CP1302 Attachment – REDLINE TEXT CHANGES TO BSCP502 V18 SECTION 4

Section 1 to Section 3 will not be impacted by CP1302

4 Appendices

4.1 Validate Meter Data.

Unless the HHDC is informed by the MOA that the retrieved data is incorrect, the HHDC shall accept Meter Period Value data collected from the Meter for validation processing.

The HHDC shall record all occurrences where data entering Settlements has been changed following instruction from the Supplier.

The HHDC shall retain the original reading value along with any alarms recorded in the Meter, the reason for failure where the value is invalid and the reason for accepting data previously flagged as suspect.

The data retrieval process shall include the following checks; however in the case where data is received from the Outstation automatically step 4.1.3 'Outstation Time' shall be performed at least every 20 calendar days by interrogation only.

The HHDC shall perform a validation check of Reactive Power Meter Period Values in addition to the Active Power Meter Period Values within step 4.1.5 'Cumulative/Total Consumption Comparison' and 4.1.7 'Main/Check Comparison'.

4.1.1 Outstation Id (Device Id)

When the Outstation is interrogated, or when data is received from the Outstation automatically the 'electronic serial number' of the Outstation is compared with that expected. If they differ then no data is collected (or processed further) and the failure is investigated in accordance with section 3.4.2.

4.1.2 Outstation Number of Channels

When the Outstation is interrogated, or when data is received from the Outstation automatically, the number of channels of the Outstation is compared with that expected. If they differ then no data is collected (or processed further) and the failure is investigated in accordance with section 3.4.2.

4.1.3 Outstation Time

When the Outstation is interrogated, the time of the Outstation is compared with that expected. If they differ by more than 20 seconds and less than 15 minutes then the outstation time is corrected by the data collection system. If the time differs by more than 15 minutes then the problem is resolved in accordance with section 3.4.2.

4.1.4 Alarms

When the Outstation is interrogated, or when data is received from the Outstation automatically, the individual alarms required by the relevant Code of Practice (CoP)

shall be investigated if flagged. Some MSs may not have all the alarm flags specified in the relevant CoP, in which case a Dispensation under BSCP32 should exist.

Each alarm shall be investigated in accordance with section 3.4.2.

4.1.5 Cumulative/Total Consumption Comparison

When the Outstation is interrogated, or when data is received from the Outstation automatically, and where the Outstation provides an electronic cumulative reading of the prime register equivalent to the total consumption of the Meter at that point in time. Using these readings, the following checks will be performed at least every seven days (i.e. on a daily or weekly basis or as agreed by the Supplier and HHDC).

i) The difference between the cumulative readings shall be calculated to ensure that the HH Metered Data used in Settlements sums to the Meter advance for the same interval[1], i.e. that the difference between cumulative readings and the sum of the Metered Period Data for the same date(s) and time(s) is within a suitable tolerance. It is recommended that the level of the tolerance should be set to take into account the period over which the check was performed. The recommended maximum levels are ±0.7% where the check is carried out on a weekly basis and ±5% where the check is carried out on a daily basis.

Specifically:
∑(pulses * pulse multiplier) for all Meter periods in the time interval = (Meter advance * Meter multiplier) for the time interval.

The calculation below outlines how the discrepancy should be calculated when performing tolerance checks.

$$Discrepancy = \left(\frac{\sum HHE - MA}{MA} \right) \times 100\%$$

Where:

∑HHE is the sum of HH Energy volumes in kWh and/or kvarh; and MA is the corresponding Meter Advance, i.e.

$$MA = M_2 - M_1$$

Where:

M2 is the cumulative reading (in kWh or kvarh) returned from the last time that the Meter was interrogated; and M1 is the cumulative reading (in kWh or kvarh) returned from the previous time that the Meter was interrogated or

[1] Described as performing a mini-MAR.

data was received automatically over the same time period as the sum of HH period energy.

ii) Where a main and check Meter is fitted, the main and check Meter advances are compared for any discrepancy between the two values in excess of 1.5 times the class accuracy requirements for the individual Meters at full load, as defined in the relevant CoP.

Allowances shall be made for low load discrepancies. If the discrepancy is unacceptable it shall be investigated in accordance with section 3.4.2.

4.1.6 Maximum Permissible Energy by Metering System Code of Practice

During validation where the energy recorded exceeds the permissible allowed, in accordance with column 4 in the table below, for one or more given Settlement Period, the HHDC will notify the Supplier.

CoP	Max. kW	Max kWh / Half Hour	Permissible Allowed: kWh per Half Hour
1	675,000	337,500	400,000
2	100,000	50,000	50,000
3	10,000	5,000	5,000
5	1,000	500	600
6 & 7	76	38	50
10	76	38	50

Following instruction from the Supplier, the HHDC will enter the actual data into Settlements or will replace the actual data with estimated data and enter this into Settlements.

Where however the Supplier does not provide instructions to the HHDC, the HHDC will apply the following rules, either:

- use actual consumption data if the energy has exceeded the permissible allowed by no more than 20%; or
- use estimated consumption data, rather than the actual consumption data if the energy exceeded the permissible allowed by more than 20%.

Note that:

CoPs 1, 2 and 3 are circuit capacity based and it is assumed that the Maximum Demand will not exceed the maximum kWh / Half Hour value.

CoP 5 is demand based and may occasionally exceed the maximum kWh / Half Hour value.

CoPs 6 & 7 are whole current Meters and the values are based on maximum voltage and current values of 3 phases x 253 Volts x 100 Amps. For these MSs, the fact that they are fused at 100 Amps limits the energy passed. Therefore, any recorded

energy greatly higher than the maximum shown in the above table can be assumed to be erroneous.

4.1.7 Main/Check Comparison

Where main and check Meters are installed in accordance with the relevant CoP, ensure that the Metered Data recorded by each Meter is compared for each circuit. Allowance shall be made for low load discrepancies. Any discrepancy between the two values in excess of 1.5 times the accuracy requirements of that prescribed for the individual Meters at full load, as defined in the relevant CoP, shall be investigated in accordance with section 3.4.2.

4.1.8 Site Checks of SVA Metering System - Site Visit Report

The following checks shall be carried out by the HHDC on the HH MS when visiting a Site:

1. Any evidence of suspected faults to the MS including phase/fuse failure.
2. Any evidence of damage to metering and associated equipment.
3. Any evidence of tampering of any sort with the MS or associated equipment, particularly seals.
4. Any evidence of supply being taken when the Meters are de-energised.
5. Any potential safety concern with the metering or associated equipment.

NB The Local Interrogation Unit (IU) or Hand Held Unit (HHU) should be set to ensure agreement with the UTC clock at least every week.

Sites with polyphase MSs should be visited at least annually and single phase at least at two yearly intervals to perform the checks described above. Sites traded in Measurement Class E are exempt from this requirement, but Suppliers are expected to arrange for the inspection of Measurement Class E Meters in accordance with provisions 12.14 – 12.16 of the Standard Conditions of the Electricity Supply Licence, notwithstanding that these provisions refer to Non-Half-Hourly Meters. Site visits made for other reasons may be used to carry out these checks.

Any problems are investigated in accordance with section 3.4.2 and a report is issued. The HHDC shall ensure that where a site visit was not possible, the reasons are explained sufficiently such that appropriate action can be taken to improve the chances of securing a successful site visit.

4.1.9 Reporting

Ensure that all cases of suspected MS faults are investigated in accordance with section 3.4.2 and are reported to the Supplier, MOA and LDSO, as appropriate.

Ensure that the original metered value (where obtained) and alarm(s), together with the reason for the changes to that value are retained.

SECTION 4.2 - END OF DOCUMENT IS NOT IMPACTED BY CP1302.