

BSCP32/4.1 Application for a Metering Dispensation

Part A – Applicant Details

To: BSCCo	Date Sent: 19/10/21
From: Requesting Applicant Details	
Name of Sender:	
Contact email address:	
Contact Tel. No.	Contact Fax. No.
Name of Applicant: Aikengall II Community Wind Company Ltd	
Company: _____	
Address: Caledonian Exchange, 19a Canning St, 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**

**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__3__¹

Does this Metering Dispensation affect the metering arrangements for a generator that has applied for/obtained a CFD Agreement? ☐ Yes ☒ No

If Yes, you must contact the Low Carbon Contracts Company and advise them of your Metering Dispensation application and include them as an Affected Party.

Have you notified all Affected Parties? ☐ Yes ☒ No

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 St, 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, NG House	
Warwick Tech Park, Gallows Hill	
Post Code:CV34 6DA	

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 Technology Park, Blantyre, Scotland	
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.

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/523.

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:

Aikengall II Community wind farm (Aikengall II) is located in East Lothian, six kilometres (km) south of Innerwick and 11 km southeast of Dunbar. Aikengall II 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. Aikengall II has an approved Metering Dispensation, D/498, to use CoP1 Metering Equipment located 20m below the DMP.

The SPT grid connection is also used for the Aikengall IIa Community wind farm (Aikengall IIa) which is currently under construction. It has a similar, approved Metering Dispensation (D/499) to use CoP1 Metering Equipment located 20m below the DMP.

As part of Metering Dispensation D/498, the CT and VT source for the Aikengall II Meters is being changed from the SPT sources to the User sources. This enables both wind farms to be separately metered as required for commercial and technical reasons.

During the process of moving the source for the main and check Meters for Aikengall II to the User sources, commissioning engineers found a fault with one of the two sets of User CTs, which cannot be repaired without disassembly of the User 132kV CB, where the faulty set of CTs reside. This means that the Metering Equipment for Aikengall II cannot be made CoP1 compliant at the Actual Metering Point (AMP), without enduring the long repair time, which is estimated to be three months. Therefore the site has been configured with main and check Meters sharing the same set of working CTs. The latter is CoP2 compliant at the AMP. Additional burden is considered minimal by the Meter Operator Agent and complying with CoP2 at the AMP enables Aikengall II to continue to produce metered energy while the repair to the CT is planned and effected.

Another alternative considered to CoP2 compliance at the AMP was an Aggregation Rule change to enable difference metering, in combination with a reversion to the SPT CT & VT sources for Aikengall II, with differencing accomplished between the installed Aikengall IIa Meters and the SPT source-Meters, which measure the sum of Aikengall II and IIa.

We believe that the change to CoP2 minimises the effect on Settlement and other Registrants because it has the least technical changes. The solution retains the same physical metering locations (AMPs) as in the current lifetime Metering Dispensations and would have the best accuracy of the two options, by virtue of avoiding the differencing

calculation. Additionally, the circuit capacity of the Aikengall II feeder being metered is below the CoP2 upper threshold of 100MVA.

Updates

The ISG approved a temporary Metering Dispensation until 3/2/22. Following engagement with contractors to carry out the required works, we were informed that the outage required will be significant and that if the work were to be carried out over the winter period, adverse weather conditions could both significantly prolong it and cause additional issues during the disassembly and reassembly process of the 132kV CB.

We requested and were granted an extension to this dispensation until the end of September 2022 to enable the work to be carried out during Summer 2022.

Update June 2022

During the run-up to the work which was scheduled for late June 2022, we were informed by SPT of a requirement for a significant 5-day outage in 2023 for 5-year maintenance of the Super Grid Transformer that feeds Aikengall II & IIa. This and the current obligation on electricity generators to maximise production led us to take the decision to postpone our CT replacement outage till summer 2023, to take advantage of being able to carry out these two outages concurrently, which we believe to be in the best interests of electricity consumers.

Period of Metering Dispensation required

Temporary

*Delete as applicable.

If temporary, indicate for how long the Metering Dispensation is required.	<i>Extension from September 2022 until September 2023</i>
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Provide justified reasoning for the period of Metering Dispensation requested in the box below:

Rationale for duration of Metering Dispensation:

Repair during opportunity for concurrent outage in summer 2023 maintenance season.

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):

What are the iron losses for this power transformer?

What are the copper losses for this power transformer?

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.

*Delete as applicable.

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

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. cable/line manufacturer's data sheet):

What is the type of power cable/line?

What is the length of this power cable/line?

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?

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

*Delete as applicable.

Materiality

Please complete the following:

What is the cost of providing compliant Metering Equipment?	What does this cost entail?
£6m	Ceasing generation for repair time of three months.
What is the cost of the proposed solution?	What does this cost entail?
No cost	Use of existing CoP1 Meters, one set of CoP1 CTs and one CoP1 VT
What is the impact to Settlement of your proposed solution?	Why?
None although there is less redundancy than we originally planned by proposing the use of CoP1 Metering Equipment for this <100MVA circuit.	Failure of a CT will affect both main and check Meters.
What is the impact to other Registrants of your proposed solution?	Why?
None	The proposed metering locations and assets are used in line with D/498

Site Details (for Site Specific Metering Dispensation)

Site Name:	Wester Dod 132kV Substation
Site Address:	Aikengall II Wind Farm, EH42 1SG
MSID(s):	8355
Registered in: 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):	90 MVA (limited by 132kV transformer rating)
(Proposed) Commissioning Date of Metering:	24/6
Accuracy at Defined Metering Point:	Compliant with CoP1 requirements
Accuracy of Proposed Solution (including loss adjustments):	CoP1
Outstanding non-compliances on Metering Systems:	None
Deviations from the Code of Practice (reference to appropriate clause):	Clause 5.1.1: Only one set of CTs will be available for both main and check Meters for a period of four months Clause 4.3.2 and Appendix A bullet 5 (i): AMP not at DMP.

* insert Code of Practice number and issue

Any Other Technical Information

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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:*

Password:

Duly authorised for and on behalf of Applicant Company

Confirmation of Receipt and Reference

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

Signature: M Smith *Date:* 9 August 2022

Duly authorised for and on behalf of BSCCo