Draft Change Proposal – BSCP40/01	DCP No: 0033 *Version No:* 1.0 *(mandatory by BSCCo)*

Title *(mandatory by originator)*

Facilitating smart metering in the Half Hourly (HH) market

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

With the introduction of Automatic Meter Reading (AMR) / smart meters comes the opportunity to expand the Half Hourly (HH) elective (sub 100kW) market. The BSC requirements necessary to facilitate this were discussed during the BSC Smart Metering Review. It was agreed that the BSC, in respect of HH processes and controls, should not unnecessarily inhibit participation in this sector of the market. The processes and controls should be appropriate for the level of consumption being metered. The principles worked to while defining the solution are as follows:

- That the likely benefits would exceed the likely costs of service (Meter Operator and Data Collector) without creating "undue risk" (where "undue risk" is defined as no greater risk than if the same Metering System was settled in the Non Half Hourly (NHH) market)
- To achieve an appropriate balance between removing prohibitively expensive controls and minimising BSC and participant changes. For example, the application of new service levels for elective HH would affect both Supplier and agent systems as currently most participants have the same processes in place for Measurement Class (MC) C and E.

Processes were considered from the point of view of existing participants rather than new entrants. The appropriateness of requirements was considered in terms of different sections of the market. For instance some requirements were considered suitable for all HH and not for NHH, some for secondary current (also known as CV/VT operated meters) and not for Primary (whole) current and some for meters in MC C but not for those in MC E. This is illustrated in Attachment D. Key changes are also summarised in the table at the end of the 'Proposed Solution' section of this Draft Change Proposal.

The processes and relevant sections of the BSC and subsidiary documents considered can be seen in Attachment E. This table gives reasons why changes were thought to be necessary or not.

Justification for Change *(mandatory by originator)*

The BERR response to the Energy Billing and Metering consultation details an amendment to the Energy Bill will require AMR metering for larger business customers to be rolled out over the next five years. The government initially proposed sites in Profile Classes (PC) 5-8 which would affect approximately 170,000 sites. However, the BERR response states that 'The Government agrees that profile and consumption categories are not immutable, and that it would be desirable to deal with any overlap between its proposal and its larger intention of providing smart meters to the smallest business customers and domestic customers. It is, therefore, considering how arrangements for the smallest businesses might best take the previous provision of advanced metering into account'. The response also notes that there is nothing to stop Suppliers from providing AMR metering to customers below the thresholds set by regulation. Indeed, AMR meters are already being fitted in some sites.

These AMR meters will be capable of remote communication and the production of HH values for use in the HH market as well as cumulative register values for use within the NHH market. However, they will not meet all the requirements of Code of Practice (CoP) 5 and so, currently, would not be allowed

to trade in the HH market.

Allowing these lower specification meters to be traded Half Hourly would cut the cost of entrance to the HH elective market and therefore provide Suppliers with a more cost effective option of trading these sites HH. It would also enable a change of Measurement Class between NHH and HH elective markets without the need for a site visit and meter exchange, giving Suppliers and customers greater flexibility. Improved Settlement accuracy is also a likely consequence.

BERR also highlighted ongoing discussions to determine whether to require the use of HH data in Settlement once advanced metering is installed. The proposed changes facilitate this requirement, removing the BSC as a potential barrier. No further BSC changes would be necessary should the use of HH data be mandated.

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

General

The proposed changes have sought to achieve a situation where the rules are such that meters that are capable of being used in the HH elective market adhere to the rules for this more stringent sector of the market (even if they are traded initially in the less stringent NHH sector). This is so that they can move to the more stringent sector at a later date without the need for a meter exchange and/or a site visit.

Code of Practice (CoP)

A new Code of Practice (CoP10) should be introduced that covers whole current meters for use in the HH elective (sub 100kW) market. The Energy Retail Association's (ERA's) smart meter specification (as it currently stands) would be compliant with CoP10. Meters covered by CoP10 must also be consistent with the Electricity Act.

The reason for only allowing whole current meters to be covered by CoP10 and not secondary current meters is that secondary current meters carry more risk than whole current and so excluding them enables the lightening of requirements. It is also useful to have a clear cut definition of where CoP10 applies.

Compliance with the CoP10 will mean meters can be traded both HH elective (MC E) and NHH, negating the need for a site visit and meter exchange when changing between these markets. Such meters would never trade in the mandatory HH sector (MC C), as the technicalities of metering are such that secondary current meters are required above a threshold somewhat below 100kW.

Attachment A details the requirements to be included in CoP10. These requirements were established during the BSC Smart Metering Review and are in line with the ERA's Smart Meter Specification. CoP5 was used as a baseline when considering the appropriate requirements. Attachment B shows CoP10 redlined against CoP5.

PARMS

In the HH market, these CoP10 meters would be traded as Measurement Class E meters (HH elective) and all the current timescales and performance standards around Measurement Class E (such as percentages of energy on actual data, and timescales for addressing meter faults etc.) would apply. The

reason for this is that although they are in some cases more stringent than the NHH requirements, changing them (with the consequential PARMS implications) would impose a disproportionate cost given the relative small operational benefits of such changes. However, a change to meter fault timescales may be necessary in the future if high volumes begin to cause problems.

BSCPs

Most of the HH requirements should apply to all Measurement Class C and E meters. However, some should be relaxed for all of Measurement Class E - on the basis that these sites could be traded NHH; and / or for whole current (which will be < 100kW) - on the basis that the risks associated with whole current metering are significantly less in certain areas.

Whole current meters should be exempt from the HH requirement for proving tests. These meters could be traded NHH where no proving test would be required so this would be no worse than NHH. Secondary current meters should continue to be proved regardless of whether they are in the elective or mandatory sector, as although they can be traded NHH they could potentially become mandatory HH which would require a proving test. These relaxations of HH processes would require changes to Appendix 4.6 'Proving of Half Hourly Metering Systems' of BSCP502 'Half Hourly Data Collection for SVA Metering Systems Registered in SMRS' and Appendix 8.3 'Proving of Half Hourly Metering Systems' of BSCP514 'SVA Meter Operations for Metering Systems Registered in SMRS' and also ensuring any references to proving tests throughout the rest of BSCP502 and BSCP524 state that they should be carried out in accordance with the relevant appendices.

Site visits for HH elective sites (whole current and secondary current) should not be mandated under the BSC. Site visits are not mandated for NHH sites. This would require a change to Appendix 4.1 'Validate Meter Data' of BSCP502 (specifically 4.1.8). Although site visits would no longer be a BSC requirement there would still be an obligation to visit sites for safety reasons under the Supply licence. Section 4.1.6 'Maximum Permissible Energy by Metering System Code of Practice' of BSCP502 would also need to have an entry for CoP10 included in the table.

These relaxations of HH processes would require changes to Appendix 4.6 'Proving of Half Hourly Metering Systems' and Appendix 4.1 'Validate Meter Data' of BSCP502 'Half Hourly Data Collection for SVA Metering Systems Registered in SMRS' and also any references to proving tests throughout the rest of BSCP502.

A change should also be made to section 3.3.2 'Change of Measurement Class from Half Hourly to Non-Half Hourly SVA Metering System coincident with change of Supplier, NHHDC, NHHDA and MOA' of BSCP502 removing the requirement for a site visit as a Change of Measurement Class (CoMC) could be carried out remotely.

CoP 4 – Commissioning

In the context of the proposed changes, CoP 4 deals with the calibration and commissioning requirements.

Metering Systems under CoP10 should be commissioned in the same way as a NHH whole current meter. Section 6 of CoP4 should be changed to reflect this and CoP10 should be included in the

paragraph about NHH commissioning in the scope. None of the appendices are applicable to NHH commissioning. Type A calibration will be undertaken during MID approval.

Commissioning test are covered by a "where appropriate" caveat, so only those tests where relevant to whole current metering would apply, and no changes are necessary.

Area	**HH - Mandatory**	**HH –Elective (not CoP 10)**	**HH – Elective and CoP 10**	**NHH (regardless of whether CoP 10)**
Metering	CoP 1, 3, 5	CoP 1, 3, 5	CoP 10	CoP 8, 9, 10
Calibration & Commissioning	CoP 4 Section 5	CoP 4 Section 5	CoP 4 Section 6	CoP 4 Section 6
DC BSCP	BSCP502	BSCP502	BSCP502	BSCP504
Proving Tests Required	Yes	Yes	No	No
Site Visits required by the BSC for detection of tampering and safety purposes	Yes	No	No	No
Applicable PARMS standards	HH Mandatory	HH Elective	HH Elective	NHH

Version History ***(mandatory by BSCCo)***

DCP0033 was raised on 4 July 2008

Has this DCP been raised for discussion by a Working Group ***(optional by originator)*****: Y/N***
(delete as appropriate)

This DCP has been discussed by the Smart Metering Expert Group.

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Attachments: Yes **Attachment A – Code of Practice for Whole Current Metering of Energy Via Low Voltage Circuits for Settlement Purposes (CoP10) (21 pages)** **Attachment B – Code of Practice for Whole Current Metering of Energy Via Low Voltage Circuits for Settlement Purposes (CoP10) red-lined against CoP 5 (40 pages)** **Attachment C – Changes to Code of Practice Four (2 pages)** **Attachment D – Matrix of Applicable Requirements for Different Types of Metering (2 pages)** **Attachment E – Table of Processes Considered by Smart Metering Expert Group (8 pages)**	