

ISG212/02 – METERING DISPENSATION D/492 – GASCOIGNE WOOD POWER STATION

MEETING NAME ISG 212

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Purpose of paper Decision

Classification Public

Summary Gazprom Marketing & Trading Retail Ltd has applied for a lifetime Metering Dispensation (D/492) from Code of Practice (CoP) 2. D/492 relates to the Metering Equipment measuring the flows to and from a new diesel Generating Plant (Allen Diesels - 20 MVA total capacity) which is connected into the existing switchgear at Northern Powergrid's Gascoigne Wood substation, via Harworth Estates' private network. The new Metering Equipment for the Generating Plant is fully compliant with CoP2 apart from being located 10 metres from the Defined Metering Point. We invite the ISG to approve Metering Dispensation application D/492 on a lifetime basis.

1. BSC requirements

- 1.1 Section L 'Metering' of the Balancing and Settlement Code (BSC) requires all Metering Equipment to either:
- comply with the requirements set out in the relevant Code of Practice (CoP) at the time the Metering System is first registered for Settlement; or
 - be the subject of, and comply with, a Metering Dispensation.
- 1.2 Section L allows the Registrant of a Metering System to apply for a Metering Dispensation if, for financial or practical reasons, Metering Equipment will not or does not comply with some or all the requirements of a CoP.
- 1.3 The process for applying for a Metering Dispensation is set out in BSCP32 'Metering Dispositions'.

2. Background to Metering Dispensation D/492

- 2.1 Northern Powergrid's (NPG's) Gascoigne Wood 33kV substation used to feed the Selby Gascoigne Wood Colliery. The site has since been developed into a business park, owned by Harworth Estates (the Customer), and this supply point was believed to be compliant with Code of Practice (CoP) 3¹ and used to facilitate a historical import capacity below 10MVA.
- 2.2 In order to facilitate Settlement arrangements for a 20 MVA Generating Plant (Allen Diesels) within the private network, the Customer's Boundary Point Metering System has been upgraded to comply with CoP2² (Issue 4).
- 2.3 The Customer's Settlement voltage transformers (VTs) and current transformers (CTs) are located on the incoming feeders, within NPG's switchgear, at this substation above the Defined Metering Point (DMP) (the

¹ 'Code of Practice for the metering of circuits with a rated capacity not exceeding 10MVA for Settlement purposes'

² 'Code of Practice for the metering of circuits with a rated capacity not exceeding 100MVA for Settlement purposes'

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point of connection to the Distribution System of a Licensed Distribution System Operator (LDSO)). The DMP is the point of connection of the Customer's three (outgoing) feeders to the switchgear busbar.

- 2.4 E.ON UK has applied for a separate Metering Dispensation (D/491) for this Metering Equipment (ISG212/01).
- 2.5 The diesel Generating Plant is connected via the private network's E1T3 circuit breaker, which is located within the Gascoigne Wood substation switchgear, and has its own new Metering Equipment located below the DMP (see the electrical single line diagram in Attachment A).

3. Metering Dispensation application (D/492)

- 3.1 Gazprom Marketing & Trading Retail Ltd has applied for a lifetime Metering Dispensation (D/492) from CoP2 (Attachment A) to measure the flows to and from the 20MVA diesel Generating Plant.
- 3.2 The Metering Equipment is non-compliant with CoP2 in one respect. The CTs/VTs for the Generating Plant are not located at the DMP. They are located within a standalone CT/VT unit which is 10 metres away from the DMP. There is no existing Metering Equipment at the DMP (i.e. within the switchgear) that can be used and new Metering Equipment cannot be located at the DMP because the switchgear is old and could be damaged installing new Metering Equipment.
- 3.3 The electrical losses from the Actual Metering Point (AMP) to the DMP will be very minimal (electrical losses in 10 metres of 33kV cable) and overall accuracy will be maintained within CoP2 limits at the DMP. Due to the difference metering arrangement required, the electrical losses between the AMP and the DMP caused by the Generating Plant will be picked up by the Registrant of the Boundary Point Metering System (E.ON UK) and, ultimately, the private network owner (Harworth Estates)). The Registrant and Harworth Estates are satisfied with this arrangement.
- 3.4 NPG (the LDSO) estimates the cost of providing compliant Metering Equipment at the DMP would be £1.5m as a new substation, with new switchgear containing Settlement measurement transformers at the DMP, would need to be built.
- 3.5 The proposed solution will cost £55k. This cost comprises:
 - £17k for a new CT/VT unit;
 - £8k for new CoP2 Meters; and
 - £30k for installing the CTs/VT and the Meters (including cabling).

4. MDRG comments

- 4.1 We circulated the application to the Metering Dispensation Review Group (MDRG) for comments.
- 4.2 Four MDRG members responded. Two MDRG members declared an interest and did not provide any comments (one is affiliated with the applicant's company and one is the Meter Operator Agent).
- 4.3 One MDRG member provided the following rationale:
 - I support the Dispensation in respect of the AMP is not at the DMP. The only difference being a short length of busbar and/or 33kV cable making negligible difference in respect of losses, if a negligible difference then compensated for in the metering.
 - I do not support the Dispensation in the context of this Metering System forming part of a differencing arrangement with the remainder of the Gascoigne Wood supply arrangement, as indicated by the reference in this application to absorbing losses into the rest of the Metering System. This would add to the complexity of the metering arrangement and has a greater opportunity for Settlement errors. The potential for errors in these complex netting arrangements has been highlighted by the [site name]

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Trading Dispute resolution reported to the last PAB meeting and leading to an Issue group planned to review the arrangements in the new year. Prior to the Issue group developing recommendations it would be best to resist increasing the risk for errors in the Settlement arrangements.

4.4 One MDRG member supports the application and provided the following rationale:

- I support this dispensation as CoP2 accuracy is maintained and I strongly suspect the losses on 10m of cable will be negligible. This MDRG member shared the other MDRG member's (above) concerns regarding differencing schemes but doesn't have sufficient experience of them to provide a considered view.

5. Transmission Company and LDSO comments

5.1 We circulated the application to the Transmission Company and the LDSO for comments.

5.2 The Transmission Company had not provided a response at the time of writing the paper. If the Transmission Company provides a late response we will update the ISG at its meeting.

5.3 The LDSO supports the application.

6. ELEXON's view

6.1 ELEXON supports this lifetime Metering Dispensation application (D/492) as overall accuracy will be maintained within CoP2 limits at the DMP.

6.2 Because the CTs/VT for the embedded Generating Plant are located below the CTs/VTs for the Customer's site, the Generating Plant metered volumes need to be deducted from the Customer's metered volumes. This is the case in any private network where embedded parties' (i.e. generator's or other customer's) metered volumes need to be deducted from the private network's Boundary Point Metering System(s), even if the CTs/VTs for the private network are located at the DMP.

6.3 The Customer's Registrant has stated that it and the Customer (private network owner) are willing to take on the risk of something going wrong with the proposed arrangements.

6.4 We believe that if the existing controls around complex sites are insufficient to mitigate these (and additional³) risks, these should be strengthened for all complex sites and this can be discussed under the Issue on complex sites that ELEXON will be raising in early 2019.

7. Recommendations

7.1 We invite you to:

- a) **APPROVE** Metering Dispensation application D/492 for Gascoigne Wood Power Station on a lifetime basis.

Attachments

Attachment A – Metering Dispensation application (D/492)

For more information, please contact:

³ i.e. the connection of other generation to the private network or customers embedded within the private network seeking a third party supply arrangement.

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