

BSCP32/4.1 Application for a Metering Dispensation

Part A – Applicant Details

To: BSCCo	Date Sent: 12/11/2020 _____
From: Requesting Applicant Details	
Name of Sender: Stephen Newsam _____	
Contact email address: Stephen.newsam@elexon.co.uk _____	
Contact Tel. No. 020 7380 4133 _____	Contact Fax. No. _____
Name of Applicant Company: Elexon _____	
Address: 350 Euston Road, London _____ _____ _____	
Post Code: _____ NW1 3AW _____	Our Ref: D/505 _____
Name of Authorised Signatory: Stephen Newsam _____	
Authorised Signature: _____	Password: _____

Confidentiality:

Does any part of this application form contain confidential information?

Request for Confidentiality ~~YES~~/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 _____¹

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

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

Contact Name at Affected party:	
Contact email address:	
Contact Tel. No.	Contact Tel. No.
Company Name of Affected party:	
Address:	
Post 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~~ / 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 purpose of this Metering Dispensation is to:

- Be able to install Metering Equipment compliant to the latest IEC standard where the CoP has not yet been changed to reflect the BS EN/IEC Standard change where the accuracy classes remain unchanged (Challenges in procuring Metering Equipment to outdated IEC standards can be mitigated and avoid the need for a site specific Metering Dispensation).
- Be able to install Metering Equipment compliant to the previous iteration of the IEC Standard where the CoP has changed to reflect the latest BS EN/IEC standard change (Any remaining stock can be installed where Metering Equipment has been procured in bulk prior to an IEC Standard change and avoid the need for a Metering Dispensation).

The overarching objective of the metering CoPs is to ensure that metered data submitted for Settlement is accurate. As well as specifying the limits of error for the overall accuracy of energy measurement at or referred to the Defined Metering Point (DMP) for a Metering System, the CoPs also specify the class accuracy and related standard for certain items of Metering Equipment, e.g. voltage transformer (VT), current transformer (CT) and Meters. These standards specify the permitted limits of error for the different classes of CTs, VTs and Meters (e.g. a class 1 CT is required to maintain accuracy at 100% of its rated current within $\pm 1\%$. At 20% the limits of error are within $\pm 1.5\%$).

Different bodies like the International Electrotechnical Commission (IEC), CENELEC and BSi produce/agree these standards.

The IEC prepares and produces international standards and our understanding of the process of adopting an IEC standard (e.g. IEC 61869-2 for CTs) as a European standard is that CENELEC may agree it is adopted and attach the reference EN (European Normative) to the IEC standard number (e.g. EN 61896-2). If the BSi agrees to adopt a European standard as a British Standard it will preface the EN standard and its number with BS (British Standard) (e.g. BS EN 61869-2). Standards bodies can and do produce their own standards that may only be applicable to their own regions (e.g. BS 7856 which is for UK Meters).

When standards are updated by the relevant bodies the CoPs may not refer to the latest version of those standards, e.g. the IEC updated IEC 60044-2 for VTs to IEC 61869-3 and

this was published in 2011. This standard then also became an EN and the British Standard (BS) standard, BS EN 61869-3. Elexon went through an exercise (CP1508) to update the standards referred in the CoPs to the latest versions in the June 2019 BSC Release.

Prior to CP1508 we also raised a generic Metering Dispensation (D/477) to retrospectively cover CTs and VTs tested to and stamped with the latest standard reference numbers that were first registered for Settlement after the relevant standard was released, until June 2019 when the CoPs were updated with them.

Manufacturers of Metering Equipment have to manufacture to the new standard either from the date of publication or by any deadline specified in a crossover period to allow changes for the new standard to be implemented.

Changes in the standard references can have a direct impact on BSC Parties and Equipment Owners as they may have purchased CTs and VTs while a previous standard was in effect but not installed and registered the Metering System until the latest standard was in effect. As mentioned previously, Metering Equipment needs to be compliant with the relevant CoP at the time the Metering System is first registered for Settlement.

So long as the accuracy class and the limits of error have not changed there is no additional risk to Settlement where CTs and VTs have been manufactured under a previous standard. Elexon reviewed the accuracy class history and limits of error for CTs and VTs in the BSi (IEC) standards and it showed that the available accuracy classes and limits of ratio error and phase displacement from 1993 to the present have not changed.

The only options available to BSC Parties and Equipment Owners is to have stranded stock which will have a financial impact on them or for Registrants to apply for a site specific Metering Dispensation to use a different standard specified in the relevant CoP. The latter having cost implications on BSC Parties applying and Elexon processing a large number of Metering Dispensations. Equipment Owners (i.e. not the Registrant) could be a BSC Party and apply for a generic Metering Dispensation but non-BSC Parties could have 'stranded' stock if they can't get a BSC Party to raise a site specific or generic Metering Dispensation. As a BSC Party Elexon can raise a generic which is what we are proposing here.

The same situation arises where a standard is updated and there is a period of time required for Elexon to raise a Change Proposal to update the CoPs to the latest reference number. Again, where the accuracy class and the limits of error have not changed there should be no additional risk to Settlement.

Elexon will check that any update to the BS EN/IEC standards has the same accuracy classes available and that the limits of ratio error and phase displacement have not changed for the current requirements (i.e. those in BS EN/IEC 61869-2, 61869-3 and 61869-4). This Generic Dispensation will only be in effect if there has been no change from those requirements.

Elexon proposes that a CT or VT manufactured to a previous version of the BS EN/IEC standard from the one that is currently in effect, and that is not the one referenced in the relevant CoP can be installed and used for Settlement so long as the required accuracy class is

as required by the relevant CoP and that the limits of ratio error and phase displacement for that accuracy class are the same as those required by the standard referenced in the relevant CoP.

Elexon believes this will not have a material impact on Settlement and will allow stocks of these CT/VTs to be used up.

Period of Metering Dispensation required

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

If temporary, indicate for how long the Metering Dispensation is required.	
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Provide justified reasoning for the period of Metering Dispensation requested in the box below:

Rationale for duration of Metering Dispensation:

Elexon will check that any update to the BS EN/IEC standards has the same accuracy classes available and that the limits of ratio error and phase displacement have not changed for the current requirements (i.e. those in BS EN/IEC 61869-2, 61869-3 and 61869-4). This Generic Dispensation will only be in effect if there has been no change from those requirements.

Where the standards change the accuracy classes available or the requirements for the limits of ratio error and phase displacement change this Metering Dispensation will no longer be applicable. As we cannot put a time limit on when any change to the standards might be made we have proposed a lifetime Metering Dispensation as should any change be made this dispensation will no longer be applicable to new installations.

A review of the Metering Codes of Practice to start in January 2021 will develop an enduring solution to this issue.

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?

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?

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?
Dependant on cost of switchgear and/or CTs and/or VTs required by the relevant CoP. Elexon have no information on this cost.	
What is the cost of the proposed solution?	What does this cost entail?
None	
What is the impact to Settlement of your proposed solution?	Why?
None	Accuracy of Measurement Transformers Metering Equipment will be maintained to relevant CoP requirements
What is the impact to other Registrants of your proposed solution?	Why?
None	

Site Details (for Site Specific Metering Dispensation)

Site Name:	
Site Address:	
MSID(s):	
Registered in: CMRS / SMRS*: *Delete as applicable.	
For SMRS, please advise of SMRA in space provided.	

Manufacturer Details (for Generic Metering Dispensation)

Manufacturer Name:	Various (any Manufacturer of Measurement Transformers)
Metering Equipment Details:	Current Transformers and Voltage Transformers

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

Part D - Technical Details**Code of Practice details**

Metering Dispensation against Code of Practice*	1, 2, 3, 5 and 10
Issue of Code of Practice*:	Cop1 v 13 Issue 2, Cop2 v 14 Issue 4, Cop3 v 14 Issue 5, Cop5 v 15 Issue 6 and Cop10 v 11 Issue 2
Capacity of Metering Circuits/Site Maximum Demand (MW/MVA):	All
(Proposed) Commissioning Date of Metering:	N/A
Accuracy at Defined Metering Point:	As required
Accuracy of Proposed Solution (including loss adjustments):	As required
Outstanding non-compliances on Metering Systems:	
Deviations from the Code of Practice (reference to appropriate clause):	BS EN/IEC standard referred to in 5.1 Measurement Transformers, 5.1.1 Current Transformers and 5.1.2 Voltage Transformers of CoP1, 2, 3 and 5; and BS EN/IEC standard referred to in 5.1 Current Transformers of CoP10

* 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:* 12/11/2020.....

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: *Date:*

Duly authorised for and on behalf of BSCCo