BSCP32/4.1 Application for a Metering Dispensation

Part A – Applicant Details

To: BSCCo	**Date Sent:** 06/11/2019
From: Requesting Applicant Details Name of Sender: Contact email address: Contact Tel. No. Contact Fax. No.	
Name of Applicant Company: Aikengall II Community Wind Company Ltd	
Address: Caledonian Exchange	
19a Canning Street	
Edinburgh	
Post Code: EH3 8HE	Our Ref:
Name of Authorised Signatory: Authorised Signature:	Password:

Confidentiality:

Does any part of this application form contain confidential information?

Request for Confidentiality No

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___3

Contact Name at Affected party:	
Contact email address:	
Contact Tel. No.	Contact Tel. No.
Company Name of Affected party: Aikengall IIA Community Wind Company Ltd	
Address: Caledonian Exchange	
19a Canning Street	
Edinburgh	
Post Code: EH3 8HE	

Contact Name at Affected party:	
Contact email address:	
Contact Tel. No:	Contact Tel. No.
Company Name of Affected party: National Grid Electricity System Operator Limited	
Address: National Grid Electricity System Operator Limited	
Floorplate 2	
National Grid House	
Warwick Technology Park	
Gallows Hill	
Post Code: CV34 6DA	

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

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Part C – Reason for Application

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

Site Specific

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

Aikengall II Community wind farm is located in East Lothian, six kilometres (km) south of Innerwick and 11 km southeast of Dunbar. The Aikengall II Community wind farm is currently metered to Code of Practice (CoP) 1 standards at the Defined Metering Point (DMP). The DMP is the Point of Connection (PoC) to Scottish Power Transmission plc's (SPT) Transmission network at the Wester Dod 132kV substation.

A Metering Dispensation is required to install new CoP1 standard Metering Equipment for the Aikengall II Community wind farm 20m away from the DMP. This is as part of variation of existing 145MW 132kV connection at the SPT Wester Dod substation. The existing 19 turbine Aikengall II Community wind farm currently utilises 63.8MW of this Transmission Entry Capacity (TEC). It is proposed to construct an additional 19 turbine wind farm known as Aikengall IIa on the site. The Aikengall IIa wind farm will utilise the remaining 81.2MW of TEC. For a number of technical and commercial reasons the two wind farms should be metered separately.

These reasons include but are not limited to:

(1) potentially different generator suppliers between the two wind farms;

(2) requirement to ensure grid code compliance of both sites separately;

(3) requirement to control output of both sites independently;

(4) potentially different power purchase agreement (ppa) providers;

(5) one project is Ofgem RO accredited the other will not be; and

(6) requirement to participate in the balancing mechanism as two separate sites, each site having different short run marginal costs.

In light of these reasons National Grid Electricity System Operator (NGESO) and SPT have both agreed to vary the existing 145MW Bilateral Connection Agreement (BCA) to provide for separate metering at the respective windfarms.

However, because there will continue to be only one PoC, with two CoP1 Metering Systems sitting beneath, the new SLD (as attached) will present two non-compliant measurement locations.

Alternative compliant solutions have been evaluated but following discussions with NGESO and SPT those have been proven to be non-viable both from a financial and technical point of view. A Metering Dispensation for the non-standard location of the Aikengall II Community wind farm metering is accordingly sought. If approved the

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existing CoP1 Metering Equipment will be deregistered as the new CoP1 Metering Equipment becomes effective in Settlement. A separate application has been made for the non-standard location of the Aikengall IIa Community wind farm metering.

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:

<u>Rationale for duration of Metering Dispensation:</u> Required for the operational lifetime of the Aikengall II community wind farm

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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?

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?

No correction required. New CoP1 Metering Equipment, the subject of this Metering Dispensation request, will be less than 20m from the existing CoP1 Metering Equipment at the DMP/PoC and accordingly any losses will be de minimis. Non-standard location is the only deviation from compliance with CoP1. Given the minimal distance between the Actual Metering Point (AMP) of the new CoP1 Metering Equipment and DMP/PoC it is not proposed to compensate losses, which will be un-compensatable. Anticipated losses have been calculated and included with this submission.

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):

N/A

What is the type of power cable/line?

What is the length of this power cable/line?

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

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Materiality

Please complete the following:

What is the cost of providing compliant Metering Equipment?	What does this cost entail?
Circa £4,000,000 of direct cost to the user. Unknown cost for the socialised element of the works.	New 132kV 90MVA transmission connection from the 132/400kV SPT collector substation at Crystal Rig to the 132kV substation at Wester Dod. Requirement to expand the existing substations to accommodate the new equipment. Requirement for a new ~3.5km underground 132kV cable running in parallel with existing 132kV cable.
What is the cost of the proposed solution?	What does this cost entail?
£10,000	£3,000 COP1 meter £7,000 electrical reconfiguration
What is the impact to Settlement of your proposed solution?	Why?
None	Settlement accuracy to be maintained within CoP1 limits. New and existing CoP1 Metering Systems to be settled separately. Only deviation is non-standard metering location. Anticipated losses have been calculated and included with this submission.
What is the impact to other Registrants of your proposed solution?	Why?
None	Registrants will continue to take feeds from the existing PoC at Wester Dod 132kV substation. Meters will operate independently of each other with no differencing, and no cross reliance for Settlement. Any Metering Equipment failure will affect that Registrant only. The decision to request this Metering Dispensation and meter below the PoC ensures that in a Metering Equipment failure scenario the only impact is to the relevant Registrant.

Site Details (for Site Specific Metering Dispensation)

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Site Name:	Wester Dod 132kV Substation
Site Address:	Aikengall II Wind Farm, EH42 1SG
MSID(s):	8355
Registered in: CMRS	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

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Part D - Technical Details

Code of Practice details

Metering Dispensation against Code of Practice*	CoP1
Issue of Code of Practice*:	Issue 2
Capacity of Metering Circuits/Site Maximum Demand (MW/MVA):	145MW/152.6MVA
(Proposed) Commissioning Date of Metering:	Q2 2021
Accuracy at Defined Metering Point:	Compliant with CoP1 requirements
Accuracy of Proposed Solution (including loss adjustments):	Compliant with CoP1 requirements (with no adjustment for electrical losses from the AMP to the DMP) Maximum losses of 0.0001707% will not materially affect the accuracy of the proposed solution.
Outstanding non-compliances on Metering Systems:	None
Deviations from the Code of Practice (reference to appropriate clause):	Clause 4.3.3 and Appendix A, Bullet 5(i)

* 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:*

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: ..... *Date:11 November 2019*

Duly authorised for and on behalf of the BSCCo

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