ELEXON

Compliance Testing and Protocol Approval – Secure Meters' Prometer 100 (integral Outstation) Meter types

Supplier Volume Allocation Group (SVG)

Date of meeting	**5 April 2022**	Paper number	**254/02**
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Classification	**Public**	Document version	**1.0**

Summary | **In June 2019, Secure Meters UK Ltd (Secure), a Meter manufacturer, applied for compliance testing of its Prometer 100 (integral Outstation) Meter types (P3E and R3E). This was against the current Issues of Codes of Practice (CoPs) 1, 2, 3, 5 and 10. In August 2021, Secure applied for protocol approval of the Prometer 100 Meter types using IMServ Europe Ltd, a Half Hourly Data Collector, as the Protocol Testing Agent. We invite the SVG to note that on 9 March 2022, as a result of successful compliance testing and protocol approval testing, we issued a Certificate of Compliance and a Certificate of Protocol Approval to Secure, for the Prometer 100 Meter types (P3E and R3E). We will also present a similar paper to the Imbalance Settlement Group regarding CoPs 1, 2, 3 and 5 and IMServ collecting data, on behalf of the Central Data Collection Agent, for Central Volume Allocation Metering Systems.**

1. Balancing and Settlement Code (BSC) requirements

1.1 BSCP601[1] sets out the processes for Meter manufacturers, Meter Operator Agents, Suppliers, Half Hourly (HH) Data Collectors and other HH Metering Equipment users to apply for compliance testing and protocol[2] approval. It covers:

- the application process;
- submission of Metering Equipment;
- communications with the Compliance and Protocol Testing Agents;
- amendments to existing approvals; and
- issuing and removing Certificates of Compliance or Protocol Approval.

1.2 Each HH Code of Practice (CoP) (i.e. CoPs 1, 2, 3, 5, 6 and 10) requires Meters and Outstations to be tested for compliance in accordance with BSCP601. BSC Parties can apply, under BSCP32[3], for a Metering Dispensation from any departure from the requirements of a CoP.

1.3 Each HH CoP also requires Outstation data to be to a format and protocol approved by the BSC Panel[4] in accordance with BSCP601.

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[1] 'Metering Protocol Approval and Compliance Testing'
[2] A protocol, in the context of an Outstation, is the set of rules (or language) governing the communication of data between the Outstation and any other device connected to it. The manufacturer of the Outstation usually designs the protocol.
[3] 'Metering Dispensations'
[4] Under the BSC Baseline Statement, the BSC Panel has delegated responsibility for BSCP601 to its BSC Panel Committees, the Supplier Volume Allocation Group and the Imbalance Settlement Group. Under BSCP601, since CP1174 was implemented in June 2007, if compliance testing or protocol approval testing is successful, Elexon can issue a Certificate of Compliance or Protocol Approval to an applicant. Prior to June 2007 Elexon had to seek a decision from the relevant BSC Panel Committee before issuing Certificates of Compliance or Protocol Approval to an applicant.

2. Compliance Testing

2.1 In June 2019, Secure Meters UK Ltd (Secure), a Meter manufacturer, applied for Compliance Testing of its Prometer 100 (integral Outstation) Meter types (P3E and R3E). This was against the current Issues of following Codes of Practice (CoPs):

- CoP1 'The metering of circuits with a rated capacity exceeding 100MVA for Settlement purposes' (Issue 2);
- CoP2 'The metering of circuits with a rated capacity not exceeding 100MVA for Settlement purposes' (Issue 4);
- CoP3 'The metering of circuits with a rated capacity not exceeding 10MVA for Settlement purposes' (Issue 5);
- CoP5 'The metering of energy transfers with maximum demand of up to (and including) 1MW for Settlement purposes' (Issue 6); and
- CoP10 'The metering of energy via low voltage circuits for Settlement purposes' (Issue 2).

2.2 The Prometer 100 comes in two Meter types. The P3E is a wall mounted variant and the R3E is a rack mounted variant. Secure confirmed that the Meter types share the same versions of:

- metering firmware (i.e. metrology);
- application firmware (i.e. functionality (including Settlement functionality); and
- communications firmware (i.e. protocol).

2.3 In August 2019, we reviewed the compliance testing reports and found the Prometer 100 Meter types comply with all aspects of these CoPs using versions of the manufacturer's M-Cubed software, from v8.1.2.19602 onwards[5].

2.4 On 9 March 2022, following successful protocol approval testing and witnessing (by Elexon), we issued Secure with a Certificate of Compliance for its Prometer 100 Meter types.

3. Protocol Approval

3.1 In August 2021, Secure applied for protocol approval of the Prometer 100 Meter types using IMServ Europe Ltd (IMServ), a Half Hourly Data Collector (HHDC), as the Protocol Testing Agent.

3.2 IMServ is a Qualified HHDC (Market Participant Id: UKDC) which collects data from Supplier Volume Allocation (SVA) Metering Systems. It also collects data from Central Volume Allocation (CVA) Metering Systems on behalf of the Central Data Collection Agent (CDCA).

3.3 On 9 March 2022, following successful protocol approval testing and witnessing (by Elexon), we issued Secure with a Certificate of Protocol Approval for the Prometer 100 Meter types using IMServ as an HHDC and IMServ collecting data on behalf of the CDCA.

4. Imbalance Settlement Group

4.1 Under the BSC Baseline Statement, the Imbalance Settlement Group (ISG) is solely responsible for CoPs 1 and 2 and jointly responsible for CoPs 3 and 4[6] with the SVG. The SVG is solely responsible for CoPs 5, 6[7], 7[8], 8[9], 9[10] and 10.

4.2 Metering Equipment that is compliant[11] with CoPs 1, 2, 3 and 5 can be registered in the Central Meter Registration Service (CMRS) as CVA Metering Systems.

4.3 Metering Equipment that is compliant[11] with CoPs 1, 2, 3, 5, 6, 7, 8, 9 and 10 can be registered in a Supplier Meter Registration Service (SMRS) as SVA Metering Systems.

4.4 We will therefore take a similar information paper to the ISG to let it know that the Prometer 100 Meter types have passed compliance testing against CoPs 1, 2, 3 and 5 and that IMServ, acting on behalf of the CDCA as a data collector, will be able to collect data from CVA Metering Systems comprising the Prometer 100 Meter types.

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[5] Following compliance testing, Secure modified M-Cubed to allow users (e.g. Meter Operator Agents) to comply with the password length requirement set out in CoPs 1, 2, 3 and 5 of 'a string of characters of length no less than six characters and no more than twelve characters'. The maximum of 12 characters password limitation is present in certain data items within the Energy Market Data Specification (EMDS) under the Retail Energy Code and the CDCA systems. To allow passwords longer than 12 characters would require changes to these documents/systems.

[6] 'The calibration, testing and commissioning requirements of Metering Equipment for Settlement purposes'

[7] 'The metering of energy Imports via low voltage circuits fused at 100 Amps or less per phase for Settlement purposes'

[8] 'The metering of energy Imports via low voltage circuits fused at 100 Amps or less per phase for Settlement purposes' (as part of a wider data collection system;

[9] 'The metering of Import Active Energy via low voltage circuits for Non-Half Hourly Settlement purposes'

[10] 'The metering of Import and Export Active Energy via low voltage circuits for Non-Half Hourly Settlement purposes'

[11] Or subject to an approved Metering Dispensation under BSCP32.

5.   Updates and notifications

5.1   In March 2022, we:

- published an updated version of the 'CoP Compliance and Protocol Approval' list to include:

    – the Prometer 100 Meter types; and
    – the protocol approval for the Prometer 100 Meter types, using IMServ (UKDC) as an HHDC and on behalf of the CDCA;

- published an updated version of the 'Valid Outstation Types' list with 'PRO' for the Prometer 100 Meter types; and

- issued a Newscast article notifying BSC Parties and BSC Party Agents of the successful compliance testing and protocol approval for the Prometer 100 Meter types.

6.   Recommendations

6.1   We invite the SVG to:

a) **NOTE** we have issued a Certificate of Compliance to Secure Meters UK Ltd for its Prometer 100 integral Outstation Meter types (P3E and R3E), against the current Issues of Codes of Practice 1, 2, 3, 5 and 10;

b) **NOTE** we have issued a Certificate of Protocol Approval to Secure Meters UK Ltd, using IMServ Europe Ltd (UKDC), as a Half Hourly Data Collector, collecting data for Supplier Volume Allocation Metering Systems; and

c) **NOTE** we will take a similar paper to the Imbalance Settlement Group in relation to CoPs 1, 2, 3 and 5 and IMServ Europe Ltd, on behalf of the Central Data Collection Agent, collecting data for Central Volume Allocation Metering Systems.

For more information, please contact:

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