BSCP32/4.1 Application for a Metering Dispensation

Part A – Applicant Details

To: BSCCo	**Date Sent:** _____
From: Requesting Applicant Details Name of Sender: Contact email address: email address of person above _____ _____ Contact Tel. No. ___	Contact Fax. No.___n/a_____
Name of Applicant Company:__ EDF Energy Customers Limited_____	
Address: 90 Whitfield Street, London (registered office address)	
Post Code:__ W1T 4EZ _____	Our Ref: _____
Name of Authorised Signatory: Nisha Patel_____ 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

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

Part B - Affected Party Details

Number of Affected parties_2_[1]

Contact Name at Affected party:	
Contact email address:	
Contact Tel. No.	Contact Tel. No.
Company Name of Affected party: Burnfoot Windfarm Limited	
Address: Alexander House, 1 Mandarin Road, Rainton Bridge Business Park, Houghton Le Spring, Sunderland	
Post Code: DH4 5RA	

Contact Name at Affected party:	
Contact email address:	
Contact Tel. No:	Contact Tel. No.
Company Name of Affected party: SP Distribution Plc	
Address: Ochil House, 10 Technology Avenue, Hamilton International Park, Blantyre	
Post Code: G72 0HT	

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

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Contact Name at Affected party: Contact email address:	
Contact Tel. No.	Contact Tel. No.
Company Name of Affected party:	
Address:	
Post Code:	

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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 ~~/ Generic*~~ **Delete as applicable.*

Describe why you require a Metering Dispensation. Include any steps you propose to limit the impact on Settlement and other Registrants: The existing wind farm provides tariff metered power to the Scottish Power Energy Network (SPEN). The new wind farm shall share the existing connection cable for 6500m to the existing connection point at the defined metering point. A new meter shall be installed to provide a separate direct measurement of the additional power generated by the new wind farm and exported to SPEN. The new meter will be aggregated against existing meter to remove any impact the new generation shall impose onto the original generation by the sharing the connection cable.

Period of Metering Dispensation required

Lifetime ~~/ Temporary*~~ ***Delete as applicable**.

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

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

Rationale for duration of Metering Dispensation: The existing wind farm will be 5 years old when new wind farm installed. Expected service life of existing wind farm shall be a further 20 years.

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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? Not Applicable - no power transformer.

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): Not Applicable

What are the iron losses for this power transformer? Not Applicable

What are the copper losses for this power transformer? Not Applicable

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

There will be a small increase in losses, in the order of 0.2% at peak (100%) generation of both wind farms, in existing Private Cable that will become the shared cable.

Demonstrate how these elements of loss have been used in the corrections to the Metering System.
Attached calculation and data sheets show increase in losses are too small for the meters to accurately measure at peak generation. At lower levels of generation, the increased losses are truly negligible. Hence it is proposed to apply simple aggregation to the existing meter by the installation of a new dedicated tariff meter at the new wind farm connection.
Sheets appended are:
Appendix 01 - Boundary and Metering Single Line Diagram.
Appendix 02 - Data sheet for Copper and Aluminium Cable
Appendix 03 - Rhodders WF electrical cable losses – in Private Cable
Appendix 04 - Combined Rhodders and Burnfoot East WFs electrical losses - in Private Cable
Appendix 05 - Increase in Rhodders electrical losses - in Private Cable

*Delete as applicable.

Describe how do you propose to correct the Metering System to account for the losses of the power cable/line?
It is not proposed to attempt to correct the metering system errors. The losses are too small to accurately measure and so any correction could introduce greater errors than the peak increase of 0.2% in losses seen.

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):

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Cable data sheet showing details for the 2 off conductor materials jointed together to form the existing private cable connection between the Rhodders Wind Farm substation and the Alva Substation is attached.

What is the type of power cable/line?
There are 2 cable types' uses in series for form the private cable connection.
The first type is a single cored cable with a 500mm2 copper conductor.
The second type is a single cored cable with a 800mm2 aluminium conductor.

What is the length of this power cable/line?
The first type used is the copper cable and it is 1300m long.
The second type used is the aluminium cable and it is 5200m long.
These are joined together to form 1 off continuous cable length.

What is the DC resistance of this power cable/line?
The first type used is the copper cable and resistance is detailed as 0.037 Ohms/km
The second type used is the aluminium cable and resistance is detailed as 0.037 Ohms/km

What is the impedance of this power cable/line?
The first type used is the copper cable and impedance is detailed as 0.117 Ohms/km
The second type used is the aluminium cable and impedance is detailed as 0.109 Ohms/km

What is the capacitance of this power cable/line?
The first type used is the copper cable and capacitance is detailed as 0.318 micro Farads/km
The first type used is the aluminium cable and capacitance is detailed as 0.390 micro Farads/km

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

Demonstrate how these elements of loss have been used in the corrections to the Metering System.
No other elements of loss have been used.

*Delete as applicable.

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Materiality

Please complete the following:

What is the cost of providing compliant Metering Equipment? Provisional estimate for supply and installation of required equipment is £491k.	What does this cost entail? Installation of 6500m of new 33kV cable between Rhodders and Alva Substation. New wind farms owned 33kV CB's at each end of new 33kV cable. New SPEN CB to accept new connection New Tariff meter.
What is the cost of the proposed solution? Provisional estimate for supply and installation of required equipment £65k	What does this cost entail New 33kV CB to be added to existing Rhodders WF Substation board New Tariff meter at new Burnfoot East WF
What is the impact to Settlement of your proposed solution? There will be no impact on the current settlement process for the existing Rhodders WF. New Burnfoot East WF will be on new contract not connected in any way to Rhodders WF.	Why? Existing settlement process for claiming Renewable Obligation Certificated (ROC) generated revenue for Rhodders WF will not be changed. The new Burnfoot East WF generation will be measured by dedicated new tariff meter and revenue collected on a new Corporate Power Purchase Agreement (CPPA).
What is the impact to other Registrants of your proposed solution? There will be no impacts on any parties.	Why? Existing Rhodders WF is an existing ROCs registered connection that will not be impacted. Burnfoot East is a new WF and will be registered as a new CPPA.

Site Details (for Site Specific Metering Dispensation)

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Site Name:	Burnfoot Hill, Burnfoot North & Rhodders Wind Farm.
Site Address:	Rhodders Farm. Alva. Clackmannanshire. FK14 7JZ.
MSID(s):	For existing tariff meters: Export MPAN is 1800060775990 Import MPAN is 1800060775972
Registered in: ~~CMRS /~~ SMRS*: *Delete as applicable.	SMRS
For SMRS, please advise of SMRA in space provided.	Scottish Power Distribution Plc.

Manufacturer Details (for Generic Metering Dispensation)

Manufacturer Name:	Elster
Metering Equipment Details:	K14A10549 and K14A10552

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

Part D - Technical Details

Code of Practice details

Metering Dispensation against Code of Practice*	Balance and Settlement Code of Practice 2
Issue of Code of Practice*:	Issue 4. Version 14.0
Capacity of Metering Circuits/Site Maximum Demand (MW/MVA):	Rhodders WF = 12.3 MW / 12.95 MVA Burnfoot East WF = 10.8 MW / 11.37 MVA
(Proposed) Commissioning Date of Metering:	May 2020
Accuracy at Defined Metering Point:	DMP metering remains 1%
Accuracy of Proposed Solution (including loss adjustments):	Remain as 1%
Outstanding non-compliances on Metering Systems:	Not Applicable
Deviations from the Code of Practice (reference to appropriate clause):	Not Applicable

* insert Code of Practice number and issue

Any Other Technical Information

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.

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Signature: ..... *Date:* *21.1.20*

Password: .....

Duly authorised for and on behalf of Applicant Company

EDF Energy Customers Ltd

Confirmation of Receipt and Reference

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

Signature: *CDay*..... *Date:* *11 Feb 2020*

Duly authorised for and on behalf of BSCCo

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