

## Change Proposal – BSCP40/02

CP No: 1338

Version No: v1.0  
(mandatory by BSCCo)

### Title (mandatory by originator)

Guidance for Complex Sites - Network Flows affecting Settlement Meter Readings

### Description of Problem/Issue (mandatory by originator)

The complex site arrangements are defined in Balancing and Settlement Code Procedures (BSCPs) 514<sup>1</sup> and 502<sup>2</sup> as ‘...any site that requires a ‘Complex Site Supplementary Information Form’ to enable the Half Hourly Data Collector (HHDC) to interpret the standing and dynamic Metered Data relating to SVA MS for Settlement purposes...’.

Guidance is also provided in these BSCPs by way of examples of situations that would require complex mapping to be applied by the HHDC to ensure that Settlement is correct. This guidance was originally designed for unusual situations within a Customer’s network, e.g. where a Customer is connected to the Distribution System via another Customer’s network. In these cases the Settlement Meter(s) at the Distribution System Boundary Point(s) would record the combined energy of both Customers and the HHDC would need to deduct the embedded Customer’s Meter readings from the reading obtained from the main Boundary Point Meters in order to calculate how much energy the Distribution System connected Customer had used. The guidance provides many examples of these kinds of intra-Customer network situations.

The Technical Assurance process<sup>3</sup> has recently identified a number of sites where non-Settlement flows (i.e. Distribution System flows or flows originating from the Customer’s own network) are affecting Settlement Meter readings. Meter Operator Agents have been using the complex arrangements to deal with these Customer and distribution ‘network’ related flows so that Settlement is not impacted by them.

Figure 1 shows how Distribution System flows can impact Settlement Meters at multi-feeder sites due to the connection arrangements on-site, i.e. the Customer’s own switchgear allows these flows to pass into the Customer’s site and back into the Distribution System. In this example the Distribution System flow would appear as an additional volume of Import to the site (on Meter M2) and as an equivalent Export volume (on Meter M1).

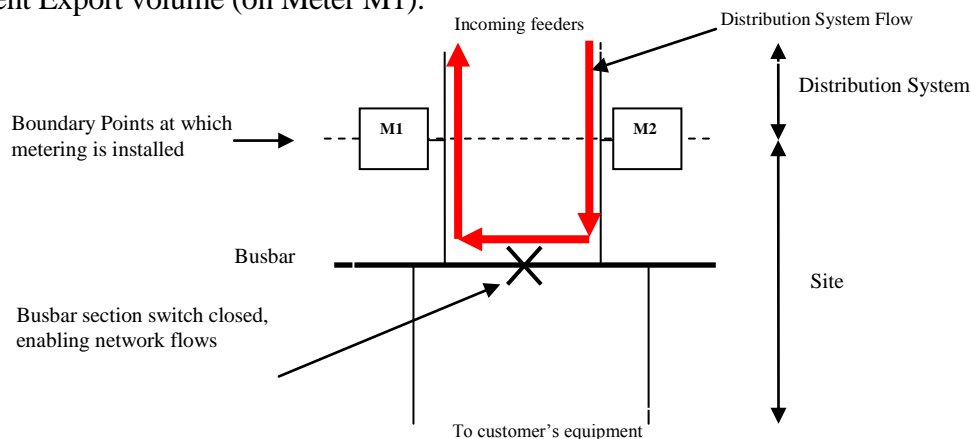


Figure 1

<sup>1</sup> ‘SVA Meter Operations for Metering Systems Registered in SMRS’

<sup>2</sup> ‘Half Hourly Data Collection for SVA Metering Systems Registered in SMRS’

<sup>3</sup> The specific sample for BSC Year 2009/2010 was Complex Sites.

Figure 2 shows how a Customer's own on-site generation can flow out onto the Distribution System (through Meter M2), as an Export volume, and then back into their site, as an Import volume (on Meter M1).

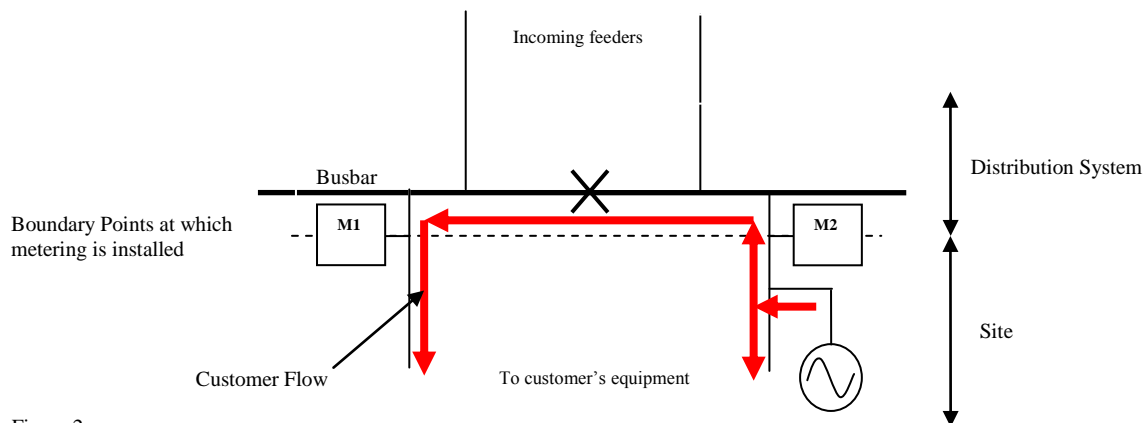


Figure 2

The Technical Assurance Agent (TAA) has been finding the use of the complex arrangements for these site arrangements as non-compliant with BSCPs 514 and 502 as the guidance provided in these BSCPs does not currently cover situations where network flows affect Settlement Meters.

#### **Proposed Solution** (mandatory by originator)

There are a number of possible solutions to the scenarios represented above:

1. The Settlement Meters could be moved to a location that would not 'see' any Distribution System flows (in figure 1) or Customer network flows (in figure 2). This would involve significant cost and disruption and would also require a Metering Dispensation to be approved;
2. The Customer's/distribution network could be re-arranged so that the feeders are not connected together therefore preventing non-Settlement network flows. This may not be possible for a number of reasons, including maintaining the security of supply to the Customer and the stability of the network; or
3. The Export volumes that appear on any one of the Meters could be subtracted from the Import volumes that appear on the other Meter. This is an administrative process which can be achieved using the complex site arrangements. It should be noted that if the Customer represented in figure 1 also has generation equipment on-site then the Export volumes could include any 'spill' so the simple algorithm described would require a more complex solution which may be achieved using the complex site arrangements.

The existing arrangements are in place if Registrants wish to progress options 1 or 2. However, this Change Proposal (CP) proposes that option 3 is progressed giving Registrants an administrative alternative. The attached redlining (Attachment A and B, respectively) is proposed to be included in BSCP514 and BSCP502 to provide additional clarity to participants.

#### Housekeeping Change

The description in paragraph 8 of Appendix 8.4 'Guide to Complex Sites', in BSCP514, and paragraph 8 of Appendix 4.9 'Guide to Complex Sites', in BSCP502, states that the following appendices 'provides a non-exhaustive list of Examples of Complex Sites'. However, the first two examples in both BSCPs are examples of sites which are not complex. This CP proposes to correct this as shown in the attached redlining by changing the description.

**Justification for Change** (mandatory by originator)

Options 1 and 2 are available to Registrants if required. However, they are both disruptive and costly whereas the preferred option, option 3, is administrative and will achieve the same results (i.e. correctly settling Import and Export flows).

**To which section of the Code does the CP relate, and does the CP facilitate the current provisions of the Code?** (mandatory by originator)

Section L ‘Metering’ and Section K ‘Classification and Registration of Metering Systems and BM Units’. Allowing such sites to be considered complex and applying complex mapping rules Registrants can ensure Boundary Point Imports and Exports are recorded in Settlement.

**Estimated Implementation Costs** (mandatory by BSCCo)

The estimated implementation cost is 9.5 Man Days which equates to £2280.

**Configurable Items Affected by Proposed Solution(s)** (mandatory by originator)

BSCP514 v18.0

BSCP502 v19.0

**Impact on Core Industry Documents or System Operator-Transmission Owner Code** (mandatory by originator)

None.

**Related Changes and/or Projects** (mandatory by BSCCo)

None.

**Requested Implementation Date** (mandatory by originator)

February 2011 Release

**Reason:**

Next available release, to provide clarity to participants as soon as possible.

**Version History** (mandatory by BSCCo)

v1.0 for Industry Impact Assessment

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Attachments: Y

Attachment A – BSCP514 v19.1 conformed redlined v0.1 (12 Pages)

Attachment B – BSCP502 v19.0 redlined v0.2 (14 Pages)