

CP1369 – Increased Flexibility in BSCP550 Data Splitting Algorithms

CP1369 proposes changes to BSCP550 sections 1.1, 1.3, 4.2 and 4.3. We have redlined changes against version 12.0 of this BSCP.

Section 1.1 to be amended as follows:

1.1 Scope and Purpose of the Procedure

This BSC Procedure (BSCP) defines the additional processes and responsibilities involved where two or more Suppliers receive Active Energy through the same Shared SVA Metering System, referred to as Shared SVA Meter Arrangement.

This data shall be supplied to meet either the:-

- (a) Initial Volume Allocation Run timescales; or
- (b) Final Reconciliation Volume Allocation Run timescales.

The requirements for allocating the Reactive Energy between two or more Suppliers are outside the scope of this document (although nothing in this BSCP shall preclude Suppliers and HHDCs from applying a Shared SVA Metering Arrangement to Reactive Energy as well as Active Energy).

Since Suppliers involved with Shared SVA Meter Arrangement do not have to appoint the same Half Hour Data Aggregator (HHDA), the “Change of HHDA” procedure is not covered in this document but in BSCP503.

Then no further change until section 1.3 amended as follows:

The HHDC shall allocate the proportion of half hourly Active Energy data specified in the Allocation Schedule. There are four Methods:

- i. Percentage Method;
- ii. Capped Block Method;
- iii. Fixed Block Method; or
- iv. Multiple Fixed Block Method.

Details of each data splitting method are covered in the relevant Appendix. In addition, Appendix 4.2.5 describes permitted variations on the four standard Methods that Suppliers may use (provided that their HHDC has systems and processes to support them). If the Allocation Schedule is not provided or is invalid, the HHDC will apply the rules described in the relevant Appendix.

Then no further change until Appendix 4.2 amended as follows:

4.2 Data Splitting Algorithm

This Appendix 4.2 describes four standard Methods for splitting of half hourly Active Energy. Suppliers using these standard Methods are able, via the Primary Supplier, ~~are~~

~~able~~ to nominate to the HHDC use of one and (subject to Appendix 4.2.5) only one of the four Methods for a given Settlement Period:

- Percentage Method;
- Capped Block Method;
- Fixed Block Method; or
- Multiple Fixed Block Method.

The agreed Method will be provided to the HHDC by the Primary Supplier in the Allocation Schedule. Any Allocation Schedule received from any other source will be rejected by the HHDC.

Subject to Appendix 4.2.5, a maximum of two Suppliers can establish a Shared SVA Meter Arrangement for Percentage, Capped Block and Fixed Block Methods, whereas more than two Suppliers can establish a Shared SVA Meter Arrangement for a Multiple Fixed Block Method. Each of the Methods are detailed below.÷

Appendix 4.2.5 describes permitted variations on the four standard Methods that Suppliers may use (provided that their HHDC has systems and processes to support them). All such permitted variations remain subject to the requirements on Allocation Schedules and splitting of data in Appendices 4.3 and 4.4.

Then no further change until a new section 4.2.5 added, immediately following the existing Appendix 4.2.4:

4.2.5 Permitted Variations on the Four Standard Methods

Where the relevant Suppliers agree (and provided that their appointed HHDC has systems and processes to support it) the four standard Methods for splitting of half hourly Active Energy may be varied as follows.

4.2.5.1 Splitting of Energy in Proportion to Non-Settlement Meter Readings

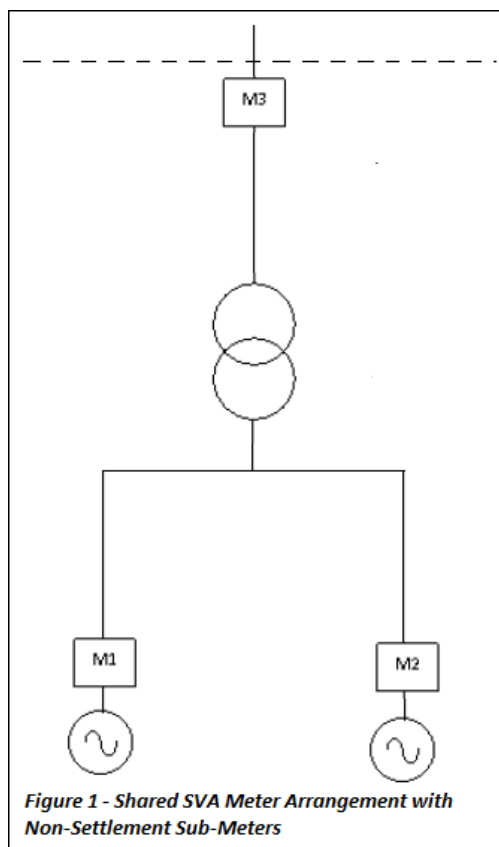
Suppliers may establish a Shared SVA Metering Arrangement in which Active Import and/or Active Export Meter readings (recorded at the Settlement Boundary Point) are apportioned between Suppliers based on readings from non-Settlement Meters on a private network. This allows generators and/or customers connected to the private network to contract with third party Suppliers, while ensuring an appropriate treatment of losses on the private network.

In this context, the Allocation Schedule will identify:

- The non-Settlement Meter(s) associated with each Supplier. Note that these Meters must be capable of providing half hourly data, and must be recording the same Measurement Quantity as the Settlement Meter at the Boundary Point.
- The agreed method for allocating between Suppliers the ‘unaccounted for’ Active Energy (i.e. the difference between the Boundary Point Meter reading and the total of the non-Settlement Meter readings). Such ‘unaccounted for’ Active

Energy may be allocated in proportion to the non-Settlement Meter readings, or using other methods agreed by the Suppliers.

Allocating Unaccounted For Energy in Proportion to Non-Settlement Meter Readings



Where the Allocation Schedule specifies that ‘unaccounted for’ Active Energy is to be allocated in proportion to the non-Settlement Meter readings, the HHDC will calculate the Meter reading M_i for each Supplier i as:

$$\text{Meter Reading for Supplier } i = M_{\text{sett}} \times M_i / \sum M_i$$

where M_{sett} is the Half Hourly Meter reading at the Settlement boundary, and M_i is the reading from each Supplier’s non-Settlement Meter.

Figure 1 provides an example of the type of site for which Suppliers may wish to use this arrangement. Two generators are connected to a private network, each with their own Export Meter (M_1 and M_2) which is Settlement-standard (i.e. compliant with the relevant Code of Practice) but not a Settlement Meter (as it is not directly associated with any Settlement Metering System). There are two Metering Systems registered for the site, but these are Shared SVA Metering Systems, each associated with the single Settlement Meter M_3 . The HHDC will use the Export readings from the non-Settlement Meters M_1 and M_2 to determine the allocation of the Settlement Export Meter reading M_3 between the two Suppliers:

$$\text{Active Export Meter Reading for Supplier 1} = M_3 \times M_1 / (M_1 + M_2)$$

$$\text{Active Export Meter Reading for Supplier 2} = M_3 \times M_2 / (M_1 + M_2)$$

This ensures that all of the electrical losses on the private network (and any metering errors in the non-Settlement Meters) are allocated between the two Suppliers at the site.

Other Methods of Allocating Unaccounted For Energy

Other methods of allocating the unaccounted for Active Energy are permissible, provided that they are agreed by all the Suppliers; that they are supported by the Qualified HHDC's systems and processes; and that they are consistent with the requirements in Appendices 4.3 and 4.4 (e.g. the requirement to agree the Allocation Schedule and notify it to the HHDC prior to Gate Closure).

For example, consider a private network on which one or more customers (with non-Settlement Meters) have contracted with third party Suppliers, while the remainder buy their power from the landlord. The Suppliers involved have agreed that the HHDC should allocate the Active Import recorded on the Boundary Meter in each Settlement Period as follows:

- Each of the third party Suppliers shall be allocated the Active Import recorded on their customer's non-Settlement Meter, adjusted by an agreed factor to allow for losses on the private network; and
- The landlord's Supplier shall be allocated the remaining Active Import.

In this case the Allocation Schedule would identify the agreed loss adjustment factor F_i for each Supplier i . The HHDC would calculate the Meter Reading for each Supplier i (other than the landlord's Supplier) as follows:

$$\text{Meter Reading for Supplier } i = M_i \times F_i$$

and the Meter Reading for the landlord's Supplier as:

$$\text{Meter Reading for Landlord's Supplier} = M_{\text{sett}} - \sum (M_i \times F_i)$$

where M_{sett} is the Half Hourly Meter reading at the Settlement boundary, and M_i is the reading from each Supplier's non-Settlement Meter.

Treatment of Metering Faults in Non-Settlement Meters

Regardless of the method used to allocate 'unaccounted for' Active Energy, the Suppliers must agree (in advance of Gate Closure, and as part of the Allocation Schedule if appropriate) how Active Energy should be apportioned in the event that Meter readings from one or more of the non-Settlement Meters are unavailable. For example, the Allocation Schedule could include a default allocation to be used in the event of non-Settlement metering faults.

Use in Combination with Standard Methods

Where the relevant Suppliers agree (and provided that their appointed HHDC has systems and processes to support it) the splitting of Active Energy in proportion to non-Settlement Meter readings may be combined with other standard Methods. For

example, the splitting based on non-Settlement Meters could be applied first, to split the Meter reading at the boundary between two (or more) virtual Metering Systems. A second round of splitting (using one of the standard Methods) would then be applied to each virtual Metering System.

4.2.5.2 Use of Standard Methods with More Than Two Suppliers

Where the relevant Suppliers agree (and provided that their appointed HHDC has systems and processes to support it) standard Methods (such as the Percentage and Fixed Block methods) may be extended to more than two Suppliers.

4.2.5.3 Rounding to One Decimal Place

Where the relevant Suppliers agree (and provided that their appointed HHDC has systems and processes to support it) Meter readings calculated using the standard Methods may be rounded up or down to a tenth of a kWh (rather than up or down to a whole number of kWh, as required by the standard Percentage Method described in Appendix 4.2.1). The rounding must still be carried out in such a way as to ensure that the Active Energy allocated to the Suppliers sums (without rounding errors) to the Active Energy recorded on the Settlement Metering System.

4.3 Rules for Allocation Schedules

4.3.1 Allocation Schedules for a Whole Settlement Day

The HHDC is required to use Allocation Schedules provided by the Primary Supplier to split the Active Import or Export Energy.

The HHDC will validate the Allocation Schedule using the following rules:

1. the Primary Supplier is the Party who has the authority of all the Parties involved to routinely provide Allocation Schedule details;
2. The initial Allocation Schedule shall endure until replaced by a revised valid Allocation Schedule. If the revised Allocation Schedule, following validation, is invalid, then the initial Allocation Schedule will be used by the HHDC until a replacement valid Allocation Schedule is received except as described in Section 4.3.2;
3. each Allocation Schedule must apply to one or more Settlement Day, except in the special case as described in Section 4.3.2;
4. the Allocation Schedule must specify which data splitting method is to be used, i.e. Percentage Method, Capped Block Method, Fixed Block Method, ~~or~~ Multiple Fixed Block Method or a permitted variation on the standard Methods as described in Appendix 4.2.5;
5. Allocation Schedules must be uniquely identifiable for each Settlement Day, differentiating between versions where used;
6. If the Fixed Block or the Multiple Fixed Block Method is to be used, that the maximum output or consumption for the Plant or Apparatus is specified;

7. That no negative quantity is specified; and
8. If a Capped Block Method, Fixed Block Method or Multiple Fixed Block Method is specified, the blocks specified are integer values of kWhs of zero or greater.

The Allocation Schedules must apply to each Settlement Period in a Settlement Day.

Daily re-nomination of parameters in the Allocation Schedule is allowed but they must be finalised prior to Gate Closure for the required Settlement Day. Allocation Schedules may not be altered for Settlement Periods for which Gate Closure has passed. A log of such exceptions and reasons must be maintained.

In the event that an initial Allocation Schedule is not received by Gate Closure, the HHDC shall allocate 100% of the consumption for each Settlement Period for the appropriate Settlement Days to the Primary Supplier.

If the subsequent Allocation Schedule that relates to a whole Settlement Day is received from the Primary Supplier after Gate Closure, for the start of the Settlement Day to which it is related, then for Settlement Periods for which Gate Closure has passed the subsequent Allocation Schedule will not be used, and the existing one will be rolled forward and used for the Settlement Period(s) for which Gate Closure has already passed. Each Allocation Schedule must include the following details:

1. Primary MSID and associated Primary Supplier;
2. Pseudo Secondary MSID(s) and associated Secondary Supplier(s);
3. allocation type (Percentage, Capped Block, Fixed Block, ~~or~~ Multiple Fixed Block Method or a permitted variation on the standard Methods as described in Appendix 4.2.5);
4. Settlement Day(s); and
5. the Settlement Period volume parameters, set as a percentage of output, specified in whole percentage points, or a block(s) of kWh.

The HHDC shall maintain a copy of each valid Allocation Schedule that it receives in its system.