CP1464 'Requiring HH consumption data to be processed to appropriate precision'

This CP Consultation was issued on 6 June 2016 as part of CPC00767, with responses invited by 1 July 2016.

Consultation Respondents

Respondent	No. of Parties/Non-Parties Represented	Role(s) Represented
British Gas	1/0	Supplier
EDF Energy	7/0	ECVNA, Generator, MVRNA, Supplier
E.ON Energy Solutions	1/0	Supplier
IMServ	0/1	Supplier Agent: HHDA, HHDC
Salient Systems Ltd	0/1	HHDC/HHDA Systems Solutions Provider
Siemens Managed Services	0/1	Supplier Agent: HHDC, HHDA
SP Distribution / SP Manweb	2/0	Distributor
SSE Energy Supply Limited	1/0	Supplier
TMA Data Management Ltd	0/1	Supplier Agent: HHDA, HHDC, NHHDC, NHHDA
UK Power Networks Operations Ltd	3/0	Distributor
Western Power Distribution	4/0	Distributor

Summary of Consultation Responses

Respondent	Agree?	Impacted?	Costs?	Impl. Date?
British Gas	✓	✓	✓	✓
EDF Energy	✗	✓	✓	✓
E.ON Energy Solutions	✓	✓	✓	-
IMServ	✗	✓	✓	✗
Salient Systems Ltd	✓	✓	✓	✗
Siemens Managed Services	✓	✓	✓	✓
SP Distribution / SP Manweb	✓	✓	✓	✓
SSE Energy Supply Limited	✓	✓	✓	-
TMA Data Management Ltd	✓	✓	✓	✓
UK Power Networks Operations Ltd	✗	✓	✓	✗
Western Power Distribution	✗	✓	✓	✓

Question 1: Do you agree with the CP1464 proposed solution?

Summary

Yes	No	Neutral/No Comment	Other
7	4	0	0

Responses

Respondent	Response	Rationale
British Gas	Yes	We agree with the proposed solution. This will allow HH consumption to be accurately recorded and allocated to the correct consumption period for Domestic and Small Non-Domestic customers if they elect to be Settled HH.
EDF Energy	No	Whilst we recognise the need for Elective Half-Hourly Settlement (EHHS) processes to record consumption to Wh precision, we are concerned that changes are being proposed and consulted on without a full end-to-end EHHS process. Without this it is difficult to impact assess this CP in the context of a full solution. We believe it needs to be agreed what information needs to be transferred between participants before agreeing changes to the DTC, and in relation to this particular CP, any existing Settlement flows. Whilst the costs to amend existing flows and systems may be relatively low for individual parties, they do impact a wide number of parties. Therefore we believe it is important that parties that are not involved in EHHS or those who do not wish to participate do not incur significant costs as a result.
E.ON Energy Solutions	Yes	We are largely neutral with regards to the proposal. Whilst we can see some potential risk from the introduction and use of data from smart metering systems for settlement purposes, on an individual meter point basis it is unlikely that a single domestic premise would have a material impact on settlement volumes. The need therefore to include data to 3 decimal points to mitigate potential risks may not be a proportionate approach.
IMServ	No	Although we are broadly supportive of this CP, please can the benefit of padding values to 3 decimal places with '00' where required be explained, all this will do is increase ongoing costs of HHDCs that use the DTN.

Respondent	Response	Rationale
Salient Systems Ltd	Yes	Increased precision of interval consumption data is available from SMETS meters. The materiality impacts of not taking advantage of increased consumption data precision opportunities suggest that the proposed solution should be addressed.
Siemens Managed Services	Yes	-
SP Distribution / SP Manweb	Yes	It seems sensible to implement such a change after the implementation of P272 on 1 April 2017 to fully utilise the increased HH data that will be available to all parties.
SSE Energy Supply Limited	Yes	We recognise and accept the SRAG/ Elexon position that recording and processing data at the Wh level is necessary for HHS for small supply points.
TMA Data Management Ltd	Yes	-
UK Power Networks Operations Ltd	No	We understand the rationale to move towards increasing the precision of HH Advances post smart metering, particularly for Measurement Classes F and G. However, the consultation is unclear as to whether there is any benefit in increasing the number of decimal places for Period Metered Consumption in the D0036 for Measurement Classes C, D and E. In doing so it will require extensive changes to our systems. This solution relies on amending existing data flows which will impact the majority of BSC parties including those who initially do not choose to manage customers on Measurement Classes F and G. Changes to the J0177 data item have a significant impact on all LDSO systems that store HH data, received via the D0036 data flow (including those used for Network Management as well as billing). The consultation mentions smart meters as being capable of recording data to the nearest Wh. It goes on to state that processing data to the nearest Wh will be mandatory where the meter can measure it, and where the meter cannot measurer to that precision the field will be back-filled with zeroes. The consultation does not state the measurement capability of the Measurement Class C

Respondent	Response	Rationale
		and E meters for which the D0036 flow is already in use. It may be that all data currently provided in the flow will be back-filled with zeroes. Cross referenced DTC CP3492 states "The SRAG identified that the current level of precision (one decimal place, 0.1 kWh) is insufficient to store Half Hourly (HH) period data accurately for the lower annual consumption values typical of domestic customers, typically 3,000 kWh per annum and below. As such the CP removes a barrier to elective Half Hourly Settlement." Therefore it becomes clear that this change is not intended to create any benefit for data associated with Measurement Classes C, D and E. However, it will have detrimental impact on those parties using these flows for customers in those Measurement Classes only. The costs associated with this CP will be significant. Our preferred solution would be to create new data items and new data flows (that mirror the existing D0036, D0003, D0022 and D0275 flows) to deliver a means of precision for those parties with customers settled in Measurement Class F and G and therefore limit the impact to the rest of the industry. Another lower impact solution would be to amend the existing flows with the introduction of a new group for a new item - Wh active consumption by period, used only for Measurement Class F and G customers or used only in flows received by Suppliers.
Western Power Distribution	No	We are supportive of the concept of increasing granularity for Half Hourly consumption data, however, we are not in agreement with the CP1464 proposed solution. We believe that the change as proposed will have an impact on LDSO's when there is no need for the LDSO to be affected. We suggest that an alternative solution to achieving the granularity for Half Hourly consumption data would be the introduction of a new data flow to be sent between the parties that need to send and receive the flow.

Question 2: Do you agree that the draft redlining delivers the CP1464 proposed solution?

Summary

Yes	No	Neutral/No Comment	Other
9	1	0	1

Responses

A summary of the specific responses on the draft redlining can be found at the end of this document.

Respondent	Response	Rationale
British Gas	Yes	-
EDF Energy	Yes	We believe the drafting does deliver the intent of the CP however there is a dependency on a DTC change which is still under consultation. Should the MRA Development Board approve different dataflows for the communication of EHHS consumption data then this drafting is not suitable.
E.ON Energy Solutions	Yes	-
IMServ	No	This CP is unclear in regard to the impact on the HHDA activity. In order to improve Settlement it would be expected (I would have thought) that the HHDA would also have to process this extra level of detail when producing flows such as the D0040, however the CP states the impact to be on HHDCs and Suppliers only. BSCP503 simply states under Section 4.4 that 'The HHDA's system must precisely aggregate…' which does imply that the extra precision should be used by HHDAs when performing aggregation. Please can this point be clarified and made clearer, ideally by updating BSCP503 with an explicit requirement, or the CP should at least state this implicit requirement?
Salient Systems Ltd	Yes – caveat	The redlined changes proposed at BSCP502 do not align precisely with the guidance included at the CP Consultation document – i.e. that only Active Energy consumptions will be subject to new data precision rules. The materiality impacts of either persisting existing data precision rules or applying new data precision rules to Reactive Energy consumptions are minimal.

Respondent	Response	Rationale
		In the interests of consistency, the proposed redline change to BSCP502 should persist and the policy constraint suggested in the CP Proposal that Reactive Energy consumption data will not be subject to new precision rules should be ignored unless there exist persuasive reasons otherwise. HHDC systems will typically record and store raw consumption data values available from the meter and will output validated consumption data at the scale and precision required by other systems and participants. Further guidance would be helpful from Elexon to inform HHDC actions against consumption data outputs available from the HHDC system related to any settlement dates prior to whatever 'significant' date is proposed for implementation of this CP – for example, in the event that prior data becomes candidate for re-output and where raw data consumptions are available what precision policy should be applied. There will be a number of HHDC data management scenarios which would benefit from additional guidance, whether such guidance be provided at BSCP or elsewhere. Similarly, although BSCP503 (HHDA) does not require redlining, the expectations upon HHDA systems to accommodate and operate effectively against the new Active Energy data precision requirements would benefit from a short additional guidance communication from Elexon.
Siemens Managed Services	Yes	-
SP Distribution / SP Manweb	Yes	-
SSE Energy Supply Limited	Yes	-
TMA Data Management Ltd	Yes	-
UK Power Networks Operations Ltd	Yes	-
Western Power Distribution	Yes	-

Question 3: Will CP1464 impact your organisation?

Summary

Yes	No	Neutral/No Comment	Other
11	0	0	0

Responses

Respondent	Response	Rationale
British Gas	Yes	Yes CP1464 will require system changes to be able to receive and process the change in the data format for our current Half Hourly portfolio.
EDF Energy	Yes	Changes to our DUOS Settlement, Dataflow and some systems within our HH architecture will be required to ensure data, stored and validated to 3 decimal places rather than one.
E.ON Energy Solutions	Yes	The consequential changes to data flows in the DTC 3492 will impact systems and processes.
IMServ	Yes	There will be a one off development / testing / implementation activity to support this change as HHDC. Should the HHDA need to process this extra level of detail there would be a similar one off development activity.
Salient Systems Ltd	Yes	We will be required to apply the necessary changes to our HHDC and HHDA system product solutions to accommodate CP1464 requirements. Notwithstanding the request for further guidance to HHDC agents and solution providers suggested at Q2 above, we do not expect any further requirements upon HHDC resulting from any further guidance to be onerous. Changes required to our HHDC and HHDA systems are non-complex and we would anticipate an elapsed period for design, development and testing of 4-6 weeks.
Siemens Managed Services	Yes	System changes will be required, as well as changes to the underlying data tables. From a technical point of view, the changes are relatively simple to code and implement. However, we would need to undertake a significant level of regression testing, particularly around the automated system calculations that use the numeric values (e.g.

Respondent	Response	Rationale
		estimation and EAC).
SP Distribution / SP Manweb	Yes	We will need to ensure that all our systems, especially our billing mechanisms are capable of receiving and processing the full granularity of the data.
SSE Energy Supply Limited	Yes	We have not completed our analysis on the system impacts of this change but we are of the view it would be extensive.
TMA Data Management Ltd	Yes	Our systems of HHDC and HHDA would be impacted by CP1464, for appropriate development and testing, we request a minimum of 6 months lead time between approval and implementation.
UK Power Networks Operations Ltd	Yes	We will need to make extensive changes to a number of systems including our Half Hourly DUoS Billing System and capacity management system, to be able to process the amended file formats and to store the increased data field size.
Western Power Distribution	Yes	System changes required to Durabill and associated development costs in relation to the proposed DTC CP 3492 MRA change introducing changes to increase the precision of data items relating to HH Advances.

Question 4: Will your organisation incur any costs in implementing CP1464?

Summary

Yes	No	Neutral/No Comment	Other
11	0	0	0

Responses

Respondent	Response	Rationale
British Gas	Yes	We envisage the system changes would cost circa £100k.
EDF Energy	Yes	We are only able to provide costs, and even then not all costs, in relation to existing HH processes. We are not in a position to provide costs for any EHHS processes we may put in place as this can only be accurately done with an end-to-end proposed solution. **Costs for changes to existing HH processes:** DUOS Settlement system - £20k Dataflow - £20-22.5k HH systems – at this stage we are not able to provide any costs. A high-level impact assessment has been carried out and we believe changes involved would primarily involve a number configuration changes and testing of those. We'd expect this to be in the low to medium scale of change.
E.ON Energy Solutions	Yes	The changes in relation to DTC3492 will incur costs to make changes to a number of systems and processes.
IMServ	Yes	There will be both a one off development cost and an ongoing cost to support this CP The initial cost will consist of: 1. Developing our Retrieval platform to collect to 3 decimal places 2. Developing our data warehouse and processing systems to produce the required flows to this precision 3. Developing our systems to accept this level of precision from other HHDCs 4. Enhancing our estimation processes to

Respondent	Response	Rationale
		calculate estimates to this level of precision 5. Planning / Testing / Documentation Total effort will be around 50 working days. The ongoing cost arises from: 1. Having to store more data in our HHDC system 2. Additional DTN costs since the D0036, D0003 and D0275 files will be larger. Part of this cost could be reduced if padding with '00' was not required The total ongoing cost of this is likely to be small per MPAN per year.
Salient Systems Ltd	Yes	Once-off internal (sunk) development costs.
Siemens Managed Services	Yes	The main cost will be in test effort. Smaller costs will be incurred for system development and support.
SP Distribution / SP Manweb	Yes	Requiring HH consumption data to be processed to appropriation precision would involve amending the D0036 flow in our Durabill Billing System. We would support this original proposal. The alternative proposal was a new Data Flow, this was deemed as cumbersome and a more expensive option.
SSE Energy Supply Limited	Yes	There will be one-off development costs to change our systems.
TMA Data Management Ltd	Yes	Medium one-off costs, no ongoing costs.
UK Power Networks Operations Ltd	Yes	We anticipate our initial software costs to be in the hundreds of thousands of pounds, across all of our impacted systems, to accommodate this CP.
Western Power Distribution	Yes	One off cost of approximately £20,000

Question 5: Do you agree with the proposed implementation approach for CP1464?

Summary

Yes	No	Neutral/No Comment	Other
6	3	2	0

Responses

Respondent	Response	Rationale
British Gas	Yes	Yes we agree that the 29th June 2017 will allow enough time for the corresponding DTC changes to be progressed and implemented.
EDF Energy	Yes	We agree with a June 2017 implementation however we would expect a full end-to-end solution within the next two months.
E.ON Energy Solutions	Yes/No	A minimum 12 months to make the necessary changes to systems will be required.
IMServ	No	It is unclear how this would be implemented hence the 'No'. Is it expected that it would be a requirement from a given calendar date, such that flows produced from that day forward would need the extra precision? There will be a number of scenarios it would be useful to clarify: 1. Where the HHDC collects data after this CP is live that relates to Settlement days before the implementation date, how should this be handled? Would the HHDC be expected to issue data to three decimals for the whole period collected? 2. However, if the data was collected prior to implementation, this may not have been to three decimal places, so if the HHDC had to issue data post implementation (say change of HHDC and the new HHDC requests 14 months of historical data), the HHDC would pad the value out to three decimal places with '00's? So, if '10.5' was historically collected, the HHDC would submit '10.500' even though the data relates to a period before the implementation date, yes?
Salient Systems Ltd	No	CP1464 is certainly tied to DTC CP3492 implementation and to the responsiveness at HHDC, HHDA and Supplier systems to accommodate the

Respondent	Response	Rationale
		change. We would expect that HHDC, HHDA and DTC CP3492 could be delivered much earlier than the proposed June 2017 release. We would favour a February 2017 release.
Siemens Managed Services	Yes	We would be supportive of the June 2017 implementation date based on the assumption that all the Change Proposals (included those to the DTC) have been approved by the end of 2016. With the volume of system change and testing involved we will require a minimum 6 month lead time from CP approvals to Industry Implementation date.
SP Distribution / SP Manweb	Yes	While we agree with the proposed implementation date of 29 June 2017, we recognise that this date is reliant on the related DTC CP 3492 being progressed timeously through the MRA processes. Given the significant impact of both changes any delay to either change could potentially impact the proposed June 2017 implementation date.
SSE Energy Supply Limited	Yes/No	We are firmly of the view that all the cross-code changes required to facilitate cost-effective Elective HHS should be implemented into code at the same time. At this stage we understand all changes are targeting the June 2017 release in order to align with the Ofgem DECC agreement for Elective HHS to be available from early 2017.
TMA Data Management Ltd	Yes	The 29th of June 2017 does provide enough lead time.
UK Power Networks Operations Ltd	No	Given the nature of the system changes required and the lead time our various developers will need, the proposed implementation is challenging. Our initial view is either November 2017 or even February 2018 are more realistic dates.
Western Power Distribution	Yes	-

Question 6: Do you have any further comments on CP1464?

Summary

Yes	No
4	7

Responses

Respondent	Response	Comments
British Gas	No	-
EDF Energy	No	-
E.ON Energy Solutions	No	-
IMserv	Yes	Currently HHDCs are obligated to send D0036s to NGC under the DSBR arrangements. It is possible therefore that NGC could be impacted by this change, has this been communicated to NGC?
Salient Systems Ltd	Yes	CP1464 is a discrete, non-complex piece of work and a pre-requisite to further later CP's that will be raised to further support effective elective HH settlement and later mandatory HH settlement. Delivery of CP1464 should be expedited to clear the pitch and hang the nets on the goalposts.
Siemens Managed Services	Yes	If this CP and associated DTC CP are approved, will part of the development pre-implementation include Joint Industry Testing with the exchange of the amended versions of the effected Data Flows being exchanged between the relevant roles? This is particularly pertinent where the Suppliers and Agents are separate organisations with their own systems. JIT would increase confidence within the Industry that possible sources of errors and mismatches have the chance of being identified and corrected prior to Industry Implementation. This would reduce the risk to Settlement, which in the past has been adversely impacted by DTC data changes. Any such JIT testing should be not left to bilateral arrangements which from our previous experience have not been that successful, but should be centrally co-ordinated.
SP Distribution / SP Manweb	No	-

Respondent	Response	Comments
SSE Energy Supply Limited	No	-
TMA Data Management Ltd	No	-
UK Power Networks Operations Ltd	Yes	We propose an alternative solution whereby new data items and a new data flow, are introduced for use with Measurement Classes F and G only. This would minimise the impact on LDSOs and Supplier agents. Alternatively a new group within the D0036 flow, that is used for Measurement Classes F and G customers only, could be a way forward.
Western Power Distribution	No	-

CP Redlined Text

No comments were received on the draft redlined text for CP1464.