

Metering Dispensation D/516 - Moray East Offshore Wind Farm

Supplier Volume Allocation Group (SVG)

Date of meeting	2 March 2021	Paper number	241/03
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Classification	Public	Document version	V1.0

Summary **Moray Offshore Windfarm (East) Ltd has applied for a lifetime Metering Dispensation (D/516) against Code of Practice (CoP) 5 to not measure the low voltage supplies to Offshore Transmission Owner (OFTO) assets, through its own auxiliary transformers, on the Offshore platforms, at the Moray East Offshore Wind Farm. We invite the SVG to approve D/516 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 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.
- 1.2.1 The process for applying for a Metering Dispensation is set out in BSCP32 'Metering Dispensations'.

2. Confidentiality

- 2.1 BSCP32 allows the Metering Dispensation applicant to request confidentiality via the application form (BSCP32/4.1).
- 2.2 In this case, the applicant has noted on the application form that the application itself is not confidential. However, the applicant has requested that we keep the metering single line diagram (Attachment B) confidential. This is to prevent Elexon making these details public on the BSC Website.

3. Background to Metering Dispensation D/516

- 3.1 For each of the three Power Park Modules (PPMs) that comprise Moray East Offshore Wind Farm CoP1¹ Meters measure the main Imports to and Exports from the PPMs on each substation platform. CoP5² Meters in the onshore substation, and the Offshore substations, measure the low voltage (LV) supplies to wind farm assets.
- 3.2 The auxiliary power for each Offshore substation, which feed OFTO assets and wind farm assets, can be provided from three different supplies:
- the OFTO owned Earthing and Auxiliary Transformers, ET1, ET2 and ET3; or

¹ 'Code of Practice for the metering of circuits with a rated circuit capacity exceeding 100MVA for Settlement purposes'

² 'Code of Practice for the metering of energy transfers with a maximum demand of up to (and including) 1MW for Settlement purposes'

- b) via the wind farm owned Auxiliary Transformers, AT1, AT2 and AT3 during ET1, ET2 and ET3 outages; or
- c) via OFTO owned diesel generators³, as emergency backup.

- 3.3 On each Offshore platform, a low voltage (LV) Boundary Point exists between the wind farm owned 175kVA 66/0.4kV Auxiliary Transformers, and the OFTO owned 400V distribution boards which supplies small, LV rated loads.
- 3.4 The Auxiliary Transformers are included as a backup. The main supply to these distribution boards is from the OFTO owned 175kVA 66/0.4kV Earthing and Auxiliary Transformers. The Auxiliary Transformers and Earthing Transformers are interlocked electrically, in such a way that an Auxiliary Transformer can only operate if the associated Earthing and Auxiliary Transformer is not connected.
- 3.5 In normal operation, the OFTO will feed these LV auxiliary loads from its own Earthing and Auxiliary Transformers. Should an Earthing and Auxiliary Transformer be out of service, the wind farm owned Auxiliary Transformer will provide the power to 400V distribution board and thus the LV auxiliary supplies.
- 3.6 As the wind farm owned Auxiliary Transformers are fed directly from the wind farm's 66kV busbar, the power consumed by the LV auxiliary supplies will be from the wind farm's own generation, when there is sufficient power available at that PPM.
- 3.7 If, during this contingency, the PPM is unable to meet the demand from LV auxiliary load from its own generation, power will be imported from National Electricity Transmission System via the OFTO and these volumes will be measured as Imports on the CoP1 Meter at the high voltage (HV) Boundary Point.
- 3.8 Due to an oversight at the design stage, installation of CoP5 Meters on the LV side of the wind farm owned Auxiliary Transformers, to be used only in the contingency operation condition (which will be infrequent and for limited duration of time), was believed not to be required and therefore was not fitted.
- 3.9 As a result of the above, Moray Offshore Windfarm (East) Limited does not wish to measure the LV auxiliary supplies to OFTO assets through its own Auxiliary Transformers on the Offshore platforms, at the Moray East Offshore Wind Farm, under contingency operation.

4. Metering Dispensation application (D/516)

- 4.1 Moray Offshore Windfarm (East) Limited has applied for a lifetime Metering Dispensation (D/516) against CoP5.
- 4.2 This is because either the wind farm operator will provide these contingency LV auxiliary supplies from its own generation or, when not generating, its CoP1 Meters will record them as part of the Imports for the Moray East Offshore Wind Farm PPMs. These contingency LV auxiliary supplies will be provided free of charge to the OFTO.
- 4.3 In addition, the cost of retrofitting CoP5 tariff Meters now (~£750k), when the substations are already installed Offshore, would require very significant effort and would have negligible impact on the amount of energy metered.
- 4.4 These LV Boundary Points are not in use during normal operation and are only required in the unlikely event of both a 220/66kV grid transformer (GT1, GT2, GT3) and a 66kV/0.4kV Earthing transformer (ET1, ET2, ET3) outage.
- 4.5 It is very likely that due to the high cost associated with retrofitting a CoP5 Meter at the LV Boundary Point, it will not be cost effective to do so at any point during the operational lifetime of the wind farm.

5. MDRG comments

- 5.1 We circulated the Metering Dispensation application (and Attachments) to the Metering Dispensation Review Group (MDRG) for comments.
- 5.2 One MDRG members responded:
 - the MDRG member noted that whilst they were disappointed in the example of failure to properly plan the Metering Equipment, they understood the justification for the application and reluctantly supported it.

6. NETSO comments

³ The diesel generators are not shown in Attachment B.

6.1 We circulated the Metering Dispensation application (and Attachments) to the National Electricity Transmission System Operator (NETSO) for comments.

6.2 The NETSO confirmed they had no objections to this Metering Dispensation

7. **Elexon's view**

7.1 Elexon supports this Metering Dispensation application (D/516) as the supplies to the OFTO LV assets across the unmetred Boundary Points would:

- be very infrequently used and low in volume; and
- either come directly from the wind farm's own generation (i.e. below the CoP1 Meters); or
- be recorded as part of the CoP1 Imports to the wind farm when not generating.

8. **Recommendation**

8.1 We invite the SVG to:

- a) **APPROVE** Metering Dispensation D/516, for Moray East Offshore Wind Farm, on a lifetime basis.

Attachments

Attachment A – Metering Dispensation application (D/516)

Attachment B (CONFIDENTIAL) – Boundary Points and metering diagram for Moray East Offshore Wind Farm

For more information, please contact:

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