SVG102/01

Meeting name	Supplier Volume Allocation Group
Date of meeting	04 August 2009
Paper title	Change Proposal Progression
Purpose of paper	For Decision
Synopsis	This paper provides: • 8 Change Proposals (CPs) for decision; • an update on the Gross Volume Correction (GVC) Draft Change Proposals (DCPs); and • details of the status of all Open Draft Change Proposals (DCPs) and Change Proposals (CPs).

1 Introduction

1.1 This paper provides details of 8 Change Proposals for you to consider and agree their progression. ELEXON issued the CPs for Party/Party Agent impact assessment via Change Proposal Circular (CPC) 00662, with the exception of CP1288 which was issued via CPC00661. In light of this assessment ELEXON invites the SVG to decide whether to approve of reject the CPs.

1.2 Additionally this paper provides an update on what the next steps will be for the 3 Gross Volume Correction (GVC) Draft Change Proposals (DCPs); DCP0041, DCP0042 and DCP0043, following industry impact assessment via CPC00662.

2 Summary of Change Proposals for progression

2.1 CP1267 v2.0 – Registration of UMSO's and MA's in SMRS

2.1.1 We raised CP1267 in November 2008, and issued it for impact assessment (via CPC00650) in late November 2008. After extensive discussion with the respondents, we issued version 2 for impact assessment (via CPC00662) in June 2009.

2.1.2 CP1267 aims to amend the process for registering an Unmetered Supplies Operator (UMSO) and/or Meter Administrator (MA) in the Supplier Meter Registration System (SMRS) for a Metering System Identifier (MSID).

2.1.3 Currently there are operational issues in registering an UMSO that is not also a Non Half Hourly (NHH) Meter Operator Agent (MOA) in a particular Grid Supply Point (GSP) Group. At the moment, the Supplier records the UMSO ID in the MOA ID field within the D0055 flow[1], which is sent to SMRS. The SMRA does not check the list of UMSOs in MDD, but instead validates the MOA field against the list of valid MOAs. This creates problems in trying to register an UMSO which is not a NHH MOA, as it will not have a valid MOA role code assigned to it in Market Domain Data (MDD), and therefore, the UMSO cannot be registered against a MSID. Previously, all UMSOs have also been NHH MOAs, and so this hasn't caused a problem. However, in the SWAE Grid Supply Point group, SWAE have ceased to operate as a NHH MOA, but continue to operate as an UMSO.

[1] D0055 - Registration of Supplier to Specified Metering Point

2.1.4 There is also some confusion regarding the HH appointment for UMS - whether to appoint the MA or the UMSO in the MOA field. CP1267 clarifies that the MA should be included for HH UMS.

2.1.5 CP1267 v1.0 - we received 13 responses to the impact assessment; of these 6 agreed, 6 disagreed (there was a split between Suppliers supporting the change, and LDSOs disagreeing with the change) and 1 was neutral. Respondents were generally supportive of the principle of the CP, but were split in their views on how best to resolve the issue. Following this, ELEXON developed CP1267 version 2.0 and issued this for industry impact assessment.

2.1.6 CP1267 v2.0 - we received 16 responses to the impact assessment; of these 4 agreed, 8 disagreed and 4 were neutral. Respondents generally agreed to the principle of the CP. While some respondents believed that the CP resolved the issue that exists in the SWAE GSP group, as well as improving the overall industry data quality, the majority believed that the benefits were outweighed by the costs involved in making IT system changes.

2.1.7 We recommend that the SVG:

- **APPROVE** CP1267 version 1.0 for inclusion in the November 2010 Release, as the solution resolves the underlying issue with Unmetered registrations, reduces the risk to Settlement and has some support from industry;
- **REJECT** CP1267 version 2.0 (if you do choose to approve CP1267, we recommend that it is included in the November 2010 Release), due to lack of support and the solution not being cost effective; and
- **AGREE** our suggested amendments to the redline text for CP1267 version 1.0 (shown in table 3 of Appendix 1).

2.2 CP1288 – Revisions to Meter test points within Code of Practice 4

2.2.1 Npower raised CP1288 on 21 April 2009. We issued CP1288 for impact assessment (via CPC00661) in May 2009.

2.2.2 CP1288 aims to align the testing provisions in Codes of Practice (CoP)4 with the British Standards and to remove the ambiguity for testing 3 phase Meters[2] by:

- Amending the headings for Reactive Meters in several tables to units of sin φ rather than power factor in Appendix B;
- Inserting a new diagram in Appendix B to clarify the test point requirements for Reactive Meters; and
- Inserting new tables from British Standards BS EN 62053-22 and BS EN 6253-23 into Appendix C.

2.2.3 We received 10 impact assessment responses; of these 7 agreed and 3 were neutral. We received some comments suggesting minor amendments to add clarity to the proposed redline text and recommend that the SVG agree to include them in CP1288.

2.2.4 We note that the changes proposed would mean including information which is taken directly from the British Standards in CoP4. We have confirmed with the British Standards Institution that we may include these extracts, provided we include the wording suggested in row 9 of table 3. We are comfortable with this wording and recommend that the SVG agree that the redline text should be amended to include this as well.

[2] A meter which is capable of more than one voltage supply to a premises.

2.2.5 We recommend that, because aligning the provisions of CoP4 with the British Standards will make the requirements easier to understand for Meter Operators and manufacturers, and majority industry support, you:

- **AGREE** our suggested amendments to the redline text; and
- **APPROVE** CP1288 for implementation in the November 2009 Release.

2.3 CP1295 – Process for distribution of MDD Updates not included in D0269/D0270 flows

2.3.1 We raised CP1295 on 05 June 2009. We subsequently issued CP1295 for impact assessment (via CPC00662) in June 2009.

2.3.2 CP1295 aims to ensure that the processes and procedures which have been developed to provide BSC Parties with MDD updates (that are not included within the D0269/D0270 flows) are robust and effective and that they can rely on these processes to obtain valid and accurate information.

2.3.3 We received 15 impact assessment responses; of these 11 agreed, 2 disagreed and 2 were neutral. Those who agreed with the proposed changes believed that the current process was not robust and that the recommended additional process would improve on the current baseline.

2.3.4 All respondents (including those who disagreed or were neutral) were in support of the proposed redline changes as they believed that this would ensure that current processes were accurately reflected within the Code Subsidiary Documents (CSDs).

2.3.5 Respondents who disagreed with CP1295 believed that the implementation costs were too high in relation to the additional 'proposed processes'. They believed that the implementation costs outweighed any benefits of the new process.

2.3.6 We discussed this with the respondents and highlighted that the benefit is in providing NHH Data Aggregators (DAs) and NHH Data Collectors (DCs) with a more robust and effective method of obtaining the applicable MDD data and that we believe this outweighs the initial implementation costs.

2.3.7 We recommend, based on CP1295 improving the current process, the inclusion of key process steps within the various CSDs and majority industry support, that you:

- **APPROVE** CP1295 for implementation in the February 2010 Release.

2.4 Reactive Power CPs

2.5 As described in paper SVG97/04, a Working Group on absent and erroneous Reactive Power Data was established by the SVG. The Group investigated problems that arise when the metered data provided to LDSOs by Half Hourly Data Collectors does not include all of the Reactive Power data required by the LDSO (for purposes of DUoS charging and network management).

2.6 There is a package of six CPs recommended to SVG by the Working Group. The six Change Proposals are:

- CP1296, 'Mandatory Capability to Record Reactive Power Demand (kvar) Values in Code of Practice 5 (CoP5) Meters'.
- CP1297, 'Mandatory Capability to Record Reactive Power Demand (kvar) Values in Code of Practice 10 (CoP10) Meters'
- CP1298, 'Requirement on MOAs to Configure Meters to Record Half Hourly Reactive Power Data (for Half Hourly Settled CT-Metered Customers)'

- CP1299 ' Requirement on Half Hourly Data Collectors to Collect and Report Reactive Power Data (where the Meter is configured to record it)'
- CP1302, 'Requirement on Half Hourly Data Collectors to Validate Reactive Power Demand Values' – This CP is currently out for Impact Assessment and will be presented to the SVG at their next meeting.
- CP1303, 'Requirement on Half Hourly Data Collectors to Estimate Reactive Power Demand Values' – This CP is currently out for Impact Assessment and will be presented to the SVG at their next meeting.

2.7 Four of the Reactive Power CPs (CP1296, CP1297, CP1298 and CP1299) are included in this paper for decision. We will present the remaining two CPs (CP1302 and CP1303) for decision at the SVG meeting on 01 September 2009.

2.7.1 CP1296 – Mandatory Capability to Record Reactive Power Demand (kvar) Values in Code of Practice 5 (CoP5) Meters

CP1297 – Mandatory Capability to Record Reactive Power Demand (kvar) Values in Code of Practice 10 (CoP10) Meters

2.7.1.1 We raised CP1296 and CP1297 on 05 June 2009. We subsequently issued them for impact assessment (via CPC00662) in June 2009.

2.7.1.2 CP1296 and CP1297 aim to address issues associated with absent and erroneous Reactive Power data. They aim to do this by ensuring that CoP5 (CP1296) and CoP10 (CP1297) Meters are capable of recording Reactive Power values. CoP5 and CoP10 would be amended to reflect these additional requirements.

2.7.1.3 We received 15 responses in relation to **CP1296**; of these 13 agreed, 1 disagreed and 1 was neutral. The respondents who agreed with the proposal believed that this change would ensure a more effective process of capturing and reporting Reactive Power data. In addition a respondent believed that CP1296 would improve the data quality and lead to more accurate Distribution Use of System (DuoS) charging.

2.7.1.4 The respondent who disagreed with CP1296 believed that CoP5 Meters should not be required to record Reactive Export for predominantly Import sites, as this would be an ineffective requirement given there are generally no Reactive Export values to report. The Reactive Power Working Group that developed these changes believes that this data will become more important in the future, and that a consistent approach should be followed in order to ensure uniformity within the market. We highlighted this viewpoint to the respondent; and they still disagree with CP1296.

2.7.1.5 We received 15 responses in relation to **CP1297**; of these 12 agreed and 3 disagreed. The respondents who agreed with the proposal believed that this change would ensure a more effective process of capturing and reporting Reactive Power data. In addition, one respondent believed that this change would enhance their current practice of Reactive Power charging.

2.7.1.6 The respondents who disagreed with CP1297 believed that CoP10 Meters should not be required to record Reactive Export values for predominantly Import sites. The rationale for this comment was that there are generally no Reactive Export values to report at these sites and that including this requirement would introduce an ineffective process. In addition some respondents believed that CoP10 had been developed as a 'lighter version' of CoP5 and including these requirements within CoP10 would create a mirror image of CoP5, which was not the intention behind the development of CoP10. Our view, as discussed with the respondent, was that this data would become more important in the future and that a consistent approach should be followed in order

to ensure uniformity within the market. The Reactive Power Working Group who assessed these changes shared this view.

2.7.1.7 We recommend that, based on the additional benefit of being able to provide accurate Reactive Power data to LDSOs, ensuring that Parties meet their BSC obligations to provide accurate Metered data, and majority industry support, you:

- **AGREE** our suggested amendments to the redline text; and
- **APPROVE** CP1296 and CP1297 for implementation in the February 2010 Release.

2.7.2 CP1298 – Requirement on MOAs to Configure Meters to Record Half Hourly Reactive Power Data (for Half Hourly Settled CT-Metered Customers)

2.7.2.1 We raised CP1298 on 05 June 2009. We subsequently issued CP1298 for impact assessment (via CPC00662) in June 2009.

2.7.2.2 CP1298 aims to address issues associated with absent and erroneous Reactive Power data by ensuring that Meter Operator Agents (MOAs) configure Meters to provide Reactive Power data in those instances where the Meter already has the capability to provide this data. CP1298 limits this requirement to those sites that are Half Hourly Settled and CT-Metered customers.

2.7.2.3 We received 15 responses; of these 11 agreed, 3 disagreed and 1 was neutral.

2.7.2.4 The respondents who agreed with the proposal believed that this change would ensure a more effective process of capturing and reporting Reactive Power data. In addition a respondent believed that CP1298 would improve data quality and lead to more accurate DUoS charging. One respondent believed that this change would enhance their current practice of Reactive Power charging by ensuring that meters have the facility to record Reactive Power data, which would align them with their Distribution Connection and Use of System Agreement (DCUSA) and their BSC Obligations.

2.7.2.5 Respondents who disagreed with the proposal believed that CP1298 should be extended to cover all Half Hourly (HH) sites (i.e. including HH sites which are also within the Whole Current side of the market). We agree with the Working Group's proposed solution because we believe that Licensed Distribution System Operators (LDSOs) would not require the Reactive Power data for the small number of HH – Whole Current Metered sites. In addition we believe that the current version of CP1298 provides the most effective solution as it offers the most benefit to LDSOs with the least impact on the BSC Parties.

2.7.2.6 We recommend, based on the additional benefit of being able to provide accurate Reactive Power data to LDSOs, ensuring that Parties meet their BSC obligations to provide accurate Metered data, and majority industry support, that you:

- **APPROVE** CP1298 for implementation in the February 2010 Release.

2.7.3 CP1299 – Requirement on Half Hourly Data Collectors to Collect and Report Reactive Power Data (where the Meter is configured to record it)

2.7.3.1 We raised CP1299 on 05 June 2009. We subsequently issued it for impact assessment (via CPC00662) in June 2009.

2.7.3.2 CP1299 aims to address issues associated with absent and erroneous Reactive Power data by ensuring that DCs collect and report Reactive Power data, in those instances where the MOA has configured the Meter to record it.

2.7.3.3 We received 15 responses; of these 12 agreed, 2 disagreed and 1 was neutral.

2.7.3.4 The respondents who agreed with CP1299 believed that this CP would align with their current Practices and would ensure that there is no ambiguity regarding the DCs obligation to provide accurate and valid Reactive Power data to Suppliers and LDSOs.

2.7.3.5 One of the respondents who disagreed with CP1299 believed that CP1299 would place an obligation on DCs to collect Reactive Power data from sites that were not even required to provide Reactive Power data. This would occur if the MOAs configured Meters to provide Reactive Power data, even if it was not required in terms of the BSCP. The respondent believed that this would inadvertently place a requirement on DCs to collect data that was not required by the LDSOs.

2.7.3.6 We highlighted to the respondent that the aim of CP1299 was to ensure that DCs collect Reactive Power data, when it is available, in order to improve the quality of data being provided to LDSOs. We highlighted that this would align to the Distribution Connection and Use of System Agreement (DCUSA) as Suppliers are required to provide accurate Metered data to LDSOs. The respondent noted our comments, but remained of their view.

2.7.3.7 We recommend, based on the additional benefit of being able to provide accurate Reactive Power data to LDSOs, ensuring that Parties meet their BSC obligations to provide accurate Metered data, and majority industry support, that you:

- **APPROVE** CP1299 for implementation in the February 2010 Release.

2.8 <u>CP1300 – System changes to support Change of Market Participant ID for the SVA Agent and MDD Agent Roles from 'CAPG' to 'SVAA'</u>

2.8.1 ELEXON raised CP1300 on 05 June 2009. We issued CP1300 for Impact Assessment (via CPC00662) in June 2009.

2.8.2 CP1300 aims to ensure the role of the BSC Central Systems is more clearly defined in its interactions with the market. It does this by updating the Market Participant ID (MPID) for the Supplier Volume Allocation (SVA) Agent from 'CAPG' to 'SVAA'.

2.8.3 The current MPID could be said to be closely linked to the former Service Provider 'Capgemini'. The MPID is a designator intended to refer to the Supplier Volume Allocation Agent (SVAA), and it is better to have a designator which more clearly identifies the role and function of the relevant Service Provider. A change of designator will also assist in ensuring that persons do not still think that Capgemini is involved in the provision of the service.

2.8.4 We received 15 responses; of these 11 agreed, 2 disagreed and 2 were neutral. Those who agreed did not raise any additional arguments to those provided in the justification section of CP1300, while those who disagreed raised the concern this is a cosmetic change only with no business benefit justification at a large cost.

2.8.5 We recommend that, based on CP1300 more clearly reflecting the role of the BSC Central Systems within its interactions, and majority industry support, you:

- **APPROVE** CP1300.

2.8.6 If you choose to approve CP1300, we recommend that, due to the potential increase in cost and the risk to Settlement of implementing in June 2010 being greater than the risks of implementing in February 2010 (and the benefits being realised earlier), you:

- **APPROVE** the February 2010 Release for the implementation of CP1300.

2.9 Implementation Costs

		BSC Agent (Demand Led)	ELEXON Operational		Total		Impacts
		Cost	Man Days	Cost	Cost	Tolerance	
CP1267	V1.0	£0	3	£660	£660	10%	BSCP501, BSCP520
	V2.0	£0	1.5	£330	£330	10%	BSCP501, BSCP520
CP1288		£0	1.25	£275	£275	10%	CoP4
CP1295		£6,000	20	£4,400	£10,400	10%	BSCP505, BSCP508, SVA Data Catalogue Vol. 1 and Vol. 2
CP1296		£0	2	£440	£440	10%	BSCP601, CoP5
CP1297		£0	2	£440	£440	10%	BSCP601, CoP10
CP1298		£0	2	£440	£440	10%	BSCP514
CP1299		£0	2	£440	£440	10%	BSCP502
CP1300		£44,242	37.5	£8,250	£52,492	10%	CVA, SVA, MDD, NHHDA, EAC/AA and PARMS software

3 Next steps for DCPs 0041, 0042 and 0043

3.1 We raised DCP0041 ('Clarifications to Gross Volume Correction (GVC) Process'), DCP0042 ('Replacing Erroneous Forward Looking EACs') and DCP0043 ('Use of Gross Volume Correction in Post Final Settlement Runs (PFSR)') on 05 June 2009. We issued them for industry impact assessment (via CPC00662) in June 2009.

3.2 We have received a large number of responses (15) for each of these DCPs, which we raised to progress the discussions of the Gross Volume Correction (GVC) Working Group.

3.3 All but one respondent agrees with the intention of the DCPs or is neutral. Although respondents have differing views on which specific solution option to progress for each DCP, there is a majority preference. We will therefore raise three CPs to progress each DCP on the basis of the majority view.

3.4 Many respondents requested further clarification, or made suggestions, on the low-level detail of the solutions. We believe that we can address many of these comments in the redlining for the

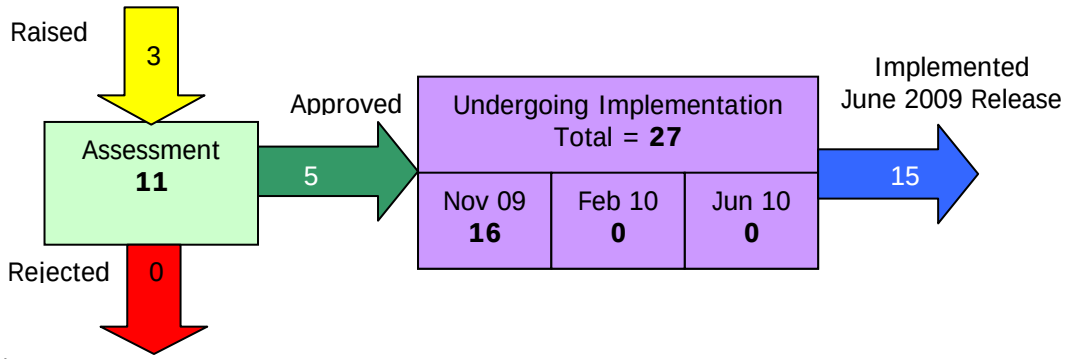
CPs. We will contact each respondent with our proposed redlining to confirm whether this addresses their points before raising the CPs. We will also ensure that the Working Group has the opportunity to review the redlining.

3.5 We anticipate that it will take a few weeks to complete the redlining and these review discussions, due to the number of responses and comments. We therefore intend to raise the CPs for inclusion in the 4 September 2009 CPC batch.

3.6 If you have any questions about these DCPs, please contact Kathryn Coffin on 020 7380 4030.

4 Summary of Open Change Proposals

4.1 There are currently **27** open CPs, SVG own **14** CPs, SVG and ISG co-own **9** CPs, and ISG own the remaining 4 CPs. **3** new CPs have been raised since the last SVG meeting. Details of the new CPs are provided in Appendix 8 on page 103.



Please note:

- The numbers in the boxes indicate the number of CPs in a given phase.
- The numbers in arrows show the variance in the past month.

4.2 There are currently 5 open DCPs, 1 of which have been raised since the last SVG meeting. Details of the new DCP are provided in Appendix 8 on page 103.

5 Recommendations

5.1 We invite you to:

a) **AGREE** the suggested amendments to the CP1288 redline text;

b) **APPROVE** CP1288 for inclusion in the November 2009 Release;

c) **AGREE** the suggested amendments to the CP1267 v2.0, CP1296 and CP1297 redline text;

d) **APPROVE** CP1267 v1.0, CP1295, CP1296, CP1297, CP1298, CP1299 and CP1300 for inclusion in the February 2010 Release;

e) **NOTE** the update on the Gross Volume Correction (GVC) DCPs (DCP0042, DCP0043 and DCP0044); and

f) **NOTE** the status of all open Draft Change Proposals and Change Proposals.

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List of Appendices:

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List of Attachments:

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Attachment B – CP1267 v1.0 – BSCP520 redlined
Attachment C - CP1267 v2.0 – BSCP501 redlined
Attachment D – CP1267 v2.0 – BSCP520 redlined
Attachment E – CP1288 – CoP4 redlined
Attachment F – CP1295 – BSCP508 redlined
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Attachment N – CP1298 – BSCP514 redlined
Attachment O – CP1299 – BSCP502 redlined

Appendix 1 – Detailed Analysis of CP1267

1 Why Change?

1.1 Background

1.2 We raised CP1267 'Registration of UMSOs and MAs in SMRS' v1.0 on 27 November 2008.

1.3 The Problem

1.4 Currently, a discrepancy exists between BSCP520 'Unmetered Supplies Registered in SMRS' and the SMRS system. BSCP520 states that, for Non Half Hourly (NHH) Unmetered Supplies Metering Systems, the Supplier nominates the Unmetered Supplies Operator (UMSO) in the Meter Operator Agent (MOA) field of the D0055[3], which they send to SMRS.

1.5 Currently, none of the SMRSs support this function if the UMSO isn't also a MOA, as they do not validate against the UMSO Market Participant ID (MPID) information from Market Domain Data for UMS MSIDs. Instead the SMRS validates the MOA field for all registrations against the list of valid MOA IDs in MDD.

1.6 Previously this has not been an issue as all UMSOs have also been MOAs, and so have been recorded under both roles in MDD. However, one UMSO has recently ceased trading as a NHH MOA and as a result their MOA role code has been end dated in MDD.

1.7 As a result, updates for NHH UMS MSIDs in one GSP Group (SWAE), cannot be sent to the SMRS as the UMSO is now no longer recognised as a valid entry in the MOA field and does not pass validation.

1.8 A similar issue exists for Half Hourly (HH) UMS appointments where current industry practice (not a BSC requirement) is to nominate the Meter Administrator in place of the UMSO, as this information is of more immediate importance than the identity of the UMSO. Where the Meter Administrator (MA) does not have the same ID as a HH MOA in MDD, the MA is not recognised as a valid entry in the MOA field.

2 Concept of the solution (applicable to CP1267 versions 1.0 and 2.0)

2.1 The solution proposes a change to the SMRS validation rules, but where the MOA field will continue to contain the UMSO or MA data.

- For a NHH UMS MSID the SMRS would validate the MPID in the MOA field against codes for the UMSO (known as role code 3) in MDD, instead of the codes for the Meter Operator (known as role code M).
- For a HH UMS MSID the SMRS should validate the MPID in the MOA field against codes for Meter Administrator (known as role code 4) in MDD instead of role code M (Meter Operator).

2.2 These changes would be reflected in two BSCPs, where there would be:

- A new entry in the Meter Operator Appointment in the Data Validation table in BSCP501 'Supplier Meter Registration Service', Section 4.3; and
- Adding clarification for Half Hourly Unmetered Supplies registration to BSCP520 Section 1.3.8 'Half Hourly Trading'.

[3] D0055 - Registration of Supplier to Specified Metering Point

2.3 This change does not affect metered supplies (HH or NHH) where the SMRS would continue to validate against role code “M” in MDD.

3 Intended Benefits

3.1 Currently NHH UMS appointment flows cannot be sent in line with BSCP520 for one of the distribution groups (the SWAE distribution Group). This CP seeks to resolve this issue and would prevent similar issues from occurring in the future for NHH and HH UMS where UMSOs/ MAs are not MOAs.

3.2 Further benefits are described in Section 11.3 of this document.

4 Proposed CP1267 version 1.0 solution

4.1 The version 1.0 solution sought to change the SMRS validation rules as is outlined in section 3 of this document.

4.2 The MOA fields in the D0055 would be populated with either an UMSO MPID (for NHH UMS) or MA MPID (for HH UMS), where the SMRS would validate against a list of UMSOs or MAs in MDD.

4.3 The SMRA would choose whether to validate against the 3, 4, or M role codes based on the ‘Measurement Class’ included in the D0055. Where no Measurement Class is included in the D0055, it would not be possible to validate the MOA field, or an assumption would need to be made before validation.

5 Industry Views to CP1267 version 1.0

5.1 We issued CP1267 v1.0 for impact assessment in December 2008 (via CPC00650). We received 13 responses; of these 6 agreed, 6 disagreed and 1 was neutral.

5.2 Respondents were generally supportive of the principle behind CP1267, and recognised the current situation as a problem, but had split views on the proposed solution.

5.3 The 6 respondents who supported CP1267, believed that the proposed solution resolves the issue of registering an UMSO that is not (or may not be) a NHH MOA as in the SWAE GSP group. They also noted that CP1267 would also prevent similar instances from occurring in the future. Additionally these respondents believed that CP1267 clarifies that the MA should be appointed as the MOA for HH UMS registrations.

5.4 The 6 respondents that did not support CP1267, were concerned that the implementation costs were too high or that the solution was not robust enough, as validation would not be possible if the Measurement Class field isn’t complete. These respondents were keen for ELEXON to investigate more cost effective and robust options.

5.5 We have considered several different solutions (see section 8) and discussed these with all of the respondents to version 1.0. Following this we issued version 2.0.

6 Impacts and Costs of CP1267 version 1.0

Market Participant	Cost / Impact	Implementation time needed
ELEXON (Implementation)	The estimated ELEXON implementation cost is 3 man days, which equates to £660.	February 2010 release suitable
Industry cost	A cost to industry (LDSOs only) was provided by St. Clements to implement version 1.0 of the CP1267 solution: approximately £10,000. Respondents did not provide any details of any additional costs to update their systems, although significant systems and process changes are anticipated by some LDSOs.	120-365WDs requested by LDSOs 0 days for Suppliers February 2010 release not suitable

7 Implementation Approach for CP1267 version 1.0

7.1 The estimated ELEXON implementation cost is 3 man days, which equates to £660 (to review and update to the impacted BSCPs).

7.2 Suppliers indicated no impacts or costs to their systems. However, LDSOs have indicated a lead time of 120-365 Working Days as there are significant impacts on their systems and processes (as a result of updating the SMRS system).

7.3 With this in mind, we believe that a November 2010 BSC Systems release is most appropriate.

8 Discussion of the different options following impact assessment of v1.0

8.1 We discussed the different options with all of those who responded to the v1.0 impact assessment, and with St Clements. We noted that there are two different routes for resolving this issue – choosing a more robust (and hence more expensive) solution or a 'dummy' code option.

8.2 We considered 3 other options:

- Using 'dummy' codes;
- Requiring the Measurement Class to be completed in all D0055s; or
- Doing nothing.

8.3 These solutions are described in more detail below.

8.4 **Dummy codes in MDD**

8.4.1 We could include generic 'dummy' codes (i.e. 'UMSO' or 'HHMA') as valid data items for the MOA field in MDD. This is a much simpler solution than CP1267 v1.0, and so would be cheaper and easier to implement.

8.4.2 However, this option could create the following issues:

- the UMSO would not be able to check the identity of the MA in SMRS and so may not be willing to send Settlement data (e.g. inventory details) to the MA until their identity has been confirmed via the Supplier; and

- the Supplier would also not be able to check the identity of the MA in SMRS. This is likely to be an issue when a Change of Supplier has occurred. As there is no database, the new Supplier will have to find the identity of the MA from another source, which would not be defined within the BSC.

8.5 **Requiring the Measurement Class to be populated in the D0055**

8.5.1 The MOA field would continue to contain the actual UMSO or MA ID. In addition, the population of the 'Measurement Class' field of the D0055 would be made mandatory.

8.5.2 Currently, the Measurement Class is not a mandatory item in the D0055 and therefore it is possible for the SMRS to receive a D0055 that contains the MOA ID but no 'Measurement Class'. The Measurement Class shows whether the MSID is Metered or Unmetered and NHH or HH.

8.5.3 This is potentially a problem, because when the Supplier does not provide the Measurement Class, the SMRA cannot work out which list to validate the MOA ID against (the MOA list, the UMSO list or the MA list). Mandating the 'Measurement Class' in the D0055 would resolve this issue.

8.5.4 As there is no standard method for a Supplier to register an Unmetered Supplies in SMRS. Some Suppliers use the D0055 as an initial means to register a MSID, and follow up with a 'complete' D0205 containing relevant details such as the UMSO/HHMA and 'Measurement Class', whereas others just submit a 'complete' D0055. Mandating the 'Measurement Class' may mean that Suppliers would have to amend their processes to cope with only sending a single complete D0055 to the SMRS.

8.5.5 In addition, an MRA change would be required to bring about the amendment to the D0055 flow.

8.6 **Do nothing approach**

8.6.1 We believe that is option is not of consideration as:

- The current problem of registering UMSOs that are not NHH MOAs would not be resolved, and the issue could manifest in other GSP Groups in the future. This is an issue as incorrect data has to be used to ensure that the D0055 passes validation. This compromises SMRS as the source of correct data;
- There would still be confusion over who should be appointed for HH UMS; and
- Identity of the UMSO or MA may well remain unknown. This becomes a potential problem, especially where a Change of Supplier is concerned as there is no BSC process to confirm who the MA or UMSO is.

9 CP1267 v2.0 Solution

9.1 After discussing all four solutions with the respondents to the v1.0 impact assessment we created CP1267 v2.0. Version 2 recommends the most robust solution (as described in section 9.5).

10 Industry views on CP1267 version 2.0

10.1 We issued CP1267 v2.0 for impact assessment in June 2009 (via CPC00662). We received 13 responses; of these 4 agreed, 8 disagreed and 4 were neutral.

10.2 Overall, respondents generally agreed to the principle of the CP. Some respondents believed that CP1267 v2.0 resolves the issue that exists in the SWAE GSP group, as well as improving the

overall industry data quality. However, the majority believed that the costs involved in making IT system changes outweighed the benefits.

10.3 One respondent, who supported the change, believes that the current arrangements are prohibitive to them carrying out their obligations as a Meter Administrator especially where a Change of Supplier occurs. The respondent highlighted two experiences of how the current arrangements are not ideal (for further details please see the enclosed CPC responses in table 5):

- an occurrence where incorrect data in the SMRS (on the identity of the Meter Administrator) nearly led to the wrong agent receiving Half Hourly UMS data, which could have prevented it from being entered in Settlement;
- an UMSO refusing to send the details of the HH UMS equipment, as the SMRS contained the wrong data with respect to the appointed agent.

10.4 The respondent also stated that the implementation costs for the version 1.0 solution would be offset by the fact that two of their large HH UMS customers having an energy bill of £10k per day. In this instance, any Settlement error could have a noticeable impact, particularly for Distributors seeking to reduce their losses.

10.5 Another respondent supported CP1267, as they believed that despite the impacts on IT systems, there is benefit as the underlying problem and noted that the overall quality of industry data would improve.

10.6 However, the majority of respondents believed that the costs of implementing the solution and impacts on IT systems outweighed any benefits of CP1267. One respondent noted that this would have an impact on the way that they register metered supplies in SMRS.

11 Impacts and Costs of CP1267 version 2.0

Market Participant	Cost / Impact	Implementation time needed
ELEXON (Implementation)	The estimated ELEXON implementation cost is 1.5 man days, which equates to £330.	February 2010 release suitable
Industry cost	Implementation costs for version 2.0 of the solution is expected to be higher than version 1.0 as it includes the re-introduction of validation rules into the SMRS and making the 'Measurement Class' of the D0055 a mandatory field.	Up to 365 days (LDSOs) 0 -730 days for Suppliers February 2010 release not suitable

12 Implementation Approach for CP1267 version 2.0

12.1 Suppliers have indicated that were would be some impacts to their systems (one Supplier noted that it would take them 730 days to implement CP1267 v2.0). LDSOs have indicated lead times of up to 365 days as there are significant impacts on their systems and processes.

12.2 Based on the points raised above, a February 2010 release is not suitable. A November 2010 release is more appropriate. One respondent highlighted that they would require a longer implementation lead time.

13 Conclusions

13.1 We do not believe that the 'do nothing approach' described in section 8.6 is appropriate. Because the current state means that incorrect data is being used to populate the D0055, and is being used in the SMRS system. This issue is expected to get worse in the future and potentially have an impact on Settlement data quality.

13.2 We do not recommend the 'dummy' UMSO/MA solution described in section 8.4, as it means that the UMSO and MA appointment information included in SMRS will not be usable, and there will be no defined way of another industry participant finding out the identity of the UMSO/MA. In addition, it would not be possible to validate that the dummy code has been used correctly.

13.3 The table below shows the pros and cons for each of the solutions which we have consulted on.

Solution	Pros	Cons
CP1267 version 1.0: The SMRS validates against a list of UMSOs or MAs in MDD for UMS MSIDs (impact assessment – 6 agree, 6 disagree and 1 neutral)	• A relatively robust solution that resolves the underlying problem of registering UMSOs that are not also a NHH MOA. • Clarifies the registration process for HH UMS. • Improves communication lines between UMSO, MA and Supplier by allowing the correct data to be included in the D0055 flow.	• Changes to SMRS validation rules and IT systems impact - Cost of approximately £10,000 which is split amongst LDSOs.
CP1267 version 2.0 Identical to version 1.0, and additionally making the 'Measurement Class' of the D0055 is mandatory (impact assessment – 4 agree, 8 disagree and 4 neutral)	• Solution is more robust than v1.0 and resolves the underlying problem of registering UMSOs that are not also a NHH MOA • Clarifies the registration process for HH UMS. • Improves overall industry data quality by ensuring that data in the SMRS is as accurate as possible.	• Significant impacts and costs to SMRS, LDSO systems and Supplier systems. • Potential impact on the registrations of metered supplies as the Measurement Class of the D0055 will be mandatory. This would mean Suppliers cannot send 'skeletal flows' initially and update them later.

14 Recommendation

14.1 We recommend that SVG:

- **APPROVE** CP1267 version 1.0 for inclusion in the November 2010 Release, as the solution resolves the underlying issue with Unmetered registrations, reduces the risk to Settlement and has some support from industry;
- **REJECT** CP1267 version 2.0 (if you do choose to approve CP1267, we recommend that it is included in the November 2010 Release) due to lack of support and the solution not being cost effective; and
- **AGREE** our suggested amendments to the redline text for CP1267 version 1.0 (shown in table 3 of this CPAR).

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Table 1: Industry Impact Assessment Summary of CP1267 v2.0 – Registration of UMSO's and MA's in SMRS

IA History CPC number	CPC00650	Impacts	BSCP501 and 520

Organisation	Capacity in which Organisation operates in	Agree?	Days to Implement
EDF Energy	Supplier, NHH Agent and HH MOP	Yes	0
Scottish Power	Supplier, LDSO, HHDA, NHHDA, HHDC, NHHDC, HHMOA, NHHMOA	Yes	120
TMA Data Management Ltd	HHDC, HHDA and NHHDA	Yes	-
AccuRead	NHHDC / NHHDA / NHHNOA / HHMOA	Yes	-
E.ON	Supplier	Yes	-
British Energy	Supplier; Generator; Trader; CVA MOA	Accept	-
NPower Limited	Supplier, Supplier Agents	No	-
CE ELECTRIC	LDSO, UMSO	No	180
Scottish and Southern Energy	Supplier/Generator/ Trader / Party Agent / Distributor	No	60-180
Western Power Distribution	Distributor & MOA	No	180
Electricity North West Ltd	LDSO	No	>365
Independent Power Networks Limited	LDSO, UMSO, SMRA	No	-
E.ON UK Energy Services Limited	NHHDC-DA NHHMO HHMO	Neutral	-

Table 2: Impact Assessment Responses[4]

Organisation	Agree?	Comments	Impact?	ELEXON response
Scottish Power	Yes	**Comments:** ScottishPower supports the change to the validation rules for both UMSO and MA. The change would seem the logical response to prevent a re-occurrence of the current problems affecting the SWAE GSP. **Impact on Organisation**: System and process changes **Implementation:** There will be system changes required to implement such a change. However, we would support the June '09 release date as being sufficient time to make all necessary changes	Yes	-

[4] Please note that we have only included responses in this table when the respondent provided additional information.

		to our systems		
British Energy	Accept	**Comment**: Accept CP however, it is important to consider what impacts / changes would be required as a result in terms of updating MPAS with the appointed UMSO.	-	We contacted St. Clements (who did not provide a formal impact assessment). We discussed in detail the version 1.0 solution. St. Clements noted that they would be able to obtain a detailed assessment once the CP was approved.
NPower Limited	No	**Comments:** The validation rule change for MPAS (Red Lines) We can't quite see how MPAS are going to know whether a MOA is being appointed as a meter operator or an UMSO. Unless the validation rules are changed to the Participant Role code is validated against the Measurement Class. Even then how does MPAS know which Role Code is being applied, "M" for MOA or "3" for UMSO or "4" for Meter Administrator?	Yes	ELEXON has explained that any validation carried out by the SMRS would be dependant on the Measurement Class field of the D0055 being populated. The Measurement class would indicate to the SMRS, whether the MSID is NHH or HH and whether it is Metered or Unmetered, and would validate against a list of UMSOs or MAs respectively.
CE ELECTRIC	No	**Comment:** We reject this change proposal as feel the benefits are outweighed by the financial implications. **Impact on Organisation** Validation rule changes would be required to the MPAS system to incorporate the changes outlined in this proposal this would incur costs. **Implementation** If implemented we would require 6 months to incorporate system changes. **Would implementation in the proposed Release have an adverse impact?** No adverse changes identified but please refer to comments above.	Yes	ELEXON contacted the respondent and explained the current problem of registering an UMSO that is not a NHH MOA, as in such instances the SMRS would reject any registration. The respondent acknowledged the problem but still believed that the benefits were outweighed by the costs for implementing the solution.
Scottish and Southern Energy	No	**Comments:** We agree that the current operational issues need to be addressed. However, it appears from the discussions that have been taking place elsewhere in the industry that there may be other options available e.g., creating a dummy UMSO/MA MoP. Perhaps these could be explored before this change is progressed further, especially in view of St Clements' estimate of 7.5k-10k to reinstate	Yes	ELEXON has discussed and investigated this option during the assessment of CP1267 and noted that other solutions are possible, for example a 'dummy UMSO/HHMA' MPID in MDD. However, we believe

		the processing of role codes 3 and 4 in MPRS. **Impact:** Changes to MPRS systems and process change		that these solutions are not as robust as the version 1.0 solution. Further discussions have resulted in a version 2.0 solution being developed. Details of these discussions and the version 2.0 solution can be found in sections 6 -10.
Western Power Distribution	No	**Comments:** This is a significant change to the SMRS system to address what we consider to be a minor issue. We would prefer to see documentation changes to reflect the fact that the UMSO and MA are not maintained on SMRS, and that the identity of the "MOA" shown on MPAS for Unmetered supplies is irrelevant. The BSCPs should instruct Suppliers to register UMS MPANs using any valid MOA MPID so that the D0055 or D0205 can be accepted. The justification for this CP seems to be all about compliance with BSCPs rather than solving a particular market issue. Is there actually a problem that anyone other than Elexon, presumably for BSC compliance purposes, needs to be solved? Does anyone actually need to look on SMRS to find out who the UMSO or MA is? (The UMSO is always the LDSO so this can not be an issue for NHH MPANs and, for HH MPANs, the UMSO and Supplier are normally told who the MA is by the customer so we are not convinced it is a problem for HH MPANS either.) **Impact:** Significant system change	Yes	ELEXON explained to the respondent, the issue that is faced with UMS registrations is that UMSOs that are not also NHH MOA, cannot be registered as the SMRS would reject such registrations as is seen in the SWAE GSP group (SMRS assumes that all UMSOs are also NHH MOA). The respondent accepted this explanation and noted that this is not a problem faced in their GSP group. They also believe that the solution is not cost effective.
Electricity North West Ltd	No	**Comment:** This seems to be an unnecessarily unwieldy and expensive change for very little benefit. See below for alternative suggestion. **Impact:** System and Process Changes **Implementation:** To make this change to MPRS would mean that all MPAS Agents would have to migrate to the same release version. As there are at least 3, perhaps 4, different versions of MPRS in existence at this moment, the affected MPAS agents would need time	Yes	ELEXON has considered the dummy 'UMSO/HHMA' MPID option (please refer to section 9). ELEXON contacted the respondent and explained the issues faced with this option. Other options were also considered (please refer to section 9 - 10).

		to progress through to the latest one. **Would implementation in the proposed Release have an adverse impact?** Yes – most MPAS agents would be unable to comply with the change in this time period – see answer above. **Other Comments:** A simpler change would be to create a dummy unmetered MOP in MDD (perhaps using UMSO as the MDID). As MPRS does not send flows to MOP, this would have no impact on data flows being sent to parties incorrectly, but would allow Suppliers to "appoint" a MOP with the minimum disruption to all concerned.		
Independent Power Networks Limited	**No**	**Comment:** As an UMSO that is not an MOA, we agree that there is an issue in the industry at present. However, we have concerns over whether the proposed solution is the most cost effective for the industry as a whole. In light of this, we would therefore recommend that the following options are explored: • the Supplier should choose an appropriate MOp, which could be any MOp. • create a dummy MOp for unmetered supplies, i.e. UMSO. **Implementation:** Though there is no internal systems or process changes involved, there would be an industry cost of around £7.5-10k to implement this proposal.	No	ELEXON has discussed these options with respondent during the assessment of the CP. With respect to the ability for a Supplier to choose any MOA, this creates a problem in that the SMRS would not contain correct information on the registered agents. We also discussed the dummy MOA (UMSO/HHMA MPID) with the respondent. ELEXON has explained that this solution would prevent the identity of the agent from being known (particularly for HH UMS) as well as the solution being potentially more expensive to implement than the version 1.0 solution, as the SMRS could be required to prevent the dummy MPIDs from being incorrectly used. Please see sections 6 -10 for further details.

Table 3: Comments on the redline text

No.	Organisation	Document name	Location	Severity Code[5]	Comments	ELEXON Recommendation
1	E.ON	BSCP501	Table in Section 4.3	M	As part of the assessment of CP1267, E.ON discussed with ELEXON (via telephone) adding further clarity to the redline text issued in CP1267 version 1. If v1.0 is approved, then we recommend that SVG agree that this text should be included. The text that is impacted is the last row in the table in section 4.3 'Data Validation', under the 'Non Half Hourly' column Therefore it is proposed that the original redline text issued with CP1267 version 1.0 (shown below in red and struck out) ~~MOA required to be specified as Unmetered Supply Operator in MDD to ensure a valid Unmetered Supply Operator is appointed as the MOA.~~ Is replaced with the following text (shown in blue) Unmetered Supply Operator to be specified (from a list of Unmetered Supply Operators in MDD), in place of the MOA, in the MOA field to ensure a valid Unmetered Supplies Operator is appointed. Appropriate 'Measurement Class' has been recorded for Non Half Hourly Unmetered Supplies This text was issued as part of CP1267 version 2. If the SVG approved CP1267 version 2.0, no amendment would be required to the redline text within the same section.	ELEXON recommends that the change should be made as it adds further clarity on the process for registering an Unmetered Supply. The suggested wording does not change the solution for CP1267 version 1.0

[5] High, Medium or Low

2	E.ON	BSCP501	Table in Section 4.3	M	As part of the assessment of CP1267, E.ON discussed with ELEXON (via telephone) in adding further clarity to the redline text issued in CP1267 version 1. This text was issued as part of CP1267 version 2. Seeing as ELEXON recommends that CP1267 version 1 is approved and version 2 rejected, ELEXON believes that this refined text should be included as part of the version 1 solution The text that is impacted is the last row in the table in section 4.3 'Data Validation', under the 'Half Hourly' column. Therefore it is proposed that the original redline text issued with CP1267 version 1.0 (shown below in red and struck out) ~~MOA required to be specified as Meter Administrator in MDD to ensure a valid Meter Administrator is appointed as the MOA.~~ Is replaced with the following text (shown in blue) Meter Administrator to be specified (from a list of Meter Administrators in MDD), in place of the MOA, in the MOA field to ensure a valid Meter Administrator is appointed. Appropriate 'Measurement Class' has been recorded for Half Hourly Unmetered Supplies This text was issued as part of CP1267 version 2. If the SVG approved CP1267 version 2.0, no amendment would be required to the redline text within the same section.	ELEXON recommends that the change should be made as it adds further clarity on the process for registering an Unmetered Supply. The suggested wording does not change the solution for version 1.0
3	E.ON	BSCP501	Text to be inserted under the	M	The following text in blue is proposed to be included in BSCP501 (These comments were discussed via telephone):	ELEXON recommends that the change should be made as it adds further clarity on the process for registering an Unmetered Supply.

			table in Section 4.3		'Please note that during the registration process for Non Half Hourly or Half Hourly Unmetered Supplies, the MOA field containing the UMSO/MA MPID is dependent on the Measurement Class field of the registration flow. Therefore if a change is made to the Measurement Class, it should be accompanied by a change in the MOA field (e.g. if the Measurement Class changes from Non Half Hourly UMS to Half Hourly Unmetered Supply, this should mean a change of agent e.g. UMSO to MA).'	
4	Power Data Associates Ltd	BSCP520	3.1.5	M	**Please note that this comment was received as part of the impact assessment for CP1291 but has implications for CP1267. The suggestion is that footnote 3 in section 3.1.5 of BSCP520 is deleted.** *The note refers to 'dummy MOA' should this not be the UMSO or MA as per 1.3.7 & 1.3.8. I suggest the note is deleted.*	ELEXON recommends that this footnote is deleted as the proposed solution version 1.0 solution does not make reference to 'dummy MOA'. By removing this reference, any potential confusion surrounding UMS registrations would be avoided.

Table 4: Industry Impact Assessment Summary for CP1267 v2.0

IA History CPC number	CPC00662	Impacts	BSCP501 and 520

Organisation	Capacity in which Organisation operates in	Agree?	Days to Implement
E.ON	Supplier	Yes	-
Power Data Association	Meter Administrator	Yes	-
British Energy	Supplier	Yes	-
EDF Energy Networks (EPN,LPN,SPN) EDF Energy (IDNO) Ltd	LDSO, SMRS, UMSO	Yes	365
The Electricity Network Company	Distributor	No	-
Western Power Distribution	LDSO, HHMOA, UMSO, MA, SMRA	No	180
Electricity North West Limited	LDSO	No	600

EDF Energy	Supplier, NHH Agent and HH MOP	No	730
Scottish and Southern Energy	Supplier/Generator/ Trader / Party Agent / Distributor	No	8 Months
CE Electric UK	LDSO, UMSO	No	6 months
ScottishPower	Supplier, LDSO, HHDA, NHHDA, HHDC, NHHDC, HHMOA, NHHMOA	No	180
Npower	Supplier	No	180
Gemserv	MRASCo Ltd	Neutral	Various (see comments)
TMA Data Management Ltd	NHHDC, NHHDA, HHDC, HHDA	Neutral	
Siemens Metering Services	NHHDC, NHHDA, NHHMO, HHDC, HHDA, HHMO	Neutral	0
E.ON UK Energy Services Limited	NHHDC/DA	Neutral	-
ScottishPower	Supplier, LDSO, HHDA, NHHDA, HHDC, NHHDC, HHMOA, NHHMOA	No	180
Npower	Supplier	No	180
Gemserv	MRASCo Ltd	Neutral	Various (see comments)

Table 5: Impact Assessment Responses[6] to CP1267 v2.0

Organisation	Agree?	Comments	Impact?	ELEXON response
E.ON	Yes	**Impact on Organisation's Systems and/or Processes?** Yes **Capacity in which Organisation is impacted :** supplier **Impact on Organisation:** systems	Yes	-
Power Data Associates Ltd	Yes	As an MA we suffer with the current arrangements. It had been possible to update MPAS with the MA (and UMSO) until some changes to MPAS last year removed this ability. The changes were not triggered by any BSC change, but are understood to be consequential to other changes to the MPAS system. As the current MA for a customer which changed Supplier this week, the new supplier sent appointed details to the MA registered in MPAS – because of this issue they sent to flow to the DNO (who is no longer acting as MA) – thankfully the DNO identified the error and responded – by email to the Supplier and to ourselves as the contracted MA. In this case the Supplier also changed the HHDC, if we had not been informed then we	No	

[6] Please note that we have only included responses in this table where the respondent provided additional information.

		would have continued to send HH data to the 'old' HHDC which would not have entered into settlements. Resolving this situation involved additional work for all parties, and may yet cause the HHDC to reject the HH data if the supplier has not correctly updated the HHDC. For another customer the UMSO initially refused to send us the Summary Inventory as we were not the 'appointed MA in MPAS' – this was resolved through email and phone calls – again involving extra manual effort and potential for settlements to be in error. It is therefore important that the Suppliers should ***once again*** have the ability to update MPAS with the correct MA. Although it does not affect ourselves as MA it is understood that the CP may fail because of the mandated change to the D0055, which will probably have a significant impact on Suppliers. Prior to the CP being formally raised we highlighted this concern to ELEXON. The rational was primarily for new connections, yet if the field in the D0055 was blank then it would seem reasonable, in the absence of any definitive information, for the MPAS system to validate on the assumption of a NHH MPAN. The changes to BSCP520 approved this week (for Nov09 implementation) remove the optionality of *changing* an MPAN from NHH to HH (or vice versa). This reflects the practical experience that UMSOs tend to issue a new [single] MPAN for HH trading and then de-energise (followed by logical disconnection) of the [multiple] NHH MPANs. The proposed changes to BSCP501 and 520 will need review as result of the agreed changes to BSCP520. The CP indicates "… The current industry practice (though not a strict requirement)…" to nominate the MA into MOA field – the MA Expert Group viewed that this was a requirement (and until recently common practice) and wanted to make this requirement more explicit, yet could not make that recommendation due to the CP. The original CP – which resolved the issue – had a cost of £10k to implement, although a significant value, however putting that into context our two largest HH UMS customers ***each have an energy bill of £10k per day*** so any settlement error will have a noticeable impact, particularly for Distributors seeking to reduce their losses. **Impact on Organisation's Systems and/or Processes?** No **Capacity in which Organisation is impacted**: Meter Administrator **Impact on Organisation**: Reduced manual activities to correct problems		The respondent noted that they believe that there is currently a difficulty in identifying whether the MSID referred to in a D0055 was metered or Unmetered, where the flow was blank or had a completed MOA ID field, but no Measurement Class. The respondent suggested that the SMRS could make an assumption that the supply is metered (as the vast majority of new connections are metered MSIDs). Where a D0055 includes an MPID the MOA field, it would assume that it is metered, and validate against a list of valid MOAs. It is worth noting that if the UMSO is also a NHH MOA, then it would pass validation. However, in instances where the UMSO/MA is not a NHH MOA, and input into the MOA field of the D0055, the flow would

		affecting settlement and customer errors.		be rejected. This would also make the version 1.0 solution more robust, by ensuring that SMRS can conduct some validation. But, without the impact on metered supplies noted in v2.0. It should be noted that this is not part of the v1.0 solution, but could be implemented by St Clements, during the implementation of this CP.
EDF Energy Networks (EPN,LPN,SPN) EDF Energy (IDNO) Ltd	Yes	**Comments** We are aware that this change will require considerable IT system changes. However we agree that the change will improve overall Industry data quality. **Impact on Organisation's Systems and/or Processes?** Yes **Capacity in which Organisation is impacted:** UMSO/SMRS **Impact on Organisation :** Systems and Processes **Implementation:** A major change will be required to the software used by SMRS. Process changes also required for SMRS and UMSO **Would implementation in the proposed Release have an adverse impact?** Additional costs due to the need to apply the software changes outside the normal programme.	Yes	-
The Electricity Network Company	No	This appears to be a dis-proportionately costly solution to a relatively minor issue. Changes to the BSCP documentation to reflect the situation is a more pragmatic solution. The proposal seems to disregard the issues raised in version 1.0 comments.	Yes	We discussed these comments with the respondent. ELEXON noted that the

		Introducing the Measurement Class as mandatory will have impact on validation rules and require both SMRS and supplier system changes. It will affect the whole registration process not just UMS registrations. The system impact is very large and would affect: tables / screens/ validation/ processing/ reports / outputs **Impact:** Yes **Capacity** in which Organisation is impacted : Distributor **Impact on Organisation**: System		respondent believed the costs and impacts of this solution, outweighed the benefits. We asked the respondent if there were other ways that this issue could be resolved -the respondent believed that there were no other suitable solutions that could resolve the current problem with registering UMSOs that are not also NHH MOAs, as is seen in the SWAE GSP Group.
Western Power Distribution	No	**Comments:** We think this change is unnecessary and will result in costs being incurred for little or no benefit to the industry. The problem is with the BSCPs and not with the SMRA system or the D0055. The proposal suggests populating the MOA data item on SMRS with either the MPID of the UMSO (for NHH) or the MPID of the MA (for HH). It also suggests changing the rules for how to populate the D0055. Our view is that the SMRS is not designed to hold details of an UMSO or MA. It does not need to hold this information for settlement purposes and it does not need to hold it for change of supply purposes. Therefore, for unmetered MPANs, the BSCPs should be changed to permit the supplier to populate the MOA data item with any valid MOA MPID. (It doesn't matter which MOA MPID they use. The only reason it needs to be populated is because SMRS requires something to be in the MOA data item). For NHH unmetered supplies it is pointless holding the MPID of the UMSO on the SMRS	Yes	ELEXON contacted the respondent to seek whether there were any other alternative solutions. The respondent did not wish to discuss further solutions and strongly believed the costs and impacts of this solution, outweighed the benefits. ELEXON also noted that changing the BSCPs to allow the Supplier to populate

		system because the UMSO is always the LDSO of the network to which the MPAN is connected. If any market participant needs to know who the UMSO is then all they need to know is the MPAN as they can derive the UMSO from this. We note that the change proposal suggests validating the UMSO MPID used against MDD. In reality the validation should be done against the MPAN's LDSO MPID as the UMSO MPID must always be the same. In its current form the proposed validation will not ensure the data item is correct. For HH unmetered supplies the CP gives two reasons why holding the MA ID on SMRS would be useful. 1 the UMSO would not be able to check the identity of the HHMA in SMRS and so may not be willing to send Settlement data (e.g. inventory details) to the HHMA until their identity has been confirmed via the Supplier; and 2 the Supplier would also not be able to check the identity of the HHMA in SMRS. This is likely to be an issue when a Change of Supplier has occurred. As there is no database, the new Supplier will have to find the identity of the HHMA from another source. For the first point, the UMSO will usually have regular contact with the Customer as they are obliged to send regular inventory updates. Therefore UMSO will normally be able to find out the identity of the MA relatively easily. In any case it is fairly simple to confirm this with the Supplier. For the second point, we do not agree it is "likely to be an issue" on a Change of Supplier because of the low incidence of CoS on relatively few HH UMS MPANs. If there are not many MPANS which can go through CoS then it is unlikely that any problem with the process will be significant. Does Elexon have any evidence of problems being experienced by Suppliers or UMSOs being unable to identify the MA on a change of supply? If so, what is the cost of the problem in relation to the cost of the proposed change? (WPD has just 33 HH UMS MPANS on our MPAS systems, only 2 of which changed supplier within the last year, so any costs to resolve problems would be negligible). Regarding difficulties for Suppliers, HH UMS portfolios are generally managed by customers who are fully aware of the electricity UMS market arrangements. There is plenty of opportunity for a Supplier to find out who the MA is when they are trying to win these customers. The scenario is totally different to a domestic change of supply		the MOA data field with any valid MOA MPID, would not resolve the underlying problem. As an UMSO that is not a NHH MOA would still not be registered. This would introduce inaccurate data in the SMRS because an incorrect MOA ID is being used. This could add to any confusion about who the correct UMSO is. ELEXON agrees that, currently, the LDSO MPID is always the same as an UMSO MPID, but it is possible for an LDSO to have one MPID for its role as a LDSO and another as an UMSO. If the SMRS was validating against the list of LDSOs, and the above explained situation arose, it would mean that work would have to be undertaken to change the SMRS validation rules. ELEXON has received

		where the Supplier is dependant on MPAS to find out who the current Supplier and Agents are. **Impact on Organisation's Systems and/or Processes?** Yes **Capacity in which Organisation is impacted:** SMRA **Impact on Organisation:** System changes **Implementation:** 180 days **Comments:** Usual 6 month development. Note that this 180 day period should start from the date the associated DTC change proposal is approved. **Would implementation in the proposed Release have an adverse impact?** Feb 2010 is achievable provided the DTC change is approved by the time of the August 2009 MDB meeting.		information from a respondent who is a MA, which has experienced problems with HH Unmetered Supplies – see section 11.3.
Electricity North West Limited	No	**Comments:** The changes required for this CP are of no benefit to LDSOs, yet it is expected that LDSOs will be required to pay the costs as it is changes to the SMRS system. In our GSP (_G) the UMS = approximately 800 Mpans (approx. 200 Mpans are HH) out of a database of 2.3 million Mpans, at the moment in our GSP the MOA has not been end dated and there are currently no plans to do so. To implement this CP would mean a large change to the validation of the registration process and I expect this would impact Suppliers registration systems as they will need to implement the validation for the D0055 for all Mpans before it is sent, which is of no benefit on the majority of the Mpans they register against. As it is stated in CP1267 for HH UMS they need to nominate the Meter Administrator, although 'this is not a strict requirement', surely it would be easier to address the inaccuracies of the BSCP520 and ensure there is a robust process in place rather than impact LDSOs and Suppliers in amending the current robust registration process and introducing complexities for a minimal number of Mpans. **Capacity in which Organisation is impacted**: SMRA/Distributor **Impact on Organisation:** Impact on SMRS and Distribution systems and processes. **How much Implementation Notification is required from receipt of approved redline text changes**?600 Calendar days **Comments**: With all the other major industry changes in the pipeline (Structure of	Yes	ELEXON has explained to the respondent that CP1267 would clarify that the Meter Administrator is the appointed agent for HH UMS registrations. The respondent explained that they did not believe that the benefits obtained from implementing CP1267 version 2, outweighed the impacts and costs of implementing this solution.

		Charges for LDSOs) with delivery dates of 01.04.2010; this issue could only be considered after 01.04.2010. **Would implementation in the proposed Release have an adverse impact?** Yes. ENW Ltd could not meet the current timescales due to other major industry changes.		
EDF Energy	No	**Comments:** In making this change to assist in resolving what is a minor issue this change will impact on every single registration that we make. This is really badly thought out and will cause significant problems for metered sites, particularly HH. If HH metering is fitted would we need to determine if this is Measurement Class C or E and if we get this wrong would registration be rejected, if not then why do we need to send Measurement Class for a metered site. There is absolutely no need to make Measurement Class mandatory on D0055 and we would request that Elexon stops suggesting changes in UMS market that have significant impact on processes for metered MPANs, as was previously done with D0052. We would also note that it should not be down to SMRS to validate if a Supplier has set-up correct agents this should be down to the Supplier. If UMS group really believe that a change is required in this area then we would suggest a more appropriate method that has no impact on metered registrations is only one that can be taken forward. Instead of making this change that impacts on every single registration all that should be added is a notes section in DTC annex C on how a D0055 needs to be populated when registering a MPAN in Measurement Classes B and D, this could then be referred to from DTC annex B under flow notes. If group still believe that SMRS validation is required this could also be added but it must have no impact on metered MPANs. In fact given that SMRS already holds details of Measurement Class it can use t hat information to do this validation and does not require this to be on a D0055. **Impact** on Organisation's Systems and/or Processes? Yes **Capacity in which Organisation is impacted** : Supplier **Impact on Organisation**: Significant changes to automated registration processes, which can be mitigated by an alternate way forward for UMS registrations which are carried out by us manually. **Implementation:** No. of Calendar Days 730 **Comments:** We have no time to make changes that have no benefit to us for at least 2 years. This is due to resources being used on new system developments.	Yes	ELEXON has contacted the respondent to discuss their views on the proposed version 2.0 solution. The respondent strongly believed that the version 2.0 solution would have an impact on its metered registrations, and therefore was not a cost effective solution.

		Would implementation in the proposed Release have an adverse impact? Yes – it would prevent us from registering any new MPANs and we would treat this as Elexon preventing us from competing in the market on a fair and equitable manner.		
Scottish and Southern Energy	No	**Comments:** We agree with the principle of this proposal, however, we would like to see the cost and impact implications on the complex changes required for this solution to the SMRS software. We also need to understand what the data cleansing exercise entails and its cost implications. **Impact on Organisation's Systems and/or Processes?** Yes **Impact on Organisation:** Cost and changes to processes and systems.	Yes	The respondent has indicated that they are in agreement with the principle of the solution, but are keen to understand what the costs and impacts for implementing the version 2.0 solution in SMRS.
CE Electric UK	No	**Comments:** We reject this change proposal as we feel the benefits are outweighed by the financial implications, we also feel the additional validation being proposed on Measurement Class is outweighed by the cost implications. **Impact on Organisation's Systems and/or Processes?** Yes **Capacity in which Organisation is impacted:** LDSO **Comments:** If implemented we would require 6 months to incorporate system changes. **Would implementation in the proposed Release have an adverse impact?** No adverse changes identified but please refer to comments above.	Yes	ELEXON has contacted the respondent, who believes that the version 2.0 solution is more complex, where the benefits of the solution are outweighed by the implementation costs.
ScottishPower	No	This new version of CP1267 seems to offer at least three solutions to the problem posed by the SWAE issue. However, the actual CP response form does not seem to reflect this. ScottishPower can therefore not support the CP if the proposed change is the Elexon recommended solution. Making a change to the D0055 seems excessive for a problem which most of the sector have viewed as insignificant via their responses in version 1 of this CP. Though there is an issue which requires resolution it would seem that such a change would incur significant costs which cannot be justified in terms of the benefit that	Yes	ELEXON has explained that the version 2.0 solution was developed in with views from respondents to the impact assessment for the version 1.0 solution. The respondent strongly

		would accrue to both ScottishPower and the wider sector. ScottishPower, though supportive of the original solution in version 1, would support a simpler resolution to the issue by use of a dummy code to populate the MOA field. However, this CP in its current form does not seem to offer a clear and precise resolution to the issue as it does not address the main issue for rejection of version 1 and has in fact offered a solution with additional costs to the original. **Impact on Organisation's Systems and/or Processes?:** Yes **Capacity in which Organisation is impacted:** UMSO, MOA, Supplier **Impact on Organisation :** The recommended solution proposed by Elexon would result in system changes to a number of systems and would require changes to internal processes. **Would implementation in the proposed Release have an adverse impact?** No **Other Comments:** While fully supporting the need for Suppliers to register the MA, ScottishPower are concerned at the way in which this CP has been further developed, with the suggestion of added complexity and therefore additional expense to resolve an extremely unique situation affecting a negligible quantity of records.		believed that the benefits of the solution were outweighed by the impacts to its systems and the costs of implementing this solution.
Npower	No	**Comment**: NPower does not agree with mandating the Measurement Class within the D0055. Currently suppliers wait for confirmation of agent appointments and receipt of meter technical details, which both arrive after the registration process (D0055), before updating (D0205) MPAS with confirmed agents and accurate metering details (SSC, energisation status, etc). There can be no assumption that details provided to SMRS will be accurate prior to receipt of the agent confirmations and the meter technical details. Inaccurate date leads to default values or no data (HH or NHH) and to data cleansing issues (D0095's etc). This solution will have system impacts and affect all MPANS. As the problem is only with a small subset of our portfolio we feel this seems an unnecessary big impact. Whilst we agree there is an issue with the current process we disagree that the best	Yes	On further discussions with the respondent, the respondent has indicated that while they agree that there is an issue with currently registering Unmetered Supplies, the impacts of the solution far outweigh the benefits.

		way to approach it is to cause an impact on all metered MPANs as well. **Capacity in which Organisation is impacted:** Supplier **Impact on Organisation:** System Impact		
Gemserv	Neutral	**Capacity in which Organisation is impacted**: MRA Service Company Ltd (MRASCo) **Impact on Organisation**: This change would require a DTC change in the status of data item J0082 'Measurement Class ID' data item from 'Optional' to 'Mandatory' (D0055). **No. of Calendar Days** Various (see Comments) **Comments** Changes to DTC - Implementation timescales: • From point CP is submitted to MDB decision – approximately 1 month • From MDB approval to implementation – standard implementation timescale for any changes to the DTC is 6 months. Changes would be implemented in line with MRA release strategy (there are three releases a year, in February, June and November). If it is a system change then from the date of approval, industry would need 6 months to update their systems accordingly. A procedural change would take approximately 3 months. **Would implementation in the proposed Release have an adverse impact:** It would depend on how long it would take for the new Data Flow to be created.	Yes	ELEXON has contacted the respondent to confirm that a new data flow is not required. The respondent confirmed that this is correct. ELEXON has noted the DTC implementation timescales, should the SVG choose to approve CP1267 version 2.0

Table 6: Comments on the redline text

We didn't receive any comments on the redline text for CP1267 v2.0.

Appendix 2 – Detailed Analysis of CP1288 - Revisions to Meter test points within Code of Practice 4

1 Why Change?

1.1 **Background**

1.2 Npower raised CP1288 on 21 April 2009. We issued CP1288 for impact assessment (via CPC00661) in May 2009.

1.3 **The Problem**

1.4 Code of Practice 4 (CoP4) deals with the testing commissioning and the calibration of Metering Equipment. It specifically references the tests that are to be conducted on Meters before they are installed, and during their in-service lives. CP1288 aims to align the testing requirements within CoP4 with the British Standards, and to remove ambiguity for testing 3 phase Meters.

1.5 The test points in CoP4 were intended to align with those in British Standards, BS[7] EN 62053-22:2003 and BS EN 62053-23:2003. However, CoP4 uses units of power factor (cos φ) for both Active and Reactive Meters whereas the British Standards use units of power factor for Active Meters and units of sin φ for Reactive Meters. This is causing some confusion to Meter Operator Agents and Meter manufacturers. The British Standards also allow a greater error range when a single phase of a polyphase Meter (a meter which is capable of more than one voltage supply to a premises) is tested.

2 Solution

2.1 CP1288 aims to align the testing provisions in CoP4 with the British Standards and to remove the ambiguity for testing 3 phase Meters. It will do so by:

Amending the headings for Reactive Meters in several tables to units of sin φ rather than power factor (cos φ) in Appendix B.

2.1.1 In Appendix B of CoP4, the headings for the Reactive Meters in tables B1, B2, B3, B4, B5 and C3 should be changed to units of sin φ rather than power factor to align with BS EN 62053-23 as shown below:

Reactive Meter		
Sin φ		
1	0.5 Inductive	0.5 Capacitive

[7] British Standards: http://www.standardsuk.com/

Inserting of a new diagram (Figure 1) into Appendix B to clarify the test point requirements for CoP 1 and 2 Reactive Meters

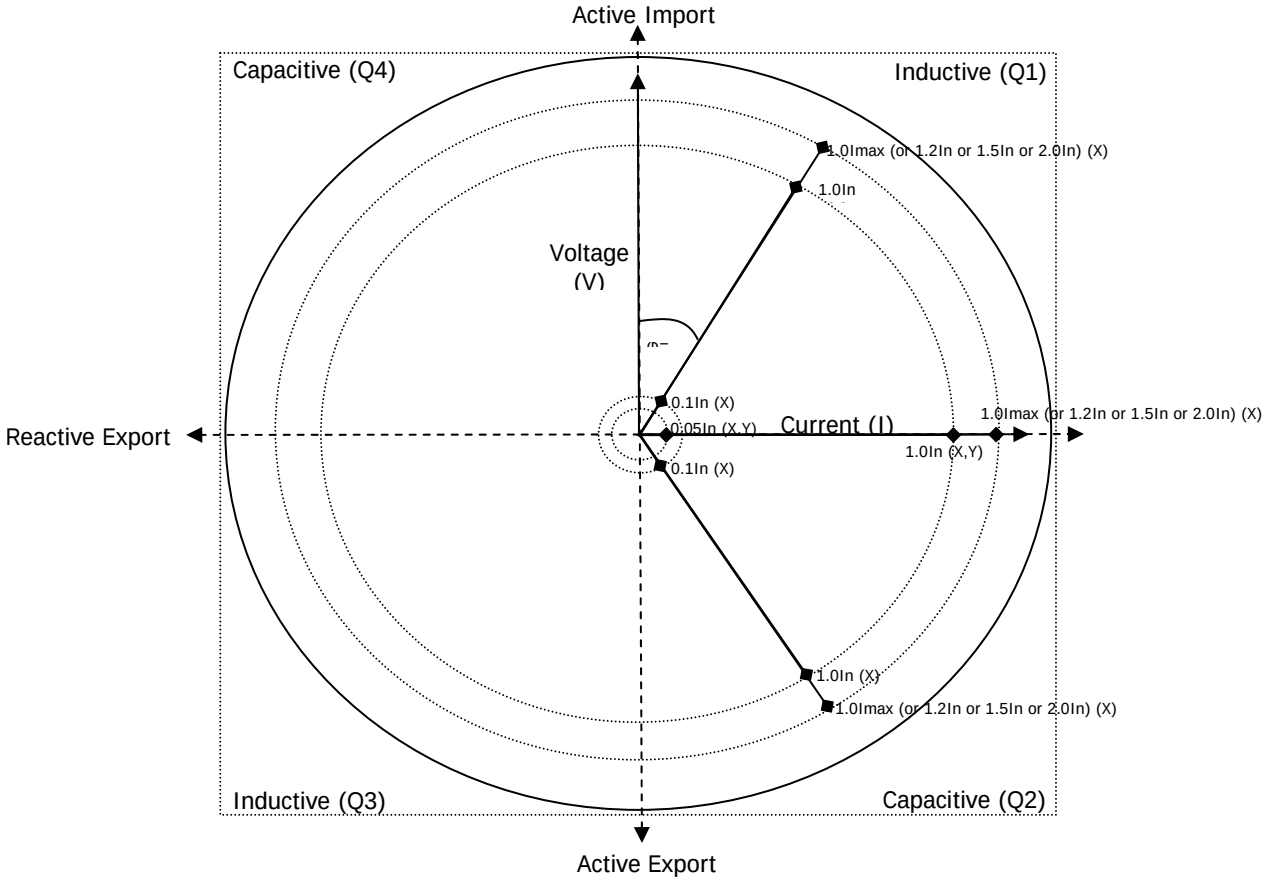

Figure 1: Example showing Type A Calibration Points for a CoP1 and 2 Reactive Energy Meter

Key
X = conduct tests on all elements combined
X,Y = conduct tests on all elements and each element on its own

Inserting new tables from British Standards BS EN 62053-22 and BS EN 6253-23 into Appendix C of CoP4

2.1.2 These tables will state the percentage error limits for polyphase Active and Reactive Meters. The standards allow a greater error when a single element of a polyphase Meter is being tested (i.e. carrying a single-phase load but with balanced polyphase voltages applied to the voltage circuits):

Active Meters

Value of current	Power Factor	Percentage error limits for Meters of class	
		0.2s	0.5s
$0.05I_n \leq I \leq I_{max}$	1	±0.3	±0.6
$0.1I_n \leq I \leq I_{max}$	0.5 inductive	±0.4	±1.0

The difference between the percentage error when the Meter is carrying a single-phase load and a balanced polyphase load at rated current, In, and unity power factor shall not exceed 0.4% and 1.0% for Meters of classes 0.2s and 0.5s respectively.

Reactive Meters

Value of current		Sin φ (inductive or capacitive)	Percentage error limits for Meters of class 2 and 3
Direct connected Meters	Transformer operated Meters		
$0.1I_n \leq I \leq I_{max}$	$0.05I_n \leq I \leq I_{max}$	1	±3.0
$0.2I_n \leq I \leq I_{max}$	$0.1I_n \leq I \leq I_{max}$	0.5	±4.0

The difference between the percentage error when the Meter is carrying a single-phase load and a balanced polyphase load at basic current, In, and sin φ =1 for direct connected Meters, respectively at rated current, In, and sin φ =1 for transformer operated Meters, shall not exceed 2.5% and 3.5% for Meters of classes 2 and 3 respectively.

2.2 Please see the redlining in Attachment E, which shows the exact changes that Npower are suggesting to CoP4.

3 Intended Benefits

3.1 The inconsistencies between the British Standards and CoP4 may cause Meter Operator Agents and Meter manufacturers to inadvertently use incorrect test points for calibration checks. Not allowing for a greater margin of error when testing a single element of a polyphase Meter may cause Meters to be sent for adjustment or scrapped unnecessarily.

4 Industry Views

4.1 We issued CP1288 for impact assessment in May 2009 (via CPC00661). We received 10 impact assessment responses; of these 7 agreed and 3 were neutral.

4.2 Some parties (one BSC Party and one non BSC Party) have raised concerns on the difficulty in finding testing laboratories which could carry out single element testing[8] for particular meters. This is outside the scope of CP1288, as the CP simply aims to clarify the metering test requirements within CoP4 by aligning them with that in the British Standards. We have provided a list of appropriate testing laboratories to these respondents. Additionally, ELEXON has agreed with these respondents to investigate whether a general metering dispensation would be required.

4.3 Some respondents suggested minor changes to add further clarity to the proposed redlined text (see comments in table 2 and 3 below). We agree with these comments and recommend that the SVG agree that the redline text should be amended to include them.

4.4 Additionally, a respondent suggested that the vector diagram in the British Standard 'BS EN 62053-23' is used within CoP4. We recommend that the SVG agree that the vector diagram contained in Appendix C of BS EN 6253-23 should replace the vector diagram that was issued during the impact assessment of CP1288.

4.5 We note that some of the proposed redline text and the diagram are identical to that in the British Standard documentation. We contacted the British Standards Institution (BSI) to confirm whether they are comfortable with this.

4.6 Following discussions between ELEXON and the BSI, permission has been granted to reproduce extracts from BS EN 62053-22 and BS EN 6253-23 within CoP4. As a consequence, we need to include an acknowledgement within CoP4, highlighting that permission has been granted from the

[8] A measuring component that measures the flow of electricity through a meter.

British Standards. We recommend that SVG agree this addition to the redlining. Please see table 3 for the proposed amendment to the redline text.

5 Impacts and Costs

Market Participant	Cost/Impact	Implementation time needed
ELEXON (Implementation)	Approximately 1.25 Working Days, which is equivalent to £275.	November 09 Release suitable
BSC Parties and Party Agents	The majority of respondents indicated that they would not be impacted by this change. Those that were impacted, highlighted that they would need 30 Working Days to make updates to internal documents and processes.	30 Working Days, November 09 Release suitable

6 Implementation Approach

6.1 We recommend that CP1288 is included for implementation in November 2009. This is in line with the recommended date in the CP form. We note that this CPAR has been delayed by 1 month, due to our discussions with the BSI.

6.2 We are in the process of contacting all respondents to reconfirm that November 2009 implementation is still suitable. However, given that respondents have indicated that only 30 Working Days are needed to make the necessary changes. We believe that a November 2009 implementation is suitable.

7 Recommendation

7.1 We believe that aligning the provisions of CoP4 with that of the British Standards will make it easier for Meter manufacturers to understand the CoP4 test requirements. Therefore, we recommend, based on CP1288 aligning the provisions of CoP4 with that of the British Standards and majority industry support, that you:

- **AGREE** our suggested amendments to the redline text; and
- **APPROVE** CP1288 for implementation in the November 2009 Release.

Lead Analyst: Sherwin Cotta, tel. 0207 380 4361 or email Sherwin.cotta@elexon.co.uk

Table 1: Industry Impact Assessment Summary of CP1288 – Revisions to Meter test points within Code of Practice 4

IA History CPC number	CPC00661	Impacts	CoP4

Organisation	Capacity in which Organisation operates in	Agree?	Days to Implement
EON	NORW, EELX, EENG, EMEB, PGEN	Yes	-
British Energy	Generator, Supplier, Trader Non-Physical	Yes	-
EDF Energy	Supplier, NHH Agents and HH MOP	Yes	30
E.ON UK Energy Services Limited	MOA HNHH DC/DA	Yes	-
ScottishPower	Supplier, LDSO, HHDA, NHHDA, HHDC, NHHDC, HHMOA, NHHMOA	Yes	0
NPower Limited	Supplier, Supplier Agents	Yes	-
Scottish and Southern Energy	Supplier/Generator/ Trader / Party Agent / Distributor	Yes	0
TMA data Management Ltd	HHDC, HHDA, NHHDC, NHHDA	Neutral	-
IPNL	LDSO, SMRA, UMSO	Neutral	-
Cewe Instrument AB	CoP 1, CoP2, CoP3 and CoP5 metering supplier	-	30

Table 2: Impact Assessment Responses[9]

Organisation	Agree?	Comments	Impact?	ELEXON Response
British Energy	**Yes***	***Comments:** Proposed changes are agreed subject to minor additions. Other changes are essential to facilitate full CoP4 compliance. See "Other Comments" below for details. **Capacity in which Organisation is impacted** Generator **Impact on Organisation**: Removal of CoP4 test requirements which cannot be met. Changes would apply immediately starting with the next set of planned calibrations.	Yes	We discussed these comments with the respondent and agreed that this concern falls outside the scope of CP1288, as CP1288 simply looks to align meter test point provisions in CoP4 with the British Standards. We agreed that the ELEXON metering team will investigate this matter further on behalf of the industry. Npower have confirmed that they do not

[9] Please note that we have only included responses in this table when the respondent provided additional information.

Organisation	Agree?	Comments	Impact?	ELEXON Response
		Would implementation in the proposed Release have an adverse impact? Current CoP4 requirements cannot be met in full. Changes are required a.s.a.p. **Costs:** Fixed contractual charges are currently being paid for less than 100% compliant Type A and C calibrations. Assuming all required changes are implemented, the same payments will cover fully compliant tests. **Other Comments:** There are no meters in existing British Energy metering systems which carry a single phase load - all meters are employed in balanced-load circuits. This means that although the proposed changes address issues which do not currently concern BE, they exclude the removal of current CoP4 requirements which cannot be met by BE, our metering support Contractor, meter manufacturer (Cewe) or nominated UK Test House. These relate to the Type A and C calibration requirements for single element-only testing. Bearing in mind single element operation with 3 phase 4 wire meters would be extremely unlikely (with the chances of such operation being even less with 3 phase 3 wire meters - as used by BE), BE have serious reservations about the justification or the need for this.		wish to extend the scope of this CP to cover the issues raised by British Energy.

Organisation	Agree?	Comments	Impact?	ELEXON Response
EDF Energy	Yes	**Comments:** See document review comments below. **Capacity in which Organisation is impacted:** MOP **Impact on Organisation :** Process changes **Implementation:** No. of Calendar Days 30 **Would implementation in the proposed Release have an adverse impact?** No – provided notice given is sufficient.	Yes	The respondent has indicated that they would require to be informed by mid August if CP1288 was to be implemented, in order to give them the required time to make necessary changes to their processes.
E.ON U.K. Energy Service Ltd	Yes	**Comments**: This change will reduce the potential for confusion **Impact**: No changes to established processes will be required.	No	-
ScottishPower	Yes	Update to internal processes	No	-
NPower Limited	Yes	**Comments**: As discussed between ELEXON and the Originator Lorna Short (NPower), it was agreed that that a couple of examples within the Change Proposal would aid clarification. Please see details below. Below table C1(a): For example the maximum permitted error at I_{max} and unity power factor for a class 0.2s meter is +/- 0.2% when the meter is being tested under balanced load conditions and +/- 0.3% under single phase load conditions. This would allow an overall difference of 0.5% but the additional requirement limits this to 0.4% for a class 0.2s meter. Below table C3(a): For example the maximum permitted error at I_n and sin φ=1 for a class 2 meter is +/- 2.0% when the meter is being tested under balanced load conditions and +/- 3.0% under single phase load conditions. This would allow an overall difference of 5.0% but the additional requirement limits this to 2.5% for a class 2.0 meter.	No	ELEXON agrees with this suggestion and recommends that the SVG agree that the CP1288 redlining is amended to include the text in blue.

Organisation	Agree?	Comments	Impact?	ELEXON Response
Cewe Instrument AB		**Comments:** The main comment is that the vector diagram is not consistent with most international metering standards (EN62053-23 etc). To assist in understanding and reduce miss-interpretation it is preferable to use a consistent standard so all manufacturers, generators and energy suppliers use the same vector diagram. It would also be helpful if angular displacement from active power unity is given (e.g. 0 = unity pf active power, +60 0.5 inductive power factor (active energy), -60 0.5 capacitive power factor (active energy), 90 = reactive import etc. Is it also realistic to have single phase load points on 3ph 3wire systems? **Capacity in which Organisation is impacted**: We are a supplier and would like to be completely clear as to the exact measurement points required for the type A calibration for CoP1 and CoP2 meters. **Impact on Organisation**: Test systems need to be reprogrammed to accommodate any changes from existing interpretation. **Implementation**: 30 **Comments**: Time to change our calibration systems which are now tailored to UK CoP4 requirements. **Would implementation in the proposed Release have an adverse impact?** We would have to submit our interpretation and seek approval from ELEXON, for Type A calibration points. **Costs:** Minimal costs are envisaged (1 man day), the important thing is to have a consistent vector diagram so we only need to do the job once.	Yes	ELEXON agrees and recommends that the vector diagram contained in the British Standards should be used in place of the proposed vector diagram issued for impact assessment with CP1288. This diagram can be found in Appendix C of BS EN 6253-23. ELEXON contacted the respondent to clarify that single phase load points are required for 3ph 3wire networks. Impact of implementing the solution is noted. The respondent noted that they would prefer to confirm the new meter test point requirements with ELEXON. 30 days as a minimum is required to change their internal systems.

Table 3: Comments on the redline text

No	Organisation	Document name	Location	Severity Code[10]	Comments	ELEXON Recommendation
1	Cewe Instrument AB	CoP4	App 1 table B1 vector diagram	H	Internationally recognised standard diagram to be used.	As detailed in our response to Cewe in the table above, ELEXON recommends that the vector diagram from BS EN 6253-23 is used in place of the diagram issued for impact assessment.
2	Cewe Instrument AB	CoP4	App 1 Table B1	M	Are single phase load points required for 3ph 3wire networks?	Please see our response to Cewe in the table above. We also confirmed with the respondent that no changes will be required to the redline text.
3	British Energy	CoP4	Tables B1, B2, B3, B4, B5	M	For consistency with proposed changes to the headings for Reactive Meters and Active meters on Table C1(a), and with existing headings on Tables C1 & C2, it is suggested the headings for Active meters be amended to include reference to "(Cos Ø)"	Comment noted. ELEXON recommend that the SVG agree that amendment is made, as it adds further clarity to the proposed redline text. Therefore all remaining references to 'System power factor' in tables B1 to B5 should be replaced with Cos Ø.
4	British Energy	CoP4	Table C3	M	For consistency with proposed additions to the headings for Tables C1 and C2, it is suggested the heading for Table C3 should include "(single-phase Meters and polyphase Meters with balanced loads)"	Comment noted. ELEXON recommend that the SVG agree that this change is made. As a result the heading for table C3 would read as: 'Summary of Class accuracy requirements for Class 2 and Class 3 Meters (single-phase Meters and polyphase Meters with balanced loads)'
5	British Energy	CoP4	Table B1 (and B2 for any Type	H	While there is no requirement for Type B meter calibrations to include a single element-only test, Type A calibrations	Comment noted. We agreed with the respondent that this concern falls outside the scope of CP1288, as the CP looks at clarifying

[10] High, Medium or Low

No	Organisation	Document name	Location	Severity Code[10]	Comments	ELEXON Recommendation
			CEP/CEQ meters installed on CoP 3, 5, 6 or 7 metering systems)		currently require such tests. In practice however, although Cewe's newer, intelligent meters can be (and are) issued with certificates including these points, Cewe do not have the facility to do the same with the older CEP/CEQ type meters (the 'test rig' used for this meter type has software that cannot do it, and cannot be changed or updated). Therefore, Type A calibration certificates do not and cannot include these points. Given the above, BE suggests that unless test "Y" is removed, neither we nor any other party who use Cewe to carry out Type A calibrations on CEP/CEQ meters can comply fully with CoP4 requirements.	the meter test point provisions in CoP4 and the issue raised by the respondent is a technical issue with the current requirements. We agreed that the ELEXON metering team will investigate this matter further on behalf of the industry.
6	British Energy	CoP4	Table B4	H	While there is no requirement for Type B meter calibrations to include a single element-only test, Type C calibrations currently require such tests. In practice however, BE's nominated UK Test House has advised (i) that a single element test of Type CEP/CEQ meters would be technically very difficult, (ii) would require significant changes to their test system, (iii) would give results with high levels of uncertainty, and (iv), since BE has no compensation calculations for single element operation, they would be unable to set up their test equipment correctly. Finally, since there is no Type A calibration data with which to compare the results (as indicated in	We agreed with the respondent that this concern falls outside the scope of CP1288, as the CP looks at clarifying the meter test point provisions in CoP4 and the issue raised by the respondent is a technical issue. We agreed that the ELEXON metering team will investigate this matter further on behalf of the industry.

No	Organisation	Document name	Location	Severity Code[10]	Comments	ELEXON Recommendation
					Item 3 above), they (and BE) believe these tests would serve no useful purpose. Given the above, BE suggests that unless test "Y" is removed, neither we nor any other party with CEP/CEQ meters can comply fully with CoP4 requirements for Type A calibrations.	
7	EDF Energy	CoP4	Table C1(a)	H	Having discussed with originator we feel that the following should be added below this table: "For example the maximum permitted error at I_{max} and unity power factor for a class 0.2s meter is +/- 0.2% when the meter is being tested under balanced load conditions and +/- 0.3% under single phase load conditions. This would allow an overall difference of 0.5% but the additional requirement limits this to 0.4% for a class 0.2s meter."	Please see our response to Npower in the table above. We recommend that the SVG agree that this change is made.
8	EDF Energy	CoP4	Table C3(a)	H	Having discussed with originator we feel that the following should be added below this table: "For example the maximum permitted error at I_n and sin φ=1 for a class 2 meter is +/- 2.0% when the meter is being tested under balanced load conditions and +/- 3.0% under single phase load conditions. This would allow an overall difference of 5.0% but the additional requirement limits this to 2.5% for a class 2.0 meter."	Please see our response to Npower in the table above. We recommend that the SVG agree that this change is made.
9	British Standards	CoP4	-	-	The BSI have requested that we include the	We recommend that text is included at the end

No	Organisation	Document name	Location	Severity Code[10]	Comments	ELEXON Recommendation
	Institution				following text into CoP4: Permission to reproduce extracts from [Name of Standard] is granted by BSI. British Standards can be obtained in PDF or hard copy formats from the BSI online shop: www.bsigroup.com/Shop or by contacting BSI Customer Services for hardcopies only: Tel: +44 (0)20 8996 9001, Email: cservices@bsigroup.com. • This permission does not cover any other editions. • On no account shall the extracts used be distributed as part of any other work not permitted under this licence. • This permission relates to the extracts listed above. Where the standard is updated and/or if there is a requirement for further reproduction of extracts you will need to make a new application. PERMISSION TO USE THE EXTRACTS LISTED IS GRANTED ONLY ON THE ABOVE CONDITIONS	of Appendix C of CoP 4. Each of the extracts will be referenced to the relevant British Standard from which it is obtained. We will also include reference to the permission granted from the British Standards.

Appendix 3 – Detailed Analysis of CP1295 - Process for distribution of MDD Updates not included in D0269/D0270 flows

1 Why Change?

1.1 Background

1.2 We raised CP1295 on 05 June 2009. We issued CP1295 for impact assessment (via CPC00662) in June 2009.

1.3 Currently the majority of Market Domain Data (MDD) updates are sent over the Data Transfer Network (DTN) using the D0269[11] and D0270[12] flows. Certain MDD updates are sent separately as MS Word documents via email, these include:

- GSP Group Profile Class Default EACs (GGPCDEAC) – currently sent to NHHDAs;
- GSP Group Profile Class Tolerances – currently sent to NHHDCs and Suppliers; and
- HH Default EACs – currently sent to HHDAs, HHDCs, Suppliers and LDSOs.
- These values have historically not been changed often and separately have not warranted a change to include them in the MDD update flows (the D0269 & D0270).

1.4 The Problem

1.5 It has come to ELEXON's attention that several participants are not receiving these email updates (many email addresses on the distribution list held by the MDD Agent (SVAA) are out of date) and are unaware that they should be receiving them. In addition, the current process followed by SVAA of emailing the GSP Group Profile Class Default EACs to NHHDAs is not included within the following Code Subsidiary Documents (CSDs):

- **BSCP508** 'Supplier Volume Allocation Agent', Section 3.7 'Implementation of MDD Changes',
- **BSCP505** 'Non Half Hourly Data Aggregation for SVA Metering Systems Registered in SMRS', Section 3.1.1 'SVAA sends Market Domain Data',
- **SVA Data Catalogue Volume 1**, and
- **SVA Data Catalogue Volume 2**.

2 Solution

2.1 In order to reduce the risk of participants using out-of-date or incorrect MDD and to ensure that processes and procedures are accurately reflected within the relevant CSDs, CP1295 proposes that the following changes be made:

2.2 **BSCP505, BSCP508 and the SVA Data Catalogue** would be updated to include reference to the fact that the GGPCDEAC data will be issued to NHHDAs by email.

2.3 The manual process for distribution of GSP Group Profile Class Default EACs is not currently included in the BSC Procedures or other configurable items. The following changes will need to be incorporated into the following documents in order to ensure that they accurately reflect the current process:

- **BSCP508**, Section 3.7.7 'Implementation of MDD Changes' would be updated to include reference to the current SVAA process of emailing the GGPCDEACs to NHHDAs.

[11] D0269 – Market Domain Data Complete Set
[12] D0270 – Market Domain Data Incremental Set

- **BSCP505**, Section 3.1.1 'SVAA sends Market Domain Data' would be updated to include reference to the current SVAA process of emailing the GGPCDEACs to NHHDAs.
- **SVA Data Catalogue Volumes 1 & 2** would need to be amended in order to remain consistent with BSCP508 and BSCP505. A new P flow 'GSP Group Profile Class Default EAC' would be referenced within both documents.

2.4 In addition to the above changes, we have noted that the new data item 'GSP Group Profile Class Default EAC' in the new P flow is similar to the 'Researched Default EAC' data item which is referenced within the NHHDA and SVAA system documentation as well as the MRA Data Transfer Catalogue. CP1295 would update the SVA Data Catalogue Volume 2 Appendix D 'Data Item Having Synonyms' to include these two data items.

2.5 In conjunction with the above recommendations, CP1295 proposes to add further benefit to the current process by removing the need for manual entry of MDD into the centrally-developed NHHDA and EAC/AA systems. CP1295 proposes that the Application Management and Development (AM/Dev) service provider develops two separate SQL scripts that will allow participants to run a report that:

- would include the updated data for GSP Group Profile Class Default EACs (including the Threshold Parameter) and GSP Group Profile Class Tolerances (including the smoothing parameter); and
- would output data in a format that can easily be submitted to ELEXON.

2.6 We will provide users of these systems with SQL scripts for updating their databases. This procedure will operated in addition to the current process.

3 Intended Benefits

3.1 It is believed that CP1295 will add benefit to the BSC in two ways:

- By updating the BSCP documents, we will ensure that processes and procedures are accurately reflected within the relevant CSDs; and
- The SQL scripts will ensure that NHHDAs and NHHDCs have access to relevant MDD data and that the data is presented in a clear and readable format. Although the current system of emailing the relevant MDD data to participants will remain, the above process will ensure that NHHDAs and NHHDCs have access to an efficient and effective process that allows them to extract all relevant MDD data.

4 Industry Views

4.1 We issued CP1295 for impact assessment in June 2009 (via CPC00662). We received 15 responses; of these 11 agreed, 2 disagreed and 2 were neutral.

4.2 All respondents (including those who disagreed or were neutral) were in support of the proposed redline changes as they believed that this would ensure that current processes were accurately reflected within the Code Subsidiary Documents (CSDs).

4.3 Respondents who agreed with the proposed changes believed that there were additional benefits in providing the NHHDAs and NHHDCs with the SQL scripts. One respondent highlighted that the current process was not robust and that CP1295 would be an improvement on the current base line.

4.4 Those respondents who disagreed with the recommended changes believed that the costs associated with the additional process would outweigh any anticipated benefits. One respondent believed that the adoption of a new process within an area that changed so infrequently was not required.

4.5 We contacted the respondent and highlighted that although the associated MDD data did not change frequently, the benefit of being able to extract the relevant data efficiently, effectively and in a readable format was beneficial to NHHDAs and NHHDCs. We indicated that the Software Technical Advisory Group (STAG) had been involved in the formulation of the proposed solution and that they were in favour of this recommendation.

4.6 In addition we highlighted that we did not feel that the initial implementation cost was unreasonable because the long term benefits would outweigh any associated implementation costs.

4.7 The same respondent also raised concerns that NHHDAs and NHHDCs would not use the additional process.

4.8 We discussed this concern with the respondent and highlighted that of the majority of respondents supported the additional process and had indicated that they would use it.

5 Impacts and Costs

Market Participant	Cost / Impact	Implementation time needed
Party Agents	Several MOAs and DCs highlighted that internal process changes would be needed	Implementation timescales ranged from between 30 WDs to 6 months. The majority of Party Agents believed that the February 2010 Release would be suitable. One respondent indicated that they would require 6 months in order to implement the necessary changes
ELEXON (Implementation)	Approximately 20 Working Days, which equates to £4,400	February 2010 Release suitable
BSC Agents	The estimated BSC Agent implementation cost is £6000 with future updates amounting to £800[13]	February 2010 Release suitable

6 Implementation Approach

6.1 We recommend that CP1295 should be approved for the February 2010 Systems Release.

[13] The £800 relates to future changes to the SQL scripts. It is anticipated that future changes to the scripts will not occur on a frequent basis.

6.2 We note that a respondent highlighted a 6 month implementation window period. After discussions with the respondent we ascertained that the respondent had misinterpreted CP1295 and that they were actually not impacted by CP1295.

7 Conclusion

7.1 The table below provides a summary of the main views expressed by parties in relation to CP1295:

Pros	Cons
This change will improve on the current baseline.	Costs incurred will outweigh the intended benefits.
This change will ensure that MDD information is up to date for all parties.	There are alternative, more efficient methods of ensuring that the updates are received and processed.

8 Recommendation

8.1 We recommend, based on perceived improvements to the current processes, the inclusion of essential process steps within the various CSDs and majority industry support, that you:

- **APPROVE** CP1295 for implementation in the February 2010 Release.

Lead Analyst: Stuart Holmes tel. 020 7380 4135 email stuart.holmes@elexon.co.uk.

Table 1: Industry Impact Assessment Summary of CP1295 – Process for distribution of MDD Updates not included in D0269/D0270 flows

IA History CPC number	CPC00662	Impacts	BSCP508, BSCP505, SVA Data Catalogue Volume 1 & 2

Organisation	Capacity in which Organisation operates in	Agree?	Days to Implement
The Electricity Network Company	Distributor	Yes	-
E.ON	Supplier	Yes	-
TMA Data Management Ltd	NHHDC, NHHDA,	Yes	90
EDF Energy	Supplier, NHH Agent and HH MOP	Yes	30
IMServ	NHHDC / NHHDA	Yes	90
E.ON UK Energy Services Limited	NHHDC/DA	Yes	30
NPower Limited	Supplier, Supplier Agents	Yes	-
Siemens Metering Services	NHHDC, NHHDA, NHHMO, HHDC, HHDA, HHMO	Yes	90
ScottishPower	Supplier, LDSO, HHDA, NHHDA, HHDC, NHHDC, HHMOA, NHHMOA	Yes	-
Stark Software International Ltd	HHDC/HHDA/NHHDC/NHHDA	Yes	30
G4S AccuRead	NHHDC, NNHDA, MOP	Yes	91
Scottish and Southern Energy	Supplier/Generator/ Trader / Party Agent / Distributor	No	30
CE Electric UK	LDSO, UMSO	No	6 Months
EDF Energy Networks (EPN,LPN,SPN) EDF Energy (IDNO) Ltd	LDSO, SMRS, UMSO	Neutral	-

Table 2: Impact Assessment Responses[14]

Organisation	Agree?	Comments	Impacted?	ELEXON Response
E.ON	Yes	**Impact on Organisation's Systems and/or Processes?** Yes **Capacity in which Organisation is impacted:** Supplier / DC DA **Impact on Organisation** : Systems / processes	Yes	-

[14] Please note that we have only included responses in this table when the respondent provided additional information.

Organisation	Agree?	Comments	Impacted?	ELEXON Response
TMA Data Management Ltd	Yes	**Capacity in which Organisation is impacted:** NHHDA and NHHDC **Impact on Organisation**: Process plus script testing **Implementation :** 90 Days **Costs:** The cost is estimated to be around £1K	Yes	-
EDF Energy	Yes	**Comments:** Ensures MDD information should be up to date for all parties. **Impact on Organisation's Systems and/or Processes?** Yes **Capacity in which Organisation is impacted:** NHHDA and NHHDC **Impact on Organisation:** Process for dealing with loading data into NHHDA and EAC/AA calculator via new scripts. **Implementation No. of Calendar Days:** 30 **Would implementation in the proposed Release have an adverse impact?** No **Other Comments:** Will any checks be made to STAG mailing list is up to date so that details are not missed by any party?	Yes	We contacted the respondent and informed them that the email list is maintained by ELEXON and that it is updated on a regular basis.
Imserv	Yes	**Impact on Organisation's Systems and/or Processes?** Yes **Capacity in which Organisation is impacted:** NHHDC/DA **Impact on Organisation :** Yes **No. of Calendar Days:** 90	Yes	-

Organisation	Agree?	Comments	Impacted?	ELEXON Response
		Comments: None **Would implementation in the proposed Release have an adverse impact?** No		
EDF Energy Networks (EPN,LPN,SPN) and EDF Energy (IDNO) Ltd	Yes	**Impact on Organisation's Systems and/or Processes?** Yes **Capacity in which Organisation is impacted :** NHHDC and NHHDA **Impact on Organisation:** Process changes and training (centrally provided software – testing required) **Comments:** Training of new processes **Would implementation in the proposed Release have an adverse impact?** No **Other Comments:** Update to BSCP, suggestion to make this a mandatory requirement to remove any possible confusions.	Yes	We contacted the respondent and highlighted that the intention of CP1295 was not to impose additional processes on NHHDAs and NHHDCs, it was however intended to improve on the current process. They would have the choice on whether or not to adopt the process outlined in CP1295. In addition we indicated that there would be additional implementation costs incurred if we were to include these within the CSDs. We indicated that we would continue to assess the success of this new process via the Software Technical Advisory Group (STAG). If it was deemed necessary to make this a mandatory requirement we would address it at that stage. The respondent agreed with this response.
Siemens Metering Services	Yes	**Impact on Organisation's Systems and/or Processes?** Yes **Capacity in which Organisation is impacted;** NHHDC/ DA **Impact on Organisation:** Process impact **Would implementation in the proposed Release have an adverse impact?** No adverse impact	Yes	-
ScottishPower	Yes	**Comments:** While Scottish Power agree with the	No	We contacted the respondent and highlighted

Organisation	Agree?	Comments	Impacted?	ELEXON Response
		change, in would be helpful if ELEXON could publish the tables on their website alongside the other MDD Tables. In addition, ELEXON propose using STAG to issue the SQL scripts, again this an acceptable solution, although this still raises the question as to whether STAG have an appropriate mailing list, and do they suffer from the same difficulties as ELEXON in contacting the appropriate people. Scottish Power would also suggest that due to any potential impacts on Settlement by using incorrect data, is it possible to bring forward this change for implementation in the November 2009 release rather than February 2010.		that the tables were already published on the ELEXON website. We directed the respondent to the following link: MDD Data**,** which contains the relevant NHH Default EAC data (Refer to the related document section). With reference to the STAG mailing list, we indicated to the respondent that this list was maintained by ELEXON and that it was updated on a regular basis. In addition to the above, we indicated that we did not believe that there was any urgency associated with CP1295 and that we did not believe that there would be any benefit in bringing this change forward to the November 2009 release. The respondent was happy with our response.
Stark Software International Ltd	Yes	**Comments:** Current process not robust. This should improve things. **Impact on Organisation's Systems and/or Processes**? Yes **Capacity in which Organisation is impacted:** NHHDC/NHHDA **Impact on Organisation:** Procedural only **Would implementation in the proposed Release have an adverse impact?** No		-
G4S AccuRead	Yes	**Capacity in which Organisation is impacted:** NHHDC / NHHDA **Impact on Organisation:** System Processes	Yes	-

Organisation	Agree?	Comments	Impacted?	ELEXON Response
E.ON	Yes	**Impact on Organisation's Systems and/or Processes?** Yes **Capacity in which Organisation is impacted:** Supplier / DC DA **Impact on Organisation :** Systems / processes	Yes	-
TMA Data Management Ltd	Yes	**Capacity in which Organisation is impacted:** NHHDA and NHHDC **Impact on Organisation:** Process plus script testing **Implementation :** 90 Days **Costs:** The cost is estimated to be around £1K	Yes	-
EDF Energy	Yes	**Comments:** Ensures MDD information should be up to date for all parties. **Impact on Organisation's Systems and/or Processes?** Yes **Capacity in which Organisation is impacted:** NHHDA and NHHDC **Impact on Organisation:** Process for dealing with loading data into NHHDA and EAC/AA calculator via new scripts. **Implementation No. of Calendar Days**: 30 **Would implementation in the proposed Release have an adverse impact?** No	Yes	We contacted the respondent and indicated that the email list was maintained by ELEXON and that it was updated on a regular basis. The respondent was happy with our response.

Organisation	Agree?	Comments	Impacted?	ELEXON Response
		Other Comments: Will any checks be made to STAG mailing list is up to date so that details are not missed by any party?		
Scottish and Southern Energy	No	**Comments:** We agree that to operate efficiently all participants use correct data and that this is managed in a secure and auditable manner. However, we cannot see the materiality or cost justification of this proposal: • The values have historically not been changed. The last change was in Apr 08 and there may not be a change at the new ongoing annual review. • The NHHDAs and NHHDCs may or may not use the new process. In which case, ELEXON will not have the confirmations, it requires. Thus not addressing the issue. • 5 out 13 did not receive the last updated data; for the new process, ELEXON still intends to send data by email. Is it considered that using the STAG mailing list will resolve the issue? If so, then can not the STAG mailing list be used in the current process We believe that the inclusion in the BSCPs of the need to apply the revised values might help those NHHDAs who weren't aware of the obligations. **Comments:** Changes to process.	Yes	We contacted the respondent and highlighted that this proposal had been discussed at length within the Software Technical Advisory Group (STAG). We indicated that the STAG supported this change as it believed that NHHDAs and NHHDCs would have access to an efficient and effective process that would allow them to extract all relevant MDD data. In addition we highlighted that the majority of respondents supported this new process and indicated that they would definitely use it in the future. The respondent highlighted that they were in support of improving the current process; however, they believed that the costs involved would outweigh the intended benefits. In addition the respondent highlighted that although they were not in agreement with the additional processes they were in support of the amendments/changes to the BSCP documents.
CE Electric UK	No	**Comments:** We reject this proposal based on the fact that we feel there are alternative, more	Yes	We contacted the respondent in order to clarify their comments.

Organisation	Agree?	Comments	Impacted?	ELEXON Response
		efficient, methods of ensuring these updates are received and processed. Can obligations not be put in place to ensure that the recipients of this data act upon the instructions, rather than implementing changes that require system changes and charges. **Capacity in which Organisation is impacted:** LDSO **Impact on Organisation:** System changes would be required to incorporate the changes to dataflows. **Comments:** We would require 6 months to implement any required system changes. **Would implementation in the proposed Release have an adverse impact?** No negative impact but please see comments above.		We highlighted that we did not believe that as an LDSO, CE Electric should be impacted by this change. CP1295 is only intended to impact NHHDCs and NHHDAs, who are the primary beneficiaries of this data. In addition, we do not believe that this change will require significant system related changes or charges. The respondent indicated that they had not fully understood the CP and that based upon our clarification, they believed that they were not impacted and would change their response to neutral.

Table 3: Comments on the redline text

We did not receive any comments on the redline text.

Appendix 4 – Detailed Analysis of CP1296 and CP1297

1 Why Change?

1.1 Background

1.2 We raised CP1296 (Mandatory Capability to Record Reactive Power Demand (kvar) Values in Code of Practice 5 (CoP5) Meters) and CP1297 (Mandatory Capability to Record Reactive Power Demand (kvar) Values in Code of Practice 10 (CoP10) Meters) on 05 June 2009. We issued CP1296 and CP1297 for impact assessment (via CPC00662) in June 2009.

1.3 The Problem

1.4 When LDSOs do not receive Reactive Power data, they are forced to make their own estimates of the missing data, for the purpose of calculating kVA Demand and Reactive Power charges. This presents difficulties for Suppliers, who potentially find it hard to pass on customers' charges based on estimated data. The issue is made more difficult – particularly for customer groups with sites spread across the country – by the inconsistent approaches to estimation adopted by different LDSOs.

1.5 Missing Reactive Power data also creates issues for LDSOs, who require such data to understand the power flows on their networks, the capacity requirements of their customers, and the efficiency of customers' electrical usage.

1.6 The Working Group identified a number of potential root causes for missing and erroneous Reactive Power data. One of these is that some of the metering Codes of Practice (including CoP5 and CoP10) do not currently require a capability to record period values for Reactive Power.

2 Solution

2.1 In order to address the issues caused by absent and erroneous Reactive Power data, it is proposed to amend Code of Practice (CoP)5 (CP1296) and CoP10 (CP1297) to require that the Meter has the capability to record Demand (kvar) values for Reactive Import and Reactive Export[15].

2.2 This will ensure that CoP5 and CoP10 Meters installed for Half Hourly customers (or Non Half Hourly customers who may enter the elective Half Hourly market at some future point) can provide Reactive Power data when required to do so.

2.3 The Working Group acknowledged that the requirement for Reactive Power metering was more relevant to industrial and commercial customers than domestic customers. However, with the extension of CoP10 to 100kW[16], and the likelihood that domestic customers will end up with smart Meters under different governance, it is proposed that the benefits of changing CoP10 will outweigh the disbenefits.

[15] The terms 'Reactive Import' and 'Reactive Export' are defined in Appendix B to CoP5. For a site without generation, Reactive Import corresponds to a lagging power factor, and Reactive Export to a leading power factor. For sites with generation as well as demand, the situation is more complex, with Reactive Import corresponding to either leading demand or lagging generation.

[16] Change Proposal CP1273 ('Changes to the scope of CoP10 to cover current transformer operated Meters') was approved by SVG and implemented as part of the June 2009 BSC Release.

2.4 BSCP601 'Metering Protocol Approval and Compliance Testing' will need to be updated in order to ensure that the 'Meter Protocol Approval' and 'Compliance Testing' procedures align with the CoP5 changes[17].

3 Intended Benefits

3.1 For those customers for whom the LDSO already requires Reactive Power data, this change will assist Suppliers in meeting their BSC and DCUSA obligations to provide LDSOs with relevant metered data.

3.2 For those customers for whom the LDSO does not currently require Reactive Power data, this change will 'future proof' the metering (should a change in the customer's circumstances or in LDSO requirements mean that Reactive Power data is required at some point in the future).

3.3 The Working Group suspected that, historically, the reason for CoP5 not mandating Reactive Power Demand values was that different LDSOs had different charging requirements; and that Reactive Power metering requirements therefore varied from geographical area to geographical area. However, as the industry moves towards a common charging methodology (and higher levels of distributed generation), the Group believed that Reactive Power metering will become a requirement in all geographical areas.

4 Industry Views

4.1 We issued CP1296 and CP1297 for impact assessment in July 2009 (via CPC00662).

4.2 **Responses to CP1296**

4.2.1 We received 15 responses in relation to CP1296; of these 13 agreed, 1 disagreed and 1 was neutral.

4.2.2 The respondents who agreed with the proposal believed that this change would ensure a more effective process of capturing and reporting Reactive Power data. In addition one respondent believed that CP1296 would improve the data quality and lead to more accurate DUoS charging.

4.2.3 The respondent who disagreed, believed that CoP5 Meters should not be required to record Reactive Export at a predominantly Import site, as this would be an ineffective requirement as there is generally no Reactive Export values to report.

4.2.4 We contacted the respondent and highlighted that the Working Group believed that such data will be of increasing importance in the future, as a result of moves towards a common charging methodology, and increasing pressure on LDSOs to manage losses on their networks for environmental reasons. For these reasons, the view of the Group was that CoP5 should be amended to include a requirement for all kVAr values. The respondent noted our response but still did not agree with this change.

4.2.5 The respondent who submitted a neutral response raised concerns relating to the storage capacity of existing CoP5 Meters. The respondent highlighted that if CoP5 Meters were required to have the 'capability to provide' Reactive Power values this may reduce their storage capacity. This could result in the storage capacity of CoP5 Meters dropping below the requirement of 20 days, leaving the Meter non compliant.

[17] Note: The same section of BSCP601 is impacted by CP1297. If both CP's are approved there will be minor changes to combine the redlining.

4.2.6 We contacted the respondent and highlighted that this could potentially occur, however it was only likely to have an impact on early CoP5 Meters that would probably be due for change anyway. The respondent agreed with our response but still wanted their comments to be noted.

4.2.7 In addition the respondent queried whether the complexity required in CoP5 Meters would increase the risk in managing the asset? The respondent believed that the proving tests and in service testing may lead to a greater chance of errors occurring.

4.2.8 We contacted the respondent and highlighted that proving and in service testing would not change, however, the complexity in managing the Meters would probably increase. We consider this acceptable due to the benefit of being able to provide valid and accurate Reactive Power data to LDSOs and in so doing fulfilling our BSC Obligations.

4.3 Responses to CP1297

4.3.1 We received 15 responses in relation to CP1297; of these 12 agreed and 3 disagreed.

4.3.2 The respondents who agreed with the proposal believed that this change would ensure a more effective process of capturing and reporting Reactive Power data. In addition, one respondent believed that this change would enhance their current practice of Reactive Power charging.

4.3.3 The respondents who disagreed believed that this change would place an additional requirement within CoP10 that would provide minimal benefit to LDSOs (as they were more interested in the higher volume end of the market). The respondents also believed that CoP10 was intended to be a 'lighter' version of CoP5 and that by including these requirements within CoP10 one would be creating more complex and expensive Metering requirements, which was not the intention of CoP10.

4.3.4 We contacted these respondents and highlighted that the Working Group believed that such data would be of increasing importance in the future, as a result of moves towards a common charging methodology, and increasing pressure on LDSOs to manage losses on their networks for environmental reasons. For these reasons, the view of the Group was that CoP10 should be amended to include a requirement for all kVAr values.

4.3.5 In addition, we highlighted that the Working Group had issued a consultation (Please see attachment B to SVG97/04 for consultation responses) relating to the above issue. The Working Group believed that on a balance of responses the requirement should be included within CoP10 as this would create a consistency within the market and provide LDSO with Reactive Power data that was necessary for accurate and consistent DuOS charging. The Working Group also believed that the additional costs and requirements would not be high within this area of the market. The respondent noted our response but still did not agree with this change.

5 Impacts and Costs

5.1 Indicative impacts and costs received from participants were similar for both CP1296 and CP1297. The impacts and costs below therefore relate to both CP1296 and CP1297.

Market Participant	Cost/Impact	Implementation time needed
Party Agents	Several MOAs and DCs highlighted that internal process changes would be needed for both CP1296 and CP1297.	Implementation timescales ranged from between 60 to 365WDs for both CPs. The majority of Party Agents believed that the February 2010 Release would be suitable. One respondent indicated that they would require 365WDs in order to implement the necessary changes.
ELEXON (Implementation)	The estimated ELEXON implementation cost is 2 man days for each CP, which equates to £880.	February 2010 Release suitable.

6 Implementation Approach

6.1 We recommend that CP1296 and CP1297 should be approved for the February 2010 Systems Release.

6.2 We noted that one respondent requested 365 Working Days in order to implement CP1298. We discussed this with the respondent and highlighted that the majority of respondents to CP1296 and CP1297 had indicated that a February implementation date was suitable.

6.3 The respondent believed that because the 6 Reactive Power CPs were linked they should be included in the same release, and that because they need a year to implement CP1298, all of the CPs should be delayed. We highlighted to the respondent that we did not believe that CP1298 should prevent the other Reactive Power CPs from being implemented as this would hamper the progress relating to the provision of accurate and valid Reactive Power data. The respondent remained of their view.

7 Conclusion

7.1 The majority of responses were in favour of the proposed changes. The views expressed by those in favour believed that CP1296 and CP1297 would go a long way towards ensuring that Licensed Distribution System Operators (LDSOs) received the data required to operate their networks, and to calculate Distribution Use of System (DUoS) charges. In addition these changes will ensure that Suppliers fulfil their BSC Obligations by providing accurate Reactive Power data to LDSOs.

7.2 The respondents who disagreed with the proposed solutions have not changed their views. Their comments have been included within this report.

7.3 After considering the comments received we still believe that the solution proposed by CP1296 and CP1297 are the most effective solutions.

8 Recommendation

8.1 We recommend, based on the additional benefit of being able to provide accurate Reactive Power data to LDSOs, ensuring that Parties meet their BSC obligations (to provide accurate Metered data), and majority industry support, that you:

- **AGREE** our suggested amendments to the redline text (as described in tables 3 and 6); and
- **APPROVE** CP1296 and CP1297 for implementation in the February 2010 Release.

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Table 1: Industry Impact Assessment Summary of CP1296 – Mandatory Capability to Record Reactive Power Demand (kvar) Values in Code of Practice 5 (CoP5) Meters

IA History CPC number	CPC00662	Impacts	CoP5; BSCP601

Organisation	Capacity in which Organisation operates in	Agree?	Days to Implement
The Electricity Network Company	Distributor	Yes	-
E.ON	Supplier	Yes	-
Electricity North West Limited	LDSO	Yes	-
TMA Data Management Ltd	NHHDC, NHHDA, HHDC, HHDA	Yes	0
EDF Energy	Supplier, NHH Agent and HH MOP	Yes	60
EDF Energy Networks (EPN,LPN,SPN) and EDF Energy (IDNO) Ltd	LDSO, SMRS, UMSO	Yes	-
IMServ	NHHDC / NHHDA	Yes	90
E.ON UK Energy Services Limited	NHHDC/DA	Yes	-
Scottish and Southern Energy	Supplier/Generator/ Trader / Party Agent / Distributor	Yes	-
CE Electric UK	LDSO, UMSO	Yes	-
ScottishPower	Supplier, LDSO, HHDA, NHHDA, HHDC, NHHDC, HHMOA, NHHMOA	Yes	120
Stark Software International Ltd	HHDC/HHDA/NHHDC/NHHDA	Yes	0
British Energy	Supplier	Yes	-
Western Power Distribution	LDSO, HHMOA, UMSO, MA, SMRA	No	90
NPower Limited	Supplier, Supplier Agents	Neutral	365

Table 2: Impact Assessment Responses[18]

Organisation	Agree?	Comments	Impact?	ELEXON Response
Electricity North West Limited	Yes	**Comments**: This change will enhance our current practice of reactive power charging by ensuring that meters have the facility to record reactive power data.	-	-
TMA Data Management Ltd	Yes	**Impact:** As a HHDC, we are already capable for retrieving the reactive power data and transmit validated reactive data to the	No	-

[18] Please note that we have only included responses in this table when the respondent provided additional information.

Organisation	Agree?	Comments	Impact?	ELEXON Response
		Supplier and Distributor if the metering is programmed to record it		
EDF Energy	Yes	**Impact on Organisation's Systems and/or Processes?** Yes **Capacity in which Organisation is impacted:** MOP **Impact on Organisation :** Field Processes **Implementation No. of Calendar Days** 60 **Would implementation in the proposed Release have an adverse impact?** No	Yes	-
EDF Energy Networks (EPN,LPN,SPN) EDF Energy (IDNO) Ltd	Yes	**Comments:** BSCP 601 should also refer to CoP 1,2, 3 & 5 for clarity not just CoP 5. **Impact on Organisation's Systems and/or Processes?** Yes **Capacity in which Organisation is impacted:** LDSO **Impact on Organisation:** Improved Data Quality and more accurate DUoS Billing	Yes	We contacted the respondent and confirmed that we agree with their comments. We do not believe that this is a material change and that this will align with the Code of Practice documents. The respondent was happy with our response. We recommend that the SVG agree that the redlining should be amended as highlighted in table 3 (point 4) below.
Imserv	Yes	**Capacity in which Organisation is impacted:** MOA **Impact on Organisation:** Process changes primarily. **How much Implementation Notification is required from receipt of approved redline text changes?** No. of Calendar Days 90 **Would implementation in the proposed Release have an adverse impact?** No	Yes	-
E.ON UK Energy Services Limited	Yes	**Capacity in which Organisation is impacted**: MOA **Impact on Organisation:** All meters currently utilised for this COPs have this capability.	Yes	-
ScottishPower	Yes	ScottishPower supports the move to capture reactive energy for the elective HH market. Under current arrangements there is no way to	Yes	The respondent highlighted that where we have actual Reactive Power data, we should use this rather than estimates.

Organisation	Agree?	Comments	Impact?	ELEXON Response
		capture the amount of reactive energy being generated in the elective HH sector. **Impact on Organisation's Systems and/or Processes?:** Yes **Capacity in which Organisation is impacted** : MOA, Supplier, HHDC, LDSO **Impact on Organisation**: Changes will be required for internal processes. However it is not envisaged that there would be system impact. **Would implementation in the proposed Release have an adverse impact?** No **Other Comments:** ScottishPower believe where actual reactive power information is available for both reactive excess and KVA that this should be used instead of estimates calculated from the power factors.		We contacted the respondent and informed them that this was the case and that this was captured within CP1303 which was issued for impact assessment as part of CPC00666.
Stark Software International Ltd	Yes	The COP5 wording always was and still remains unclear. 'Demand Period', 'Measured Quantities', 'Demand Values', 'Energy Measurements', 'shall be 'provided'' are ambiguous expressions and could easily be re-drafted to distinguish between HH data, demand registers and cumulative registers.	No	We contacted the respondent and highlighted that there were mechanisms in place to address ambiguous expressions or unclear wording. The respondent indicated that they did not have problems with the redlining proposed within CP1296 and that their concerns were with existing wording in the CoP, rather than the redlining proposed. We suggested that they communicate any issues relating to the current wording to us so that we could address their concerns via the appropriate mechanisms. The respondent agreed that they would follow the appropriate processes in order to address these concerns.
Western Power	No	Please note these comments apply to CP1296. CP1297 and CP1298	Yes	We contacted the respondent and highlighted that the Working Group believed that such data will be of

Organisation	Agree?	Comments	Impact?	ELEXON Response
Distribution		which are all related. We agree with the need for kVArh import but do not think is necessary to record kVArh export for the vast majority of sites else we are increasing the volume of data handled by parties by 50% for little benefit. Reading the CPs for COP5 and COP10 it says it is about the meters having the **capability** to record reactive interval data but the red-lined versions of the CoPs make it mandatory to be set up? The amendments to BSCP514 imply it is only mandated for CT supplies and the CP says the obligation does not apply to whole current but this is not reflected in the changes to COP5 and COP10. The new BSCP also says if the meter has the capability it must be programmed (albeit only for CT). We think the changes should say: COP5/COP10 meters should have the capability to record interval kVArh import and kVArh export data. When trading HH COP5/COP10 must be setup to record interval kVArh import data. As we need kVArh import to correctly bill any HH site the distinction between CT and Whole Current (and any assumption that whole current COP10 will not trade HH) is inappropriate. **Impact on Organisation's Systems and/or Processes?** Yes **Capacity in which Organisation is impacted**: HHMOA\LDSO **Impact on Organisation:** Procedural changes and update to		increasing importance in the future, as a result of moves towards a common charging methodology, and increasing pressure on LDSOs to manage losses on their networks for environmental reasons. For these reasons, the view of the Group was that CoP5 should be amended to include a requirement for all kVAr values. The respondent did not agree with the Working Groups rationale and asked that we include their comments. The respondent also raised concerns regarding the use of the phrase 'shall be provided' within sections 4.1.1 and 4.1.2 of CoP5 and CoP10. The respondent believed that this phrase should be replaced by 'shall be capable of providing'. We indicated to the respondent that this was out of the scope of this CP (as it related to current wording within the CoP, rather than the proposed redline text); however, we believed that the current wording was suitable. The respondent did not agree with our response and asked that we include their comments within the report. Comments concerning changes to BSCP514 relate to CP1298 and will be included within that assessment report.

Organisation	Agree?	Comments	Impact?	ELEXON Response
		LWIs.		
NPower Limited	Neutral	It would to be appropriate that if DNOs are to adopt a common methodology for Reactive Power charging that the capability to record half-hourly Reactive Power (kvar) values should be mandated in CoP5. However, in mandating this capability consideration needs to be given to the following: Will this render some types of CoP5 meters as non compliant? The storage of additional channels of half-hourly Reactive Power values will affect the number of days a meter can store. This may mean certain meters storage capacity drops below the existing CoP5 requirement of 20 days. Will mandating the additional complexity increase the risk in managing the asset? Proving tests and in service testing will need to be performed on these assets and with extra channels there will be a greater chance of errors occurring. **Implementation Comment**: As CP1296, CP1297, CP1298 & CP1299 were raised to address the issue of "Absent and erroneous Reactive Power data" we believe that if approved they should go through as a package of changes in the same Release. For CP1298 our MOA has stated that they will require a minimum of 365 days lead time from approval of the redline text to implement the necessary changes to their systems and processes. Therefore, 365 days should be recommended for all 4 CPs in order that they can be included in the same Release.	No	We contacted the respondent and highlighted that this could potentially occur, however it was only likely to have an impact on quite old CoP5 Meters that would probably be due for change anyway. The respondent agreed with our response but still wanted their comments to be noted. We contacted the respondent and highlighted that proving and in service testing would not change, however, the complexity in managing the Meters would probably increase. We explained that we feel that this increase in complexity is justified as Meters would be capable of providing Reactive Power data, which would contribute towards allowing Parties to fulfil their BSC Obligations of providing accurate Meter data to LDSOs. The respondent agreed with our response but still wanted their comments to be noted. We discussed the implementation approach with the respondent and highlighted that the majority of respondents to CP1298 had indicated that a February implementation date was suitable. The respondent believed that because the 6 Reactive Power CPs were linked they should be included in the same release. We highlighted to the respondent that we did not believe that CP1298 should prevent the other Reactive Power CPs from being implemented as this would hamper the progress relating to the provision of accurate and valid Reactive power data. The respondent remained of their view.

Table 3: Comments on the redline text

No.	Organisation	Document name	Location	Severity Code[19]	Comments	ELEXON Recommendation
1	SSE	601	3.4.7		The changes incorrectly state kvarh, demand should read kVAr	We agree with these comments and recommend that the redline text is amended. The current version of the redlining states: 3.4.7 (a) 'kvarh value is provided for each Reactive Energy Measured Quantity (CoP5 only)' This should be amended to read: 3.4.7 (a) 'kvar value is provided for each Reactive Energy Measured Quantity (CoP5 only)' We do not believe that this is a material change to the redline text.
2	npower	BSCP601	3.4.7 (a)		Redline text contains the requirement ";and kvarh value is provided for each Reactive Energy Measured Quantity". We believe this should be kVar rather than "kvarh" and the requirement should read ";and **kVar** value is provided **for each Demand Period** for each Reactive Energy Measured Quantity".	Please see the recommendation in point 1 above.
3	npower	CoP 5	5.5.1 (ii)		We believe that the additions of CoP5 4.1.2 (iii) & (iv) impact on 5.5.1 (ii), "a storage capacity of 48 periods per day for a minimum of 20 days for all Demand Values as defined in clause 4.1.2. The stored values shall be integer multiples of	We agreed that a change to section 5.5.1 (ii) should be approved in order to ensure consistency between the proposed redline changes. We recommend that section 5.5.1 (ii) be amended to read as follows: "a storage capacity of 48 periods per day for a minimum of 20 days for all Demand Values as defined in clause 4.1.2. The stored values shall be integer

[19] High, Medium or Low

No.	Organisation	Document name	Location	Severity Code[19]	Comments	ELEXON Recommendation
					kW". Should the requirement "The stored values shall be integer multiples of kW" be removed, or changed to also include integer multiples of kVar?	multiples of kW and kvar"; We do not believe that this is a material change to the redlining.
4	EDF Energy Networks (EPN,LPN,SPN) EDF Energy (IDNO) Ltd	BSCP601	3.4.6 & 3.4.7		BSCP 601 should also refer to CoP 1,2, 3 & 5 for clarity not just CoP 5.	We agree with these comments. We do not believe that this is a material change, and note that this will align with the Code of Practice documents. The current version of the section 3.4.6 redlining states: (d) Import Reactive Energy is measured in kvarh (CoP5 only) (e) Export Reactive Energy is measured in kvarh (CoP5 only) We recommend that the SVG agree the following amendments to the section 3.4.6 redlining: (d) Import Reactive Energy is measured in kvarh (CoP1, 2, 3 and 5) (e) Export Reactive Energy is measured in kvarh (CoP1, 2, 3 and 5) Section 3.4.7 currently reads as: (a) Kvarh value is provided for each Reactive Energy Measured Quantity (CoP5 only) We recommend that SVG agree that this should be amended to read: (a) Kvarh value is provided for each Reactive Energy Measured Quantity (CoP1, 2, 3 and 5)

Table 4: Industry Impact Assessment Summary of CP1297 – Mandatory Capability to Record Reactive Power Demand (kvar) Values in Code of Practice 10 (CoP10) Meters

IA History CPC number	CPC00662	Impacts	CoP10; BSCP601

Organisation	Capacity in which Organisation operates in	Agree?	Days to Implement
The Electricity Network Company	Distributor	Yes	-
E.ON	Supplier	Yes	-
Electricity North West Limited	LDSO	Yes	-
TMA Data Management Ltd	NHHDC, NHHDA, HHDC, HHDA	Yes	-
EDF Energy	Supplier, NHH Agent and HH MOP	Yes	60
EDF Energy Networks (EPN,LPN,SPN) and EDF Energy (IDNO) Ltd	LDSO, SMRS, UMSO	Yes	-
IMServ	NHHDC / NHHDA	Yes	90
E.ON UK Energy Services Limited	NHHDC/DA	Yes	-
Scottish and Southern Energy	Supplier/Generator/ Trader / Party Agent / Distributor	Yes	-
CE Electric UK	LDSO, UMSO	Yes	-
ScottishPower	Supplier, LDSO, HHDA, NHHDA, HHDC, NHHDC, HHMOA, NHHMOA	Yes	120
British Energy	Supplier	Yes	-
Western Power Distribution	LDSO, HHMOA, UMSO, MA, SMRA	No	90
NPower Limited	Supplier, Supplier Agents	No	365
Stark Software International Ltd	HHDC/HHDA/NHHDC/NHHDA	No	-
Association of Meter Operators	Trade Association representing Meter Operators	Neutral	-

Table 5: Impact Assessment Responses[20]

Organisation	Agree?	Comments	Impact?	ELEXON Response
Electricity North West Limited	Yes	**Comments**: This change will enhance our current practice of reactive power charging by ensuring that meters have the facility to record reactive power data.	-	-

[20] Please note that we have only included responses in this table when the respondent provided additional information.

Organisation	Agree?	Comments	Impact?	ELEXON Response
TMA Data Management Ltd	Yes	**Impact:** As a HHDC, we are already capable for retrieving the reactive power data and transmit validated reactive data to the Supplier and Distributor if the metering is programmed to record it.	No	-
EDF Energy	Yes	**Capacity in which Organisation is impacted** MOP **Impact on Organisation :** Field processes **Implementation:** 60 Days **Would implementation in the proposed Release have an adverse impact?** No	Yes	-
EDF Energy Networks (EPN,LPN,SPN) and EDF Energy (IDNO) Ltd	Yes	**Comments:** BSCP 601 should also refer to CoP 1,2, 3,5 and 10 for clarity not just CoP 10 **Impact on Organisation's Systems and/or Processes?** No **Capacity in which Organisation is impacted:** LDSO **Impact on Organisation:** Improved Data Quality and more accurate DUoS Billing **Would implementation in the proposed Release have an adverse impact?** No	No	We contacted the respondent and confirmed that we agree with their comments. We do not believe that this is a material change and that this will align with the Code of Practice documents. Please see table 6 for details of how we believe this suggested change should be applied. The respondent was happy with our response.
Imserv	Yes	**Capacity in which Organisation is impacted:** MOA **Impact on Organisation :** Process Changes **Would implementation in the proposed Release have an adverse impact?** No	Yes	-
E.ON UK Energy Services Limited	Yes	**Capacity in which Organisation is impacted**: MOA **Impact on Organisation:** All meters currently utilised for this COPs have this capability.	Yes	-
Western Power Distribution	No	Please see response to CP1296.	Yes	Please see response to CP1296.

Organisation	Agree?	Comments	Impact?	ELEXON Response
ScottishPower	Yes	**Comments**: ScottishPower supports the move to capture reactive energy for the elective HH market. Under current arrangements there is no way to capture the amount of reactive energy being generated in the elective HH sector. **Impact on Organisation's Systems and/or Processes?** Yes **Capacity in which Organisation is impacted**: MOA, Supplier, HHDC, LDSO **Impact on Organisation**: Changes will be required for internal processes. However it is not envisaged that there would be system impact. **Would implementation in the proposed Release have an adverse impact?** No **Other Comments:** Consideration should be given to the fact that COP10 meters are designed to allow customers using them to move between NHH and HH without a meter change. As NHH sites will not be required to record reactive energy a site visit may be required to reconfigure such meters to record reactive energy where this cannot be done remotely. This may impact on other documents and as such ELEXON should investigate whether any further changes may be required to ensure this is captured and implemented correctly.	Yes	We confirmed with the respondent that ELEXON performs an internal impact assessment of all changes in order to ascertain whether all potential impacts of this change have been addressed. In addition we highlighted to the respondent that if they became aware of any potential impacts that were not raised as part of the Change Proposal, to inform us as part of their response. The respondent indicated that they did not believe that their were any further impacts as part of this CP, however, they would inform us in future if any impacts were missed.
NPower Limited	No	**Comment**: We must recognise that there is a limit to the usefulness of half-hourly Reactive Power data and this limit is based on the load at site. The vast majority of sites where CoP10 compliant metering is installed will fall outside of the scope where this data is useful. It is highly likely that if this requirement is mandated the capability will only be 'switched on' at a small number of CoP10 sites. CoP10 was intended to be 'lighter' version of CoP5 to allow a cheap and simple method of recording half-hourly active data, particularly given consideration over the roll out of smart metering. Mandating these additional requirements will make CoP10 meters	No	We contacted this respondent and highlighted that the Working Group believed that such data would be of increasing importance in the future, as a result of moves towards a common charging methodology, and increasing pressure on LDSOs to manage losses on their networks for environmental reasons. For these reasons, the view of the Group was that CoP10 should be amended to include a requirement for all kVAr values.

Organisation	Agree?	Comments	Impact?	ELEXON Response
		more complex and expensive. Aligning it closer to CoP5 raises questions over the original requirement for CoP10. We do not believe there is a case for imposing additional costs and requirements on this area of the market. **Implementation Comments**: As CP1296, CP1297, CP1298 & CP1299 were raised to address the issue of "Absent and erroneous Reactive Power data" we believe that if approved they should go through as a package of changes in the same Release. For CP1298 our MOA has stated that they will require a minimum of 365 days lead time from approval of the redline text to implement the necessary changes to their systems and processes. Therefore, 365 days should be recommended for all 4 CPs in order that they can be included in the same Release.		In addition, we highlighted that the Working Group had issued a consultation (Please see attachment B to SVG97/04 for consultation responses) relating to the above issue. The Working Group believed that on a balance of responses the requirement should be included within CoP10. This would create a consistency within the market and provide LDSOs with Reactive Power data that would be necessary for accurate and consistent DuOS charging. The Working Group also believed that the additional costs and requirements would not be high within this area of the market. The respondent did not agree with the Working Groups rationale and asked that we include their comments.
Stark Software International Ltd	No	The benefit of COP10 was to provide low cost HH data at sub 100kW metering points. This upgrade appears to mandate a very similar spec to COP5. Again there is ambiguity over the description of terms. See comments on CP1296. **Capacity in which Organisation is impacted:** HHDC/NHHDC	No	We contacted the respondent and highlighted that the Working Group believed that such data would be of increasing importance in the future, as a result of moves towards a common charging methodology, and increasing pressure on LDSOs to manage losses on their networks for environmental reasons. For these reasons, the view of the Group was that CoP10 should be amended to include a requirement for all kVAr values. In addition, we highlighted that the Working Group had issued a consultation (Please see attachment B to SVG97/04 for consultation responses) relating to the above issue. The Working Group believed that on a balance of responses the requirement should be

Organisation	Agree?	Comments	Impact?	ELEXON Response
				included within CoP10 as this would create a consistency within the market and provide LDSO with Reactive Power data that was necessary for accurate and consistent DuOS charging. The Working Group also believe that the additional costs and requirements would not be high within this area of the market. The respondent did not agree with the Working Groups rationale and asked that we include their comments.
Association of Meter Operators	Neutral	The ENA is managing a process to develop a common DUoS charging methodology. The process is ongoing and will result in changes being implemented in Apr 2010. The current proposals – available on ENA website – rely on 'supercustomer' DUoS billing for NHH customers, which does not rely on reactive data. This will not be a change for most Distributors, but there is at least one who is currently attempting reactive NHH billing. If the current proposals are adopted then reactive billing for NHH customers cease for all Distributors in April 2010. It would seem appropriate to review this CP as a result of the ENA members work. The probably outcome would be the need for reactive measurement for CT metered sites, but not for whole current. It would be unfortunate to initiate a change under the BSC for CoP10 which will add complexity and therefore cost to the metering requirements where there is no need – particularly when the requirement is not a 'settlement' requirement.		We contacted the respondent and highlighted that the Working Group believed that such data would be of increasing importance in the future, as a result of moves towards a common charging methodology, and increasing pressure on LDSOs to manage losses on their networks for environmental reasons. For these reasons, the view of the Group was that CoP10 should be amended to include a requirement for all kVAr values. In addition, we highlighted that the Working Group had issued a consultation (Please see attachment B to SVG97/04 for consultation responses) relating to the above issue. The Working Group believed that on a balance of responses the requirement should be included within CoP10 as this would create a consistency within the market and provide LDSOs with Reactive Power data that would be necessary for accurate and consistent DuOS charging. The Working Group also believe that the additional costs and requirements would not be high within this area of the market.

Organisation	Agree?	Comments	Impact?	ELEXON Response
				In addition, we confirmed with the respondent that we believed that the 6 Reactive Power CPs, which we issued to Industry, were consistent with the ENA members work i.e. they focus primarily on CT and HH metered sites, which is they key focus areas of LDSOs. We highlighted that CP1297 did not relate to CT nor Whole Current Metered sites and that this would be addressed as part of the CP1298 assessment report.

Table 6: Comments on the redline text

No.	Organisation	Document name	Location	Severity Code[21]	Comments	ELEXON Recommendation
1	SSE	601	3.4.7		As per CP1296, the changes incorrectly state kvarh, demand should read kVAr	Please see comments within table 3 above.
2	npower	BSCP601	3.4.7 (a)		Redline text contains the requirement ";and kvarh value is provided for each Reactive Energy Measured Quantity". We believe this should be kVar rather than "kvarh" and the requirement should read ";and kVar value is provided for each Demand Period for each Reactive Energy Measured Quantity".	Please see comments within table 3 above.
3	EDF Energy Networks (EPN,LPN,SPN) and	BSCP601	3.4.6 & 3.4.7		BSCP 601 should also refer to CoP 1,2, 3, 5 and 10 for clarity not just CoP 10.	We agree with these comments. We do not believe that this is a material change and that this will align with the Code of Practice documents. We recommend that this change is approved.

[21] High, Medium or Low

No.	Organisation	Document name	Location	Severity Code[21]	Comments	ELEXON Recommendation
	EDF Energy (IDNO) Ltd					The current version of the section 3.4.6 redlining states: (d) Import Reactive Energy is measured in kvarh (CoP10 only) (e) Export Reactive Energy is measured in kvarh (CoP10 only) We recommend that the SVG agree the following amendments to the section 3.4.6 redlining: (d) Import Reactive Energy is measured in kvarh (CoP1, 2, 3 and 10) (e) Export Reactive Energy is measured in kvarh (CoP1, 2, 3 and 10) Section 3.4.7 currently reads: (a) Kvarh value is provided for each Reactive Energy Measured Quantity (CoP10 only) We recommend that SVG agree that this should be amended to read: (a) Kvarh value is provided for each Reactive Energy Measured Quantity (CoP1, 2, 3 and 10)

Appendix 5 – Detailed Analysis of CP1298 - Requirement on MOAs to Configure Meters to Record Half Hourly Reactive Power Data (for Half Hourly Settled CT-Metered Customers)

1 Why Change?

1.1 **Background**

1.2 We raised CP1298 on 05 June 2009. We issued CP1298 for impact assessment (via CPC00662) in June 2009.

1.3 **The Problem**

1.4 When LDSOs do not receive Reactive Power data, they are forced to make their own estimates of the missing data, for the purpose of calculating kVA Demand and Reactive Power charges. This presents difficulties for Suppliers, who potentially find it difficult to pass on to customers charges based on estimated data. The issue is made more difficult – particularly for customer groups with sites spread across the country – by the inconsistent approaches to estimation adopted by different LDSOs.

1.5 Missing Reactive Power data also creates issues for LDSOs, who require such data to understand the power flows on their networks, the capacity requirements of their customers, and the efficiency of customers' electrical usage.

1.6 The Working Group identified a number of potential root causes for missing and erroneous Reactive Power data. One of these is that Meter Operator Agents (MOAs) may not configure Meters to record Reactive Power data.

2 Solution

2.1 CP1298 proposes amending BSCP514 to place a specific obligation on MOAs that:

- when they install or reconfigure Half Hourly Metering Equipment, that is supplied via measurement transformers, they should configure the Metering Equipment to record Half Hourly demand values for both Reactive Import and Reactive Export (provided that the Metering Equipment has the capability to do so).

2.2 The above obligation would be included as a new bullet point in section 2.3.2 ('Installation, Removal and Re-programming of Meters') of BSCP514. Please note that the new obligation would not apply to customers:

- settled in the Non Half Hourly market (as Metering Equipment that is settled on a NHH basis does not constitute Half Hourly Metering Equipment for BSC purposes, even if it is recording Half Hourly data for non-Settlement purposes); and
- with "whole current" metering;

2.3 CP1298 is not intended to oblige Parties or their Agents to replace existing Metering Equipment, and for this reason the obligation only applies when the Metering Equipment is capable of recording Half Hourly Reactive Power data. However, as the Working Group has also recommended changes to CoP5 (via CP1296) and CoP10 (via CP1297) to mandate this capability, the intention is that it would be present for new and replacement Metering Equipment.

3 Intended Benefits

3.1 The Working Group believes that LDSOs already require Half Hourly Reactive Power data for most CT-metered Half Hourly-settled customers, and that this will continue to be the case as the industry moves towards a common methodology for DUoS charging and more active management of distribution networks. This change will therefore assist Suppliers in meeting their existing BSC (and DCUSA) obligations to provide LDSOs with relevant metered data.

4 Industry Views

4.1 We issued CP1298 for impact assessment in June 2009 (via CPC00662). We received 15 responses; of these 11 agreed, 3 disagreed and 1 was neutral.

4.2 The respondents who agreed with the proposal believed that this change would ensure a more effective process of capturing and reporting Reactive Power data. In addition a respondent believed that CP1298 would improve data quality and lead to more accurate DUoS charging.

4.3 One respondent believed that this change will enhance their current practice of Reactive Power charging. They believed that by ensuring that meters have the facility to record Reactive Power data, they would align with their Distribution Connection and Use of System Agreement (DCUSA) and their BSC Obligations.

4.4 Some respondents who disagreed with the proposal believed that CP1298 should be extended to cover all Half Hourly (HH) sites (i.e. HH sites which are within the Whole Current side of the market).

4.5 We contacted the respondents and highlighted that the Working Group had discussed this issue at length. We indicated to the respondents that the Working Group did not feel that they had sufficient evidence to suggest that LDSOs would require Reactive Power data from the elective HH side of the market, as this would provide minimal benefit to LDSOs.

4.6 In addition the Working Group felt that unless the common charging methodology that emerges from industry discussions[22] highlights the need for Reactive Power charges within elective HH segment, this requirement would not be necessary.

4.7 With this in mind, the Working Group decided to limit the scope of CP1298 to HH customers within CT operated sites only. They believed that this would be the first step in addressing Reactive Power data issues and would provide the greatest benefit with the least possible impact.

4.8 A respondent raised concerns that if the MOP programmed Meters to provide Reactive Power data even though they were not required to, in terms of CP1298, the DC would still be required to collect these additional data items. The respondent believed that this would contribute towards additional cost and effort that should not necessarily be the case.

4.9 We indicated to the respondent that BSC Parties are already required to supply valid and accurate Reactive Power data to LDSOs as part of their BSC/DCUSA Obligations. We stressed that CP1298 is aimed at creating the mechanism for those obligations. We stressed that if Meters had the capability to provide Reactive Power data, they should be used to improve the quality of data flowing through to LDSOs.

[22] The seven electricity Distribution Network Operator (DNO) members of the Energy Networks Association (ENA) are currently working together towards achieving commonality on their charging methodologies and tariff structures, with a view to implementing changes from April 2010

5 Impacts and Costs

Market Participant	Cost/Impact	Implementation time needed
Party Agents	Several MOAs and DCs highlighted that internal process changes would be needed for CP1298.	Implementation timescales ranged from between 60 to 365WDs. The majority of Party Agents believed that the February 2010 Release would be suitable. One respondent indicated that they would require 365WDs in order to implement the necessary changes.
ELEXON (Implementation)	The estimated ELEXON implementation cost is 2 man days for which equates to £440.	February 2010 Release suitable.

6 Implementation Approach

6.1 We recommend that CP1298 should be approved for the February 2010 Systems Release.

6.2 We noted that one respondent requested 365 Working Days in order to implement CP1298. We discussed this with the respondent and highlighted that the majority of respondents to CP1298 had indicated that a February implementation date was suitable.

6.3 The respondent believed that because the 6 Reactive Power CPs were linked they should be included in the same release. We highlighted to the respondent that we did not believe that CP1298 should prevent the other Reactive Power CPs from being implemented as this would delay the progress relating to the provision of accurate and valid Reactive Power data. The respondent remained of their view, but agreed that they could implement CP1298 in February.

7 Conclusion

7.1 The majority of responses were in favour of the proposed changes. The views expressed by those in favour believed that CP1298 would go a long way towards ensuring that Licensed Distribution System Operators (LDSOs) received the data required to operate their networks, and to calculate Distribution Use of System (DUoS) charges. In addition these changes will ensure that Suppliers fulfil their BSC Obligations by providing accurate Reactive Power data to LDSOs.

7.2 The respondents who disagreed with the proposed solutions have not changed their views, and their comments have been included within this report.

7.3 After considering the comments received we still believe that the solution proposed by CP1298 is the most effective solution.

8 Recommendation

8.1 We recommend, based on the additional benefit of being able to provide accurate Reactive Power data to LDSOs, ensuring that Parties meet their BSC obligations to provide accurate Metered data, and majority industry support, that you:

- **APPROVE** CP1298 for implementation in the February 2010 Release.

Lead Analyst: Stuart Holmes, tel. 020 7380 4135 email stuart.holmes@elexon.co.uk.

Table 1: Industry Impact Assessment Summary of CP1298 – Requirement on MOAs to Configure Meters to Record Half Hourly Reactive Power Data (for Half Hourly Settled CT-Metered Customers)

IA History CPC number	CPC00662	Impacts	BSCP514

Organisation	Capacity in which Organisation operates in	Agree?	Days to Implement
The Electricity Network Company	Distributor	Yes	-
E.ON	Supplier	Yes	-
Electricity North West Limited	LDSO	Yes	
TMA Data Management Ltd	NHHDC, NHHDA, HHDC, HHDA	Yes	-
EDF Energy	Supplier, NHH Agent and HH MOP	Yes	60
EDF Energy Networks (EPN,LPN,SPN) and EDF Energy (IDNO) Ltd	LDSO, SMRS, UMSO	Yes	-
IMServ	NHHDC / NHHDA	Yes	90
E.ON UK Energy Services Limited	NHHDC/DA	Yes	-
Scottish and Southern Energy	Supplier/Generator/ Trader / Party Agent / Distributor	Yes	-
CE Electric UK	LDSO, UMSO	Yes	-
British Energy	Supplier	Yes	-
ScottishPower	Supplier, LDSO, HHDA, NHHDA, HHDC, NHHDC, HHMOA, NHHMOA	No	180
Western Power Distribution	LDSO, HHMOA, UMSO, MA, SMRA	No	-
Stark Software International Ltd	HHDC/HHDA/NHHDC/NHHDA	No	30
NPower Limited	Supplier, Supplier Agents	Neutral	365

Table 2: Impact Assessment Responses[23]

Organisation	Agree?	Comments	Impacted?	ELEXON Response
Electricity North West Limited	Yes	**Comments:** This change will enhance our current practice of reactive power charging by ensuring that meters have the facility to record reactive power data, subsequently aligning with our licence condition statement.	-	-

[23] Please note that we have only included responses in this table when the respondent provided additional information.

Organisation	Agree?	Comments	Impacted?	ELEXON Response
TMA Data Management Ltd	Yes	**Impact:** As a HHDC, we are already capable for retrieving the reactive power data and transmit validated reactive data to the Supplier and Distributor if the metering is programmed to record it.	-	-
EDF Energy	Yes	**Capacity in which Organisation is impacted:** MOP **Impact on Organisation** Field processes **Implementation**: No. of Calendar Days 60 **Would implementation in the proposed Release have an adverse impact?** No	Yes	-
EDF Energy Networks (EPN,LPN,SPN) and EDF Energy (IDNO) Ltd	Yes	**Impact on Organisation's Systems and/or Processes?** No **Capacity in which Organisation is impacted** LDSO **Impact on Organisation:** Improved Data Quality and more accurate DUoS Billing	No	-
Imserv	Yes	**Capacity in which Organisation is impacted:** MOA **Impact on Organisation:** Process Changes **Would implementation in the proposed Release have an adverse impact?** No	Yes	-
Scottish and Southern Energy	Yes	Section 8.4 of BSCP514 provides guidance for Complex Sites. At present, this only includes reference to Active energy and believe the proposed changes should perhaps include reference to reactive energy.	No	We contacted the respondent and highlighted that we were currently looking into the potential impacts on section 8.4 of BSCP514. We indicated that if there was an impact we would need to address it as part of a follow up CP due to the complex nature of this section. The respondent agreed with our rationale.

Organisation	Agree?	Comments	Impacted?	ELEXON Response
ScottishPower	No	**Comments:** ScottishPower agrees with the sentiment and goals of the change that reactive energy should be recorded for HH customers. However, as an LDSO, ScottishPower disagrees with limiting reactive energy recording to CT sites only. If a customer elects to become HH even if using whole current then they are liable for reactive energy charges and this is reflected in our DUoS charges which they incur. Therefore without the CP being extended to all HH sites we feel we can not support the CP at this time. **Impact on Organisation's Systems and/or Processes?** Yes **Capacity in which Organisation is impacted:** LDSO, MOA, Supplier **Impact on Organisation:** Internal process changes will be required however it is not envisaged there would be system changes required to implement the change **Would implementation in the proposed Release have an adverse impact?** No **Other Comments:** ScottishPower agrees with the aims of this and the other related CPs. However, we believe that the CP does not go far enough and should not be limited to CT sites only. If the CP was to be extended to all HH CT premises and elected HH WC or CT premises, we would be happy to give our full support to this CP.	Yes	We contacted the respondent and highlighted that the Working Group had discussed this issue at length. We indicated to the respondent that the Working Group did not feel that they had sufficient evidence to suggest that LDSOs would require Reactive Power data from the elective HH side of the market, as this would provide minimal benefit to LDSOs. In addition the Working Group felt that unless the common charging methodology that emerges from industry discussions (The seven electricity Distribution Network Operator (DNO) members of the Energy Networks Association (ENA) are currently working together towards achieving commonality on their charging methodologies and tariff structures, with a view to implementing changes from April 2010) highlights the need for Reactive Power charges within elective HH segment, this requirement would not be necessary. With this in mind, the Working Group decided to limit the scope of CP1298 to HH customers within CT operated sites only. They believed that this would be the first step in addressing Reactive Power data issues and would provide the greatest benefit with the least possible impact. The respondent still believed that there were HH customers within the Whole Current segment that should be included within the scope.

Organisation	Agree?	Comments	Impacted?	ELEXON Response
E.ON UK Energy Services Limited	Yes	**Impact:** Yes **Capacity in which Organisation is impacted:** MOA **Impact on Organisation:** Modified procedures would be required for the re-configuration of legacy meters	Yes	-
Western Power Distribution	No	The amendments to BSCP514 imply it is only mandated for CT supplies and the CP says the obligation does not apply to whole current but this is not reflected in the changes to COP5 and COP10. The new BSCP also says if the meter has the capability it must be programmed (albeit only for CT). We think the changes should say: When trading HH COP5/COP10 must be setup to record interval kVArh import data. As we need kVArh import to correctly bill any HH site the distinction between CT and Whole Current (and any assumption that whole current COP10 will not trade HH) is inappropriate. **Impact on Organisation's Systems and/or Processes?** Yes **Capacity in which Organisation is impacted**: HHMOA\LDSO **Impact on Organisation:** Procedural changes and update to LWIs.	Yes	Please see response to Scottish Power.
Stark Software	No	This would require the MOP to know if the meter was to be settled as HH or NHH. It is likely that if	Yes	We contacted the respondent and highlighted that the Meter Operator (MOP) would be

Organisation	Agree?	Comments	Impacted?	ELEXON Response
International Ltd		implemented, MOPs will configure all meters with HH reactive, causing unnecessary confusion/cost in non-settlement HH data provision to suppliers and customers. In the elective HH market, the metering point would not otherwise have had HH reactive data and this requirement again goes against the principle of low cost meter provision and collection in this market. In a later CP (CP1299), the HHDC is required to collect this data if available. **Capacity in which Organisation is impacted:** HHDC **Impact on Organisation** Increased costs of collection and transmission of data compared with the current (active energy only) requirement in the elective market. CP1299 also. **Would implementation in the proposed Release have an adverse impact?** No		expected know whether or not the Meter was to be settled HH or NHH. They would know this via: 1. their internal systems; and 2. their contracts with the supplier. We do not believe that this would be a major issue for MOPs. The respondent noted our response; however they believed that if the MOP configured the Meter to provide Reactive Power data within the elective HH segment of the market, it would go against the principle of low cost Meter provision and collection within this segment of the market. We indicated to the respondent that BSC Parties are required to supply valid and accurate Reactive Power data to LDSOs as part of their BSC Obligations. We stressed that this CP was aimed at creating the mechanism for that obligation. The respondent remained of their view.
NPower Limited	Neutral	**Comments:** Whilst we agree that meters should be configured to record half-hourly Reactive Import, we do not believe there is a strong enough case to also configure the meter to record half-hourly Reactive Export. Mandating this requirement will increase the volume of data between participants and have an associated cost. Is there any merit in collecting a stream of zero values on the Reactive Export channel for the vast majority of half-hourly settled CT metered customers?	Yes	We contacted this respondent and highlighted that the Working Group believed that such data would be of increasing importance in the future, as a result of moves towards a common charging methodology, and increasing pressure on LDSOs to manage losses on their networks for environmental reasons. For these reasons, the view of the Group was that meters (within the scope of CP1298) should be configured to

Organisation	Agree?	Comments	Impacted?	ELEXON Response
		We also have the following issues: • If the MOA is unable to identify a CT metered site is it likely that the MOA will configure the meter to record Reactive Power values irrespective of whether it is a CT metered or whole current? • We are aware of existing D0268 issues and have some concern that mandating a solution will magnify these issues. • Is there a lower cost solution that would target specific types of site more effectively and encourage those sites to manage their Reactive Power flows to help reduce distribution network costs? Also we have noticed that for CP 1299 "Requirement on Half Hourly Data Collectors to Collect and Report Reactive Power Data (where the Meter is configured to record it)" we noted the incorrect CP Number in our comments. Comment "Our only concern with this is alluded to in our response to CP1297" should read "Our only concern with this is alluded to in our response to CP1298". **Impact on Organisation's Systems and/or Processes?** Yes **Capacity in which Organisation is impacted:** MOA **Impact on Organisation:** Our MOA would have to update their automated validation routines, handheld devices and meter templates within their		provide Reactive Power values. In relation to the MOA being able to identify a CT metered site, we believe that if this is an issue then the failing is likely to be with the LDSO (D0170 incorrect). Therefore the incentive is on the LDSO to get good information to the MOA in order to receive good Reactive data back. We discussed D0268 issues with the respondent and indicated that we did not feel that this CP would magnify those issues. We also highlighted that D0268 issues would be addressed by the Technical Assurance Agent and should therefore not hamper progress regarding Reactive power data provision. In terms of a low cost solution we highlighted that the Working Group had not provided any alternative low cost solutions and we are not aware of any low cost alternatives either. We discussed the implementation approach with the respondent and highlighted that the majority of respondents to CP1298 had indicated that a February implementation date was suitable. The respondent believed that because the 6 Reactive Power CPs were linked they should be included in the same release. We highlighted to the respondent that we did not believe that CP1298 should prevent the other Reactive Power CPs from being implemented as this would hamper the progress relating to the provision of accurate and valid Reactive Power data. The respondent noted our views but asked that

Organisation	Agree?	Comments	Impacted?	ELEXON Response
		propriety metering software. **Comments:** As CP1296, CP1297, CP1298 & CP1299 were raised to address the issue of "Absent and erroneous Reactive Power data" we believe that if approved they should go through as a package of changes in the same Release. For CP1298 our MOA has stated that they will require a minimum of 365 days lead time from approval of the redline text to implement the necessary changes to their systems and processes. Therefore, 365 days should be recommended for all 4 CPs in order that they can be included in the same Release. **Would implementation in the proposed Release have an adverse impact?** Yes. We believe that given existing pressures on our half-hourly Agents and the impact this will have on their systems, they will require a 12 month minimum lead time from approval of redline text changes. This suggests that a November 2010 Release would be more appropriate. **Costs:** Our MOA has indicated a cost of circa £300k to implement these changes.		we include their comments.

Table 3: Comments on the redline text

We did not receive any comments on the redline text.

Appendix 6 – Detailed Analysis of CP1299 - Requirement on Half Hourly Data Collectors to Collect and Report Reactive Power Data (where the Meter is configured to record it)

1 Why Change?

1.1 Background

1.2 We raised CP1299 on 05 June 2009. We issued CP1299 for impact assessment (via CPC00662) in June 2009.

1.3 The Problem

1.4 When LDSOs do not receive Reactive Power data, they are forced to make their own estimates of the missing data, for the purpose of calculating kVA Demand and Reactive Power charges. This presents difficulties for Suppliers, who potentially find it difficult to pass on to customers charges based on estimated data. The issue is made more difficult – particularly for customer groups with sites spread across the country – by the inconsistent approaches to estimation adopted by different LDSOs.

1.5 Missing Reactive Power data also creates issues for LDSOs, who require such data to understand the power flows on their networks, the capacity requirements of their customers, and the efficiency of customers' electrical usage.

1.6 The Working Group identified a number of potential root causes for missing and erroneous Reactive Power data. One of these is that HHDCs are not currently obliged to collect Reactive Power period values, even if the Meter Operator Agent (MOA) has configured the Meter to record them.

2 Solution

2.1 CP1299 proposes that the current requirement in BSCP502 relating to the collection of Reactive Power data should be strengthened to oblige the HHDC to collect and report Reactive Power data, where the MOA has so configured the Meter. The wording in paragraph 1.2 of the BSCP will be amended as follows:

- The HHDC shall have the capability to collect and record all Meter Period Value data for Reactive Power (with associated alarms), cumulative readings and maximum demand readings by Meter register that are required for the LDSO, and shall use this capability to collect (and report to the Supplier and LDSO) Meter Period Value data for Reactive Power for all those SVA MS for which it is responsible and for which the Meter Technical Details indicate that the Meter is configured to record such data.

2.2 The Working Group believes that this change will have limited impact on most HHDCs, who will in most cases already collect and report data for all the metering channels defined in the Meter Technical Details.

3 Intended Benefits

3.1 CP1299 is largely formalising existing practice, which is for the HHDCs to collect and report data for all of the Meter channels defined in the Meter Technical Details. This is preferable to the HHDC making their own decision on which channels to report data for, as it ensures all available data is provided to Suppliers and LDSOs for purposes of charging and network management, and provides clarity to Suppliers and LDSOs on what data they will be receiving.

4 Industry Views

4.1 We raised CP1299 on 2 July 2009. We subsequently issued it for impact assessment (via CPC00662) in July 2009. We received 15 responses; of these 12 agreed, 2 disagreed and 1 was neutral.

4.2 The respondents who agreed with CP1299 believed that this CP would align with current Practices and would ensure that there is no ambiguity regarding the DCs obligation to provide accurate and valid Reactive Power data to Suppliers and Licensed Distribution System Operators (LDSOs).

4.3 One of the respondents who disagreed with CP1299 believed that the CP would place and obligation on DCs to collect Reactive Power data from sites that were not even required to provide Reactive Power data. This would occur if the MOPs configured Meters to provide Reactive power data, even if it was not required in terms of the BSCP. The respondent believed that this would inadvertently place a requirement on DCs to collect data that was not required by the LDSOs.

4.4 We contacted the respondent and indicated that the aim of CP1299 was to ensure that DCs collect Reactive Power data, where it is available, in order to improve the quality of data being provided to LDSOs. We highlighted that this would align to the Distribution Connection and Use of System Agreement (DCUSA) as Suppliers are required to provide accurate Metered data to LDSOs. The respondent noted our comments, but remained of their view.

4.5 The second respondent who disagreed with CP1299 indicated that they were actually in support of the CP, but believed that this CP should be assessed in conjunction with the other Reactive Power CPs (CP1302 and CP1303 will be presented to the SVG and their next meeting).

4.6 We highlighted to the respondent that we believed that CP1302 and CP1303 aligned with the principles of CP1299 and that we did not believe that there would be any negative impacts on CP1299 if they were approved. In addition we indicated that we believed that none of the Reactive Power CPs were dependent on the other, and as such, we believed that they could be assessed independently of each other.

5 Impacts and Costs

Market Participant	Cost / Impact	Implementation time needed
Party Agents	Several MOAs and DCs highlighted that internal process changes would be needed for CP1299.	Implementation timescales ranged from between 60 to 180WDs. The majority of Party Agents believed that the February 2010 Release would be suitable.
ELEXON (Implementation)	The estimated ELEXON implementation cost is 2 man days which equates to £440.	February 2010 Release suitable.

6 Implementation Approach

6.1 We recommend that CP1299 should be approved for the February 2010 Systems Release.

6.2 We noted that one respondent requested 365 Working Days in order to implement CP1298. We discussed this with the respondent and highlighted that the majority of respondents to CP1299 had indicated that a February implementation date was suitable.

6.3 The respondent believed that because the 6 Reactive Power CPs were linked they should be included in the same release. We highlighted to the respondent that we did not believe that CP1298 should prevent CP1299 from being implemented as this would delay the progress relating to the provision of accurate and valid Reactive Power data. The respondent remained of their view, but agreed that they could implement CP1299 in February 2010.

7 Conclusion

7.1 The majority of responses were in favour of the proposed changes. The views expressed by those in favour believed that CP1299 would go a long way towards ensuring that LDSOs received the data required to operate their networks, and to calculate Distribution Use of System (DUoS) charges. In addition these changes will ensure that Suppliers fulfil their BSC Obligations by providing accurate Reactive Power data to LDSOs.

7.2 The respondents who disagreed with the proposed solutions have not changed their views. Their comments have been included within this report.

7.3 After considering the comments received we still believe that the solution proposed by CP1299 is the most effective solution.

8 Recommendation

8.1 We recommend, based on the additional benefit of being able to provide accurate Reactive Power data to LDSOs, ensuring that Parties meet their BSC obligations (to provide accurate Metered data), and majority industry support, that you:

- **APPROVE** CP1299 for implementation in the February 2010 Release.

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Table 1: Industry Impact Assessment Summary of CP1299 – Requirement on Half Hourly Data Collectors to Collect and Report Reactive Power Data (where the Meter is configured to record it)

IA History CPC number	CPC00662	Impacts	BSCP502

Organisation	Capacity in which Organisation operates in	Agree?	Days to Implement
The Electricity Network Company	Distributor	Yes	-
E.ON	Supplier	Yes	-
Electricity North West Limited	LDSO	Yes	-
TMA Data Management Ltd	NHHDC, NHHDA, HHDC, HHDA	Yes	-
EDF Energy	Supplier, NHH Agent and HH MOP	Yes	0
EDF Energy Networks (EPN,LPN,SPN) and EDF Energy (IDNO) Ltd	LDSO, SMRS, UMSO	Yes	-
Scottish and Southern Energy	Supplier/Generator/ Trader / Party Agent / Distributor	Yes	-
NPower Limited	Supplier, Supplier Agents	Yes	
CE Electric UK	LDSO, UMSO	Yes	
ScottishPower	Supplier, LDSO, HHDA, NHHDA, HHDC, NHHDC, HHMOA, NHHMOA	Yes	180
British Energy	Supplier	Yes	-
IMServ	NHHDC / NHHDA	No	90
Stark Software International Ltd	HHDC/HHDA/NHHDC/NHHDA	No	-
E.ON UK Energy Services Limited	NHHDC/DA	Neutral	-

Table 2: Impact Assessment Responses[24]

Organisation	Agree?	Comments	Impacted?	ELEXON Response
Electricity North West Limited	Yes	**Comments:** This change will enhance our current practice of reactive power charging by ensuring that Agents have a requirement to always provide the data, subsequently aligning with our licence condition statement.	N/A	-
TMA Data	Yes	**Impact:** As a HHDC, we are already capable for retrieving the reactive power data and transmit validated	No	-

[24] Please note that we have only included responses in this table when the respondent provided additional information.

Organisation	Agree?	Comments	Impacted?	ELEXON Response
Management Ltd		reactive data to the Supplier and Distributor if the metering is programmed to record it		
EDF Energy Networks (EPN,LPN,SPN) and EDF Energy (IDNO) Ltd	Yes	**Capacity in which Organisation is impacted** LDSO **Impact on Organisation** Improved Data Quality and more accurate DUoS Billing **Would implementation in the proposed Release have an adverse impact?** No	No	-
NPower Limited	Yes	**Comments:** We believe that this should remove any ambiguity that currently exists, although in practice HHDCs already collect and report data for all configured channels providing they are included in the Meter Technical Details (D0268 data flow). Our only concern with this is alluded to in our response to CP1298. The expected increase in the volume of data between participants will have an associated cost. Is there any merit in collecting a stream of zero values on the Reactive Export channel for the vast majority of half-hourly settled CT metered customers? As CP1296, CP1297, CP1298 & CP1299 were raised to address the issue of "Absent and erroneous Reactive Power data" we believe that if approved they should go through as a package of changes in the same Release. For CP1298 our MOA has stated that they will require a minimum of 365 days lead time from approval of the redline text to implement the necessary changes to their systems and processes. Therefore, 365 days should be recommended for all 4 CPs in order that they can be included in the same Release.	No	We contacted this respondent and highlighted that the Working Group believed that such data would be of increasing importance in the future, as a result of moves towards a common charging methodology, and increasing pressure on LDSOs to manage losses on their networks for environmental reasons. For these reasons, the view of the Group was that this data should be available to LDSOs. We discussed the implementation approach with the respondent and highlighted that the majority of respondents to CP1299 had indicated that a February implementation date was suitable. The respondent believed that because the 6 Reactive Power CPs were linked they should be included in the same release. We highlighted to the respondent that we did not believe that CP1298 should prevent CP1299 from being implemented as this would hamper the progress relating to the provision of accurate and valid Reactive Power data.

Organisation	Agree?	Comments	Impacted?	ELEXON Response
				In addition we believe that none of the Reactive Power CPs were dependent on the other and as such we believed that they could be assessed independently of each other. The respondent noted our views but asked that we include their comments.
ScottishPower	Yes	**Comments:** ScottishPower strongly agrees with the aims of the CP and as such supports the change. **Impact on Organisation's Systems and/or Processes?** Yes **Capacity in which Organisation is impacted :** Supplier, HHDC, LDSO, MOA **Impact on Organisation :** Internal process changes will be required however it is not envisaged there would be system changes required to implement the change	Yes	-
Imserv	No	At this time very few Suppliers have expressed either interest (or concerns) in regard to the estimation or validation of Reactive Power data to IMServ in their role as HHDC. This is despite the fact that a validation and estimation service is offered as a commercial agreement. Further, very few enquiries are received from Suppliers concerning Reactive Power data even for sites where Suppliers have taken a Validation and Estimation service. 'Significant DUoS charging issues' suggests that a large volume of sites are frequently affected – our experience based on the above points contradicts this. **Impact on Organisation's Systems and/or Processes?** Yes **Capacity in which Organisation is impacted:** HHDC	Yes	We contacted the respondent to discuss their concerns. The respondent highlighted that they were actually in support of CP1299, however, they believed that this CP should be assessed in conjunction with: • **CP1302** - 'Requirement on Half Hourly Data Collectors to Validate Reactive Power Demand Values' ; and • **CP1303** – 'Requirement on Half Hourly Data Collectors to Estimate Reactive Power Demand Values' as these CPs would have an impact on the procedures that DCs follow in collecting

Organisation	Agree?	Comments	Impacted?	ELEXON Response
		Impact on Organisation: Yes **Would implementation in the proposed Release have an adverse impact?** Yes. Additional development and processing required.		Reactive Power data. In addition the respondent indicated that the proposed solution of CP1299 aligned with their current procedures. We highlighted to the respondent that we believed that CP1302 and CP1303 aligned with the principles of CP1299 and that we did not believe that there would be any negative impacts on CP1299 if they were approved. The respondent stressed that they were in support CP1299, however, they wanted the relevant Panel Committees to assess CP1299 in conjunction with the other related CPs. We highlighted that we believed that none of the Reactive Power CPs were dependent on the other and as such we believed that they could be assessed independently of each other.
Stark Software International Ltd	No	**Comments**: In the elective HH market, the metering point would not otherwise have had HH reactive data and this requirement again goes against the principle of low cost meter provision and collection in this market as the HHDC is required to collect this data if available. Many existing COP5 HH meters already have active energy only. MOPs may have difficulty in identifying HH/NHH COP10 Settlement arrangements and make mistakes in either	Yes	We contacted the respondent and highlighted that the Working Group believed that this change would have limited impact on most HHDCs, who will in most cases already collect and report data for all the metering channels defined in the Meter Technical Details. In addition we indicated that the aim of CP1299 was to ensure that DCs collect Reactive Power data, when it is available, in

Organisation	Agree?	Comments	Impacted?	ELEXON Response
		direction. **Impact on Organisation's Systems and/or Processes?** Yes **Capacity in which Organisation is impacted**: HHDC **Impact on Organisation**: Increased costs of collection and transmission of data compared with the current (active energy only) requirement in the elective market. See CP1298 also.		order to improve the quality of data being provided to LDSOs. We highlighted that this would align to the DCUSA agreement where Suppliers are required to provide accurate Metered data to LDSOs. We also highlighted that following discussions with MOPs, we did not believe that they would have difficulty in identifying whether a Meter was HH or NHH Settled. The respondent noted our comments but remained of their view.
E.ON UK Energy Services Limited	Neutral	Although we are neutral on this CP we do consider it to be a logical extension of the related CPs	No	-

Table 3: Comments on the redline text

We didn't receive any comments on the redline text.

Appendix 7 – Detailed Analysis of CP1300 - System changes to support Change of Market Participant ID for the SVA Agent and MDD Agent Roles from 'CAPG' to 'SVAA'

1 Why Change?

1.1 **Background**

1.2 ELEXON raised CP1300 on 05 June 2009 as requested by Capgemini. This was a result of Logica taking over the BSC Services Contract as Business Process Operator (BPO) / Host of the Central Systems.

1.3 **The Problem**

1.4 Capgemini feel the MPID currently in use by the SVA Agent ("CAPG") is linked closer to them as a company, rather than the role. They would not like any potential errors / issues with the BSC Central Systems to reflect badly on them.

2 Solution

2.1 A number of system / application updates are required:

System	Solution
Market Domain Data (MDD)	A new MPID "SVAA" is to be created with Market Role Codes "G" and "U", the Effective From Date is to be the Market Domain Data (MDD) Go Live Date. An Effective To Date of the day before the above MDD Go Live Date is to be applied to the "CAPG" MPID and its Market Role Codes "G" and "U".
Affected Data Transfer Network (DTN) Output Flows	The MPID is contained in: • All the MDD flows sent from the SVA Agent in the From Participant ID field of the ZHD header row; • The Market Participant (MAP) and Market Participant Role (MPR) record set in the D0269 'Market Domain Data Complete Set' and D0270 'Market Domain Data Incremental Set' flows; and • The ISR (Initial Settlement & Reconciliation) Agent Appointments (IAA) table in the D0269 and D0270 flows.
Affected DTN Input Flows	The MPID is contained in all the MDD flows sent to the SVA Agent in the To Participant ID field of the ZHD header row. The Service Provider is to develop a script to resolve a potential cut-over issue with the D0265 'Line Loss Factor Data File'.
Central Registration Agent (CRA)	An extra code is to be added to the P0181 'BM Unit Registration Data File' report – a workaround to retrieve the correct identifier.
SVA Agent (ISRA)	Changes to standing data, including the System Participant ID and the active ISR and MDD Agent. The Service Provider is to provide manual scripts. All SVA Agent Operational Scripts which refer to "CAPG" will need updating. System documentation will need to be updated.
Non Half-Hourly Data	Changes to the Standing Data are required. Participants can either load

System	Solution
Aggregator (NHHDA) and Estimated Annual Consumption / Annualised Advance (EAC/AA) Software	MDD with the new definitions or the updates can be performed manually using the front end. A new "SVAA" MPID will need to be defined in the EAC/AA database, for which a manual update (SQL script) is to be issued to Participants by the Service Provider.
Performance Assurance Reporting and Monitoring System (PARMS)	A number of filetype definitions and database tables will need an update from "CAPG" to "SVAA". System documentation will need to be updated.

3 Intended Benefits

3.1 CP1300 would allow a more generic MPID to be used by the role of the SVA Agent. There is potential for the Service Provider to change again in the future and the use of 'SVAA' is a clearer representation of the role and better future proofed against further changes in due course.

4 Industry Views

4.1 CP1300 was issued for impact assessment in June 2010 via CPC00662. We received 15 responses; of these 11 agreed, 2 disagreed and 2 were neutral.

4.2 None of the 11 respondents who agreed with the change provided comments.

4.3 The two respondents who disagreed with CP1300 both highlighted that they felt there is no business benefit; just a large cost and risk to Settlement. They also raised the point that there are a number of Parties whose MPIDs do not resemble the current business ownership, through a number of mergers and acquisitions which have occurred within the market.

4.4 A respondent who was neutral commented they were "happy to change but don't really see the need".

5 Impacts and Costs

Market Participant	Cost/Impact	Implementation time needed
BSC Agent (Application Management and Development; Business Process Operator)	Development costs for CVA, SVA and Minor Applications cost: £9,990 Testing and documentation costs for CVA, SVA and Minor Applications £27,599 Software development and testing for PARMS £6,653 **Total BSC Agent cost £44,242**[25]	February 2010 Release suitable
Data Transfer Network	There is no charge for the DTN to accept both MPIDs until the market has changed over (note this is separate from the BSC Systems accepting the "CAPG" MPID after go-live).	February 2010 Release suitable

[25] These costs are the correct costs and slightly higher than the ones provided in the Change Proposal form. This is due to the final cost of the PARMS development now being formalised.

ELEXON (Implementation)	ELEXON will be supervising the changes for the 3 development contracts, deploying the PARMS upgrade, providing witness to the software testing, and co-ordinating the industry participant testing. **Total ELEXON Cost £8,250** * Note industry participation will be required for industry participant testing.	February 2010 Release suitable
Market participants	All Market Participants who receive automated flows from and send automated flows to the SVA Agent are impacted. 9 of the 15 respondents indicated they would need time to implement the system changes: • 2 x 1 month • 4 x 3 months • 2 x 6 months • 1 x 9 months Implementation in the February 2010 Release would mean a 6-7 month timescale.	February 2010 Release suitable

6 Implementation Approach

6.1 ELEXON recommends CP1300 is implemented in the February 2010 Release, as this is the next available release, and can be met by all but one respondent. Please note that the go-live date is to be an MDD go-live date close to this time, not the February Release go-live date.

6.2 One Party has stated they will not be able to meet the timescales. After further consultation, they have stated the earliest possible Release for them to meet is the June 2010 Release. This is due to the large MDD change (CP1269 'Publication of Additional Non Half Hourly Combination Data in Market Domain Data') which is due to go live as part of the November 2009 Release. The respondent stated it is too difficult for large scale MDD changes to be implemented in consecutive Releases.

6.3 Table: Advantages of the different implementation options:

Advantages of February 2010 Implementation	Advantages of June 2010 Implementation
Change will be completed by current Service Provider, under the existing contract. The BSC Agent costs provided above are indicative only if CP1300 is not implemented in February 2010, and could change; this is due to the possibility of a new Service Provider completing development work for June 2010 or a new contract being in place for the June Release. Risk of implementation slightly increased for June due to the potential for a new Service Provider / Service Provider handover in April 2009.	Increased time between MDD changes All market participants capable of completing the change in these timescales. Risk of implementation increased for February as one market participant has indicated that they cannot meet this date.

6.4 As an implementation option, if CP1300 is approved, the industry could speak to the Data Transfer System (DTS) User Group and explore a fix where the DTN automatically converts the files. This could work out to be more cost effective for participants than individual system adjustments

6.5 The DTN will accept both MPIDs after go-live for as long as is needed for participants to change their own systems. However, this does not mean files will be accepted by the BSC Systems.

7 Conclusions

Approving / Rejecting CP1300

7.1 The majority of the industry agreed with the change as they either

- agreed with the justification within CP1300; or
- they could not find anything wrong with the request, as opposed to believing it is necessary.

7.2 Capgemini has not raised any convincing legal reason to change the MPID, and it is also correct to say that many BSC Parties use MPIDs which are not entirely reflective of their current business ownership.

7.3 However, it is noted that Capgemini has a concern that the MPID is associated with it and therefore that if an error / issue were to arise stemming from the new Service Provider, this might reflect badly on them even though it no longer provides the service.

7.4 The solution would ensure this issue does not arise again.

7.5 The Release which best fits the implementation should be treated as a separate issue to the approval of CP1300.

Implementing CP1300

7.6 There are risks for implementing in February 2010 (not all participants are able to make this date) and June 2010 (current costs are indicative only, and could increase).

7.7 There are options for the industry with regard to the DTN and the Service Provider to make the cut-over easier on market participants who could not meet the timescales, but these would come at a cost.

7.8 The risks for June 2010 could be countered by applying for the development work to be completed during the current financial year. Many of the BPO activities however will need to be completed on or around the implementation date.

8 Recommendation

8.1 We recommend, based on CP1300 more clearly reflecting the role of the BSC Central Systems within its interactions, and majority industry support that you:

- **APPROVE** CP1300.

8.2 We recommend (provided the decision in 8.1 is to approve the CP), that due to the potential increase in implementation costs and the risk to Settlement of implementing in June 2010 being greater than the risks of implementing in February 2010, that you:

- **APPROVE** the February 2010 Release for the implementation of CP1300.

Lead Analyst: Graeme Windley, tel. 0207 380 4346 or email graeme.windley@elexon.co.uk

Table 1: Industry Impact Assessment Summary of CP1300 – System changes to support Change of Market Participant ID for the SVA Agent and MDD Agent Roles from 'CAPG' to 'SVAA'

IA History CPC number	CPC00662	Impacts	CVA, SVA, MDD, NHHDA, EAC/AA and PARMS software

Organisation	Capacity in which Organisation operates in	Agree?	Days to Implement
The Electricity Network Company	Distributor	Yes	-
E.ON	Supplier	Yes	180
Electricity North West Limited	LDSO	Yes	-
TMA Data Management Ltd	NHHDC, NHHDA, HHDC, HHDA	Yes	90
EDF Energy	Supplier, NHH Agent and HH MOP	Yes	0
EDF Energy Networks (EPN,LPN,SPN) EDF Energy (IDNO) Ltd	LDSO, SMRS, UMSO	Yes	180
IMServ	NHHDC / NHHDA	Yes	90
Scottish and Southern Energy	Supplier/Generator/ Trader / Party Agent / Distributor	Yes	30
Siemens Metering Services	NHHDC, NHHDA, NHHMO, HHDC, HHDA, HHMO	Yes	90
G4S AccuRead	NHHDC, NNHDA, MOP	Yes	91
British Energy	Supplier	Yes	-
E.ON UK Energy Services Limited	NHHDC/DA	No	-
NPower Limited	Supplier, Supplier Agents	No	9 months
CE Electric UK	LDSO, UMSO	Neutral	-
Stark Software International Ltd	HHDC/HHDA/NHHDC/NHHDA	Neutral	30

Table 2: Impact Assessment Responses[26]

Organisation	Agree?	Comments	Impacted?	ELEXON Response
The Electricity Network Company	Yes	**Impact:** Distributor	Yes	-
E.ON	Yes	**Impact on Organisation's Systems and/or**	Yes	-

[26] Please note that we have only included responses in this table when the respondent provided additional information.

Organisation	Agree?	Comments	Impacted?	ELEXON Response
		Processes? Yes **Capacity in which Organisation is impacted**? Supplier **Impact on Organisation:** System / processes		
Electricity North West Limited	Yes	**Comments:** There will be a small impact via a system change and subsequent testing to ensure we can process the amended flow. **Impact on Organisation's Systems and/or Processes?** Yes **Capacity in which Organisation is impacted?** LDSO **Impact on Organisation?** Small impact on systems and processes.	Yes	-
TMA Data Management Ltd	Yes	**Capacity in which Organisation is impacted:** NHHDC, NHHDA, HHDC, HHDA **Impact on Organisation:** Systems **Implementation :** No. of Calendar Days 90 **Costs:** The estimated cost for all 4 agencies is estimated to be £14 K	Yes	-
EDF Energy	Yes	**Comments:** We do not see that changing this id will have any impact as it will be dealt with under process for MDD updates	No	-
EDF Energy Networks (EPN,LPN,SPN) EDF Energy (IDNO) Ltd	Yes	**Capacity in which Organisation is impacted** LDSO **Impact on Organisation?** System and Process changes **How much Implementation Notification is required from receipt of approved redline text changes?**	Yes	-

Organisation	Agree?	Comments	Impacted?	ELEXON Response
		No. of Calendar Days 180 **Would implementation in the proposed Release have an adverse impact?** No		
Imserv	Yes	**Capacity in which Organisation is impacted:** HHDA, NHHDA **Impact on Organisation:** Some configuration changes required **Would implementation in the proposed Release have an adverse impact?** No	Yes	-
Scottish and Southern Energy	Yes	**Impact on Organisation's Systems and/or Processes?** Yes **Impact on Organisation** Systems and processes **Implementation** Days 30 - Allow for testing and making the changes	Yes	-
Siemens Metering Services	Yes	**Agree Change?** Yes **Impact on Organisation's Systems and/or Processes?** Yes – 90 days required **Capacity in which Organisation is impacted:** NHHDC, NHHDA, NHHMO, HHDC, HHDA, HHMO **Impact on Organisation :** System changes required **Would implementation in the proposed Release have an adverse impact?** No adverse impact	Yes	-
ScottishPower Energy Management Ltd.	Yes	**Comments** Scottish Power believes that the proposed scripts to add in the new market participant could be managed by STAG as per the process identified in CP1295. **Capacity in which Organisation is impacted:**	Yes	-

Organisation	Agree?	Comments	Impacted?	ELEXON Response
		HHDA, NHHDA, EAC/AA, HHDC, NHHDC, PARMS & Supplier Systems. **Impact on Organisation:** Systems would have to be re-configured to accept new market participant ID **Comments:** Proposed changes to HH systems will require a minimum 6 months lead time and will therefore have an impact on the proposed release date of February 2010. **Costs:** Scottish Power feel that the proposed costs are almost prohibitively expensive for what is effectively a cosmetic change**.**		
G4S AccuRead	Yes	**Capacity in which Organisation is impacted:** NHHDA / NHHDC (Ref: EAC/AA) **Impact on Organisation :** Systems	Yes	-
E.ON UK Energy Services Limited	No	**Comments:** We believe that the change of MPID is merely a cosmetic change and as such is hard to justify the associated costs to the community as a whole. In addition there are a large number of market participants currently operating with legacy MPIDs that do not reflect the current ownership of the agency service. If there where to be a wholesale change to MPIDs throughout the community triggered by this change. In addition to the significant costs associated with these changes there would be a increased risk that flows would be misdirected with the consequent impact on settlements. **Impact on Organisation's Systems and/or Processes?** Yes **Capacity in which Organisation is impacted:** NHHDC and NHHDA	Yes	We discussed these comments with the respondent and explained that ELEXON understands the arguments presented but will be recommending the CP is approved in line with the majority of industry respondents. Despite many companies using MPIDs which are not directly reflective of the current business ownership, the previous Central Services provider is not a BSC Party (who is bound by the BSC) but is a contractor providing services. In this regard ELEXON has noted that Capgemini is concerned that, as the current MPID is associated with it, any errors/issues could reflect badly on Capgemini despite it not holding the contract. The respondent accepted the recommendation of ELEXON, describing it as

Organisation	Agree?	Comments	Impacted?	ELEXON Response
		Impact on Organisation: Negligible **Would implementation in the proposed Release have an adverse impact?** No **Other Comments:** MDD should be updated with this change which will load automatically, therefore causing no impact. A cosmetic change seems feasible for potential future changes to the service provider – add the change of name into the testing of the new service provider?		'understandable'.
NPower Limited	No	**Comments:** There is no Business Justification for this change. Since the market opened in 1998 there has been many merges and acquisitions within the market resulting in MPIDs changing ownership. In some cases the same MPID is being used by different organisations, performing different roles, with different role codes. Therefore there are already many instances where the 4 Character MPID bares no resemblance to the name of the organisation that either owns or operates the MPID and this has not caused any issues within the market. The change of Service Provider from CAPG to SVAA is no different from previous changes within the market. MDD has already been updated to reflect the change of ownership and we believe this is sufficient. Making these additional changes will add significant costs to our Business for no benefit. **Impact on Organisation's Systems and/or Processes?** Yes **Capacity in which Organisation is impacted** Supplier, HHDC, HHDA, NHHDA **Impact on Organisation:** Settlement Systems, Agent Systems and Supplier Systems will all be impacted by	Yes	We discussed these comments with the respondent and explained that ELEXON understands the arguments presented but will be recommending the CP is approved in line with the majority of industry respondents. Despite many companies using MPIDs which are not directly reflective of the current business ownership, the previous Central Services provider is not a BSC Party (who is bound by the Code) but is a contractor providing services. In this regard ELEXON has noted that Capgemini is concerned that, as the current MPID is associated with it, any errors/issues could reflect badly on Capgemini despite it not holding the contract. The respondent replied they still disagree with the change as there is no business justification. Also asked the respondent if they could meet the February 2010 Release for implementation if this CP is to be approved as of the 4 August SVG meeting.

Organisation	Agree?	Comments	Impacted?	ELEXON Response
		this change. **Would implementation in the proposed Release have an adverse impact?** Yes **Costs:** We would incur system development costs on multiple systems and have to undertake testing on all of these which would incur cost for no apparent benefit. The process as its currently operating is not causing any issues and we don't see why it should be changed.		The respondent commented they could not meet this deadline. There is a large MDD change occurring in the November 2009 Release (CP1269 'Publication of Additional Non Half Hourly Combination Data in Market Domain Data') and the respondent stated it is too difficult for the changes to go into consecutive Releases. The earliest possible Release to implement is the June 2010 Release.
Stark Software International Ltd	Neutral	**Comments:** Happy to change, but do not really see the need. If the risks and costs are as high as indicated, consideration should be given to leaving well alone. **Impact on Organisation's Systems and/or Processes?** Yes **Capacity in which Organisation is impacted:** HHDA/NHHDA/HHDC/NHHDC **Impact on Organisation:** Minor system change	Yes	-

Table 3: Comments on the redline text

No redline text was required for this CP.

Appendix 8 – New Draft Change Proposals and Change Proposals

New Draft Change Proposals

DCP	CVA/SVA	Title	Description	Raised
0045	SVA and CVA	Maintenance of Outstation Type Information	At present, altering the Valid Set of 'Outstation Type' requires a formal change to the DTC. This can give rise to issues when new equipment is introduced outside the DTC release timescales. The result is that the Valid Set will often be out of date, and participants have to resort to manual workarounds in order to transfer the necessary information. DCP0045 sets out 6 options, concerning how the Valid set of Outstation Type could be maintained in a more transparent and efficient way.	03/07/09

New Change Proposals

CP	CVA/SVA	Title	Description	Raised
1301	CVA	Registration Requirements for System Connection Points Between Onshore Distribution Systems and Offshore Transmission Systems	For some time now, BERR and Ofgem have been developing a new regulatory regime for Offshore licensed Transmission Systems. In June 2009 the Secretary of State approved changes to the Balancing and Settlement Code. The approved changes are now in the relevant sections of the BSC. CP1301 recommends that these changes are reflected in the relevant Code Subsidiary Documents.	03/07/09
1302	SVA	Requirement on Half Hourly Data Collectors to Validate Reactive Power Demand Values	The reporting of erroneous Reactive Power data to LDSOs and Suppliers potentially leads to incorrect DUoS charges and other issues. CP1302 recommends extending the scope of existing validation processes to include Reactive Power data. This would reduce errors in those industry processes that use Reactive Power data (e.g. DUoS charging), and reduce the administrative overhead of data errors on Suppliers, LDSOs and customers.	03/07/09
1303	SVA	Requirement on Half Hourly Data Collectors to Estimate Missing Reactive Power Demand Values	The estimation methods defined in section 4.2.1 of BSCP502 'Half Hourly Data Collection for SVA Metering Systems Registered in SMRS' have a proven track record of mitigating the impact of missing Active Power data on settlement processes. CP1303 recommends extending these methods to include Reactive Power. This would reduce the impact of missing data on DUoS charging and network management functions, and hence bring benefits to Suppliers, LDSOs and customers.	03/07/09

Appendix 9 – Release Information

Key to Release Plan

Change Proposals and Modification Proposals in **BLACK** text represents SVA changes, **RED** text represents CVA changes and **BLUE** text represents changes which impact both the SVA and CVA arrangements.

The Authority decision dates are provided in the following format:	
P	Modification Proposal number
(< date)	Date by which a determination must be made by the Authority in order for the Modification Proposal to be implemented within the indicated release
Pro✓/Pro✖	Indicates that the Panel's recommendation to the Authority was to Approve/Reject the proposed Modification
Alt✓/Alt✖	Indicates that the Panel's recommendation to the Authority was to Approve/Reject the Alternative Modification

		Release Date			
		November 2009 Scope (Imp. Date 05 Nov 09)	**February 2010 Scope (Imp. Date 25 Feb 10)**	**June 2010 Scope (Imp. Date 24 Jun 10)**	**Standalone Releases**
Change Proposals	**Pending**	1288	1267 v2.0, 1295, 1296, 1297, 1298, 1299, 1300, 1301, 1302, 1303	Currently there are no Change Proposals targeted at this Release.	There are currently no changes in a stand alone release.
	Approved	1248 v2.0, 1269, 1275 v2.0, 1278 v2.0, 1281, 1283, 1284, 1285, 1286, 1287, 1289, 1290, 1291, 1292, 1293, 1294			
Modifications	**Pending**		Currently there are no Modifications targeted at this Release.	Currently there are no Modifications targeted at this Release.	
	Approved	P217 Alt✓, P223 Alt✓, P231 Pro✓, P232 Alt✓, P234 Pro✓			
Updates		The November 2009 Release is currently progressing to time and quality. The scope of the Release has increased to cover 1 Housekeeping Modification and 9 additional Change Proposals. Industry review of the updated Code Subsidiary Documents (CSDs) for P223 and P217 has now completed. The P223 amendments were approved by SVG on 30 June. The P217 changes will be taken for ISG approval in July. All changes for the November 09 Release will be implemented on 5 November 2009 with the exception of P223 which has an implementation date of 1 December 2009.			

Draft CP Scope of the November 2009 Release

CP	Title	Impacts	BSC Agent (Demand Led)	ELEXON Operational		Total
				Man Days	Cost	
CP1248 v2.0	Early release of Meter Technical Details by the Non Half Hourly Meter Operator Agent	BSCP514, BSCP533 Appendix A and BSCP533 Appendix B	£4,200	3	£700	£4,900
CP1269	Publication of Additional Non Half Hourly Combination Data in Market Domain Data	BSCP509, BSCP509 Appendix, SVA Data Catalogue Vol. 1 and Vol. 2	£73,775	57	£12,540	£86,315
CP1275 v2.0	Supplier Agents – Access to Meter Protocols	CoP10, BSCP601	£0	2.5	£550	£550
CP1278 v2.0	Streamlining the SVA Standing Data Change Process	BSCP507, BSCP537 Appendix 1	£0	3.75	£825	£825
CP1281	Revenue Protection: requiring NHHDC to send EAC/AA data to the Supplier via the DTC.	BSCP504	£0	1	£220	£220
CP1283	Revisions to data correction processes in BSCP18	BSCP18, NETA IDD Part 2	£1,365	2	£440	£1,805
CP1284	Ability for Third Parties to raise Change Proposals and replacement of energywatch with National Consumer Council	BSCP40, PrA Service Description, Teleswitch Agent Service description	£0	2.5	£550	£550
CP1285	Unmetered Supplies: Clarification of Central Management System requirements	BSCP520	£0	1	£220	£220
CP1286	BSCP18 Operational Review: Additional flag in Transmission Company's BOAL file to indicate an amended Bid-Offer Acceptance	NETA IDD Part 2, BMRA URS, SAA URS	£0	2.5	£550	£550
CP1287	Correction of inconsistencies in BSCP536 'Supplier Charges'	BSCP536	£1,998	3	£660	£2,658
CP1289	Correction to the Level 4 password requirement in Code of Practice 2	CoP2	£0	1.25	£275	£275
CP1290	Rationalise and Simplify Unmetered Supplies requirements following a review by an Expert Group	BSCP520	£0	3	£660	£660
CP1291	Clarify requirements on Meter Administrators relating to Equivalent Meters	BSCP520	£0	2	£440	£440
CP1292	Clarify Meter Administrator requirements relating to PECU arrays	BSCP520	£0	2.5	£550	£550
CP1293	Housekeeping changes to BSCP537 Appendix 1 – Self Assessment Document (SAD)	BSCP537 Appendix 1	£0	0	£0	£0
CP1294	Housekeeping Change to SVA Data catalogue Volume 2	SVA DC Vol. 2	£0	0	£0	£0
		Total[27]	**£81,338**	**87**	**£19,180**	**£100,518**

[27] A Tolerance of 20% applies for both Demand Led costs and ELEXON Operational Costs

Red Lined Changes for BSCP501 'Supplier Market Registration Service'

Housekeeping amendment of Section 1.9 of BSCP501: change in title for BSCP533 into paragraph 1.5 'Associated BSC Procedures'

1.9 Associated BSC Procedures

The following BSC Procedures interface with this BSC Procedure and should be read in conjunction with BSCP501.

BSCP68	Transfer of Registration of Metering Systems between CMRS and SMRS
BSCP503	Half Hourly Data Aggregation for Metering Systems Registered in SMRS
BSCP505	Non-Half Hourly Data Aggregation for Metering Systems Registered in SMRS
BSCP508	Supplier Volume Allocation Agent
BSCP513	Bulk Change of Non Half Hourly Supplier Agent
BSCP515	Licensed Distribution
BSCP533	~~PARMS Data Provision~~ PARMS Data Provision, Reporting and Publication of Peer Comparison Data
BSCP537	Qualification Process for SVA Parties, SVA Party Agents and CVA MOAs
BSCP550	Shared SVA Meter Arrangements of Half Hourly Import and Export Active Energy

Amendment to Section 1.11 of BSCP501: Acronyms and Definitions

1.11 Acronyms and Definitions

In addition the following meanings and acronyms are used in this BSC Procedure.

BSCCo	Balancing and Settlement Code Company
CD	Calendar Days being all Working Days & Non-Working Days
CMRS	Central Meter Registration Service
DA	Data Aggregator (either Half Hourly or Non-Half Hourly)

Data	Those items denoted as used by the SMRS in the SVA Data Catalogue
DC	means Data Collector (either Half Hourly or Non-Half Hourly)
DUoS	Distribution Use of System
EFSD {REGI}	Effective From Settlement Date {Registration}
HHDA	Half Hourly Data Aggregator
Invalid data	Data which falls outside pre-defined parameters, or is incomplete or is corrupt
LDSO	Licensed Distribution System Operator
MDDM	Market Domain Data Manager
MOA	Meter Operator Agent
Metering System Registration Data	All BSCCo Required Data associated with Data Collector appointment; Data Aggregator appointment and Registration plus SVA Metering System Standing Data
Metering System Standing Data	All Code Required Data associated with SVA Metering Systems, Energisation Status, GSP Group, Line Loss Factor Class, Measurement Class, Profile Class, Standard Settlement Configuration and Measurement Quantity
MRA	Master Registration Agreement
MSID	Metering System Identifier (has the same meaning as Supply Number core data as defined in the MRA)
NHHDA	Non-Half Hourly Data Aggregator
SMRA	Supplier Meter Registration Agent
SMRS	Supplier Meter Registration Service
SSD	Supply Start Date (also known as Effective from Settlement Date {REGI})
SVA	Supplier Volume Allocation
SVAA	Supplier Volume Allocation Agent
Valid data	Data which falls within pre-defined parameters, and is complete and is not corrupt
Validation	The process by which data is tested in order to establish whether it is 'valid data' or 'invalid data'
WD	Working day

All other terms are defined in the Balancing and Settlement Code.

Amendment to Section 4.3 of BSCP501: Addition of validation rules

4.3 Data Validation

The SMRS must validate all BSCCo Required Data submitted before accepting or rejecting the data.

Upon rejection of data, the SMRA shall set out all the reasons for rejection to the sending market participant.

The SMRA shall ensure that all data for SVA Metering Systems conform with the rules outlined in the following table.

Property	Non Half Hourly	Half Hourly
Profile Class	Valid Profile Class (as specified in MDD) required	Profile Class not required
Standard Settlement Configuration	Valid Standard Settlement Configuration (as specified in MDD) required	Standard Settlement Configuration not required
Data Aggregator Appointment	Data Aggregator required to be specified as non half hourly in MDD	Data Aggregator required to be specified as half hourly in MDD
Data Collector Appointment	Data Collector required to be specified as non half hourly in MDD	Data Collector required to be specified as half hourly in MDD
LLF Class Id	Valid LLF Class Id (as specified in MDD) required.	Valid LLF Class Id (as specified in MDD) required.
MOA Appointments for Unmetered Supplies	MOA required to be specified as Unmetered Supply Operator in MDD to ensure a valid Unmetered Supply Operator is appointed as the MOA.	MOA required to be specified as Meter Administrator in MDD to ensure a valid Meter Administrator is appointed as the MOA.

No further changes have been made to this BSCP

Red Lined Changes for BSCP520 'Unmetered Supplies registered in SMRS'

Clarification of Half Hourly Unmetered Supplies registration to Section 1.3.8 'Half Hourly Trading'.

1.3.8 Half Hourly Trading

The Supplier shall appoint Party Agents and send the registration details to SMRA. In addition the Supplier shall nominate the MA as the Meter Operator Agent (MOA).

The Supplier shall confirm with the UMSO the type of EM that is to be used in the LDSO's area associated with the MSID and whether this requires photo-electric cell unit (PECU) arrays or a Central Management System (CMS) to be used.

The Supplier shall advise the UMSO of the appointed MA. The UMSO shall send a copy of the current summary inventory to the MA of a passive EM or dynamic PECU EM appointed for an MSID. Where the UMSO requires more than one PECU array to be installed for an MSID, the summary inventory shall identify the Apparatus, suitably codified, to be assigned to each PECU array. Where a CMS is required, the UMSO shall create and send a control file to the MA detailing the Apparatus that is to be managed by the CMS.

In addition, any agreed updates to the summary inventory or any control file shall be advised to the appointed MA.

Housekeeping amendment of Section 1.4 'Other Sections within the BSCP' of BSCP520: Removal of any references to Section 2

1.4 Other Sections within the BSCP

The remaining sections in this document are:

Section 2 - This section is no longer in use.

Section 3 - Interface and Timetable Information:- this section defines in detail the requirements of each business process~~, as displayed in Section 2~~. Neither the UMSO or the MA can send or receive flows using the Data Transfer Service. Where Section 3 identifies either the UMSO and/or the MA being the sender/and or recipient of a 'D' flow, the data items to be provided will be as included in the BSC SVA Data Catalogue, however the method of sending the information will be manual e.g. e-mail.

Section 4 - Appendices:- this section provides supporting information to this BSCP.

No further changes have been made to this BSCP

Red Lined Changes for BSCP501 'Supplier Meter Registration Service'

Housekeeping amendment of Section 1.9 of BSCP501: change in title for BSCP533 into paragraph 1.5 'Associated BSC Procedures'

1.9 Associated BSC Procedures

The following BSC Procedures interface with this BSC Procedure and should be read in conjunction with BSCP501.

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BSCP505	Non-Half Hourly Data Aggregation for Metering Systems Registered in SMRS
BSCP508	Supplier Volume Allocation Agent
BSCP513	Bulk Change of Non Half Hourly Supplier Agent
BSCP515	Licensed Distribution
BSCP533	~~PARMS Data Provision~~ PARMS Data Provision, Reporting and Publication of Peer Comparison Data
BSCP537	Qualification Process for SVA Parties, SVA Party Agents and CVA MOAs
BSCP550	Shared SVA Meter Arrangements of Half Hourly Import and Export Active Energy

Amendment to Section 1.11 of BSCP501: Acronyms and Definitions

1.11 Acronyms and Definitions

In addition the following meanings and acronyms are used in this BSC Procedure.

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Data	Those items denoted as used by the SMRS in the SVA Data Catalogue
DC	means Data Collector (either Half Hourly or Non-Half Hourly)
DUoS	Distribution Use of System
EFSD {REGI}	Effective From Settlement Date {Registration}
HHDA	Half Hourly Data Aggregator
Invalid data	Data which falls outside pre-defined parameters, or is incomplete or is corrupt
LDSO	Licensed Distribution System Operator
MA	Meter Administrator
MDDM	Market Domain Data Manager
MOA	Meter Operator Agent
Metering System Registration Data	All BSCCo Required Data associated with Data Collector appointment; Data Aggregator appointment and Registration plus SVA Metering System Standing Data
Metering System Standing Data	All Code Required Data associated with SVA Metering Systems, Energisation Status, GSP Group, Line Loss Factor Class, Measurement Class, Profile Class, Standard Settlement Configuration and Measurement Quantity
MRA	Master Registration Agreement
MSID	Metering System Identifier (has the same meaning as Supply Number core data as defined in the MRA)
MPID	Market Participant Identifier
NHHDA	Non-Half Hourly Data Aggregator
SMRA	Supplier Meter Registration Agent
SMRS	Supplier Meter Registration Service
SSD	Supply Start Date (also known as Effective from Settlement Date {REGI})
SVA	Supplier Volume Allocation
SVAA	Supplier Volume Allocation Agent
UMSO	Unmetered Supplies Operator
Valid data	Data which falls within pre-defined parameters, and is complete and is not corrupt
Validation	The process by which data is tested in order to establish whether it is 'valid data' or 'invalid data'
WD	Working day

All other terms are defined in the Balancing and Settlement Code.

Amendment to Section 4.3 of BSCP501: Addition of validation rules

4.3 Data Validation

The SMRS must validate all BSCCo Required Data submitted before accepting or rejecting the data.

Upon rejection of data, the SMRA shall set out all the reasons for rejection to the sending market participant.

The SMRA shall ensure that all data for SVA Metering Systems conform with the rules outlined in the following table.

Property	Non Half Hourly	Half Hourly
Profile Class	Valid Profile Class (as specified in MDD) required	Profile Class not required
Standard Settlement Configuration	Valid Standard Settlement Configuration (as specified in MDD) required	Standard Settlement Configuration not required
Data Aggregator Appointment	Data Aggregator required to be specified as non half hourly in MDD	Data Aggregator required to be specified as half hourly in MDD
Data Collector Appointment	Data Collector required to be specified as non half hourly in MDD	Data Collector required to be specified as half hourly in MDD
LLF Class Id	Valid LLF Class Id (as specified in MDD) required.	Valid LLF Class Id (as specified in MDD) required.
MOA Appointments for Unmetered Supplies	Unmetered Supply Operator to be ~~specified~~specified (from a list of Unmetered Supply Operators in MDD) ~~in~~, in place of the MOA, in the MOA field to ensure a valid Unmetered Supply~~y~~ies Operator is appointed. Appropriate 'Measurement Class' has been recorded for Non Half Hourly Unmetered Supplies	Meter Administrator to be specified (from a list of Meter Administrators in MDD), in place of the MOA ~~in~~, in the MOA field ~~in MDD~~ to ensure a valid Meter Administrator is appointed. Appropriate 'Measurement Class' has been recorded for Half Hourly Unmetered Supplies

Please note that during the registration process for Non Half Hourly or Half Hourly Unmetered Supplies, the MOA field containing the UMSO/MA MPID is dependent on the Measurement Class field of the registration flow. Therefore if a change is made to the Measurement Class, it should be accompanied by a change in the MOA field (e.g. if the Measurement Class changes from Non Half Hourly UMS to Half Hourly Unmetered Supply, this should mean a change of agent e.g. UMSO to MA).

No further changes have been made to this BSCP

Red Lined Changes for BSCP520 'Unmetered Supplies registered in SMRS'

Clarification of Half Hourly Unmetered Supplies registration to Section 1.3.8 'Half Hourly Trading'.

1.3.8 Half Hourly Trading

The Supplier shall appoint Party Agents and send the registration details to SMRA. In addition the Supplier shall nominate the MA as the Meter Operator Agent (MOA).

The Supplier shall confirm with the UMSO the type of EM that is to be used in the LDSO's area associated with the MSID and whether this requires photo-electric cell unit (PECU) arrays or a Central Management System (CMS) to be used.

The Supplier shall advise the UMSO of the appointed MA. The UMSO shall send a copy of the current summary inventory to the MA of a passive EM or dynamic PECU EM appointed for an MSID. Where the UMSO requires more than one PECU array to be installed for an MSID, the summary inventory shall identify the Apparatus, suitably codified, to be assigned to each PECU array. Where a CMS is required, the UMSO shall create and send a control file to the MA detailing the Apparatus that is to be managed by the CMS.

In addition, any agreed updates to the summary inventory or any control file shall be advised to the appointed MA.

No further changes have been made to this BSCP

Changes to Code of Practice 4

SVG102/01 - Attachment E

The following changes have been made to this document

1. Headings for tables B1, B2, B3, B4, B5 and C3 have been changed to units of sin φ, to align with BS EN 62053-23 as shown below. A diagram has been inserted with table B1 to clarify the test point requirements for Reactive Meters for CoP 1 and 2 applications.
2. New tables have been inserted into Appendix C (from BS EN 62053-22 and BS EN 62053-23), which state the percentage error limits for polyphase Active and Reactive Meters carrying a single-phase load, but with balanced polyphase voltages applied to their voltage circuits.

APPENDIX B. TEST POINTS

Meter Calibrations should be performed at the test points (values of currents) indicated in the following tables. The measured errors at these test points should not exceed the percentage error limits stated in the tables in Appendix C.

Where a test point is outside the range of the value of current given in the relevant table in Appendix C, the percentage error limit shall be taken from the percentage error limit from the value of current closest to the test point value. For example, for a CoP2 Class 0.5 active Meter, Tables B1 and B4 require it to be tested with a value of current of $0.01I_n$ at unity power factor. However, for this value of current and power factor there is no corresponding percentage error limit in Table C2. In this case the value of current (at unity power factor) nearest to $0.01I_n$, for a transformer operated Meter, is the range $0.02I_n \leq I < 0.05I_n$. Therefore, the appropriate percentage error limit will be +/- 1.0 %.

It should be noted that I_b refers to the basic current of a whole current Meter, I_n refers to the rated current of a transformer operated Meter and I_{max} to the maximum current rating of a Meter.

1. Type A Calibration Test Points

Table B1: Type A Meter Calibrations for Codes of Practice 1 and 2

Test Point	Active Meter			Reactive Meter		
Value of current (I)	System Power Factor			~~System Power Factor~~ Sin φ		
	Unity	0.5 Inductive	0.8 Capacitive*	~~Zero~~1	~~0.866~~0.5 Inductive	~~0.866~~0.5 Capacitive
0.01 I_n	X					
0.02 I_n		X	X			
0.05 I_n	X (3), Y			X, Y		
0.1 I_n		X	X		X	X
1.0 I_n	X (2), Y (5)	X (4)	X	X, Y	X	X

1.0 I_{max} or 1.2 I_n or 1.5 I_n or 2.0 I_n**	X (1)	X	X	X	X	X

Notes:
These tests shall be carried out for Import/Export directions, as registered in SMRS or CMRS for a given metering point. If the same measuring element is used for both Import and Export one additional test point only (at 1.0 I_n, Unity Power Factor, balanced) is required in the reverse direction.
X= all elements combined.
Y = each element on its own.
X,Y means tests should be carried out on all elements combined and each element on its own.
*Tests at 0.5 capacitive Power Factor are acceptable.
** Determined by overload capacity of circuit. If unspecified test at 1.0I_{max}.
Numbers in brackets identifies, for reference only, those tests specified in Statutory Instruments 1998 No. 1566 Schedule 1, Table 2 and Schedule 3, Table 2.

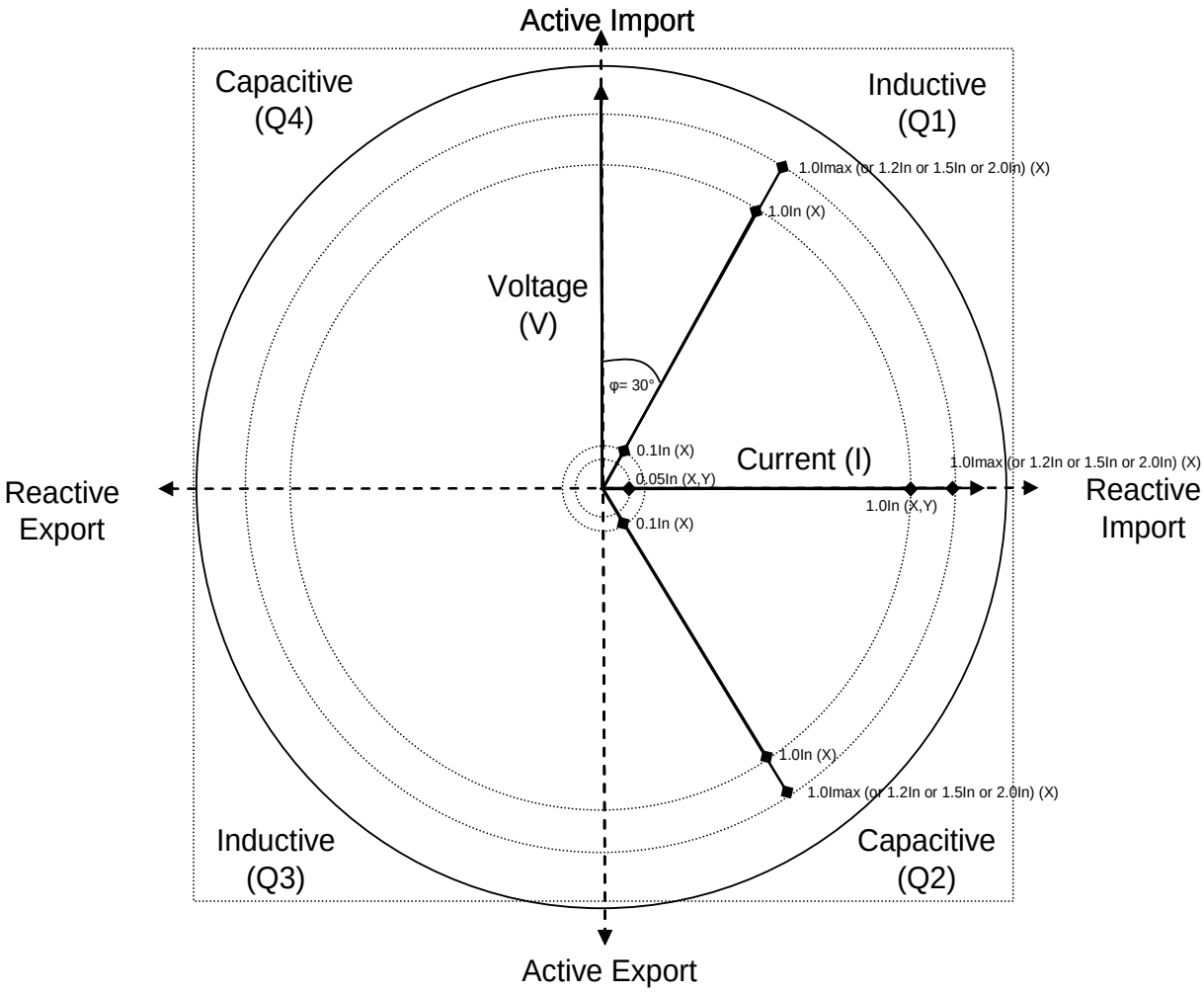

Figure 1: Example showing Type A Calibration Points for a CoP1 and 2 Reactive Energy Meter

Key
X = conduct tests on all elements combined
X,Y = conduct tests on all elements and each element on its own

Table B2: Type A Meter Calibrations for Codes of Practice 3, 5, 6 and 7

Test Point	Active Meter		Reactive Meter
Value of current (I)	System Power Factor		~~System Power Factor~~Sin φ
	Unity	0.5 Inductive	~~Zero~~1
0.05 I_b/I_n	X (3)		
1.0 I_b/I_n	X (2), Y (5)	X (4), Y (6)	X
1.0 I_{max}	X (1)		

Notes:
These tests shall be carried out for Import/Export directions, as registered in SMRS or CMRS for a given metering point. If the same measuring element is used for both Import and Export one additional test point only (at 1.0 I_b/I_n, Unity Power Factor, balanced) is required in the reverse direction.
X = all elements combined.
Y = each element on its own.
X,Y means tests should be carried out on all elements combined and each element on its own.
Numbers in brackets identifies, for reference only, those tests specified in Statutory Instruments 1998 No. 1566 Schedule 1, Table 2 and Schedule 3, Table 2.

1. Type B Calibration Test Points

Table B3: Type B Meter Calibrations for Codes of Practice 1 and 2

Test Point	Active Meter			Reactive Meter		
Value of current (I)	System Power Factor			Sin φ~~System Power Factor~~		
	Unity	0.5 Inductive	0.8 Capacitive*	~~Zero~~1	~~0.866~~0.5 Inductive	~~0.866~~0.5 Capacitive
0.05 I_n	X (3)			X		
0.1 I_n		X	X		X	X
1.0 I_{max} or 1.2 I_n or 1.5 I_n or 2.0 I_n**	X (1)	X	X	X	X	X

Notes:
These tests shall be carried out for Import/Export directions, as registered in SMRS or CMRS for a given metering point. If the same measuring element is used for both Import and Export one additional test point only (at 1.0 I_n, Unity Power Factor, balanced) is required in the reverse direction.
X= all elements combined.
*Tests at 0.5 capacitive Power Factor are acceptable.
** Determined by overload capacity of circuit. If unspecified test at 1.0I_{max}.
Numbers in brackets identifies, for reference only, those tests specified in Statutory Instruments 1998 No. 1566 Schedule 1, Table 2 and Schedule 3, Table 2.

Type B Meter Calibration for Codes of Practice 3, 5, 6 and 7

For Codes of Practice 3, 5, 6 and 7:

1. Calibrate at prevailing load when the load current > 0.1 I_n (or > 0.1 I_b for whole current Meters) and Power Factor > ± 0.8; or

2. Calibrate using an injection test when the load current < 0.1 I_n (or < 0.1 I_b for whole current Meters) and/or Power Factor < ± 0.8. The injection test shall use as a minimum 1 test point at a current of > 0.1 I_n (or > 0.1 I_b for whole current Meters) and Power Factor > ± 0.8.

3. Only the active Meter needs to be tested for Type B Meter Calibrations.

3. Type C Calibration Test Points

Table B4: Type C Meter Calibrations for Codes of Practices 1 and 2

Test Point	Active Meter			Reactive Meter		
Value of current (I)	System Power Factor			Sin φ~~System Power Factor~~		
	Unity	0.5 Inductive	0.8 Capacitive*	~~Zero~~1	~~0.866~~0.5 Inductive	~~0.866~~0.5 Capacitive
0.01 I_n	X					
0.02 I_n		X	X			
0.05 I_n	X(3),Y			X,Y		
0.1 I_n		X	X		X	X
1.0 I_{max} or 1.2 I_n or 1.5 I_n or 2.0 I_n**	X (1)	X	X	X		

Notes:
These tests shall be carried out for Import/Export directions, as registered in SMRS or CMRS for a given metering point. If the same measuring element is used for both Import and Export one additional test point only (at 1.0 I_n, Unity Power Factor, balanced) is required in the reverse direction.
X= all elements combined.
Y = each element on its own.
X,Y means tests should be carried out on all elements combined and each element on its own.
*Tests at 0.5 capacitive Power Factor are acceptable.
** Determined by overload capacity of circuit. If unspecified test at 1.0I_{max}.
Numbers in brackets identifies, for reference only, those tests specified in Statutory Instruments 1998 No. 1566 Schedule 1, Table 2 and Schedule 3, Table 2.

Table B5: Type C Meter Calibrations for Codes of Practices 3, 5, 6 and 7

Test Point	Active Meter		Reactive Meter
Value of current (I)	System Power Factor		~~System Power Factor~~ Sin φ
	Unity	0.5 Inductive	~~Zero~~1
0.05 I_b/I_n	X (3)		
1.0 I_b/I_n	X (2), Y (5)	Y (6)	X

Notes:
These tests shall be carried out for Import/Export directions, as registered in SMRS or CMRS for a given metering point. If the same measuring element is used for both Import and Export one additional test point only (at 1.0 I_b/I_n, Unity Power Factor, balanced) is required in the reverse direction.

X= all elements combined.
Y = each element on its own.
X,Y means tests should be carried out on all elements combined and each element on its own.
Numbers in brackets identifies, for reference only, those tests specified in Statutory Instruments 1998 No. 1566 Schedule 1, Table 2 and Schedule 3, Table 2.

APPENDIX C. MEASURED ERRORS

The following tables state the percentage error limits for each Class of Meter and include both whole current Meters and CT/VT operated Meters. Reference should be made to the relevant Code of Practice for the minimum Meter Class accuracy requirements.

It should be noted that I_b refers to basic current of a whole current Meter, I_n to the rated current of a transformer operated Meter and I_{max} to the maximum current rating of a Meter.

1. Accuracy Tables for Active Meters

Table C1: Summary of Class accuracy requirements for Class 0.2S and Class 0.5S Meters (single-phase Meters and polyphase Meters with balanced loads)

Value of current (I)	Power factor (Cos Ø)	Percentage error limits for Meters of Class	
		0.2S	0.5S
$0.01\ I_n \le I < 0.05\ I_n$	1	+/- 0.4	+/- 1.0
$0.05\ I_n \le I \le I_{max}$	1	+/- 0.2	+/- 0.5
$0.02\ I_n \le I < 0.1\ I_n$	0.5 inductive 0.8 capacitive	+/- 0.5 +/- 0.5	+/- 1.0 +/- 1.0
$0.1\ I_n \le I \le I_{max}$	0.5 inductive 0.8 capacitive	+/- 0.3 +/- 0.3	+/- 0.6 +/- 0.6

Source: BS EN 62053 - 22

Table C1(a): Summary of Class accuracy requirements for Class 0.2S and Class 0.5S Meters (polyphase Meters carrying a single-phase load, but with balanced polyphase voltages applied to voltage circuits):

Value of current (I)	Power Factor (Cos Ø)	Percentage error limits for Meters of Class	
		0.2s	0.5s
0.05In ≤ I ≤ Imax	1	±0.3	±0.6
0.1In ≤ I ≤ Imax	0.5 inductive	±0.4	±1.0

Source: BS EN 62053 - 22

The difference between the percentage error when the Meter is carrying a single-phase load and a balanced polyphase load at rated current I_n and unity power factor shall not exceed 0.4% and 1.0% for Meters of classes 0.2s and 0.5s respectively.

Table C2: Summary of Class accuracy requirements for Class 0.5, Class 1 and Class 2 Meters (single-phase Meters and polyphase Meters with balanced loads)

Value of current (I)		Power factor (Cos Ø)	Percentage error limits for Meters of Class		
For whole current Meters	For transformer operated Meters		0.5	1	2
$0.05\ I_b \le I < 0.1\ I_b$	$0.02\ I_n \le I < 0.05\ I_n$	1	+/- 1.0	+/-1.5	+/- 2.5
$0.1\ I_b \le I \le I_{max}$	$0.05\ I_n \le I \le I_{max}$	1	+/- 0.5	+/-1.0	+/- 2.0
$0.1\ I_b \le I < 0.2\ I_b$	$0.05\ I_n \le I < 0.1\ I_n$	0.5 inductive 0.8 capacitive	+/- 1.3 +/- 1.3	+/- 1.5 +/- 1.5	+/- 2.5 -
$0.2\ I_b \le I \le I_{max}$	$0.1\ I_n \le I \le I_{max}$	0.5 inductive 0.8 capacitive	+/- 0.8 +/- 0.8	+/- 1.0 +/- 1.0	+/- 2.0 -

Source: BS EN 62053 – 11 and BS EN 62053 - 21

2. Accuracy Tables for Reactive Meters

Table C3: Summary of Class accuracy requirements for Class 2 and Class 3 Meters

Value of current (I)		~~Power factor (Cos Ø)~~ Sin φ (inductive or capacitive)	Percentage error limits for Meters of Class	
For whole current Meters	For transformer operated Meters		2	3
$0.1\ I_b \le I \le I_{max}$	$0.05\ I_n \le I \le I_{max}$	~~0~~1	+/- 2.0	+/- 3.0
$0.2\ I_b \le I \le I_{max}$	$0.1\ I_n \le I \le I_{max}$	~~0.866 inductive or capacitive~~0.5	+/- 2.0	+/- 3.0

Source: BS EN 62053 - 23

Table C3(a): Summary of Class accuracy requirements for Class 0.2S and Class 0.5S Meters (polyphase Meters carrying a single-phase load, but with balanced polyphase voltages applied to voltage circuits):

Value of current (I)		Sin φ (inductive or capacitive)	Percentage error limits for Meters of Class	
For whole current Meters	For transformer operated Meters		2	3

$0.1\ I_b \leq I \leq I_{max}$	$0.05\ I_n \leq I \leq I_{max}$	1	+/- 3.0	+/- 4.0
$0.2\ I_b \leq I \leq I_{max}$	$0.1\ I_n \leq I \leq I_{max}$	0.5	+/- 3.0	+/- 4.0

Source: BS EN 62053 - 23

The difference between the percentage error when the Meter is carrying a single-phase load and a balanced polyphase load at basic current In and sin φ =1 for direct connected Meters, respectively at rated current In and sin φ =1 for transformer operated Meters, shall not exceed 2.5% and 3.5% for Meters of classes 2 and 3 respectively.

No further changes have been made to this document

CP1295 ATTACHMENT - REDLINE CHANGES TO BSCP508 V16 SECTION 3.7 'IMPLEMENTATION OF MDD CHANGES' – SEE BELOW:

3.7.7	In accordance with timescales published in MDD CMC.	a) Send Complete and Incremental MDD[1].	MDDM.	Relevant MDD Recipients[3].	D0269 Market Domain Data Complete Set. D0270 Market Domain Data Incremental Set.	Electronic or other method as agreed.
		b) Send Technical Product Deliverables (TPD) in accordance with the confidentiality agreement[2].	MDDM.	SVAA, HHDC.	D0269 Market Domain Data Complete Set. D0270 Market Domain Data Incremental Set.	Manual Process.
		c) Send remaining MDD dataflows.	MDDM.	NHHDC[4].	P0190 GSP Group Profile Class Tolerances[7]. D0227 Pool Market Domain Data File[8] [9].	Electronic or other method as agreed.
				NHHDA[5].	D0227 Pool Market Domain Data File [9] D0286 Data Aggregation and Settlements Timetable File. Pxxxx (**Note: the P flow number will be issued once the CP is approved**) GSP Group Profile Class Default EAC	Email
				Non-BSC Parties[6]	D0269 Market Domain Data Complete Set (excluding TPD). D0270 Market Domain Data Incremental Set (excluding TPD).	

[1] The SVAA will distribute a cut down version of these dataflows unless the MDD recipients have specifically requested, via the NHD, a full version of these dataflows. However, if all of the data items within the dataflows have changed, the SVAA will provide the complete dataflows to the recipients.

[2] The SVAA will distribute a cut down version of these dataflows unless the MDD recipients have specifically requested, via the NHD, a full version of these dataflows.

[3] MDD recipients for these dataflows will include: Suppliers, DAs, DCs, MOAs, LDSOs, UMSO, Panel, SAA, CDCA, OFGEM, SMRS, Transmission Company, and SVAA (for use in Stage 2 DPP and Initial Volume Allocation Run). The SVAA will use the MDD matrix to determine how many versions of these dataflows are distributed to each

3.7.7 (Cont/d.)			MDDM.	SVAA[10].	P0015 Profile Data File. D0278 Teleswitch BSCCo Market Domain Data File. D0286 Data Aggregation and Settlements Timetable File.[11] D0299 Stage 2 BM Unit Registration Data File.	Manual Process. Electronic or other method as agreed.

SECTION 3.7.8 - END OF DOCUMENT WILL NOT BE IMPACTED BY CP1295.

MDD recipient. These dataflows will be sent automatically from the MDDM system to the SVA System. These recipients may also request data on an ad-hoc basis from MDDM.

[4] This dataflow will be provided with every publication of the MDD, even though the data contained within the file may not have changed.

[5] These dataflows will be provided with every publication of the MDD, even though the data contained within the file may not have changed.

[6] These dataflows are optional and will only be provided to a non-BSC party if the SVAA is directed to do so by BSCCo.

[7] This dataflow will be provided with every publication of the MDD, even though the data contained within the file may not have changed.

[8] This dataflow will be provided with every publication of the MDD, even though the data contained within the file may not have changed.

[9] The version of the D0227 dataflow being sent is the Standard Settlement Configuration extract file.

[10] These dataflows will be provided with every publication of the MDD, even though the data contained within the file may not have changed.

[11] This dataflow will be sent automatically from the MDDM system to the SVA System.

CP1295 ATTACHMENT - REDLINE CHANGES TO BSCP505 V.11 SECTION 3.1.1.2 – SEE BELOW:

3.1.1 SVAA sends Market Domain Data

REF.	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.1.1.1	If required.	Request MDD from SVAA.	NHHDA.	SVAA.	NHHDA Id.	Electronic or other method, as agreed.
3.1.1.2	When published by SVAA or within 1 WD of request from NHHDA.	Send MDD.	SVAA.	NHHDA.	D0227 BSCCo Market Domain Data File. D0269 Market Domain Data Complete Set. D0270 Market Domain Data Incremental Set. D0286 Data Aggregation and Settlements Timetable File. Pxxxx **(Note: the P flow number will be issued once the CP is approved)** GSP Group Profile Class Default EAC	Electronic or other method, as agreed. Email
3.1.1.3	Within 4 working hours of receipt of MDD.	Send acknowledgement that data has been received.	NHHDA.	SVAA.	P0024 Acknowledgement.	Electronic or other method, as agreed.
3.1.1.4	If file not readable & / or not complete.	Send notification and await receipt of MDD.	NHHDA.	SVAA.	Appendix 4.3 - Validation of Data Aggregation and Settlements Timetable File. P0035 Invalid Data.	Internal Process. Electronic or other method, as agreed.

3.1.1.5	After receiving notification.	Send corrected MDD.	SVAA.	NHHDA.	Refer to 3.1.1.2 for dataflows.	Electronic or other method, as agreed.
3.1.1.6	If data in correct format.	Update database.	NHHDA.			Internal Process

SECTION 3.1.2 - END OF DOCUMENT WILL NOT BE IMPACTED BY CP1295.

CP1295 Attachment – proposed redlined changes to SVA Data Catalogue Volume 1 v29.0:

Changes to Volume 1 Appendix A

The data flow index in Volume 1 Appendix A of the SVA Data Catalogue should be modified as indicated below. Equivalent changes should then be made to the individual data flow entries in Appendix B.

Flow Ref.	Data Flow Name	Source	From	To	Version
PXXXX	GSP Group Profile Class Default EAC	BSCP505	SVAA	NHHDA	001
PXXXX	GSP Group Profile Class Default EAC	BSCP508	SVAA	NHHDA	001

Changes to Volume 1 Appendix B Data Interface Definition

GSP Group Profile Class Default EAC	PXXXX	001

Source Document	Known as	From	To	Comment
BSCP505	GSP Group Profile Class Default EAC	SVAA	NHHDA	
BSCP508	GSP Group Profile Class Default EAC	SVAA	NHHDA	

Data required from BSC Procedures:

Data Group	Data Item Name	Comment

Structure not defined	GSP Group Profile Class Default EAC
	GSP Group Id
	GSP Group Name
	Profile Class Id
	Effective From Settlement Date {GGPCDE)
	Effective To Settlement Date {GGPCDE)

CP1295 Attachment – proposed redlined changes to SVA Data Catalogue Volume 2 v25.0:

Changes for Volume 2 Appendix C

The data flow index in Volume 2 Appendix C of the SVA Data Catalogue should be modified as indicated below:

SVA Data Catalogue Volume 2: Data Items

Effective from Settlement Date
Description: The first inclusive settlement date that a default EAC applies for a GSP Group and Profile Class.

Units: None
Valid Set: A valid date within the constraints of the format.

Domain: Effective Date
Logical Format: DATE
Default Value:

Acronym:
Notes:

Effective to Settlement Date
Description: The last inclusive Settlement date for which the group description value is in effect.

Units: None
Valid Set: A valid date within the constraints of the format.

Domain: Effective Date
Logical Format: DATE
Default Value:

Acronym:
Notes:

GSP Group Profile Class Default EAC
Description: The average Estimated Annual Consumption for Metering Systems assuming a specific combination of GSP Group and Profile Class.

Units: KWh
Valid Set: Zero or positive number within the constraints of the format

Domain: Consumer Energy
Logical Format: NUM(12,1)
Default Value:

Acronym:
Notes:

Changes for Volume 2 Appendix D: Data Item Having Synonyms

The data flow index in Volume 2 Appendix D of the SVA Data Catalogue should be modified as indicated below:

Data Item Name	Synonym
GSP Group Profile Class Default EAC	Researched Default EAC

CP1296 - REDLINE CHANGES TO COP5 ISSUE 1 V6.1 CONFORMED SECTION 4 – SEE BELOW:

SECTION 1 to 3 WILL NOT BE IMPACTED BY CP1296.

4. MEASUREMENT CRITERIA

4.1. Measured Quantities and Demand Values

4.1.1. Measured Quantities

For each separate circuit the following energy measurements shall be provided:-

(i) Import kWh*
(ii) Export kWh* } *

(iii) Import k~~VA~~varh*
(iv) Export k~~VA~~varh* } *

While Active Energy values are a Settlement requirement the Reactive Energy values are not but are likely to be required by Licensed Distribution System Operators (LDSO).

4.1.2. Demand Values

For each Demand Period for each circuit the following Demand Values shall be provided:-

(i) Import kW*
(ii) Export kW* } *

(iii) Import kvar

(iv) Export kvar

* Import and/or Export metering need only be installed where a Party requires this measurement to meet system or plant conditions.

Where Import and Export metering is installed gross Import and gross Export Active Energy shall be recorded separately for Settlements.

While Active Energy values are a Settlement requirement the Reactive Energy values are not but are likely to be required by LDSO.

SECTION 4.2 - END OF DOCUMENT WILL NOT BE IMPACTED BY CP1296.

CP1296 ATTACHMENT - REDLINE CHANGES TO BSCP601 V10.1 CONFORMED – SEE BELOW:

Section 1 to 3.4.5 will not be impacted by CP1296

3.4.6 Measured Quantities {4.1.1}

The following tests shall be performed to establish the measured quantities:

(a)	establish the number and type of Measured Quantities available on the Meter;	**001**
(b)	if more than one Measured Quantity configuration is available, list all configurations;	**002**
(c)	confirm that a cumulative register display is available for each Measured Quantity (see also 3.4.12);	**003**
(d)	Import Active Energy is measured in kWh; Import Reactive Energy is measured in kvarh (*CoP 5 only*)	**004**
(e)	Export Active Energy is measured in kWh; Export Reactive Energy is measured in kvarh (*CoP 5 only*); and	**005**
(f)	confirm that Measured Quantities are available in both kilo and Mega values. *(CoPs 1 and 2 only)*	**006**

3.4.7 Demand Values {4.1.2}

The following test shall be performed to confirm that Demand values are provided:

(a)	confirm that a kW value is provided for each Demand Period for each Active Energy Measured Quantity; and kvarh value is provided for each Reactive Energy Measured Quantity (*CoP 5 only*)	**007**
(b)	where Import and Export values are provided confirm that each value is gross and recorded separately. (*Applies to CoP 5 3 and 10 only);and*	**008**
(c)	confirm that Demand values are available in both kilo and Mega values. *(CoPs 1 and 2 only)*	**009**

There will be no further changes to BSCP601 as part of CP1296.

CP1297 ATTACHMENT - REDLINE CHANGES TO COP10 ISSUE 1 V1.0

SECTION 1 to 3 WILL NOT BE IMPACTED BY CP1297.

4. MEASUREMENT CRITERIA

4.1. Measured Quantities and Demand Values

4.1.1. Measured Quantities

For each separate circuit the following energy measurements shall be provided:-

(i) Import kWh*

(ii) Export kWh* } *

(iii) Import k~~VA~~varh*

(iv) Export k~~VA~~varh* } *

While Active Energy values are a Settlement requirement the Reactive Energy values are not but are likely to be required by Licensed Distribution System Operators (LDSO).

4.1.2. Demand Values

For each Demand Period for each circuit the following Demand Values shall be provided:-

(i) Import kW*

(ii) Export kW* } *

(iii) Import kvar

(iv) Export kvar

* Import and/or Export metering need only be installed where a Party requires this measurement to meet system or plant conditions.

Where Import and Export metering is installed gross Import and gross Export Active Energy shall be recorded separately for Settlements.

While Active Energy values are a Settlement requirement the Reactive Energy values are not but are likely to be required by LDSO.

SECTION 4.2 - END OF DOCUMENT WILL NOT BE IMPACTED BY CP1297.

CP1297 ATTACHMENT - REDLINE CHANGES TO BSCP601 V10.1 CONFORMED – SEE BELOW:

Section 1 to 3.4.5 will not be impacted by CP1296

3.4.6 Measured Quantities {4.1.1}

The following tests shall be performed to establish the measured quantities:

(a)	establish the number and type of Measured Quantities available on the Meter;	**001**
(b)	if more than one Measured Quantity configuration is available, list all configurations;	**002**
(c)	confirm that a cumulative register display is available for each Measured Quantity (see also 3.4.12);	**003**
(d)	Import Active Energy is measured in kWh; Import Reactive Energy is measured in kvarh (*CoP 10 only*)	**004**
(e)	Export Active Energy is measured in kWh; Export Reactive Energy is measured in kvarh (*CoP 10 only*); and	**005**
(f)	confirm that Measured Quantities are available in both kilo and Mega values. *(CoPs 1 and 2 only)*	**006**

3.4.7 Demand Values {4.1.2}

The following test shall be performed to confirm that Demand values are provided:

(a)	confirm that a kW value is provided for each Demand Period for each Active Energy Measured Quantity; and kvarh value is provided for each Reactive Energy Measured Quantity (*CoP 10 only*)	**007**
(b)	where Import and Export values are provided confirm that each value is gross and recorded separately. (*Applies to CoP 5 3 and 10 only);and*	**008**
(c)	confirm that Demand values are available in both kilo and Mega values. *(CoPs 1 and 2 only)*	**009**

There will be no further changes to BSCP601 as part of CP1297.

CP1298 ATTACHMENT - REDLINE CHANGES TO BSCP514 V15.1 CONFORMED

SECTION 1 to 2.3.1 WILL NOT BE IMPACTED BY CP1298.

2.3.2 Installation, Removal and Re-programming of Meters

a) The MOA shall maintain records and comply with systems and processes so approved in accordance with BSCP537 to commission, recommission, remove, replace or reprogram Meters and shall inform its Associated Supplier, its Associated Data Collector and the LDSO of the nature and date of any related work carried out within such time as shall allow its Associated Data Collector to carry out its obligations to ensure that correct data is taken into Initial Volume Allocation Runs.

b) The MOA shall carry out a proving test / re-test for each Half Hourly SVA Metering System, that it is responsible for, in accordance with and in the circumstances described in Section 8.3.

c) The MOA shall set Non Half Hourly SVA Metering Systems which incorporate a clock or teleswitch with a timing mechanism to switch at a time consistent with a valid combination of Standard Settlement Configuration and Time Pattern Regime derived from Market Domain Data with an Average Fraction of Yearly Consumption valid for the GSP Group to which the SVA Metering System belongs.

d) Where multi-register Non Half Hourly Meters are installed, the MOA shall programme those for which it is responsible so that the physical registers may be mapped using the Meter Technical Details supplied to its Associated Data Collector onto logical registers forming a valid Standard Settlement Configuration.

e) When installing a NHH multi-register Meter, or when attending the site to carry out significant[1] work on such a Meter that would require re-registration of the Metering System, the MOA shall ensure that the registers of the metering asset are clearly identified[2] and that the Meter Register IDs (J0010) to be used in all relevant data flows clearly identify the registers on the metering asset to be read. (e.g. “L”, “N”, “R1”, “R2”, etc.).

f) When installing or reconfiguring Half Hourly Metering Equipment that is operated by measurement transformers, the MOA shall configure the Metering Equipment to record Half Hourly demand values for both Reactive Import and Reactive Export (except where the Metering Equipment does not have this capability, and is not required to do so by the relevant Code of Practice).

~~f~~g) The MOA shall seal and reseal Metering Equipment in accordance with Section 8.1 or 9.1.

[1] Significant work – means any work carried out on the Metering System by a competent person, that would require re-registration of the Metering System

[2] Where the identifier cannot be uniquely identified by a 2-character Meter Register ID (e.g. “CUM 3”), a label shall be applied to, or immediately adjacent to, the Meter that shows the display sequence with the equivalent Meter Register ID for each register (e.g. “CUM 2 – Reg ID = 02” etc.). For two-rate Key Meters only, the only permitted Meter Register IDs are “ 1”, “1 “, “01” or “R1” and “ 2”, “2 “, “02” or “R2”. (When installing or attending the site to carry out significant work requiring re-registration).

~~g~~h) The MOA shall request Site Technical Details from the Licensed Distribution System Operator in accordance with this BSCP.

SECTION 2.4 - END OF DOCUMENT WILL NOT BE IMPACTED BY CP1298.

CP1299 ATTACHMENT - REDLINE CHANGES TO BSCP502 V18.0

SECTION 1.1 WILL NOT BE IMPACTED BY CP1299.

1.2 Main Users of Procedure and their Responsibilities

This BSC Procedure should be used by Suppliers and their agent(s) (including Meter Operator Agents (MOAs), HHDAs and HHDCs), the SVA Agent, and by each Licensed Distribution System Operator (LDSO) and the Transfer Co-ordinator.

The HHDC shall perform the responsibilities and obligations set out in the Party Agent Service Line PSL100 and this BSC Procedure for a SVA MS for all Settlement Days for which the HHDC is appointed by the Supplier in a SMRS.

The HHDC shall use Qualified systems and processes so approved in accordance with BSCP537 in carrying out the collection of data from SVA Metering Equipment.

The HHDC shall ensure that its systems and processes so approved in accordance with BSCP537 used for the purposes of collecting data have protocols for every Meter type (including an Equivalent Meter) for which it is responsible.

The HHDC's system shall be set in accordance with Co-ordinated Universal Time (UTC) at least once every day.

On change of HHDC to a new HHDC or a new NHHDC and irrespective of whether there is a Change of Measurement Class (CoMC), the HHDC shall retain responsibility for data collected for all Settlement Days that he was appointed by the Supplier in SMRS.

The HHDC shall send active energy data to the HHDA in kWh and in clocktime.

Where the HHDC has not received data in sufficient time to enable it to fulfil its obligations as HHDC, it shall request from the Supplier or its agent that the data that has not been received be supplied forthwith.

The HHDC shall prepare and maintain plans that will enable the Supplier's obligations under the Code to continue to be met notwithstanding the expiry or termination of the HHDC's appointment as the HHDC. The plans, which the HHDC undertakes to implement on any such expiry or termination, will include the transfer of data and other information to an incoming HHDC appointed by the Supplier in accordance with sections 3.2.4 and 3.2.7 of this BSCP.

On expiry or termination of the HHDC's appointment as HHDC in respect of a SVA MS the outgoing HHDC shall continue to retain data and support the Trading Disputes process, as specified in 10.2 and 10.3 of PSL100, for all Settlement Days that he was appointed by the Associated Supplier in SMRS.

The HHDC shall maintain and use records (as updated from time to time) of the Meter Technical Details (MTD), including energisation status received from the MOA (or MA for an

Equivalent Meter) for each meter and communication system comprising each SVA MS for which it is responsible, together with access and site location details in respect of all such SVA MSs.

The HHDC shall have the capability to collect and record all Meter Period Value data for Reactive Power (with associated alarms), cumulative readings and maximum demand readings by Meter register that are required for the LDSO, and shall use this capability to collect (and report to the Supplier and LDSO) Meter Period Value data for Reactive Power for all those SVA MS for which it is responsible and for which the Meter Technical Details indicate that the Meter is configured to record such data.

The HHDC's system shall be capable of receiving, processing and transmitting all required data accurately and within the timescales agreed by the Panel, Suppliers and LDSOs, and shall be capable of supporting metered data (processed and unprocessed) and associated standing data for all SVA MSIDs for which the HHDC is appointed (with allowance for growth) for the retention periods specified.

The HHDC must only provide Suppliers with data relating to SVA MSs against which the Suppliers are contracted with the HHDC, and must ensure that LDSOs are not provided with data relating to SVA MSs supplied by the distribution networks of other LDSOs.

Where the same Metering Equipment (ME) is being utilised for the measurement of the Import and/or Export Active Energy for more than one MSID at a site, the Supplier(s) shall ensure that the same MOA is appointed for all of the MSIDs involved to comply with the requirements of the Code. Similarly, where a common Outstation is being utilised for the Import and/or Export Active Energy for more than MSID, the Supplier(s) shall ensure that the same HHDC is appointed for all of the MSIDs involved. These obligations shall be fulfilled by mutual agreement between the Suppliers involved, except in the case of there being an Import Supplier and an Export Supplier where the obligation rests with the Export Supplier to appoint the same agent(s) as the Import Supplier.

SECTION 1.3 - END OF DOCUMENT WILL NOT BE IMPACTED BY CP1299.