

Reference Network Mapping Statement for use in BSC Year 2023-24

Imbalance Settlement Group (ISG)

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Summary	This paper presents the draft reference Network Mapping Statement (NMS) to the ISG for information. The NMS is used in the calculation and allocation of Transmission Loss Factors to BM Units. On 31 August 2022, the draft reference NMS was issued to BSC Parties for a 10 Working Day Consultation. At the October 2022 meeting, the ISG will be invited to approve the reference NMS, taking into account any amendments made following the Consultation.
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1. Introduction

- 1.1 When electricity is transmitted over the Transmission System some energy is 'lost'. This 'lost' energy is commonly referred to as 'transmission losses'. To account for transmission losses in Settlement, each Balancing Mechanisms (BM) Unit's Metered Volume is scaled by applying a Transmission Loss Factor (TLF) to it on an individual basis.
- 1.2 These TLFs are calculated by the TLF Agent (TLFA) for each TLF Zone. The TLF Zones are aligned with the existing Grid Supply Point (GSP) Groups so transmission losses can be allocated on a geographical basis.
- 1.3 Elexon allocates the TLFs to BM Units using the Network Mapping Statement (NMS). The TLFA also uses the NMS Statement.
- 1.4 The NMS is based on historic data from a 'Reference Year', running from 1 September to 31 August each year, for use in the following BSC Year. This NMS contains data relating to the Reference Year 2021/22 for use in the BSC Year 2023/24.
- 1.5 Elexon must produce and provide a copy of the draft reference NMS to the ISG and each Party, wherever practicable, no later than 31st August in the preceding BSC Year.
- 1.6 The ISG must approve the NMS no later than 19 October 2022 for use in the BSC Year 2023/24. Prior to approval, the NMS is called the draft reference NMS; once approved it is the reference NMS. Elexon must provide the reference NMS to the TLFA and National Grid Electricity System Operator (NGESO), and must also publish it on the BSC Website/Portal.
- 1.7 Following approval, Elexon updates the reference NMS on a periodic basis to contain any newly registered BM Units, GSPs and Interconnectors that were registered in the Central Registration Service (CRS), at which point it is called the prevailing NMS.

2. Draft Reference Network Mapping Statement

- 2.1 The draft reference NMS must contain:
 - a) for each:
 - i) BM Unit that is directly connected to the Transmission System;
 - ii) GSP; and

iii) Interconnector;

that was registered in the CRS at any point between 1 September 2021 and 31 August 2022 (the Reference Year) a mapping to the Node which represents or best represents it (it being recognised that one Node may represent several such points); and

b) for each Node, the Zone in which the Node lies;

c) for each BM Unit, the Zone in which the BM Unit lies; and

d) for each High Voltage Direct Current (HVDC) Boundary, the Node which represents or best represents the HVDC Boundary.

3. Consultation with BSC Parties

- 3.1 The BSC requires Elexon to provide a copy of the draft reference NMS to the ISG and each BSC Party by 31 August.
- 3.2 The draft reference NMS is provided as part of this paper (Attachment A), along with the supporting document (Attachment B) and the proforma (Attachment C). Elexon issued the draft NMS for a 10 working day consultation period on 31 August 2021, publicised the consultation in Newscast, and uploaded it to the BSC Website/Portal.

4. Next Steps

- 4.1 Elexon will present the draft reference NMS highlighting any amendments made following the Consultation to the ISG in October for approval.

5. Recommendations

- 5.1 We invite the ISG to:
 - a) **NOTE** the Draft Reference Network Mapping Statement, and that it has gone to Industry for consultation
 - b) **NOTE** that the Reference Network Mapping Statement will be used in the Determination of Transmission Loss Factors, and
 - c) **NOTE** that Elexon will present the Reference Network Mapping Statement to the ISG for approval at its October 2022 meeting.

Attachments

Attachment A – Draft Reference Network Mapping Statement, based on data from Reference Year 1 September 2022 to 31 August 2023 (Excel document)

Attachment B – Draft Reference Network Mapping Statement Supporting Document (Word document)

Attachment C – Pro-forma for responses to industry consultation on Draft Reference Network Mapping Statement

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