

ISG210/04 - METERING DISPENSATION D/489 – CHESHIRE POWER STATION

MEETING NAME ISG 210

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Purpose of paper Decision

Classification Public

Summary RWE Generation UK plc has applied for a lifetime Metering Dispensation (D/489) against Code of Practice 2 for the location of the Metering Equipment associated with Cheshire Power Station. We invite the ISG to approve D/489 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 Dispersations'.
- 1.4 Registrants can request confidentiality of application, in this instance the Registrant has requested confidentiality of technical details.

2. Background to Metering Dispensation D/489

- 2.1 Cheshire Power Station is currently registered in the Supplier Volume Allocation (SVA) arrangements and consists of:
- one 44MW OCGT (Cheshire OCGT);
 - a bank of six 1.1MW reciprocation gas engine generators (Cheshire East); and
 - a bank of 12 1.1MW reciprocation gas engine generators (Cheshire West).
- 2.2 The SVA Settlement Metering System is located at the point of connection between the Power Station and the Licensed Distribution System Operator's (LDSO) Distribution System, which is at the Defined Metering Point (DMP).
- 2.3 Each generating unit (GU) is capable of being controlled individually, but in practice are run as three distinct units: Cheshire OCGT (44MW); Cheshire East (6.6MW); and Cheshire West (13.2MW).
- 2.4 RWE Generation UK is proposing to transfer the registrations to the Central Volume Allocation (CVA) arrangements. With the proposed BM Unit configuration, new Metering Equipment has been located on the 33kV Switchboard prior to formal registration in CVA.

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- 2.5 The Cheshire OCGT is a single GU and, in the CVA arrangements, will be classed as a standard BM Unit as it will be operated and controlled as an individual generator. It is connected to a single 11kV Switchboard (103) and then connects to the 33kV Switchboard (Green) via a single 11/33kV transformer (102TX). The new Metering Equipment installed for the Cheshire OCGT is located on the High Voltage (HV) side of 102TX.
- 2.6 Cheshire East's six GUs are connected to a single 11kV Switchboard (105) and then connect to the 33kV Switchboard via a single 11/33kV transformer (104TX). The six GUs are identical units and are dispatched as a collective unit. The new Metering Equipment installed for Cheshire East is located on the HV side of 104TX.
- 2.7 Cheshire West's 12 GUs are connected to a single 11/33kV transformer (TX5). This transformer, in turn, is connected to the 33kV Switchboard (Red). The 12 GUs are identical units and are dispatched as a collective unit. The new Metering Equipment installed for Cheshire West is located on the Low Voltage (LV) side of TX5. There is insufficient space in the existing switchgear to install metering class current transformers (CTs) and voltage transformers (VTs) in the switchgear on the HV side of TX5.
- 2.8 At its meeting in September 2018 the ISG ([ISG209/05](#)) approved two non-standard BMU applications, one for Cheshire East and one for Cheshire West.

3. Metering Dispensation application (D/489)

- 3.1 RWE Generation UK plc has applied for a lifetime Metering Dispensation against CoP2¹ for the location² of the Metering Equipment associated with Cheshire Power Station (Attachment A). The Metering Equipment associated with the Power Station is fully compliant with CoP2, aside from its location away from the DMP.
- 3.2 The Cheshire OCGT Metering Equipment is located on the HV side of 102TX. The electrical equipment between the Actual Metering Point (AMP) (HV side of 102TX) and the DMP consists solely of bus bar and is of minimal distance. As such, the applicant considers the electrical line losses between the AMP and DMP to be negligible and therefore no compensation has been calculated or applied to the associated Meters.
- 3.3 The Cheshire East Metering Equipment is located on the HV side of 104TX. The electrical equipment between the Actual Metering Point (AMP) (HV side of 104TX) and the DMP consists solely of bus bar and is of minimal distance. As such, the applicant considers the electrical line losses between the AMP and DMP to be negligible and therefore, no compensation has been calculated or applied to the associated Meters.
- 3.4 The Cheshire West Metering Equipment is located on the LV side (11kV) of TX5. There is 20m of cable between the AMP (LV side of TX5) and the DMP (the outgoing terminals of the 33kV switchgear). The CTs are located in the TX5 11kV cable connector box therefore there are no line losses associated with the 11kV cable. The applicant proposed to apply a compensation factor to account for Active Energy losses caused by the power transformer. Given the length of cable between the AMP and DMP is relatively short at 20m, the applicant considers the line losses will be negligible and therefore no compensation has been calculated or applied.
- 3.5 As overall accuracy at the DMP will be maintained within the CoP2 limits the applicant does not consider the proposed solution poses a risk to Settlement.
- 3.6 The applicant has applied for a lifetime Metering Dispensation on the basis that the arrangement is intended to be enduring and is not expected to change.

¹ 'Code of Practice for the metering of circuits with a rated capacity not exceeding 100MVA for Settlement purposes'

² Specifically from paragraph 8 of Appendix A 'Define Metering Points'.

³ 'Transfer of Registration of Metering Systems Between CMRS and SMRS'

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4. MDRG comments

- 4.1 Two out of five Metering Dispensation Review Group (MDRG) members responded to ELEXON's request for comments on the Metering Dispensation application.
- 4.2 One MDRG member declared an interest as they are the Meter Operator Agent (MOA).
- 4.3 One MDRG member supported the application on the basis that the accuracy will be maintained within CoP 2 at the DMP.

5. Transmission Company and LDSO comments

- 5.1 The Transmission Company confirmed it had no issues or objections to the application providing that BSCP68³ has been successfully followed.
- 5.2 The LDSO had no comments on the application.

6. Electrical Loss Validation Agent (ELVA) comments

- 6.1 We submitted the Metering Dispensation application to the ELVA for validation of the proposed compensation. The ELVA has queried whether the proposed Active Energy compensation factor values were transposed in the application and should be swapped around to be acceptable. The ELVA noted that as no Reactive Energy compensation was proposed it could not validate it.
- 6.2 The applicant confirmed that the Active Energy compensation factors were transposed. The applicant confirmed it does not propose to compensate for Reactive Energy. The LDSO has no concerns.

7. ELEXON's view

- 7.1 ELEXON supports this application on the grounds that overall accuracy of the Metering System will be maintained within CoP2 limits at the DMP.

8. Recommendations

- 8.1 We invite you to:
 - a) **APPROVE** Metering Dispensation application D/489 on a lifetime basis.

Attachments

Attachment A – ISG210_XXA_Metering Dispensation_D489_application_Cheshire_PS_PUBLIC

Attachment B (CONFIDENTIAL) – ISG210_XXB_Metering Dispensation_D489_Cheshire_PS_SLD_CONFIDENTIAL

Attachment C (CONFIDENTIAL) – ISG210_XXC_Metering Dispensation_D489_Cheshire_PS_Tx5_Load_Loss_CONFIDENTIAL

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