load is lighting equipment on a dusk-dawn regime, although there is equipment on continuously (e.g. many signs, bollards, subway lighting, communications equipment and traffic signals), in some lighting authorities there is also some lighting on a part-night basis. Across our portfolio of 2 million items (incl. lighting and continuous equipment) we see an average annual load factor of 49%, with each item consuming an average of 344 kWh/year

Using an average load factor of 49% is equivalent (working backwards) to 'average burn hours' across all unmetered equipment (incl. the impact of continuous equipment) of 4,292 hours/year.

² Demand includes controllers (such as photocells and time switches), but numbers of items excludes controllers

Overall Effect

Taken together, the typical exit point could have:

- a demand of 79 watts per item
- an annual load factor of 49%
- and 1.33 items per exit point

Leading to $79 \times 365 \times 24 \times 49\% \times 1.33 = 451\text{kWh/year}$

The above information is based on our aggregated records, we are not familiar with the internal workings of the CDCM model so cannot predict the impact on the final prices as a result of changes to the input data.

The proposed reduction in ENW HH & NHH unmetered tariffs would bring ENW unmetered charges closer to the other Distributors, although still on the 'high side' compared with other Distributors. The effect of the other Distributors implementing similar changes to their models have not been included in the graphs below, as the information is not available.

The quoted relative average costs of NHH & HH differ from our own calculation, which show the HH average lower than the NHH, this is based on our assumed proportion of red/amber/green units, which clearly differs from your own analysis. Our calculation (on last page) shows a revised ENW HH unmetered at an average cost of 2.40p/kWh.

I trust that the above information is of assistance, I would be happy to answer any questions or provide any clarification of the points made.

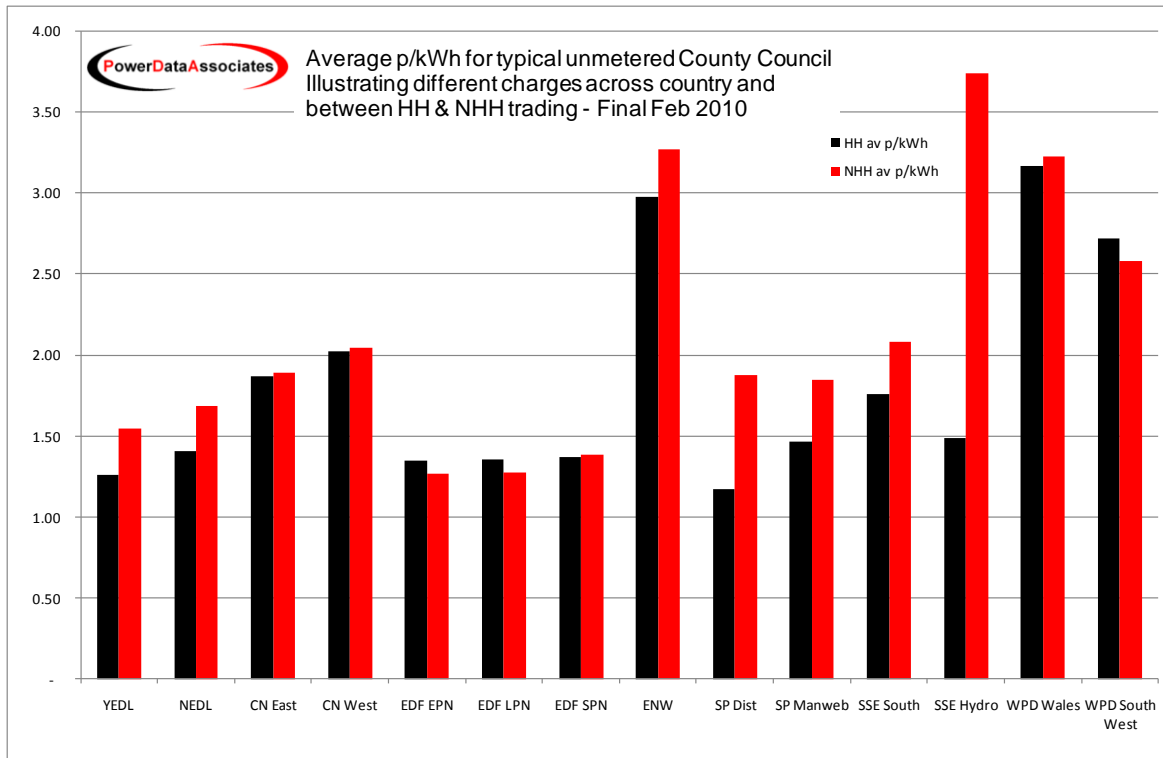
Best Regards

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Unmetered Use of System Charges – Published April 2010



Unmetered Use of System Charges – following ENW proposed changes

