
LLF METHODOLOGY AUDIT REPORT

Imbalance Settlement Group (ISG)

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Purpose of paper **Decision**

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Summary **Exelon reviewed the Line Loss Factor (LLF) methodology statements submitted by Licensed Distribution System Operators (LDSOs), in accordance with BSCP128. All methodologies are subject to approval by the ISG and Supplier Volume Allocation Group (SVG). Exelon will publish the approved LLF methodology statements on the Exelon Portal.**

1. Methodology Review

- 1.1 In accordance with BSC Section K1.7.7, Exelon performed an annual review of the Line Loss Factor (LLF) methodology statements submitted by Licensed Distribution System Operators (LDSOs). The methodology review is set out in BSC Procedure 128 'Production, Submission, Audit and Approval of Line Loss Factors' (BSCP128).
- 1.2 Each year, Host LDSOs¹ and Embedded LDSOs² that calculate their own LLFs must prepare a methodology for calculating LLFs that complies with the LLF Methodology Principles in BSCP128, and submit this along with the Methodology Self-Assessment Document (MSAD) Appendix 1, providing evidence of compliance. This year's methodologies apply to LLFs that will be calculated for the 2024/25 BSC Year (1 April 2024 until 31 March 2025).
- 1.3 Where LDSOs operate an independent distribution network connected to a Host LDSO's distribution network, there is an alternative review process. These Embedded LDSOs must provide BSCCo with the details of each methodology that it intends to Mirror³. The Embedded LDSOs that Mirror submits this information within the MSAD Appendix 2.
- 1.4 Exelon reviewed each methodology statement/MSAD and liaised with the LDSOs so that the LDSOs could correct any non-compliances and Exelon could re-review, before this final report was issued to the SVG and ISG.

2. Methodology Statements and MSAD information

- 2.1 Exelon is satisfied that all LLF Methodology Statements are compliant with BSC Section K1.7.7 (a) and (b).
- 2.2 All Embedded LDSOs will mirror Host LDSO Generic LLFs.
- 2.3 Two Embedded LDSOs (Vattenfall Networks and Eclipse Power Networks) have submitted methodology statements as they intend to calculate Site Specific LLFs for sites connected at Extra High Voltage (EHV). They will continue to Mirror Host LDSO Generic LLFs until sufficient consumption data (at least 12 months) is

¹ A LDSO operating a distribution network that is directly connected to the Transmission System in their own distribution licence area.

² A LDSO operating an independent distribution network connected to a Host LDSO's distribution network.

³ Where the Embedded LDSO replicates the Generic Line Loss Factors of the relevant Host LDSO for their own specified LLFCs for the GSP Group.

available. If they are unable to calculate Site Specific LLFs until [CP1578 'Enabling Embedded LDSOs to submit Site Specific LLFs'](#) is implemented, they will continue to Mirror Host LDSO Generic LLFs.

2.4 The table below summarises any changes to the LDSO methodology statements:

LDSO	GSP Group(s)	Changes from previous year
Northern Powergrid	_F, _M	No change to how the LDSO calculates LLFs. Only minor amendments such as year, version number etc.
Electricity North West	_G	As above
Scottish Power	_D, _N	As above
UK Power Networks	_A, _C, _J	As above
National Grid Electricity Distribution	_B, _E, _K, _L	As above
Scottish and Southern Energy	_H, _P – Host LDSO areas _A, _B, _C, _D, _E, _F, _G, _J, _K, _L, _N, _M (Embedded LDSO areas)	As above
Eclipse Power Networks	ALL – Embedded LDSO	As above
Vattenfall Networks	ALL – Embedded LDSO	As above

2.5 The table below provides the Host LDSO methodologies that will be mirrored by the Embedded LDSOs for the 2024/25 BSC Year:

Embedded LDSO	Mirroring Host LDSO
Eclipse Power Networks	ALL
The Electricity Network Company	ALL
Last Mile Electricity	ALL
Energy Assets Networks	ALL
ESP Electricity	ALL
Optimal Power Networks	ALL
Fulcrum Electricity Assets	ALL
Harlaxton Energy Networks	ALL
Independent Power Networks	ALL
Leep Electricity Networks	ALL
Murphy Power Distribution	ALL
Scottish Hydro-Electric Distribution	_N
Southern Electric Power Distribution	_A, _B, _C, _D, _E, _F, _G, _J, _K, _L, _M
UK Power Distribution	ALL except _P
Vattenfall Network	ALL
Indigo Power	ALL

3. Default Generic LLFs required for GSP Group _P for 2024/25

- 3.1 In the annual LLF submission due on 30 September 2023, Scottish Hydro-Electric Distribution (SHEPD) are unable comply with BSCP128 LLF Methodology Principle 12 for GSP Group _P (MPID: HYDE). Principle 12 mandates that all generic LLFs need to be recalculated at least every 2 years. SSEN are not going to be able to recalculate generic LLFs for GSP Group _P as required, as the model LDSOs use to calculate generic LLFs does not allow for a network that is generation dominated.
- 3.2 SSEN are planning to create a new model, but this will not be in place to calculate the 2024/25 generic losses. As per BSCP128, default LLF values will need to be approved for 2024/25 (the last approved LLFs).
- 3.3 Principle 14 mandates that no changes can be made to approved generic LLFs mid-year. However, if default LLFs have been applied due to an audit failure, these may be replaced with approved LLFs on a prospective

basis as determined when the LLFs resubmitted by the LDSO have been approved by the Panel. It is therefore possible that LLFs could be applied on a prospective basis once the new model is ready.

4. Next Steps

- 4.1 The methodology statements will be presented to the ISG and SVG on 5 September 2023. Once approved by SVG and ISG, Elexon will publish the methodology statements on the Elexon Portal. All draft methodology statements are available to Committee Members on request.
- 4.2 The next milestone for the LLF audit is 30 September 2023. This is the deadline for all Host LDSOs and Embedded LDSOs that are calculating their own LLFs to submit their LLF values for the 2024/25 BSC Year. The LLF calculation audit will take place in October and November 2023.
- 4.3 Once the audit is complete for both Host and Embedded LDSOs, we will ask the ISG and SVG in March 2024 to approve the final LLF values which will go live on 1 April 2024.

5. Recommendations

- 5.1 We invite you to:
 - a) **APPROVE** the LDSO methodology statements;
 - b) **NOTE** that all Embedded LDSOs intend to Mirror Host LDSO Generic LLFs;
 - c) **NOTE** that the LDSO methodology statements will be presented to the SVG for approval at its 5 September 2023 meeting; and
 - d) **NOTE** the update on 2024/25 Generics LLFs for GSP Group _P.

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