

ATTACHMENT I: DETAILED RATIONALE PROVIDED BY THE ISG MEMBER WHO DID NOT SUPPORT CP1479

CP1479 indirectly highlights an issue with allocation of losses that is more significant than the relatively simple administrative and meter savings it seeks to achieve. These wider issues should be considered more thoroughly before deciding upon it. This leads the ISG member to oppose the proposal, even though it is consistent with the current BSC baseline. The ISG member acknowledges this means the BSC Panel itself will have to consider the proposal, but he believes it is reasonable for them to do so, given the issue it highlights and its potential materiality.

Under the current BSC baseline, a network user can avoid the cost of local transmission losses by maximising transmission network ownership of assets connecting the user to the wider network. How it might do so and other consequences, are largely outside the scope of the BSC. The losses then become socialised. In particular, losses in transformers can be of order 0.5%, and losses in long transmission-owned lower voltage lines can be material. A generator whose transformers and connections to the high voltage transmission network are not owned by the transmission company cannot avoid these losses. Current Code of Practice obligations require meters to be located at the high voltage side of generation transformers. When the BSC was written this was the usual commercial ownership boundary, and the BSC and Codes of Practice were broadly consistent and equitable. The current Code of Practice obligation provides scope for equal treatment of losses if appropriate changes to the BSC were made. CP1479 would tend to cement the current inequality by removing the obligation for metering on the high voltage side. It could be an obstacle to an equitable treatment of losses better meeting BSC Objective (c) in future, by requiring adjustments in future for any metering located at an ownership boundary on the LV side.

When the BSC, and the Pool before it, were originally written, there was an aim of equitable treatment between generators who were then mainly connected directly to high voltage transmission by their own transformers, and separately between suppliers whose customers were mainly connected to high voltage transmission via transmission-owned Grid Supply Point transformers. The growing misalignment between the metering location required by CoPs and the commercial boundary points, that has developed since the BSC was written, has mostly occurred as a result of new ownership models for network connection, which to my knowledge the BSC has not really considered. There was mention at ISG of discussions at the time of BETTA.

While the numbers of connections with transmission-owned transformers and circuits was small, the inequality was less material. The CP1479 paper to ISG suggests there are now large numbers of connections using transmission-owned transformers and circuits. Without more information, it is difficult to know the materiality. For example, if 5000 MW of generation with 0.3 load factor were connected with transmission-owned transformers with 0.5% losses, the materiality at 50 £/MWh could be of order $4000 * 0.3 * 0.005 * 8760 * 50 =$ over £3m/year.

Site-specific Line Loss Factors might include distribution transformer losses. The costs of local transmission assets themselves are generally borne by the connecting user itself under connection charging methods, unlike the associated energy losses. Multiple users connecting via private network assets would generally agree the allocation of losses on those assets between themselves, but would not usually share those losses with other users of the public network.

In legal terms, CP1479 would better align the location of meters required by the BSC Metering Codes of Practice (CoPs) with the commercial boundary at which point, under the current BSC baseline, BSC Parties take responsibility for flows with networks. Superficially this seems a rational thing to do, and it would simplify existing BSC processes by avoiding the need for dispensations for metering at the commercial boundary rather than the location required by CoPs, and the need for meter adjustments where metering is at the location required by CoPs rather than at the commercial boundary.

The reason for opposition is that it could act against BSC objective (c) concerning competition, by removing the potential to measure flows so as to allocate local losses consistently in future. If CP1479 is approved, an equitable treatment in future would require methods for estimating local transmission losses, since generation meters on an LV boundary would not capture the local transmission losses. There are currently methods for allocating

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transmission asset costs to local users, but equivalent methods for losses could be avoided with metering that includes the losses, as provided by generation metering at current Code of Practice locations.