Change Proposal – F40/01 (Page 1 of 2)	**CP No: 511** *(mandatory by BSCCo)*

Title *(mandatory by originator)* **CVA Meter Status Reports**

Description of Change *(mandatory by originator)*

Extend the Interface Definition Document (IDD) to include a new flow "CVA Meter Status Reports", sent from the CDCA to CVA Meter Operator Agents and Registrants. The new data flow will provide a succinct summary of any potential faults with the metering equipment, similar to the Meter Status Reports provided by Logica ESIS prior to NETA, but enhanced to include a warning if the data collected from the primary and secondary data collectors disagree.

This information is a requirement of BSCP 03 (version 2.0, section 1.6) which is not currently met.

Proposed Solution(s) *(mandatory by originator)*

New data flow from CDCA to MOA and BSC Party (Registrant) providing details of any metering equipment where the data indicates a potential problem as detailed in BSCP 03 Section 1.6. ie.

- the outstation has not been contacted,
- the outstation clock has drifted by more than ±10 seconds
- the Main / Check comparison over the 24 hour period (GMT Day) exceeds a ±1.5 times the accuracy class of the meter
- the primary / secondary outstation channels disagree by more than ±0.1%
- the period data is outside the threshold limits defined by the Registrant
- there is an outstation alarm
- data is missing

BSCP 03 also requires the Registrant and MOA to be informed if the cumulative comparison error is outside ±0.1%. This is believed to be covered by BSCP 05 and is not repeated in this change request.

The suggested structure of the new data flow is as follows:

Interface ID:	**User:** BSC Party, MOA	**Title:** Meter Status Report	**ITT Reference:**
Mechanism: Electronic data file transfer	**Frequency:** Daily	**Volumes:** Estimated that all Registrants of CVA Metering Equipment and MOA's will receive a data flow on a daily basis. Perhaps 100 (?) total per day.	

Interface Requirement:

This data flow will be sent whenever a potential fault is identified with the metering equipment. The CDCA will send meter status reports to:

The Responsible Party for the Metering System
The MOA operating the Metering System

For each metering system where a fault is identified the report will include:

Settlement Day
BSC Party Identifier
Metering System Identifier
Site Name

<u>Where the CDCA has failed to download data from an outstation</u>
Outstation ID
Number of days since data was last downloaded successfully from the outstation.
Exception Description

<u>Where the outstation clock has been adjusted by more than 10 seconds</u>
Outstation ID
Clock drift in seconds
Exception Description

<u>Where the Main and Check channels disagree by more than ±1.5 times the accuracy class of the meter over a 24 Hour period</u>
Outstation ID
Circuit Name ("Metering Subsystem ID" from Meter Technical Details)
Channel Number for Main Meter
Channel Number for Check Meter
Measurement Quantity (Active Import, Active Export, Reactive Import, Reactive Export)
Difference between Main and Check meter over 24 hour period in kWh
% Difference between Main and Check Meter
Exception Description

<u>Where valid data has been collected from the primary and secondary data collectors and the readings disagree by >±0.1%</u>
Primary Outstation ID
Secondary Outstation ID
Circuit Name ("Metering Subsystem ID" from Meter Technical Details)
Channel Number
Measurement Quantity (Active Import, Active Export, Reactive Import, Reactive Export)
Settlement Period(s) affected
Discrepancy Value
Discrepancy, expressed as a percentage
Exception Description

Where period data is outside threshold limits set by the Registrant

Outstation ID
Circuit Name ("Metering Subsystem ID" from Meter Technical Details)
Channel Number
Measurement Quantity (Active Import, Active Export, Reactive Import, Reactive Export)
Settlement Period(s) affected
Value Recorded
Threshold defined by the registrant
Exception Description

Where there is an outstation alarm

Outstation ID
Start time of alarm
Stop time of alarm
Alarm description

Physical Interface Details:

Justification for Change *(mandatory by originator)*

Prior to NETA, all registrants and meter operators of Stage 1 (CVA) metering equipment were sent a daily Meter Status Report by Fax (example attached). This was a compact document, but provided a great deal of information about the continued functionality of the metering equipment, and it was used as the first indication that a problem may exist which required further investigation. There is also requirement in BSCP 03 "Data Estimation and Substitution for Central Volume Allocation" for this information to be provided by the CDCA to the Registrant and Meter Operator Agent.

This flow appears to have been overlooked during the design of the IDD. CDCA-I010 "Exception report for missing and invalid period data" does provide some data that could be used to check the status of the metering equipment. However this data flow has some significant shortcomings:

- Too much data is provided – the old Meter Status Report might contain 4 or 5 lines of data. CDCA-I010 appears to contain several thousand lines of data.
- The Meter Status Report indicated Main – Check meter discrepancies over a 24-hour period. CDCA-I010 makes comparisons on a half-hourly basis, and therefore often reports discrepancies where the data is actually valid. NB. It is quite possible for the Main and Check meter to disagree by "two meter pulses" in any half-hour period. However, this discrepancy will disappear over 24 hours.
- CDCA-I010 provides no indication of any drift in the outstation clocks
- If the CDCA fails to contact an outstation this is reported in CDCA-I1010 as 32*48 lines of "missing data". Under the previous system, the Meter Status Report notified the problem as a single line "number of days that outstation had not been contacted"

Although each individual party and party agent could produce systems to process CDCA-I010 and distil the information required, there would also be a substantial duplication of effort. ***In addition, some of the information provided in the previous Meter Status Reports would still be missing, leaving the possibility that the metering equipment may develop a fault which would go undetected until such time as the primary channel used for settlement purposes failed.***

It is therefore proposed that a new data flow be generated which reproduces the functionality of the old Meter Status Report.

Change Proposal – F40/01 (Page 2 of 2)	**MP No:** *(mandatory by BSCCo)*

Other Configurable Items Potentially Affected by Proposed Solution(s) ***(optional*** *by BSCCo)*

Impact on Core Industry Documents *(optional by originator)*

Changes to "Interface Design Document – Logica – Part 1" and "IDD – Logica – Part 1 – Spreadsheet" to include the definition of the new data flow.

Related Changes and/or Projects *(mandatory by BSCCo)*

Originator's Details:

BCA Name…….

Organisation……

Email Address……..

Date……

[BSC Panel Representative]…….

Organisation……..

Attachments: Y/~~N~~* (If Yes, No. of Pages attached: One)
(delete as appropriate)

Attachment A
Example of Metering Status Report

METERING STATUS REPORT

logica ESIS

OPERATOR Power Technology Centre **SETT DATE:** 22-Mar-01

CONTACT CHRIS HORNE **FAX No:** 9 0115 9362711

O/S No	Site Name	Missing Outstations			Time Drifts in Seconds	Meters Out of Range/Suspect Data		Main/Check Meter Comparisons			
		FH/EK	O/S Type	No Days		Meter ID	Circuit Name	Meter ID	Circuit Name	Difference over day in kWhh	Difference over day in % age
5000	Kingsnorth PS	FH	METEOR	1	0			KINO_02S1	Kingsnorth	15	-0.50
5002	Kingsnorth PS				0						
5003	Cottam PS				0			COTT_02M2	Cottam	65280	0.56
5005	Cottam PS				0			COTT_02S1	Cottam	1110	-0.32
5025	Rheidol PS				0			RHEI_01S1	Rheidol	1	-2.13
7068	Cottam Development Centre				0			CDCL_01S1	Cottam Development Centre	180	0.60

POWER TECHNOLOGY METER OPERATOR
RECEIVED
DATE:
INITIALS:
ACTION REQ'D:
REF:
FILE:

POWER TECHNOLOGY METER OPERATOR
RECEIVED
DATE:
INITIALS:
ACTION REQ'D:
REF:
FILE:

SHOULD YOU HAVE ANY QUERIES CONCERNING THE ABOVE, PLEASE CONTACT THE ESIS SERVICE DESK ON 0115 9456789

QUALITY\BUSDEL\PRI\PRODOPS\FORMS\3815FORM.WPD\1.0