

Redlined BSCP502 for CP1378v 2.0 ‘Facilitating appointment of Multiple HHMOAs for Third Party Access on Licence Exempt Distribution Network’

The CP proposes changes to BSCP502 section 4.9.3.

We have redlined these changes against Version 22.0.

4.9.3 Customers on a Licence Exempt Distribution (Private) Networks requiring Third Party Access for a Supplier of their choice

This is an example where one or more customers within a Licence Exempt Distribution Network are supplied with electricity by a third party licensed Supplier and therefore customer have their own MSID. There are two ways the BSC can accommodate this:

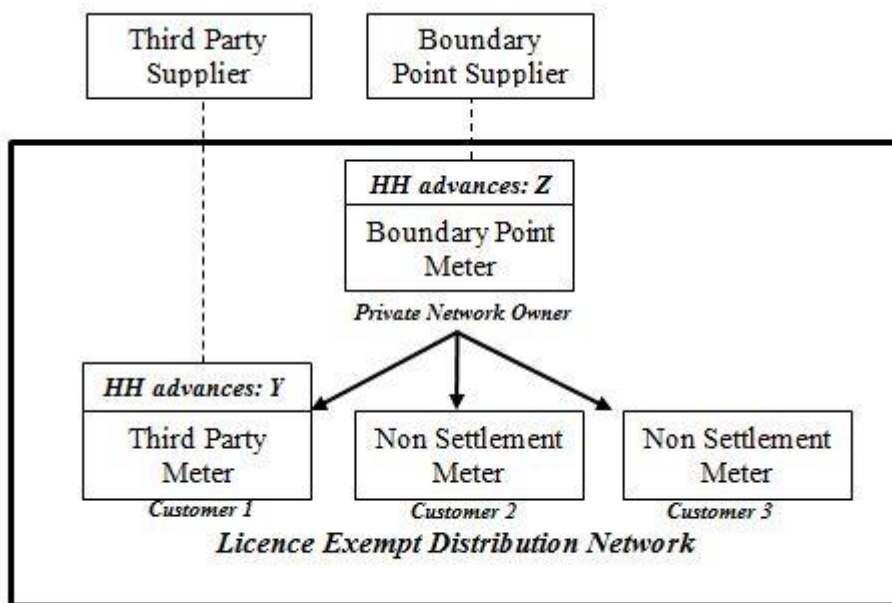
Full Settlement Option

If all customers on the private network have an MSID, **with** a BSC Settlement Metering System **with-and** a Supplier of their choice, the private network becomes an 'Associated Distribution System'. MSIDs within an 'Associated Distribution System' will be similar to MSIDs connected to a Licensed Distribution Network; hence the same obligations shall be applicable **and such arrangements are not deemed as complex**.

Difference Metering Option

Where one or more customers (not all) have a BSC Settlement Metering System with a Supplier of their choice, this requires the deduction of the consumption through the Third Party Meter(s) from the Boundary Point Meter.

- Customer 1's HH advances: Y
- Private network owner's HH advances (Boundary Point Meter): Z - Y



In the context of a private network, the following terms are defined:

- Boundary Point Supplier: The Supplier appointed at the Boundary Point of the private network; usually appointed by the private network owner;
- Boundary Point Meter: Code of Practice (CoP) Compliant Settlement Meter at the Boundary Point;

- Third Party Supplier: A Supplier appointed by a customer on the private network;
- Third Party Meter: CoP compliant Settlement Meter for the customer on the private network; and
- Non Settlement Meter: A meter that is not registered for Settlement purposes.

Under this Difference Metering scenario the Boundary Point Metering System shall be complex but each Third Party Metering System need not necessarily be complex (unless there is some specific reason, other than it being a Third Party Metering System that requires it to be treated as such). As the Third Party Meters will not be at the Boundary Point, the Registrant for each Metering System must apply for a Metering Dispensation or if available, use any relevant Generic Metering Dispensation.

In order to maintain the integrity of Settlement under these arrangements it will be necessary for Registrants to:

- Be HH Settled;
- ~~Appoint and maintain the same HHMOA as the Boundary Point Supplier;~~
- Appoint and maintain the same HHDC as the Boundary Point Supplier; and
- Account for electrical losses between the Defined Metering Point (DMP) and the Actual Metering Point (AMP)¹. ~~(DMP and AMP are definitions taken from the CoPs)~~

The customer may choose to contract with, and the Third Party Supplier appoints, a different HHMOA to the Boundary Point HHMOA.

To ensure accuracy of Settlement, the following conditions must be met:

- The HHMOA appointed to the Boundary Point Metering System must indicate on the “complex site supplementary information form” that Difference Metering is in place. This will highlight to the common HHDC that it is required to subtract the Metered Volumes for Third Party Metering Systems. However, it will not contain the details of those Meters (as these are not available to the Boundary Point MOA).
- It shall be the responsibility of the HHMOA appointed to each Third Party Metering System to provide a D0268 data flow (and any other relevant information) to the common HHDC upon installation and/or material changes to the Metering Equipment. This is to enable the HHDC to construct the appropriate mapping of Meter data and maintain the “complex site supplementary information” (BSCP514/8.4.9) to enable correct differencing of the consumption between Boundary Point Meters and Third Party Meters.
- The common HHDC for the private network will combine the D0268s provided by the relevant HHMOAs to ensure that the correct Metered Volumes of energy enter Settlement. The common HHDC will determine:

¹ DMP and AMP are definitions taken from the CoPs

- The Metered Volumes for each Third Party Metering System in accordance with the D0268s provided by the HHMOAs appointed to those Metering Systems; and
 - Metered Volumes for the Boundary Point Metering by subtracting the quantities of Active Energy for each Third Party Metering System on the network.
- In order to allow the HHDC to perform this process correctly, Third Party Suppliers will need to notify the common HHDC that the Metering System is subject to a difference metering arrangement. The information must include the MSID of the relevant Boundary Point Metering System to allow the HHDC to map the Boundary Point Meter with the associated Metering Systems.
- The Boundary Point Supplier shall validate and agree the mapping of data before differencing commences.

There are two options for how losses on a private network may be accounted for:

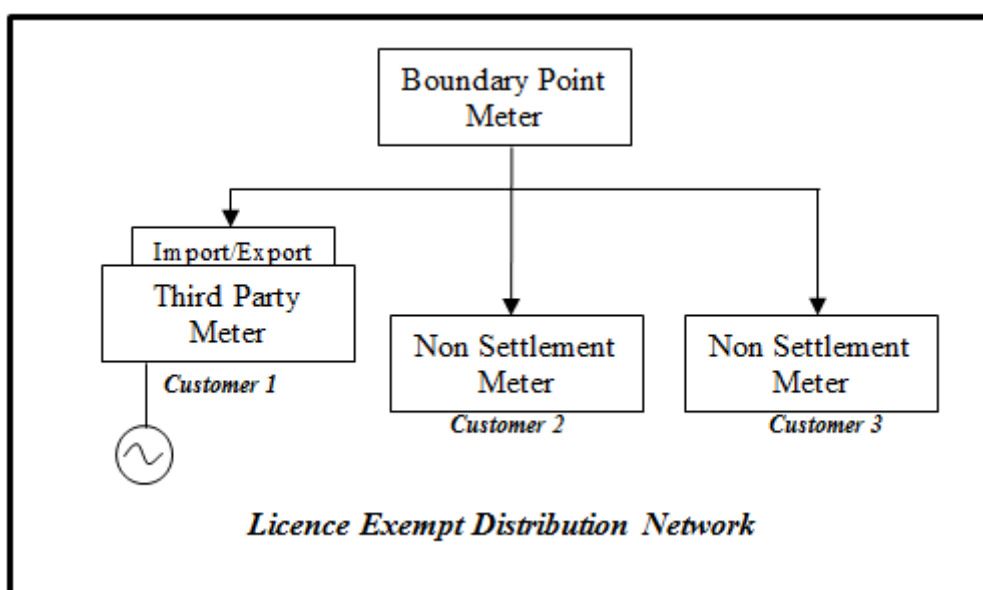
- By the appropriate application of factors either within the Meters as compensations or within the HHDC system as constants identified within the complex site supplementary information (BSCP514/8.4.8). ~~Note that the latter case does require the Third Party Metering Systems to be treated as complex;~~ or
- No adjustment of Third Party Meter HH advances for losses on the private network. This means that all such losses remain the responsibility of the Boundary Point Supplier for BSC purposes (but does not preclude the private network owner from including an allowance for losses on the private network in the use of system charges made to Third Party Suppliers and/or customers).

~~The HHMOA at the Boundary Point of the private network will need to maintain the complex site supplementary information (BSCP514/8.4.9) to allow the HHDC to correctly difference the consumption between Boundary Point Meters and Third Party Meters.~~

Export on Licence Exempt Distribution Network

On some private networks there may be on-site generation, and therefore the potential for individual customers and/or the private network as a whole to export as well as import. In such cases the possibility of Export will need to be taken into account in the differencing calculation performed by the single HHDC, in order to accurately determine the energy generated that gets used within the private network or exported on the Distribution System, such that each customer can be Settled accurately. The required calculation is essentially the same in all cases, irrespective of the location of the generator within the private network.

The example below illustrates the case in which the customer with generation equipment has opted for third party supply and has an Export MSID.



In this example, one customer on the private network has embedded generation. If customer 1 generates 100kWh active energy and consumes 20kWh, this will leave 80kWh of Active Export onto the private network (which will be recorded on the customer's Export MSID). If the other customers on the private network consume 20kWh each, this will leave 40kWh recorded on the Boundary Point Meter as Active Export to the Distribution System. Therefore, customer 1 will have 80kWh of Active Export entering Settlement, and the HHDC must accurately undertake the differencing to ensure that the 40kWh consumed on site by the two other customers is recognised as 40kWh Active Import and allocated to the Boundary Point Meter. The HHDC will perform the differencing calculation as shown below:

Total Boundary Generation or Demand, $T_{\text{Boundary}} = (\text{AE at Boundary Point Meter} - \text{AI at Boundary Point Meter}) - (\text{AE customer 1} - \text{AI for customer 1})$

If T_{Boundary} is positive then the Boundary Point Supplier is a net Exporter, and T_{Boundary} should be entered into Settlement as a positive quantity of Active Export.

If T_{Boundary} is negative then the Boundary Point Supplier is a net Importer, and T_{Boundary} should be entered into Settlement as a positive quantity of Active Import.

The required calculation remains the same if it is one of the customers with a Non Settlement Meter who has the generation. In the above example, if the 100kWh of generation belonged

to customer 3 rather than customer 1, the Settlement meters would record 40kWh of Active Export at the Boundary Point Meter, and 20kWh of Active Import from customer 1. The differencing calculation would be performed as above, and result in a Total Boundary Demand of 60kWh of Active Export.