Attachment A Redlined BSCP520 v14.0 for CP1292

Section 1.1 no changes

1.2.1 UMSO Responsibilities

Where an UMS has been agreed, each UMSO shall be responsible for the following:-

a) where the inventory is subject to HH trading, providing a copy of the summary inventory to the appointed MA of an EM. Agreed updates to the summary inventory will be similarly passed to the appointed MA;

b) providing Unmetered Supply Certificates;

c) requesting additional MSIDs from the SMRA where additional inventory items need to be allocated to alternative SSCs and associated Profile Class and passing details of all MSIDs and the associated Meter Timeswitch Code and Profile Class to the Supplier for registration;

d) where the inventory is subject to NHH trading, calculating initial and revised EACs and submitting them to the appointed Supplier and NHHDC;

e) ~~agreeing with~~informing the Supplier of the type of EM (i.e. whether passive or dynamic) to be used in the LDSO's area;

f) ~~and~~ agreeing with the MA the location of any associated photo-electric cell unit (PECU) arrays in accordance with the citing procedures in 4.5.1.1;

~~f)~~g) informing Suppliers and MA of the ~~weighted average~~agreed latitude and longitude information for the installed Apparatus for each MSID where an EM is being used;

~~g)~~h) providing any other additional information required to enable the Supplier to determine the Distribution Use of System (DUoS) charges;

~~h)~~i) for supporting the Trading Query / Trading Dispute process as required by Section W of the Code;

~~i)~~j) for responding to any queries raised by the Panel, Supplier, the Supplier Volume Allocation Agent, the Data Collector, the Meter Administrator and / or the BSC Auditor;

~~j)~~k) providing Suppliers with the data that will enable them to fulfil their obligations under the Code;

~~k)~~l) notifying Suppliers on discovering that any Settlement data for which the UMSO is responsible is potentially incorrect or missing;

~~l)~~m) retaining all the data, that is necessary for the Supplier to fulfil its Code obligations e.g. history of summary inventories, history of EACs. Data must be retained for a minimum of 40 months;

~~m)~~n) ensuring that the Customer continues to comply with the conditions for an Unmetered Supply;

~~n)~~o) issuing an annual spreadsheet containing all UMS EACs for each MSID split by Settlement Register (using the appropriate Average Fraction of Yearly Consumption) to Suppliers each June, and providing confirmation to BSCCo. that this process has occurred; and

~~o)~~p) resending the correct EAC(s) to the NHHDC upon instruction by the Supplier if Supplier identifies a discrepancy between EACs received from NHHDCs to those received from the UMSO.

Section 1.2.2-4.4.3 no changes

Section 4.5.1.1 **PECU Array Siting Procedure**

Overview

The MA shall maintain and operate the PECU array or, as the case maybe, arrays used for a particular SVA Metering System. ~~There will normally be one PECU array per GSP Group but this may be varied by agreement between the UMSO and the Supplier after consideration of the following paragraphs.~~ The siting of the PECU arrays will be agreed between the~~by the~~ UMSO and the MA and be located in an area with a high density of apparatus unless otherwise agreed between the UMSO and the Supplier.

Siting Factors

The factors to be considered when determining the location and number of PECU arrays are:

a) Centres of population and hence concentrations of load;
b) Distance from another PECU array;
c) Topography;
d) Customer boundaries;
e) GSP Group boundaries; ~~and~~
f) Total load controlled; and
g) Access

Sharing PECU Arrays

One PECU array may provide data for more than one EM. Also, more than one PECU array may provide data for the same EM. There will be instances when one PECU array will service the requirements of part of, or more than, one Customer.

Research

Research may be carried out on the siting of PECU arrays, by measuring concurrent lux level readings at adjacent locations for a month.

PECU Array Variations

In considering any variation of the number of PECU arrays as stated in the overview paragraph above, the parties shall have due regard to the need:

a) to reasonably minimise costs;
b) to achieve the required accuracy in each half hour.

If a variation in the number of PECU arrays is proposed by the Supplier but is not agreed by the UMSO research may be carried as stated above. While such research is carried out and during any period of discussions, a supply in accordance with this BSCP may be commenced on the basis of the lesser of the number of PECU arrays proposed.

Failing any agreement after research and discussion the matter may be referred to the Panel for resolution.

Section ~~4.5.1.2~~ 4.5.2 **PECU Array Operating Procedure**

Overview

Before a Supplier can provide the Customer with a Half Hourly Unmetered Supply the PECU array installations must be operational and a MA appointed. The PECU arrays must conform to the specification as set out in the paragraph Specification for PECU arrays.

Types of PECUs

There are different types of PECUs, with different operating characteristics. Therefore, so that the operation of the PECU arrays reflect reality:-

a) PECUs used in the PECU array are to be ~~ex-circuit~~representative of type, manufacturer and ~~as per the~~ age of the population they are representing~~, i.e. not new cells~~.

b) The PECUs in the PECU array are to be proportional to the various types in the area covered by the PECU array.

PECU Representation in Equivalent Meter

The operation of each PECU is deemed to be proportional to the population on the PECU array of that type of cell, e.g. if there are 8 cells of one type, then the operation of each one will represent the operation of one eighth i.e. 12.5% of the load controlled by that type of cell.

Where the calculation indicates that the load controlled requires less than one PECU in the array, it may be omitted from the array (and default arrangements should then apply). Where the calculation indicates that the load controlled requires more than one PECU in the array, it shall be populated with at least two PECUs.

Multiple PECU Arrays

If more than one PECU array is used per Inventory, then the operation of a PECU cell is deemed to be proportional to the population of that type of PECU controlled load within the area covered by that PECU array. Therefore, where more than one PECU array is used per inventory, the inventory must identify which PECU array is controlling each item.

PECU Array Maintenance and Upkeep

Each PECU array shall be installed, maintained and operated in accordance with Good Industry Practice and the accuracy of its clock be maintained within +/- 20 seconds.

The MA shall monitor the performance of the PECU Arrays. ~~to ensure that that the single cells are representative of the total population of the cells within the summary inventory.~~

Where the monitoring of the PECU Arrays indicates that ~~the switching light level of~~ a single ~~cell~~ PECU is out of line with other ~~cells~~ PECUs of identical type in the same PECU Array to such an extent that the PECU is no longer representative then such PECUs shall be removed from the calculation and a retrospective calculation will be made using the remaining cells~~,~~. Failed or unrepresentative PECUs should be replaced at the next available opportunity.

~~the single cell should be replaced.~~

At least annually, or in the event of a significant change to the Summary Inventory, the MA shall ensure that the PECU Arrays are populated with PECUs in accordance with this section. ~~Annually, the MA shall ensure that the PECU Arrays continue to reflect the requirements of the Unmetered Supplies Certificate. The MA shall notify the Supplier of the results of the annual review.~~

Where the LDSO has indicated, pursuant to paragraph 1.2.4.1, that a SVA Metering System to which the Meter Administrator has been appointed requires data from a Central Management System, the Meter Administrator shall provide ad-hoc extracts of the operational event data received from such system to the LDSO on request.

The hardware and software associated with any Central Management System shall be installed, maintained and operated in accordance with Good Industry Practice, with clocks synchronised to UTC and accurate to within ± 20 seconds.

PECU Array Failure

If PECU data is not available then data from an appropriate PECU array or default data shall be used.~~If a single PECU on the PECU array stops operating, then the remaining operating cells of that type will represent a correspondingly higher proportion of the load.~~

~~If communications with a PECU array are lost, then data from the adjacent PECU array will be used. In the event of total PECU array data failure, the relevant time switch profile, adjusted to the burning hours assumption used by the UMSO for that PECU regime will be used; these assumptions will be refined as actual data becomes available.~~ In the event of data recovery ~~within the Settlement period~~ the MA will rerun EM and submit the corrected meter readings to the HHDC.

The EM will log all switching actions to the nearest minute.

~~**Note: There can be more than one cycle of operation within 24 hours.**The EM will monitor failed PECUs. The MA must replace failed PECUs within 5 WD. The MA shall ensure that the Customers provide replacement cells of the age and type requested by the MA.~~

Section ~~4.5.1.3~~4.5.2.1 **Minimum Specification for PECU Arrays**

Number of Photocells per array	30
Arrangement of Cells	Any arrangement which ensures no over shadow of one cell on another.
Mounting Platform	Flat platform which can be fitted on a flat roof or supported on a single upright for wall mounting. All the construction must be coated with a weather coated finish.
Mounting for Photocells	NEMA photocell sockets and 6 blanking plates to cater for miniature cells where required, in a waterproof housing.
Waterproof Housing	All equipment externally located must be protected by a weatherproof enclosure.
Data Collection	To capture the switching on and off times of each cell together with the Lux level at time of operation for a minimum of 7 days and 28 events per cell. Rolling Barrel (data overwrites once the logger is full).
~~Communication Equipment~~	~~Either radio link or direct telephone line to a modem.~~
Clock or time counter	The data collector must be accurate to +/- 20 seconds / month, which is checked by the EM at the time of contact.
~~Software~~	~~A package to permit data extraction remotely.~~
Operating Temperature	-20 to +50 degree Celsius.
Lux Meter	Recording the illumination level at time of ~~sw~~switching.
Communication Protocol	Determined by the EM to permit interrogation for remote data collection.

Section 4.5.3 **Equivalent Meter Functionality**

Equivalent meters are of two types:-

a) Passive meters which allocate the Unmetered consumption across the half hourly periods by a mathematical relationship of annual burning hours to the daily time of sunrise and sunset; and

b) Dynamic meters which allocate the Unmetered consumption across the half hourly periods by reference to the operation of a number of actual ~~photoelectric cells~~PECUs, or by making use of actual switching times reported by a Central Management System. In either case the equivalent meter defaults to a passive mode using calculated times of switch operation in the event of the actual switching times not being available.

Section 4.5.4-4.8.2 no changes

