BSCP32/4.1 Application for a Metering Dispensation

Part A – Applicant Details

To: BSCCo	Date Sent: 12/09/18
From: Requesting Applicant Details	
Name of Sender:	
Contact email address:	
Contact Tel. No.	Contact Fax. No. n/a
Name of Applicant Company: RWE Generation U	K plc
Address:	
	•
Post Code:	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

BSCP32/4.1	Application	for a Metering	Dispensation	(Cont.)
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Number of Affected parties 1 Contact Name at Affected party: Contact Tel. No. Contact Tel. No. Company Name of Affected party: Address: Post Code: Contact Name at Affected party: Contact Name at Affected party: Contact Tel. No. Contact Tel. No.	Part B - Affected Party Details	
Contact email address: Contact Tel. No. Company Name of Affected party: Address: Post Code: Contact Name at Affected party: Contact email address: Contact Tel. No: Contact Tel. No: Contact Tel. No. Company Name of Affected party: SP Energy Networks	Number of Affected parties 1	
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Post Code:	Deat Code	

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

Cheshire Power Station is located on North Road, Ellesmere Port and consists of one 44MW OCGT (Cheshire OCGT), a bank of six 1.1MW reciprocation gas engine generators (Cheshire East) and a bank of twelve 1.1MW reciprocation gas engine generators (Cheshire West). All generators are natural gas-fuelled. Each generating unit (GU) is capable of being controlled individually, but in practice run as three distinct units, Cheshire OCGT 44MW, Cheshire East 6.6MW and Cheshire West 13.2MW.

The power station is currently registered in SVA and RWE Generation UK are transferring the metering systems to be registered in CVA. Non-standard BMU applications are in progress for Cheshire East and Cheshire West.

The Cheshire OCGT is a single GU, and will be classed as a standard BM unit as it will be operated and controlled as an individual generator. It is connected to a single 11 kV Switchboard (103) and then connects to the 33kV Switchboard (Green) via a single 11/33kV transformer (102TX). The metering is located on the HV side of 102TX.

Cheshire East six GUs are connected to a single 11 kV Switchboard (105) and then connects to the 33kV Switchboard (Red) via a single 11/33kV transformer (104TX). The six GUs are identical units and are dispatched as a collective unit. The metering is located on the HV side of 104TX.

Cheshire West twelve GUs are connected to a single 11/33kV transformer (TX5). This transformer in turn is connected to the 33kV Switchboard (Red). The twelve GUs are identical units and are dispatched as a collective unit. The metering is located on the LV side of TX5. There is insufficient space in the existing switchgear to install metering class CTs and VTs in the switchgear on the HV side of TX5.

The 33kV Switchboards (Green and Red) are connected to the local Licensed Distribution System Operator's (LDSO) distribution system (SP Manweb) at 33kV via two cables. The SVA Settlement Metering System is currently located at the point of connection between the Power Station and the LDSO's distribution system which is at the Defined Metering Point (DMP). With the proposed BM configuration, the metering systems have been relocated to the 33kV Switchboard as marked in the Cheshire SLD Meter Configuration.pdf prior to formal registration in CVA.

Period of Metering Dispensation required

Lifetime

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:

This dispensation is for changes to an existing site. There will be an ongoing requirement for the 33kV switchboards to remain connected during normal operation for resilience therefore it will not be possible to uniquely identify the generation at the commercial boundary points (Incomer 1 and Incomer 2). Additionally there is not space in the switchgear on the HV side of TX5 to install tariff class instrument transformers and there are no plans to replace the switchgear or switchboard.

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?

Compensation for the active losses in TX5 has been calculated using the data below.

TX5 data

Rating: 15MVA Ratio: 33/11kV

Iron (no-load) losses: 11.11kW at rated voltage

Copper (load) losses: 83.527kW at 15MVA, tap position 9 and 75°C

CT ratio: 800/1

Compensation applied to the meters:

Iron (no-load) loss: 0.566% Copper (load) loss: 0.073%

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

The losses between the HV sides of 102TX and 104TX are busbar losses only, these are negligible so no compensation has been calculated or applied.

There is a 20m cable between the 33kV switchgear and TX5. This length is relatively short and the losses will be negligible so no compensation and been calculated or applied.

The CTs are located in TX5 11kV cable connector box so there are no cable losses associated with the 11kV cable.

Materiality

Please complete the following:

What is the cost of providing compliant Metering Equipment?	What does this cost entail?
£M	Installing new switchboards & switchgear, providing a 3 rd connection to the local network and installing new instrument transformers and meters.
What is the cost of the proposed solution?	What does this cost entail?
Approx £40k	Calculation of power transformer loss for TX5, installation & commissioning of new instrument transformers and installation & commissioning of meters to tariff standards.
What is the impact to Settlement of your proposed solution?	Why?
Negligible	The tariff metering is corrected to account for losses between the actual metering points and the defined metering points
What is the impact to other Registrants of your proposed solution?	Why?
None.	No other Registrants impacted.

Site Details (for Site Specific Metering Dispensation)

Site Name:	Cheshire Power Station
Site Address:	
MSID(s):	TBC
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*	CoP 2 version 13
Issue of Code of Practice*:	Issue 4
Capacity of Metering Circuits/Site Maximum Demand (MW/MVA):	Site maximum demand – 1MVA Site maximum generation – 63.8MW via 2 * 45MVA grid connections
(Proposed) Commissioning Date of Metering:	August 2018
Accuracy at Defined Metering Point:	CoP 2
Accuracy of Proposed Solution (including loss adjustments):	CoP 2
Outstanding non-compliances on Metering Systems:	The Actual Metering Points are not at the Defined Metering Points.
Deviations from the Code of Practice (reference to appropriate clause):	Appendix A 6. For transfers between a Distribution System operated by a Licensed Distribution System Operator and Generating Plant, the DMP shall be the point(s) of connection of the generating station to the Distribution System operated by a Licensed Distribution System Operator. The Actual Metering Points are not at the Defined
	Metering Points.

Any Other Technical Information

Cheshire SLD Meter Configuration.pdf is attached

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 author	ised 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:

26/9/18

Duly authorised for and on behalf of the BSCCo