MP No: P350

(mandatory by BSCCo)

### Title of Modification Proposal:

Introduction of a seasonal Zonal Transmission Losses scheme

#### Submission Date:

4 July 2016

### **Description of Proposed Modification**

This modification relates to the CMA (Competition and Market Authority) Energy Market investigation<sup>1</sup> and proposes to apply the same solution as that proposed under P229. A high-level description of P229 is provided in italics below.

P229 was raised by RWE Npower on 28 November 2008.

It seeks to allocate transmission loss costs more cost reflectively across generators and demand customers on the GB transmission system. Under the current BSC arrangements, losses are allocated to Parties in proportion to their metered energy volumes, with a uniform allocation of 45% of losses to production accounts and 55% to consumption accounts. The current BSC losses arrangements do not consider the geographic location of generators and customers.

P229 proposes to change the Transmission Losses arrangements in the BSC so a Transmission Loss Factor (TLF) for each BSC Season is calculated for each 'TLF Zone'. TLFs would be calculated annually for the following year using historical data.

The P229 Proposed solution is essentially the same as that proposed by P203 'Introduction of a seasonal Zonal Transmission Losses scheme', except that it includes provision for offshore nodes.

It's worth noting that, subsequent to P229, P278 set TLMs to 1 for all I/C BM Units, which may require consideration as this mod progresses<sup>2</sup>. Similarly, this new modification may require consideration of onshore HVDC circuits as these were not considered under P229.

### Description of Issue or Defect that Modification Proposal Seeks to Address

The defect that this modification seeks to address is that the current treatment of transmission losses (i.e. allocated to BSC parties on a non-locational basis)<sup>3</sup> does not follow the principles that are to be set out in the electricity transmission licence as a result of the CMA Energy Market

<sup>&</sup>lt;sup>1</sup> See para 6.144c of the <u>CMA Energy Investigation Final Report</u>

<sup>&</sup>lt;sup>2</sup> This is clarified in para 6.121 of the CMA Energy Investigation Final Report

<sup>&</sup>lt;sup>3</sup> All transmission system losses are allocated to BSC parties in proportion to metered energy, whether production or consumption, on a uniform allocation basis (45% to production accounts, 55% to consumption accounts) taking no account of location.

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Investigation Order referenced in para 6.143 of the CMA Energy Investigation Final Report (the report).

This specifically relates to the CMA AEC (Adverse Impact on Competition) that the absence of locational pricing for transmission losses is likely to distort competition between generators, raise bills to customers and to have both short- and long-run effects on generation and demand:

- In the short run, costs will be higher than would otherwise be the case, because crosssubsidisation will lead to some plants generating when it would be less costly for them not to generate, and other plants, which it would be more efficient to use, not generating.
- In the long run, the absence of locational pricing may lead to inefficient investment in generation, including inefficient decisions over the extension or closure of plant. There could also be inefficiency in the location of demand.

The remedy that the CMA has adopted, as set out in para 6.113 of the report, is to "introduce locational charging for transmission losses in Great Britain".

This para also states that "the design of the remedy will be identical in its technical aspects to the P229 code modification previously assessed in 2011, including notably the use of semi-marginal (rather than full marginal) transmission loss factors (for the avoidance of doubt, any reference to the P229 code modification proposal relates to the original proposal raised by RWE – referred to as the Proposed Solution in the P229 Assessment Report – and not to any alternative proposals considered within the context of the modification process)".

**Impact on Code** (optional by originator)

Expected to impact Sections E, H, T, V and X (specifically Annexes X-1 and X-2)

**Impact on Core Industry Documents or System Operator-Transmission Owner Code** (optional by originator)

None anticipated

**Impact on BSC Systems and Other Relevant Systems and Processes Used by Parties** (*optional by originator*)

Likely to impact the BMRA, the CDCA, the CRA and the SAA and will also require a new BSC Agent to be established for determining TLF values

**Impact on other Configurable Items** (*optional by originator*)

To be determined

**Balancing and Settlement Code** 

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## Justification for Proposed Modification with Reference to Applicable BSC Objectives

This proposal will better facilitate Applicable BSC Objective A as the current arrangements are in direct contradiction to the principles which will be set out in the electricity transmission licence as a result of the CMA Energy Investigation Order detailed in para 6.143 of the report. For ease of reference, this states that:

"at all times, imbalance charges (and specifically the estimated volumes of an imbalance) are calculated such as to be locationally sensitive to transmission losses".

In conjunction with this, the report specifies (in para 6.144) that the required changes need to be in place by April 2018 and (in para 6.145) that "the order will also provide for the modification of the Transmission Standard Licence Conditions" to give effect to this.

The CMA has also clearly demonstrated in the report (e.g. in the AEC referenced in the section above) that there are benefits under objectives B and C.

Finally, the proposal appears neutral on Applicable BSC Objective E as it not incompatible with the EU Target Model and implementing this solution would not preclude a move further toward this design at a later point in the future.

## Is there a likely material environmental impact? Yes

The CMA modelling found "a moderate environmental cost arising from the absence of locational charges for transmission losses in the form of increased SO2 and NOX emissions, valued at between around £1 million and £15 million" over the period 2017 to 2026.

### Urgency Recommended: No

### Justification for Urgency Recommendation

N/A

Self-Governance Recommended: No

## Justification for Self-Governance Recommendation

N/A

## Fast Track Self-Governance Recommended: No

### Justification for Fast Track Self-Governance Recommendation

N/A

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Should this Modification Proposal be considered exempt from any ongoing Significant Code Reviews?

Yes, as this Modification does not relate to the faster switching SCR currently being undertaken.

#### **Details of Proposer:**

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