Redlined BSCP502 for CP1377 'Clarifying the Rules on Third Party Access on Licence Exempt Distribution System'

The CP proposes changes to BSCP502 section 4.9.3.

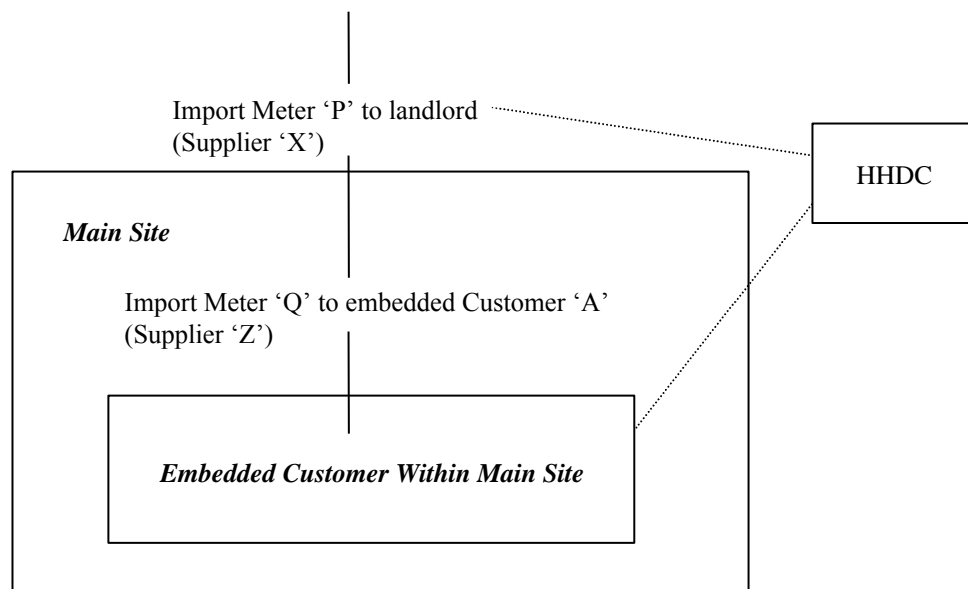We have redlined these changes against Version 21.0.

4.9.3   Embedded Customers within a Private Network

An example is where Customer 'A' within an industrial site takes energy directly from the landlord's internal network, but has a separate Supply contract with a licensed Supplier. The energy consumption of the landlord's network supply is determined by the netting of the Meters at the point of connection to the Distribution System and the individual Customer 'A' Meter.

This arrangement results in two distinct MSIDs. When traded in SMRS, to ensure the proper allocation of energy traded within the Settlement processes, **both the landlord's supply and the Customer 'A' supply shall have the same HHDC and HHMOA,** the same HHMOA being necessary for the processing of related D0268's. Different Suppliers and HHDAs would be acceptable.

A Metering Dispensation for each arrangement should be obtained before further MSIDs are created in SMRS for this type of customer.

The applied Line Loss Factors (LLFs) shall not take account of losses within the private network and should be left to the landlord and Customer 'A' to come to a mutual agreement. However, each traded MSID should have Voltage General or site Specific LLFs applied in the normal way for Settlement purposes.

Import Meter 'P' to landlord
(Supplier 'X')

HHDC

Main Site

Import Meter 'Q' to embedded Customer 'A'
(Supplier 'Z')

Embedded Customer Within Main Site

Landlord energy for Supplier 'X' = Meter 'P' – Meter 'Q' HH data: 1 Import MSID

Customer 'A' energy for Supplier 'Z' = Meter 'Q' HH data: 1 Import MSID

No. of Import MSIDs = 2 (1 MSID for embedded customer and 1 for the landlord or Main site)

No. of Export MSIDs = 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, a BSC Settlement Metering System with 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.

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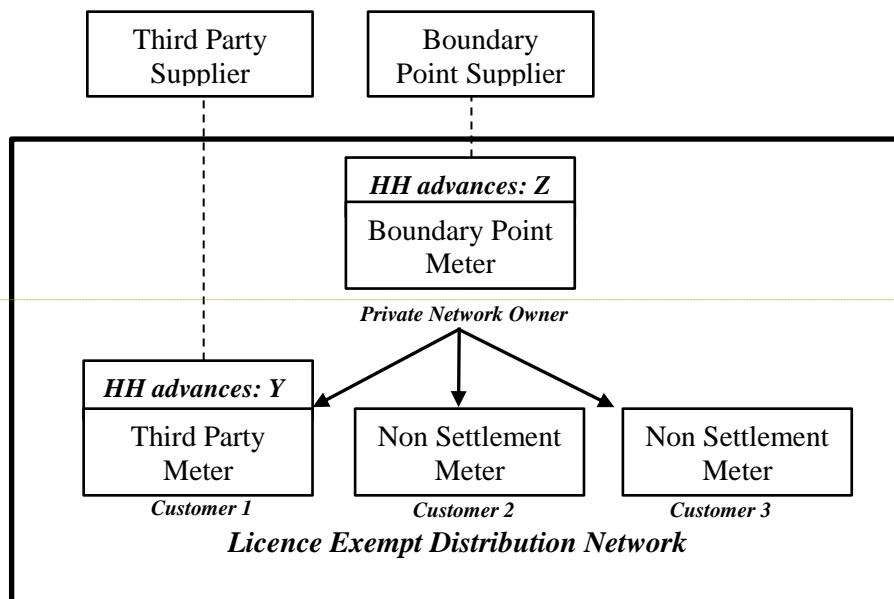
In the context of a private network, the following terms are defined:

- 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.

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). (DMP and AMP are definitions taken from the CoPs)

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 (BSCP514/8.4.9); 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 customers 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.
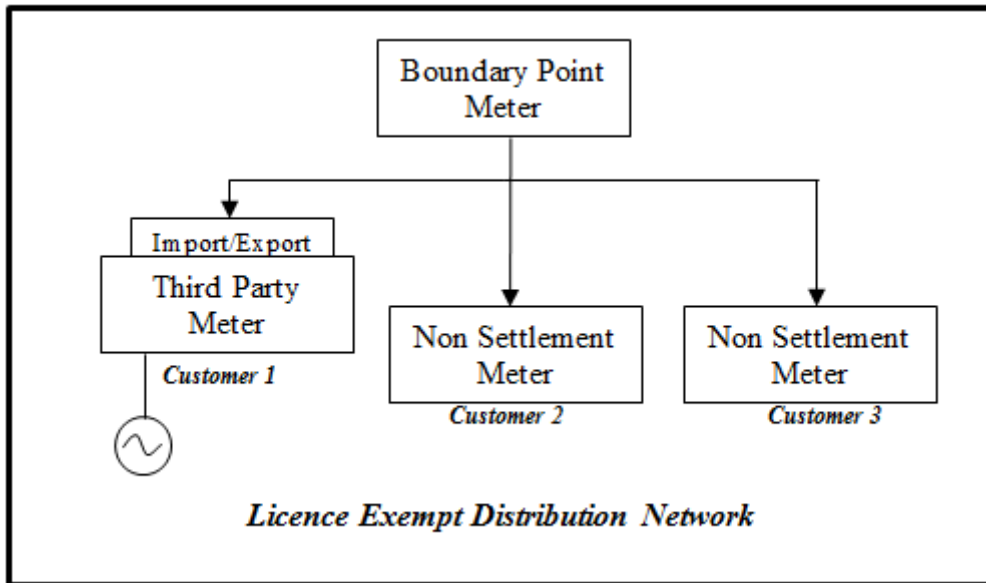
In this example, one customer on the private network has embedded generation. If customer 1 generates 100~~Mk~~Wh active energy and consumes 20k~~M~~Wh, this will leave 80k~~M~~Wh of Active Export onto the private network (which will be recorded on the customer's Export MSID). If the other customers on the private network consume 20k~~M~~Wh each, this will leave 40k~~M~~Wh recorded on the Boundary Point Meter as Active Export to the Distribution System. Therefore, customer 1 will have 80k~~M~~Wh of Active Export entering Settlement, and the HHDC must accurately undertake the differencing to ensure that the 40k~~M~~Wh consumed on site by the two other customers is recognised as 40k~~M~~Wh Active Import and allocated to the Boundary Point Meter.~~.~~ The HHDC will perform the differencing calculation as shown below:

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

~~Total Boundary Demand = AI at Boundary Point Meter – AE at Boundary Point Meter – (AI customer 1 – AE 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 Total Boundary Demand is positive then the Boundary Point Supplier is a net Importer, and the Total Boundary Demand should be entered into Settlement as a positive quantity of Active Import.~~

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.

~~If Total Boundary Demand is negative then the Boundary Point Supplier is a net Exporter, and the Total Boundary Demand should be entered into Settlement as a positive quantity of Active Export.~~

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 100k~~M~~Wh of generation belonged to customer 3 rather than customer 1, the Settlement meters would record 40k~~M~~Wh of Active Export at the Boundary Point Meter, and 20k~~M~~Wh of Active Import from customer

1. The differencing calculation would be performed as above, and result in a Total Boundary Demand of 60k~~M~~Wh of Active Export.