BSCP32/4.1 Application for a Metering Dispensation

Part A – Applicant Details

To: BSCCo	**Date Sent:** 04/06/18
From: Requesting Applicant Details **Name of Sender:** **Contact email address:** **Contact Tel. No.** :	**Contact Fax. No.** N/A
Name of Applicant Company: Uskmouth Power Company Limited	
Address:	
Uskmouth Power Station	
West Nash Road	
Nash	
Post Code: NP18 2BZ	**Our Ref:** SIMEC1-BIOFUEL-U1
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***

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

Part B - Affected Party Details

Number of Affected parties: 3

Contact Name at Affected party:
Contact email address:
Contact Tel. No. :
Company Name of Affected party: Uskmouth Power Company Limited
Address: Uskmouth Power Station, West Nash Road, Nash, NP18 2BZ

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

Contact Name at Affected party:
Contact email address:
Contact Tel. No. :
Company Name of Affected party : Western Power Distribution
Address: Duffryn Bach Terrace, Church Village, Pontypridd, CF38 1BN

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/ **No existing application and application is Site Specific**

Describe why you require a Metering Dispensation.
Simec Power has built an 18MW transmission connected Biofuel Park on the site of the decommissioned Uskmouth Power Station in order to provide balancing, ancillary and other commercial services. The scheme consisting of fourteen biofuel containers connected together and designed to function as a single Balancing Mechanism Unit (BMU). Balancing Settlement Code (BSC) Section L3.2 states that all Metering Equipment must be compliant with the requirements of the relevant Codes of Practice (CoP). In tandem, the CoP outlines the requirements, location and accuracy the Metering Equipment at the Defined Metering Point (DMP) must meet. Due to the rated capacity not exceeding 100MVA, this registration is covered under CoP2 and in line with Appendix A5(i) of this CoP, the DMP is defined be the point of connection of the Biofuel Park to the Transmission System. As can be seen be the attached Meter Location Diagram, the Actual Metering Point (AMP) for the Biofuel Park is behind the point of connection to the Transmission System and therefore the AMP is not at the DMP. Under CoP2 4.3.3, where the AMP and the DMP do not coincide a Metering Dispensation will be required to account for this discrepancy and if necessary to compensate for losses between them. Therefore, it is under this basis that a request for Metering Dispensation is made.

Period of Metering Dispensation required: Lifetime

If temporary, indicate for how long the Metering Dispensation is required.	N/A

Provide justified reasoning for the period of Metering Dispensation requested in the box below:

Rationale for duration of Metering Dispensation:
The proposed solution will be in place for the entire lifetime of the Biofuel Park.

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 the power cable/line?

The distance from the AMP to the DMP is 260m in total. It is 10m from the AMP to the banking compound busbar plus an additional 25m along the banking compound busbar to the 225m cable from the busbar to the Transmission System. As the distance from the AMP to the cable is short and the losses minimal we propose to apply compensation to account for the losses occurred in the 225m cable only.

As detailed below, assuming a maximum output of 18MW, the total loss in the cable will be ~50W, or less than 0.0005% of overall generation. It is proposed that the metering system will be compensated to include this loss and we have had confirmation that this will be possible at the calculated losses and is within the scope of our current metering equipment.

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):

At the maximum output of 18MW:

$P_{Total} = 3 \times I^2R = 3 \times (78.73)^2 \times 2520 \times 10^{-6} = 46.86W$

$Q_{Total} = 3 \times I^2X_L = 3 \times (78.73)^2 \times 3442.5 \times 10^{-6} = 64.01W$

What is the type of power cable/line?

Single core copper conductor, Aluminium sheath, 1600m^2, XLPE Pirelli Cable

What is the length of this power cable/line?

225m

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

11.2 μΩ/m = 2520 μΩ

What is the impedance of this power cable/line?
15.3 μΩ/m = 3442.5 μΩ

What is the capacitance of this power cable/line?
305pf

Are there any other losses that have been taken into account?
No

Materiality

What is the cost of providing compliant Metering Equipment?	**What does this cost entail?**
The costs associated with providing a new connection point would be estimated to be in excess of £5M	The provision of an additional grid connection, transformer, associated costs and loss of revenue.
What is the cost of the proposed solution?	**What does this cost entail?**
£20-30k	Installation of CoP compliant equipment, testing and maintenance with compensations applied to the Defined Metering Point.
What is the impact to Settlement of your proposed solution?	**Why?**
None	Accuracy at the Boundary Point will be maintained and the metering will remain within CoP accuracy limits
What is the impact to other Registrants of your proposed solution?	**Why?**
We do not anticipate any impact to other Registrants	There are no downstream impact and accuracy at the Boundary Point will not be impacted

Site Details (for Site Specific Metering Dispensation)

Site Name:	Uskmouth Biofuel
Site Address:	Uskmouth Power Station, West Nash Road, Nash, NP18 2BZ
MSID(s):	7368
Registered in:	CMRS
For SMRS, please advise of SMRA in space provided.	N/A

Manufacturer Details (for Generic Metering Dispensation)

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

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Part D - Technical Details

Code of Practice details

Metering Dispensation against Code of Practice*	Code of Practice 2 –The Metering of Circuits with a Rated Capacity not Exceeding 100MVA for Settlement Purposes
Issue of Code of Practice*:	Issue 4 (Version 13)
Capacity of Metering Circuits/Site Maximum Demand (MW/MVA):	30MW maximum capacity with Biofuel Park limited to 18MW
(Proposed) Commissioning Date of Metering:	26th June 2018
Accuracy at Defined Metering Point:	As defined in CoP 2 Section 4.3
Accuracy of Proposed Solution (including loss adjustments):	As defined in CoP 2 Section 4.3
Outstanding non-compliances on Metering Systems:	None
Deviations from the Code of Practice (reference to appropriate clause):	4.3.3 - Compensation for Power Transformer and Line Losses

* insert Code of Practice number and issue

Any Other Technical Information

The existing Uskmouth coal fired power station is currently decommissioned and is not expected to have any significant electrical demand or generation. The Biofuel Park is expected to therefore represent the only significant onsite generation for the foreseeable future.

To ensure that the proposed metering solution does not affect Settlements data, the installed meters will be compensated for cable losses.

Attached files

- Transformer and Banking Schematic (SIMEC1-BIOFUEL-U1-Transformer and Banking Schematic)
- Single Line Diagram (SIMEC1-BIOFUEL-U1-Single-Line-Diagram.pdf)
- Uskmouth Meter Location Diagram (SIMEC1-BIOFUEL-U1-Uskmouth Meter Location Diagram)

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**: 04/06/18*

***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: 04/06/2018.....

Duly authorised for and on behalf of the BSCCo