

**Balancing and Settlement Code**

**BSC PROCEDURE**

**CVA Meter Operations for Metering Systems Registered in CMRS**

**BSCP06**

**Version 10.0**

**Date : 6 November 2008**

**BSCP06**  
**relating to**  
**CVA METER OPERATIONS FOR METERING SYSTEMS**  
**REGISTERED IN CMRS**

1. Reference is made to the Balancing and Settlement Code and in particular, to the definition of "BSC Procedure" in Section X, Annex X-1 thereof.
2. This is BSC Procedure 06, Version 10.0 relating to CVA Meter Operations for Metering Systems Registered in CMRS.
3. This BSC Procedure is effective from 6 November 2008.
4. This BSC Procedure has been approved by the Panel.

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**AMENDMENT RECORD**

VERSION	DATE	DESCRIPTION OF CHANGES	CRs INCLUDED	MODS PANEL REF
1.0	Code Effective Date	Designated Version	n/a	n/a
2.0	14/12/2000	Work outstanding at Go Active resolution of inconsistencies inclusion of consultation comments	NCR 221 & 220	09/006
3.0	10/12/2002	CDCA Improvement Project CP	CP780	n/a
4.0	24/06/2003	Change Proposal for CVA Programme June 03 Release	CP821	
5.0	24/06/2003	Approved Modification P62	P62	
6.0	30/06/2004	Change Proposals for CVA Programme June 04 Release	CP964, CP998	ISG/40/003
7.0	23/02/2005	CVA Programme Feb 05 Release	BETTA 6.3, CP1049, CP1054, CP1091	ISG/42/003 ISG/46/002
8.0	28/06/2006	June 06 Release	P190 CP1152	ISG/64/001
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## **1. Introduction**

### **1.1 Purpose and Scope of the Procedure**

This procedure defines the obligations on the Meter Operator Agent (MOA) in relation to the work of Meter operations for Central Volume Allocation (CVA) Metering Systems registered in Central Meter Registration Service (CMRS). It also outlines the responsibilities of the MOA, Central Data Collection Agent (CDCA) and Registrant with regard to notification of work and of the sealing and re-sealing of CVA Metering Equipment for the following purposes:

- (a) routine inspection testing, calibration and circuit isolations; and
- (b) metering faults.

It additionally covers the reading of Meters before the start and on completion of the above work and the subsequent resealing of Metering Equipment. It also specifies the types of seals to be applied to Metering Equipment and the Metering Equipment to be sealed.

This BSCP should be read in conjunction with BSCP27, Technical Assurance of Half Hourly Metering Systems for Settlement Services, which describes key interfaces and timetabled responsibilities for the roles of the SVA and CVA Technical Assurance Agents (TAA), the processes for inspection and testing of Metering Equipment by the TAA and for rectifying non-compliances.

This procedure specifically excludes the following:

- Metering Equipment for Supplier Volume Allocation (SVA) which is covered by BSCP514; and
- Detailed requirements and intervals for carrying out inspection, testing and calibration of meters, which are covered in Code of Practice Four.

### **1.2 Main Users of the Procedure and their Responsibilities**

This BSCP is to be used by the:

- MOA to understand its obligations in relation to CVA Meter operations;
- MOA to notify work which requires seals to be broken;
- MOA for the breaking of Metering Equipment seals and their resealing, and also for ensuring the necessary audit trail is maintained through the reading of Meters for reconciliation purposes;
- MOA for the sealing of new metering equipment.
- MOA for maintaining a local register of sealing pliers and a local register of seals applied; and
- BSCCo for maintaining a central register of MOA sealing IDs.

### 1.3 Balancing and Settlement Code Provision

This BSCP has been produced in accordance with the provisions of the Code. In the event of an inconsistency between the provisions of this BSCP and the Code, the provisions of the Code shall prevail.

### 1.4 Associated BSC Procedures

This procedure interfaces with the following BSCPs:

BSCP03	Data Estimation and Substitution for Central Volume Allocation
BSCP05	Meter Advance Reconciliation for Central Volume Allocation
BSCP20	Registration of Metering System for Central Volume Allocation
BSCP25	Registration of Transmission System Boundary Points, Grid Supply Points, GSP Groups and Distribution Systems Connection Points
BSCP27	Technical Assurance of Half Hourly Metering Systems for Settlement Purposes
BSCP38	Authorisations (or where appropriate BDTP38). Please note references throughout this document to BSCP38 also relate to the associated BDTP38 where appropriate
BSCP537	Qualification Process for SVA Parties, SVA Party Agents and CVA MOAs.

### 1.5 MOA Obligations

#### 1.5.1 General Obligations

##### (a) Systems and Processes

The MOA shall use systems and processes so approved in accordance with BSCP537 in the operation of CVA Metering Equipment. These systems and processes must also comply with all other applicable requirements set out in the Code, this BSCP06 and its appendices and the BSC Procedures.

##### (b) Metering Equipment

The MOA shall ensure that the Import or Export of electrical energy by every CVA Metering System for which it is responsible is accurately recorded by Metering Equipment installed and maintained in compliance with the relevant Code of Practice (subject to any Metering Dispensations which may be in place).

##### (c) Communications

The MOA shall send and receive data and other information relating to its activities as MOA in accordance with BSCP02, BSCP03, BSCP05, this BSCP06, BSCP20 and, where appropriate, the Communication Requirements Document.

### 1.5.2 Registration Obligations

#### (a) Recording of Details

- (i) The MOA shall record sufficient details, received from its associated Registrant, of its appointment in respect of a CVA Metering System to enable the MOA to perform its functions as MOA. These details shall include the relevant CVA Metering System Number, the associated Registrant's metering requirements and, where appropriate, the associated Distribution System Operator.
- (ii) On appointment to a CVA Metering System and where existing Metering Equipment is to be used, the incoming MOA shall request the transfer of data and other information, in accordance with clause 1.5.2 b) iii), from the outgoing MOA to enable such incoming MOA to assume responsibility for the CVA Metering System.

#### (b) Termination of Appointment of MOA

- (i) The MOA shall prepare and maintain plans that will enable its associated Registrant's obligations under the Code to continue to be met notwithstanding the expiry or termination of the MOA's appointment as the MOA. The plans, which the MOA undertakes to implement on any such expiry or termination, will include the immediate transfer of data and other information to an incoming MOA appointed by the associated Registrant or to the Panel.
- (ii) On expiry or termination of the MOA's appointment as MOA in respect of a CVA Metering System, and where the existing Metering Equipment is to be used, the outgoing MOA shall transfer the data and other information, as specified in clause 1.5.2. b) iii) to the incoming MOA within 2 working days, when requested to do so by the incoming MOA.
- (iii) Data and other information to be transferred shall include Meter Technical Details including those relating to the associated Communications Equipment as appropriate, commissioning data, mapping data and certification and/or calibration details.

### 1.5.3 Metering Obligations

#### (a) Energisation of Meters

- (i) The MOA shall only energise a CVA Metering System if requested to do so by its associated Registrant.
- (ii) The MOA shall as soon as reasonably practicable inform its associated Registrant and the CDCA of any change in the energisation status of any CVA Metering System to which it has been appointed.

#### (b) Installation, Removal and Re-programming of Meters



- (i) The MOA shall maintain records and comply with systems and processes so approved in accordance with BSCP537 to commission, re-commission, remove, replace or reprogram Metering Equipment and shall inform its associated Registrant, the CDCA and, where applicable, the Distribution System Operator or the Transmission Company of the nature and date of any related work carried out within such time as shall allow the CDCA to carry out its obligations to ensure that correct data is taken into Initial Settlement Runs.
  - (ii) The MOA shall record proving, validation and communications errors found or reported by the CDCA as a result of a proving test and shall rectify any errors reported.
- (c) Sealing Service

The MOA shall provide a sealing service and shall ensure that all Metering Equipment is sealed and re-sealed in accordance with this BSCP06.

#### 1.5.4 Interface to Other Agents

- (a) Information to the CDCA
  - (i) Upon any change of Meter Technical Details or upon the MOA's appointment in respect of a CVA Metering System, the MOA shall give Meter Technical Details, commissioning details and access details of the CVA Metering System and its energisation status to the CDCA.
  - (ii) The MOA shall inform the CDCA of the installation, repair, removal, reprogramming, energisation or de-energisation of any Metering Equipment for which the CDCA is responsible. The MOA shall use all reasonable endeavours to assist the CDCA in recovering data required for Settlement from any Metering Equipment that is about to be removed or de-energised.
  - (iii) Except in an emergency, the MOA shall give the CDCA sufficient notice of the installation, repair, removal, reprogramming, energisation or de-energisation of any Metering Equipment for which the CDCA is responsible to enable the CDCA to recover the data required for Settlement using its normal method of data collection.
  - (iv) When requested by the CDCA, the MOA shall provide opening/final meter readings to the CDCA following installation, removal, reprogramming, fault investigation, energisation, de-energisation or replacement of any Metering Equipment by the MOA in accordance with BSCP20 and this BSCP06.
- (b) Meter Fault Reporting
  - (i) Upon the MOA being notified by any person or discovering that any Metering Equipment for which the MOA is responsible is potentially recording incorrect data, the MOA shall investigate and rectify the problem and notify its associated Registrant and the CDCA of the

nature of the fault, the date and time at which it was rectified and the initial reading of the cumulative total registers following rectification.

- (ii) The MOA shall report Metering Equipment faults to its associated Registrant and the CDCA and advise the CDCA as to the period covered by the fault. For Metering Equipment faults located at Offshore Power Park Modules, that are subject to access difficulties for more than 5WD due to health and safety reasons, the MOA shall notify BSCCo using Form BSCP06/4.9 'Risk Assessment of Metering Equipment Fault at Offshore Power Park Module'.
- (iii) The MOA shall separately identify Metering Equipment faults affecting data quality and those not affecting data quality and shall record the date on which each fault was reported and the date on which each fault was cleared. For this purpose a fault affecting data quality shall be treated as cleared when the relevant Metering System once again records in compliance with the relevant Code of Practice.

#### 1.5.5 Service Levels

The MOA shall perform the services to be performed by it as MOA pursuant to this BSCP06 to standards which shall be at least as good as those specified in Appendix 4.8.

#### 1.5.6 Input, Processing and Output

Controls to ensure that input, processing and output are valid may include the use of software validation checks and exception reporting to identify problems.

### 1.6 Operational Emergencies

Seals may be broken by others under instruction from operational staff in an operational emergency or for safety reasons in an emergency, providing the MOA is informed at the earliest opportunity, stating the reasons for so doing. The MOA can then arrange to reinstate any seals affected. This includes equipment which is declared a "point of isolation" e.g. secondary fuses associated with metering VTs.

### 1.7 Routine Work and Metering Faults

All routine work and Metering System faults should be dealt with under Section 3.1 of this procedure.

Routine work shall be regarded as any work planned in advance which:

- Is not associated with the CVA Metering Equipment but requires secondary metering VT isolation. This type of work is usually circuit planned outages.
- Associated with the CVA Metering Equipment which is not due to a fault. This type of work is usually replacement of Outstation battery, calibration of Meters, accuracy tests of Meters.

## 1.8 Register of Sealing Pliers

For the purpose of maintaining an audit trail of the Metering Equipment seals applied, CVA MOAs shall maintain a register of sealing pliers detailing when, to whom and which unique pair(s) of sealing pliers have been issued for use. The register should additionally specify details of any lost or stolen pliers, any pliers sent for repair (CVA MOAs shall ensure that records relating to repairs are kept for at least 10 years) and the dates on which any pliers were destroyed.

CVA MOAs shall ensure their register of sealing pliers is made available for inspection by the BSC Auditor and the TAA for audit purposes.

## 1.9 Register of Seals Applied

CVA MOAs shall maintain a register containing details of when seals were applied to Metering Equipment for individual circuits. The details shall include:

- Circuit name;
- Metering Equipment sealed;
- Date seals applied;
- Sealing pliers number; and
- Signature of person applying seals.

A template for the register of seals applied is provided in Appendix 4.3 of this BSCP, which may be used by CVA MOAs.

Copies of this register shall be kept on site to enable the CDCA to carry out the visual inspection of Metering Equipment checks required in section 4.3 of BSCP05 'Meter Advance Reconciliation for Central Volume Allocation' when it carries out Meter Advance Reconciliations (MARs) in accordance with BSCP05.

In addition, this register of seals applied shall be made available for inspection by the BSC Auditor (off site) and the TAA (on site) for audit purposes.

## 1.10 Central Register of CVA MOA Sealing IDs

BSCCo shall maintain a central register of CVA MOA sealing IDs and issue a unique ID to each Qualified CVA MOA on request. The CVA MOA sealing ID will be associated with the CVA MOA's Party Agent ID registered in Central Systems. The CVA MOA sealing ID may only be used by the CVA MOA it was allocated to and therefore cannot be transferred to any existing or new CVA MOAs. Where a CVA MOA ceases to operate in the CVA market, it will be required to destroy the sealing pliers associated with its CVA MOA sealing ID.

A CVA MOA can use an SVA MOA sealing ID in the CVA market where the CVA and SVA MOAs are from the same company. However, where the SVA MOA has more than one sealing ID, only one must be declared by the CVA MOA in order that the BSCCo can ensure that MOA sealing IDs remain unique in the CVA market.

Where the same MOA sealing ID is used in both markets, and the MOA subsequently ceases to operate in the CVA market only, the sealing pliers associated with CVA MOA sealing ID need not be destroyed as the TAA will have an effective from and effective to date for the relevant CVA Party Agent ID and therefore the MOA sealing ID. However, where an MOA subsequently ceases to operate in both SVA and CVA markets, the sealing pliers associated with the CVA MOA sealing ID must be destroyed in line with the SVA requirements.

The BSCCo will ensure that the up-to-date register of all CVA MOA sealing IDs, along with their effective from and effective to dates, are made available to the BSC Auditor and the TAA for audit purposes.

## **2. Acronyms and Definitions**

### **2.1 List of Acronyms**

The following is a list of acronyms used in BSCP06:

BDTP	BETTA Data Take On Procedure
BSCCo	Balancing and Settlement Code Company
CDCA	Central Data Collection Agent
CMRS	Central Meter Registration Service
CVA	Central Volume Allocation
LDSO	Licensed Distribution System Operator
MOA	Meter Operator Agent
MSID	Metering System Identifier
MSSY	Metering Sub System Identifier
SVA	Supplier Volume Allocation
TAA	Technical Assurance Agent
TC	Transmission Company
UTC	Co-ordinated Universal Time
WD	Working Day

### **2.2 List of Definitions**

Full definitions of the above acronyms in Section 2.1 are included in the Code.

### 3. Interface and Timetable Information

#### 3.1 Routine Work and Metering Faults

REF	WHEN	ACTION	FROM	TO	INPUT INFORMATION REQUIRED	MEDIUM
3.1.1	For routine work, prior to the day work is to be carried out, or, for work carried out in respect of a metering fault	If MOA wishes to carry out some work give notification of date, time and place where work required,  or, Proceed to step 3.1.3	MOA <sup>1</sup>	Registrant	Details of the work to be completed, including date, time and place.	Letter / Fax / Email
3.1.2	Following 3.1.1, and prior to the day work is to be carried out.	If Registrant wishes to attend the site, he provides confirmation.	Registrant	MOA	Confirmation of attendance	Letter / Fax / Email

<sup>1</sup> Where the Registrant and MOA are the same, the Registrant can initiate the process but only in the role of MOA.

REF	WHEN	ACTION	FROM	TO	INPUT INFORMATION REQUIRED	MEDIUM
3.1.3	Day work carried out	Give notification of work to be carried out and where appropriate request CDCA to remotely interrogate Outstation(s). <sup>2</sup>  Where appropriate, take “before” Meter readings.  Break seal(s).	MOA  MOA  MOA	CDCA	BSCP06/4.6 Notification of Completed Work/Meter Reading Sheet  This form must be signed by an authorised person as registered under BSCP38.	Phone / Fax / Email  Internal  Internal
3.1.4	On the day when work has been completed	Where appropriate, take “after” Meter readings, reseal Metering Equipment.  Update register of seals applied and ensure the details are available for inspection on and off site.  Where appropriate, request CDCA to remotely interrogate Outstation(s).	MOA  MOA	CDCA	BSCP06/4.6 Notification of Completed Work/Meter Reading Sheet  Register of seals applied  Request to remotely interrogate Outstation(s)	Internal  Phone / Fax / Email
3.1.5	Within 3WD of 3.1.4	Send confirmation and details of work carried out, along with “before” and “after” readings.	MOA	CDCA, Registrant	BSCP06/4.6 Notification of Completed Work/Meter Reading Sheet	Letter / Fax / Email

<sup>2</sup> In the case of metering faults, located at Offshore Power Park Modules where access has been prevented for health and safety reasons for more than 5 WD of 3.1.3, the MOA shall notify BSCCo using Form BSCP06/4.9 ‘Risk Assessment of Metering Equipment Fault at Offshore Power Park Module’. BSCCo shall monitor progress and if necessary inform the relevant Panel Committee of any unsatisfactorily controlled risk.

### 3.2 New Metering Equipment Sealing

This section is utilised for new registration of Metering System in accordance with BSCP20 where the initial Meter readings and sealing of Metering Equipment is required before the Metering System effective date.

REF	WHEN	ACTION	FROM	TO	INPUT INFORMATION REQUIRED	MEDIUM
3.2.1	Prior to the Effective From Date of the Metering System	Take “initial” Meter readings, seal all Metering Equipment and update register of seals applied.	MOA		BSCP06/4.6 Notification of Completed Work/Meter Reading Sheet  Signing witness must be an authorised person as registered under BSCP38.	Internal
3.2.2	Within 3WD of 3.2.1	Provide initial Meter readings.	MOA	CDCA, Registrant	BSCP06/4.6 Notification of Completed Work/Meter Reading Sheet	Letter / Fax / Email



### 3.3 Removing Seals From De-Registered Metering Equipment

This section is utilised for newly de-registered Metering System in accordance with BSCP20 where the final Meter readings and removal of seals is required after the Metering System effective date.

REF	WHEN	ACTION	FROM	TO	INPUT INFORMATION REQUIRED	MEDIUM
3.3.1	On date agreed under BSCP20				BSCP06/4.6 Notification of Completed Work/Meter Reading Sheet Signing witness must be an authorised person as registered under BSCP38	Internal
3.3.2	Within 3 WD of 3.3.1	Provide final Meter readings.	MOA	CDCA, Registrant	BSCP06/4.6 Notification of Completed Work/Meter Reading Sheet	Letter / Fax / Email
3.3.3	Following 3.3.2	Perform Meter Advance Reconciliation in accordance with BSCP05.	CDCA			Internal

### 3.4 Fault Investigation and Resolution

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.4.1	As soon as aware of inconsistency or possible fault.	Send notification of inconsistencies or possible fault and request investigation.	CDCA <sup>3</sup> or BSCCo or any Party	Registrant BSCCo MOA LDSO or TC as appropriate	BSCP06/4.5 Part A 'Metering Equipment Fault Report'.	Fax / Letter / Email
3.4.2	As soon as possible after 3.4.1	Investigate problem: a) Resolve the issue; or b) Send request to MOA to inspect and test suspect metering.	Registrant	a) Internal; b) MOA	Details of inconsistency.	Fax / Letter / Email
3.4.3	Within 3 WD of receipt of request in 3.4.2	Investigate suspect metering and send report of findings.	MOA	CDCA Registrant	BSCP06/4.5 Part B 'Metering Equipment Fault Report'	Fax / Letter / Email
3.4.4	As soon as possible after receipt of data in 3.4.3	Report resolution of problem.	Registrant	BSCCo LDSO or TC as appropriate	Details of findings and resolution of problem	Fax / Letter / Email
3.4.5	As soon as possible after receipt of data in 3.4.3	Where an investigation indicates that a fault has caused incorrect Metered Data to be recorded, estimate Metered Data in accordance with BSCP03.	CDCA	Registrant LDSO or TC as appropriate	Details of estimated Metered Data.	Fax / Letter / Electronic

<sup>3</sup> In addition to informing the Registrant, BSCCo and LDSO or TC, as appropriate, the CDCA shall also inform the MOA

## **4. Appendices**

### **4.1 This form is no longer used**

### **4.2 This form is no longer used**

### **4.3 Register of Seals Applied**

This form is no longer used. However, it may be used by CVA MOAs as a template for a register of seals applied.

### **4.4 This form is no longer used**

### **4.5 Metering Equipment Fault Report**

This form is to be used by the CDCA, BSCCo or any other Party to report inconsistencies or possible faults with Metering Equipment, or the MOA to report the action taken to rectify a fault.

### **4.6 Notification of Completed Work/Meter Reading Sheet**

This form is to be used by the MOA (signed by an authorised person as registered under BSCP38 Authorisations) to give details of any work carried out on Metering Equipment, and to provide “before” and “after” Meter readings. It is also used to provide “initial” Meter readings for new Metering Equipment, and “final” Meter readings for de-registered Metering Equipment.

### **4.7 Equipment to be Sealed, Types of Seals and Responsibilities for Sealing**

This appendix specifies the Metering Equipment to be sealed, the types of seals to be applied to the Metering Equipment and where the responsibilities for sealing lie.

### **4.8 Meter Operator Agent Service Levels**

This appendix has effect for the purposes of Section 1.5.5 of this BSCP06 to determine;

- (i) the functions to be performed by the Meter Operator Agent, as described in columns 2 to 5 of the table set out in this Appendix, in respect of which minimum standards of performance are required;
- (ii) the minimum standards of performance (Service Levels) relating to the functions referred to in paragraph (i) above, as described in columns 6 and 7 of the table set out in this Appendix; and
- (iii) a reference number (Serial) in respect of each Service Level, as described in column 1 of the table set out in this Appendix.

**4.1 BSCP06/4.1 This form is no longer used**

**4.2 BSCP06/4.2****This form is no longer used**



**4.4 BSCP06/4.4 This form is no longer used**

## 4.5 BSCP06/4.5 Metering Equipment Fault Report

**Part A** (CDCA-I038)

**From:** CDCA or BSCCo or any Party

**To:** Registrant, BSCCo, MOA  
LDSO or TC (as appropriate)

**Registrant:** \_\_\_\_\_

**MOA:** \_\_\_\_\_

**MSID(s):** \_\_\_\_\_

**Date:** \_\_\_\_\_

**CDCA Fault Ref:** \_\_\_\_\_

<b><u>Communications</u></b>		<input type="checkbox"/>
Outstation Id:		
Comms Address:		
Device Type:		
Last Successful Call:		
Comms Test:		
Comments:		

<b><u>Data Quality</u></b>		<input type="checkbox"/>
Type:		
Outstation Id(s):		
Subsystem Id:		
Channel(s) Affected:		
Comments:		

<b><u>Time Tolerance</u></b>		<input type="checkbox"/>
Outstation Id:		
Time Difference (secs):		
Fast/Slow:		
Comments:		



<b><u>Meter Advance Reconciliation</u></b> <input type="checkbox"/>	
Meter Serial No:	
Outstation Id:	
Outstation Channel:	
Other Details:	
Comments:	

<b><u>Other</u></b> <input type="checkbox"/>
Comments:

---

**Part B** (CDCA-I015)

**From:** MOA

**To:** Registrant, CDCA

**Date:**

MOA Fault Ref:

CDCA Fault Ref:

MSID(s)

<b><u>Action Taken:</u></b>
<b><u>Other Comments:</u></b>

**4.6 BSCP06/4.6 Notification of Completed Work/Meter Reading Sheet****PAGE 1 OF \_\_**

<b>To:</b> _____	<b>Date Sent:</b> _____
<b>From: Participant Details</b>	
MOA ID: _____	Name of Sender: _____
Contact email address: _____	
Our Ref: _____	Contact Tel. No. _____
<b>Name of Authorised Signatory:</b> _____	
Authorised Signature: _____	Password: _____

PLEASE COMPLETE IN BLOCK CAPITALS

*Site Name:* .....*Registrant:* .....*MSID:* ..... *Name of Meter Reader:* .....*Circuit Name:* .....*Start date/time (UTC):* ..... *End date/ time (UTC):* .....

*Work Carried Out:* .....

.....

.....

.....

Before Reading	Physical Meter	Outstation (Primary)_	Outstation (Secondary)
<b>Serial No.:</b>			
Import MWh			
Export MWh			
Import MVarh			
Export MVarh			

After Reading	Physical Meter	Outstation (Primary)_	Outstation (Secondary)
<b>Serial No.:</b>			
Import MWh			
Export MWh			
Import MVarh			
Export MVarh			

## BSCP06/4.6 Notification of Completed Work/Meter Reading Sheet continued

PAGE \_\_ OF \_\_

MSID: .....

Circuit Name: .....

Start date/time (UTC): ..... End date/ time (UTC): .....

Work Carried Out: .....

.....

.....

Before Reading	Physical Meter	Outstation (Primary)_	Outstation (Secondary)
<b>Serial No.:</b>			
Import MWh			
Export MWh			
Import MVarh			
Export MVarh			

After Reading	Physical Meter	Outstation (Primary)_	Outstation (Secondary)
<b>Serial No.:</b>			
Import MWh			
Export MWh			
Import MVarh			
Export MVarh			

Circuit Name: .....

Start date/time (UTC): ..... End date/ time (UTC): .....

Work Carried Out: .....

.....

.....

Before Reading	Physical Meter	Outstation (Primary)_	Outstation (Secondary)
<b>Serial No.:</b>			
Import MWh			
Export MWh			
Import MVarh			
Export MVarh			

After Reading	Physical Meter	Outstation (Primary)_	Outstation (Secondary)
<b>Serial No.:</b>			
Import MWh			
Export MWh			
Import MVarh			
Export MVarh			

## 4.7 Equipment to be Sealed, Types of Seals and Responsibilities for Sealing

This Appendix specifies the minimum requirements for:

- The equipment to be sealed;
- The types of seal to be used and their purpose;
- General sealing practice; and
- Particular procedures for the control of specified seals and dies.

### 4.7.1 Equipment to be Sealed

The table below shows equipment to be sealed, the type of seal to be applied and by whom seals may be removed and/or applied.

<i>Measurement Technique</i>	<i>Metering Equipment to be sealed</i>	<i>MOA</i>	<i>LDSO/ Transmission Co/ Generation Co</i>
CT operated Low voltage	Primary voltage fuse only if no secondary fuse	S	
	CT chamber	I	P
	Meter terminal cover	S	
	Meter case (cover)	S	
	CT terminal cover	S	
	Test terminal block	S	
	Switch (controlling supply)	I	P
	Secondary voltage fuse	S	
	Communications port	S	
	Metering Equipment connections to Load control equipment	S	
	Bus bar chamber	I	P
CT/VT operated High voltage (additional to LV)	VT racking	I	P
	VT fuses (on switchgear)	I	P

<i>Measurement Technique</i>	<i>Metering Equipment to be sealed</i>	<i>MOA</i>	<i>LDSO/ Transmission Co/ Generation Co</i>
	VT Marshalling box	I	P
	VT fuse (on panel)	S	
	Auxiliary fuses	S	
	CT Marshalling box	I	P

Key: S - Security seal I - Indicative seal P - Padlock

#### 4.7.2 Types of Seal and Purpose

Table 1 identifies three generic types of 'seal' by purpose:

- A security seal shall be used where both protection to avoid danger (to make opening of the equipment difficult) and indication of any interference are required. Where applied to Metering Equipment by a CVA MOA it shall be a specified seal as defined under 'Specified Seal, Wire Rope and Associated Sealing Equipment' below;
- An indicative seal or label shall be used where only an indicative warning is required that work on the equipment could compromise the operation of Metering Equipment; and
- A padlock shall be used to protect and to avoid danger on certain types of distribution/transmission equipment (to make opening of the equipment very difficult except to authorised persons having keys for the purposes of carrying out operations under required Safety Rules).

#### *Specified Seal, Wire Rope and Associated Sealing Equipment*

A specified seal is a particular form of security seal. The requirements of a specified seal are that it shall:

- be a tin-plated, annealed, copper ferrule;
- not be less than 5.0mm nor more than 7.0mm long;
- have an internal diameter which is not less than 1.98mm nor more than 2.28mm;
- be of some constant cross-section of such a size and shape so that its external perimeter lies within a circle whose diameter is not less than 4.06mm nor more than 4.6mm and the wall is nowhere less than 0.72mm thick; and
- be crimped and marked on one side with the identification symbol appropriate to

the MOA and on the other side with the 3-digit identification number of the Meter Operative. Alternatively, the specified seal can be crimped with up to 3 digits on each side to identify the Meter Operative and the identification symbol appropriate to the MOA, or the MOA's company name, may be impressed on a seal's flange or protuberance, provided that the design of the flange or protuberance is one approved by the BSCCo, from time to time.

The Requirements of Wire Rope are that it shall:

- be manufactured from 7 strands of drawn, class Z, zinc-coated wire complying with BS 2763:1982;
- have a diameter of not less than 0.914mm; and
- have a breaking load of not less than 880N.

The requirements for sealing equipment are that it shall crimp specified seals onto wire rope sufficiently to withstand a tensile load of not less than 200N, in order to secure equipment so as to prevent accidental breaking or removal of the seal or wire rope.

### ***Indicative Seal***

The type used may be at the discretion of the party concerned. The main purpose, particularly on CT/VT equipment, is to warn persons intending to work on such equipment that their actions might interfere with metering integrity.

### ***Padlock***

General practice is to use brass bodied, hardened steel hasp locks with a common key suite so that any person with appropriate authority, issued with a master key, can open them. In some cases a coloured sheath (e.g. red) may be applied to indicate danger.

## **4.7.3 Guidance on Sealing Practice**

### ***General***

Metering Equipment and related distribution/transmission equipment shall be sealed following initial energisation and shall be resealed following any subsequent works that require the removal of seals. The party carrying out such works shall be responsible for resealing equipment and for taking the removed seals from the site and destroying them, whether they are owned by that party or are the property of another party.

### ***General Guidance Specific to Meter Operator Agents***

Each Meter Operator Agent shall have a system for sealing and resealing, which shall include using a seal uniquely identifiable to it as specified in 'Specified Seal, Wire Rope and Associated Sealing Equipment' above.

#### **4.7.4 Control of Specified Seals and Associated Dies**

##### ***Sealing Pliers and Dies***

Sealing pliers, to be used with uniquely identified dies for crimping and marking specified seals, must be provided by MOAs for each Meter Operative. Dies shall not be transferred between MOAs. In addition:

- No MOA shall retain any duplicate sets of dies.
- Sealing pliers, dies or specified seals shall not be used other than for sealing Metering Equipment.
- Sealing pliers with dies that do not make legible marks shall not be used.

##### ***Destruction of Dies***

A MOA shall be required to destroy sets of dies that have been damaged or are no longer required because the relevant Meter Operative will no longer be sealing Metering Equipment on its behalf.

In the event of a MOA ceasing to operate all sets of sealing pliers and dies shall be destroyed by it forthwith.

## 4.8 Meter Operator Agent Service Levels

For the purposes of this Appendix:

- (a) the references in column 3 of the table below to a numbered paragraph are to the relevant paragraph in Section 1.5 of this BSCP06;
- (b) the references in column 4 of the table below to a sub-process/data flow are to the relevant sub-process or data flow as described in the relevant BSC Procedure or Appendix 4.8 to this BSCP06;
- (c) references to a Distribution System Operator are to the Distribution System Operator of the Distribution System in whose area the relevant CVA Metering Systems are located (if applicable);
- (d) references to “Timescales” are to those specified by BSCP02, BSCP20 and, if applicable, the Settlement Calendar;
- (e) references to a certain percentage of tasks being completed within a certain specified period are to be read as a reference to that percentage of tasks being completed during an applicable reporting period as specified by BSCP20;
- (f) references to an item being “valid” are to an item which conforms to an applicable Data Catalogue item;
- (g) reference to an item being in “correct format” are to an item which complies with the applicable Data Catalogue format or the format specified by BSCP02, BSCP20 and this BSCP06;
- (h) references to an item being “accurate” are to an item being correctly recorded; and
- (i) in calculating percentages, the performance figures shall be rounded up or down to the nearest two decimal places (with 0.005 being rounded upwards).



#### 4.8.1 Meter Operator Service Levels – BSCP06

Serial	Sender	Process	Sub-process / Data Flow	Recipient	Performance Measure	Service Levels	Reporting Method
1	Meter Operator Agent	1.5.4 Interface to other Agents	Fault repairs	Meter Operator Agent	Time to rectify faults which would constitute a category 1 or category 2 non compliance as defined in BSCP27	(i) 95% rectified within 5 working days of receipt of notification; (ii) 99% rectified within 15 working days of notification.	Provision of data under 10.1.1 of PSL100
2	Meter Operator Agent	1.5.2 Registration Obligations	Meter Technical Details	Incoming Meter Operator Agent	Complete, valid, correct format and accurate within Timescales	(i) 95% within 5 working days in accordance with this BSCP; (ii) 99% within 10 working days in accordance with this BSCP06.	Provision of data under 10.1.1 of PSL100
3	Meter Operator Agent	1.5.4 Interface to other Agents	Meter Technical Details	CDCA	Complete, valid, correct format and accurate within Timescales	(i) 95% within 5 working days in accordance with BSCP02 (ii) 99% within 15 working days in accordance with BSCP02.	Provision of data under 10.1.1 of PSL100
4	Meter Operator Agent	1.5.4 Interface to other Agents	Fault Resolution Reports	Registrant CDCA	Complete, valid, correct format and accurate within Timescales	(i) 95% within 5 working days in accordance with this BSCP06; (ii) 99% within 15 working days in accordance with this BSCP06.	Provision of data under 10.1.1 of PSL100

**BSCP06/4.9 Risk Assessment of Metering Equipment Fault at Offshore Power Park Module**Page 1 of 2

<b>To: BSCCo</b>	<b>Date Sent:</b>
<b>From: Participant Details</b>	
MOA ID: _____	Name of Sender: _____
Our Ref: _____	Contact Tel. No.: _____
<b>Name of Authorised Signatory:</b> _____	
Authorised Signature: _____	Password: _____

**Metering Equipment Details****Site:** \_\_\_\_\_ **MSID:** \_\_\_\_\_**Circuit(s):** \_\_\_\_\_**Details of Metering Fault**

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**Details of Proposed Rectification and reason for Delay**

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**Proposed Date of Rectification:** \_\_\_\_\_

BSCP06/4.9 (Continued)

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<u>Metering System Component</u>	<u>Impact on Data Quality</u>	<u>Method of Controlling Risk</u>
<u>Primary Plant</u>		
<u>CTs and VTs</u>		
<u>Cabling and Marshalling Boxes</u>		
<u>Metering Panel</u>		
<u>Meters</u>		
<u>Outstations</u>		
<u>Auxiliary Power Supplies</u>		
<u>Communications Equipment</u>		
<u>Other</u>		

Existing Control MeasuresAdditional Information