

Reference:



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Distribution Policy
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Dear Chris,

ELEXON's response to the Ofgem impact assessment consultation on the electricity distribution charging boundary between higher (EDCM) and lower (CDCM) voltages

Thank you for the opportunity to respond to the Ofgem impact assessment consultation on the EDCM/CDCM charging boundary.

Why does EHV/HV boundary interest ELEXON?

ELEXON administers the Balancing and Settlement Code (BSC) arrangements. Under the BSC we are required to audit the calculation of Line Loss Factors (LLFs) submitted to us by the Licensed Distribution System Operators (LDSOs).

These LLFs are used in the BSC settlements process to account for the distribution losses incurred in transporting power across the distribution network, between the transmission/distribution boundary and the embedded customer's settlement meter. In general these LLFs are calculated by LDSOs in advance and do not change during the year that they are effective. Although static, these LLF values are calculated in advance to vary by time of day/season.

The EHV/HV boundary is important in this process because the LLF calculation method that LDSOs must employ ("Site Specific" or "Generic") is dependent on whether the LLF is to be applied to a site designated as EHV connected; or to a site designated as HV or lower voltage connected.

The LLFs are calculated by LDSOs for submission to ELEXON by 30 September prior to their use in Settlement on 1 April in the following year. Any change to the definition of the EHV/HV boundary will impact the LLF process administered under the BSC.

What are the potential interactions between the consultation Options and the current BSC LLF calculation process?

It would seem right that we align the LLF calculations' EHV/HV boundary with the charging methodologies' EHV/HV boundary. In which case, these are the potential interactions between the consultation Options and the LLF process.

- 1) If **Option 1** were implemented, we would as part of our audit seek evidence from the LDSOs as to the date of connection for 132/11kV and 66/11kV customers as we would need to determine whether they were classed as "old" (treated as EHV) or "new" (treated as HV).

- 2) With Options 2, 4 and 5a, these are more straightforward from an LLF audit perspective as the boundary between EHV and HV is clear and not date of connection dependent.
- 3) If **Option 2** were implemented we would expect that current EHV sites in Class B would move to HV "Generic" LLFs as a result. (Currently our arrangements require EHV sites to have "Site Specific" LLFs and sites connected at lower voltages to have "Generic" LLFs. HV customers are permitted to opt to have "Site Specific" LLFs if the LDSO agrees, so it will still be possible that a CDCM-charged customer would have a "Site Specific" LLF.)
- 4) If **Option 3** were implemented, we would need to know which EHV customers had exercised their charging option to CDCM so that we could determine whether they should be on "Site Specific" or "Generic" LLFs. Therefore we would need evidence from the LDSOs as to the status of the option for each Class B customer, as well as evidence for those HV customers who had opted the other way for "Site Specific" LLFs normally available only to EHV customers, under our existing BSC arrangements.

So for customers connected below 22kV, the correct LLF would not be obvious until we had examined the LDSO and customer agreements. In the absence of any evidence, we would need a default position which from the consultation we assume would be that the Class B customer moves to CDCM (or equivalently for us HV "Generic" LLFs).

We would need to introduce a cut-off date beyond which it is deemed to be impractical to match the customer's charging option for that LLF year because a customer could presumably exercise an option late in the fiscal year when LDSOs have already submitted their LLFs or even after the LLFs have been approved for use.

- 5) If **Option 4** were implemented we would see current HV sites Classes C1 and C2 move to EHV "Site Specific" LLFs. According to the figures in Table 3 of the consultation Classes C1 and C2 include over 400 sites so there would be a significant increase the number of Site Specific LLF calculations to be undertaken by LDSOs and in the LLF audit burden. There could be also be a small reduction if Class B3 currently on EHV Site Specific LLFs move to HV Generic LLFs, but this would not offset the larger C1 and C2 Classes.
- 6) **Option 5** is similar to Option 1 and will require us to distinguish between "old" (Class C1) and "new" (Class A1) customers using evidence supplied by the LDSO.
- 7) **Option 5a** would result in moving existing Class B2 and B3 EHV customers on "Site Specific" LLFs to HV "Generic LLFs". This would reduce the LLF computational and audit burden. Against this Class C1 customers move from "Generic" to "Site Specific" LLFs, although the numbers in Table 3 (only a few C1) suggest that the net effect is a reduction in the number of "Site Specific" LLFs.
- 8) If **Option 6** were implemented, we would collect extra information from LDSOs on authorised capacity to confirm the EHV/HV status of sites. If the authorised capacity changed during the year such that it crossed the threshold, we would not necessarily

be able to change their status for LLF purposes until the following year. And similar considerations apply to changes of status during the auditing period and after LLF approval as outlined for Option 3.

The timing of any licence changes

We note that Ofgem is seeking to ensure any licence changes are made by 27 August 2010. LDSOs have to submit their LLF values to us by 30 September. We are therefore hopeful that the EHV/HV boundary will be determined as early as possible and before the start of the LLF audit process under the BSC. However, we are also aware that some LDSOs plan to start calculating LLF values for 2011/12 during August. So it may be that for these LDSOs their calculations will need to be redone and re-audited as we seek to align the charging methodology and LLF EHV/HV boundaries. (It may be all their calculations because of the dependency between "Site Specific" and "Generic" loss calculations.)

Any changes made to the EHV/HV boundary allowing time for LDSOs to perform their LLF calculations in accordance with the new boundary prior to submission on 30 September would remove risks to this process.

Other interactions between EDCM and LLF calculation and audit processes

Although unrelated to the specific EHV/HV boundary issue, we found that the introduction of the CDCM last year had consequences for the LLF audit process and it may be the same this year as EDCM is being introduced. Last year, a number of LDSOs made requests for additional Line Loss Factor Classes, each of which has a separate set of LLF values that must be audited. These requests were made in order to align with the CDCM tariffs. This would not normally be a problem but the need for these extra LLFCs was identified after the normal LLF audit process had completed. There was then a second audit and approval process to accommodate. This was not efficient for the industry.

In conclusion, we have identified a number of ongoing potential interactions between the setting of the EDCM and CDCM boundary and LLF calculation and audit process; and a potential one-off interaction arising from the introduction of the EDCM in April 2011. All the Options can be managed under the BSC rules but those that are not dependent on date of connection, customer options, or move large numbers of sites between HV and EHV, particularly HV to EHV, are less burdensome from an LLF audit perspective.

On this basis Option 2 is the most straightforward from an LLF audit perspective after this first introductory year. (For this first year, because under Option 2 Class B sites would move from EHV "Site Specific" LLFs to HV "Generic" LLFs, the timing of any decision to change the boundary will be important to us and LDSOs.)

We hope you find these comments helpful. If you wish to discuss this response further please contact me on 020 7380 4253.

Yours sincerely

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Senior Advisor