

## LLF 2017/18 audit scenario

During the recent LLF audit process, ELEXON noted that a certain Party submitted LLF values for 2017/18 which contained two site specific values of >10.000. These two values were calculated for one site and are to be applied at two different Seasonal Time Of a Day (STOD) periods - the Winter Peak and Winter Weekday periods. This would mean upscaling imported volumes by a factor of ~10.000 and billing the customer based on those volumes. The site in question is a large site with embedded generation.

DNO has used the same approved methodology to calculate LLFs for a number of years. The large LLFs for these two time periods have been caused by the customer only importing one unit of electricity in each of these two periods in the last year to March 2016.

DNO queried the data with the Supplier due to the large amount of imported reactive power but very low imports of units which were presented within the data. The Supplier noted that *'the increase in reactive power was due to the embedded generation had to be switched off (...) due to an issue at the site. This resulted in the import data estimating double normal consumption'*. However, further investigation revealed that this problem did not occur during STOD periods in question.

DNO noted that they suspect a number of sites which deliberately consume in such a way (high reactive import with low volume of units) due to arrangements with National Grid (this was not confirmed for site in question).

Currently, DNOs have a choice how they calculate their LLF values for respective LLFCs, as long as the methodology they choose follows 16 principles stated in BSCP128 point 3.1.

DNO re-performed the calculation on multiple occasions to ensure the calculated LLF values are accurate and no discrepancy is evident within the data used. The end result after performing re-calculations returns the same values.

As part of the annual audit, ELEXON highlighted these large LLF values to DNO during its site visit and requested to go through the value calculations and data. The ELEXON account manager was happy with the demonstration and the details provided by DNO; however ELEXON noted to DNO that this would be investigated further due to the size of the LLF values.

Net import at the site in question, during Winter STOD periods is currently (and had been in the past) very small due to embedded generation (less than 5 kWh in a given year). However should the embedded generation fail or be switched off during those STOD periods, import of energy would hugely increase and large LLFs would cause severe impact to customer and potentially to Settlement.

## ELEXON's observations

As it currently stands, neither the Balancing and Settlement Code (BSC) nor BSCP128 define a limit on the LLF values submitted by Parties.

However, the Master Registration Agreement's (MRA's) Data Transfer Catalogue (DTC) states that an SVA LLF can have a numerical value of (5,3) which means the LLF can be five digits long, but three of the characters are required to be after the decimal place i.e. 99.999. The flow defined in the DTC (D0265) is owned by the BSC.

ELEXON believes that the two large LLF values of >10.000 should not be applied, as the unprecedented magnitude of the values might indicate more issues related to methodologies and LLF Approval process.

ELEXON wanted to investigate the possibility of introducing threshold limitations to BSCP128. This piece of work would involve consulting with industry members to ascertain what an ideal and realistic threshold would be and whether such a proposal would be plausible.

We note that a review of BSCP128 could potentially take up to 12 months to complete through to implementation of any required Change Proposal. It would also potentially involve revising the LLF value within the DTC for the D0265.

## Committee comments

This scenario was brought to the Committee. DNO proposed that perhaps a way to bypass high LLF values resulting from such behaviour, a unit cap/value cap should be introduced. Alternatively, EHV generic LLF should be applied. None of those solutions are currently contained within BSC/BSCP128. Committee member commented that perhaps we should consider to introduce a process that would allow to appeal LLFs retrospectively just like Trading Disputes (whenever the consumption/generation on site changes). At the moment ELEXON does not have any means to determine which values reflect correct loss on the line (i.e. where is the limit above which we think that the LLF value is non-reflective of what is happening on the network). One Committee member commented that one of the issues is the fact that LLF calculation is based on data from 2 years passed (hence when entering Settlement it is 3 y.o.). Committee Chair commented that we should seek for high LLF values in all data submitted and request LDSO's to provide explanation as to what has caused these (above 2.000). Committee decided to raise it to the Issue Group.

## The Goal of the Issue 65 Group

ELEXON would like to consult industry to examine whether:

- Current provisions of the BSCP128 and 16 methodology principles need to be revised;
- Establish what values of LLFs are representative of the losses on the network i.e. up to what value of LLF the losses should be taken into Settlement;
- Whether additional mechanism needs to be introduced to BSCP128 that would allow defaulting LLF values above certain value.