

BSCP32/4.1 Application for a Metering Dispensation

Part A – Applicant Details

To: BSCCo	Date Sent: 23/01/2019_____
From: Requesting Applicant Details	
Name of Sender: _____	
Contact email address: _____	
Contact Tel. No. _____	Contact Fax. No. _____
Name of Applicant Company: Spalding Energy Expansion Limited _____	
Address: 81 George Street, Edinburgh	
Post Code: EH2 3ES_____	Our Ref: _____
Name of Authorised Signatory: _____	
Authorised Signature: _____	Password: _____

Confidentiality:

Does any part of this application form contain confidential information?

Request for Confidentiality **NO**

**Delete as applicable*

If 'YES', please state the parts of the application form that are considered confidential, including justification below. Information that is considered confidential:

Reasons for requesting confidentiality:

.....

number, site name, expiry date (if any) and BSC Panel determinations will routinely be made available in the public domain unless the applicant informs BSCCo otherwise at the time of application

BSCP32/4.1 Application for a Metering Dispensation (Cont.)**Part B - Affected Party Details**

Number of Affected parties_1¹

Contact Name at Affected party:	
Contact email address:	
Contact Tel. No.	Contact Tel. No.
Company Name of Affected party: National Grid	
Address: National Grid House, Warwick Technology Park, Warwick	
Post Code: CV34 6DA	

¹ For more than one Affected party, Part B should be completed for each, using additional copies of Part B as required.

BSCP32/4.1 Application for a Metering Dispensation (Cont.)

Part C – Reason for Application

If the application is an extension or update for an existing Metering Dispensation, enter existing ref: D/.....

Site Specific

**Delete as applicable.*

Describe why you require a Metering Dispensation. Include any steps you propose to limit the impact on Settlement and other Registrants:

A Metering Dispensation is required due to the Actual Metering Point (AMP) being 120m from the Defined Metering Point (DMP) (i.e. the point of connection (Boundary Point) to the Transmission System) therefore compensation for 120m of cable losses will be required. The compensation will ensure that the cable losses are taken into account for Settlement for Spalding Energy Expansion (an OCGT) and therefore will not impact other Registrants. The compensation will be applied within the Meter.

Period of Metering Dispensation required

Lifetime

**Delete as applicable.*

If temporary, indicate for how long the Metering Dispensation is required.	
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Provide justified reasoning for the period of Metering Dispensation requested in the box below:

Rationale for duration of Metering Dispensation:

The distance from the AMP to the DMP will not change over the lifetime of the asset therefore the Metering Dispensation should be for the lifetime of the asset.

Part D1 - Loss Adjustments for Power Transformer and/or Cable/Line Losses

Where loss adjustments are proposed and applied (or are to be applied) to the Metering System for power transformer and/or cable/line losses, provide the following information:

Describe how do you propose to correct the Metering System to account for the losses of this power transformer?

N/A

In order to validate the loss adjustments applied (or to be applied) to the Metering System please provide the following information together with supporting data (e.g. power transformer test certificates):

N/A

What are the iron losses for this power transformer?

N/A

What are the copper losses for this power transformer?

N/A

Are there any other losses that have been taken into account? Yes/No*. If Yes what are they?

N/A

Demonstrate how these elements of loss have been used in the corrections to the Metering System.

N/A

*Delete as applicable.

Describe how do you propose to correct the Metering System to account for the losses of the power cable/line?

Dynamic compensation will be applied to Meters (main and check). The Meters will dynamically calculate losses for Import and Export direction and add them to the appropriate register. The Meters will also be compensated for CT/VT errors and burdens.

In order to validate the loss adjustments applied (or to be applied) to the Metering System please provide the following information together with supporting data (e.g. cable/line manufacturer's data sheet):

What is the type of power cable/line?

A2X(F)KL2Y 1 x 800 RM 230/400 kV

What is the length of this power cable/line?

Red Phase – 122m, Yellow Phase – 117m, Blue Phase – 121m

What is the DC resistance of this power cable/line?

max. 0,0367 Ω /km

What is the impedance of this power cable/line?

What is the capacitance of this power cable/line?

nom. 0,140 μ F/km

Are there any other losses that have been taken into account? No. If Yes what are they?

Demonstrate how these elements of loss have been used in the corrections to the Metering System.

Compensation certificated/calculations (this is to be provided at later date). Compensation figures will be provided however it is expected that even without compensation the loss would be within the compliance threshold and the compensation is purely to get closer to 100% accuracy.

*Delete as applicable.

Materiality

Please complete the following:

What is the cost of providing compliant Metering Equipment?	What does this cost entail?
<p>£460k overall cost estimate.</p> <p>In addition below are reasons that the metering is located where it is.</p> <p>The 400kV Highly Integrated Switchgear (HIS) is unable to have tariff metering standard CTs or VTs. This is due to the lack of space available within the VT and CT enclosures within the switchgear. Note: The switchgear is a gas enclosed design. Also, there are not currently any certified HAM CTs or VTs which are suitable for the inclusion within the 400kV HIS switchgear.</p> <p>There is no space available next to the cable sealing ends from the HIS switchgear (near to label X591C) on the attached sketch.</p>	<p>The cost estimates for the various activities are as follows:</p> <ol style="list-style-type: none"> Relocate the emergency standby generator (due to safety clearance issues) (£70,000, keeping the existing generator) Relocate the PRR (Portable Relay Room where Meters are located) to a location which is away from the switchgear (due to safety clearance issues) (£35,000, including civils) Replace the cable sealing ends on the HIS switchgear with gas to air bushings (£180,000, including installation) Construct a plinth for the HAM CTs and VTs (£15,000) Install new cable sealing ends and re-terminate the 400kV cables (£45,000, plus £10,000 for commissioning) New busbar sections within the 400kV AIS compound (£5,000, including installation) Install new multicore cables from the primary plant to the re-located PRR (£25,000, including installation) Re commission all equipment (£25,000) NGET time for SAP and recommissioning (£50,000) <p>Overall cost estimate £460,000, if the HAM CTs and VTs are relocated into the 400kV substation and as close as possible to the boundary point.</p>
What is the cost of the proposed solution?	What does this cost entail?
The relative cost difference (excluding compensation cost) is included in the row above.	Compensation within the meter.

What is the impact to Settlement of your proposed solution?	Why?
No impact.	Losses will be compensated for within the Meter and this will allocate these losses to the Generator in Settlement.
What is the impact to other Registrants of your proposed solution?	Why?
No impact.	Under the Metering Dispensation the losses will be allocated to the Generator rather than being added into overall transmission losses.

Site Details (for Site Specific Metering Dispensation)

Site Name:	Spalding Energy Expansion
Site Address:	Spalding Power Station Control Room West March Road Spalding PE11 3BB
MSID(s):	7381
Registered in: CMRS / SMRS*: *Delete as applicable.	CMRS
For SMRS, please advise of SMRA in space provided.	

Manufacturer Details (for Generic Metering Dispensation)

Manufacturer Name:	N/A
Metering Equipment Details:	N/A

BSCP32/4.1 Application for a Metering Dispensation (Cont.)**Part D - Technical Details****Code of Practice details**

Metering Dispensation against Code of Practice*	Code of Practice One
Issue of Code of Practice*:	Issue 2 version 12.0
Capacity of Metering Circuits/Site Maximum Demand (MW/MVA):	300MW
(Proposed) Commissioning Date of Metering:	11 th Feb 2019
Accuracy at Defined Metering Point:	CoP 1 overall accuracy limits
Accuracy of Proposed Solution (including loss adjustments):	CoP 1 overall accuracy limits (including compensation for cable losses)
Outstanding non-compliances on Metering Systems:	None
Deviations from the Code of Practice (reference to appropriate clause):	<p>The DMP is at the point of connection to the Transmission System however the AMP is 120m from the DMP therefore is not in accordance with Code of Practice One, Appendix A 5(i).</p> <p>(For Generating Plant connections to the Transmission System clause 4.3.3 requires a Metering Dispensation to be applied for where the AMP does not coincide with the DMP and, where necessary, accuracy compensation for power transformer and/or line losses provided to meet the overall accuracy at the DMP.)</p>

* insert Code of Practice number and issue

Any Other Technical Information

The Meters will also be compensated for CT/VT errors which will assist in making the overall accuracy limits more achievable.

Sketch attached showing space around switchgear and reasoning for placement of metering.

Declaration

We declare that other than as set out above we are in all other respects, in compliance with the requirements of the relevant Code of Practice and the BSC. A schematic is attached to this application for clarification of the metering points involved.

Signature: *Date:* 23/01/2019.....

Password:

Duly authorised for and on behalf of Applicant Company

Confirmation of Receipt and Reference

The BSCCo acknowledges receipt of this document and has assigned the reference number as indicated on the first page.

Signature: M Smith..... *Date:* 25/01/2019.....

Duly authorised for and on behalf of the BSCCo