

# Request for Information Responses

## Issue 80 'Increase in minimum data storage requirements within the relevant metering CoPs'

This Request for Information was issued on 5 June 2019 with responses invited by 18 June 2019.



### Phase

Initial Written Assessment

Definition Procedure

Assessment Procedure

Report Phase

Implementation

### RfI Respondents

Respondent	No. of Parties/Non-Parties Represented	Role(s) Represented
Solarplicity	1	Supplier
EDF Energy Generation	1	Generator
Robin Hood Energy	1	Supplier
Npower Group Ltd	1	Supplier Agent: MOA, DC, DA
SSE Metering Ltd	1	Supplier Agent: MOA
Scottish Power Dataserve	1	Supplier Agent
IMServ	1	Supplier Agent: Data Collector & Meter Operator
EDF Energy	1	Supplier
Stark Software Int Ltd.	1	Supplier Agent: DC/DA
TMA Data Management Ltd	1	Supplier Agent: HHDC, HHDA, NHHDC and NHHDA

Issue 80  
RFI Responses

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Version 1.0

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**Question 1: Do you believe that the minimum data storage capacity for Outstations should be increased? If so, to what?**

**Summary**

Yes	No	Neutral/No Comment	Other
9	0	1	0

**Responses**

Respondent	Response	Rationale
Solarplicity	Yes	The current CoP is outdated as suggested in this RFI. Increasing the memory capacity to a minimum of 200 days would almost exactly align with the current third reconciliation run in settlement (R3) would benefit bill disputes, settlement exceptions, and more.
EDF Energy Generation	Yes	At least 100 days. It would assist in ensuring actual data was stored for a significant period of time in the event of remote collection and or access to site issues.
Robin Hood Energy	Yes, to 13 months	Domestic SMART meters use comparable technology and the SMETS 2 requirement is to hold 13 months' worth of half-hourly data. So there should be no prohibitive reason this cannot also be applied to Half Hourly metering.
Npower Group Ltd	No comment	Npower's preference would be for option A, if the minimum data storage capacity for Outstations was to be increased. We already have arrangements in place where data can be dialled back for this number of days storage or more.
SSE Metering Ltd	Yes	Meters being procured with integral outstations already have a memory capacity that exceeds CoP requirements. By bring the CoPs in line with this capability it provides confidence in Settlement data being collected. I agree with 60 days across all CoPs (see Q3)
Scottish Power Dataserve	Yes	The Code of Practice minimum capacity requirements should be re-evaluated as they are outdated and, due to advances in memory storage capacity technology, it is potentially cheaper and easier for meter manufacturers to provide a larger memory capacity than was previously available. With regards what it should be, this is open to debate but we would suggest that the current capacity already provided by the meter/outstation manufacturers has to be taken in to consideration?

Respondent	Response	Rationale
IMServ	Yes to 100 days given 15 minute intervals or 200 days given 30 minute intervals	<p>Agree with the proposer that storage capability has increased massively and cost has dropped in line over the last 30 years so the industry should update to fall in line with current technology.</p> <p>Also as communications change and the number of sites increase the overhead of 100 days will allow DC more time to cope with cases of comms failures and no direct meter access; These are rare but as stated in the document as materiality increases timescales for access actually get shorter and this is something that should be addressed.</p>
EDF Energy	Yes	Yes. It would make sense to match the data capacity to the Settlement runs (Final Reconciliation) i.e. 292 days or one year. Consideration should also be made to logger capacity and logger interval with six channel metering. Six channels should be used a base for measuring data storage i.e. six channels, 30 minutes, 365 days as BSCP601 does not specify a base and is open to interpretation.
Stark Software Int Ltd.	Yes	6 months minimum.
TMA Data Management Ltd	Yes	We are supportive of increasing the minimum data storage capacity to limit the risk of loss of data in case of faults and/or access issues.

Question 2: If you are a Outstation manufacturer with a CoP compliant Outstation, what is the data storage capacity for 1, 4 and 6 Demand Values with a 30 minute Demand Period? What is the data storage capacity for 1, 4 and 6 Demand Values with a 15 minute Demand Period?

## Summary

Yes	No	Neutral/No Comment	Other
0	1	9	0

## Responses

Respondent	Response	Rationale
Solarplicity	n/a	n/a
EDF Energy Generation	n/a	n/a
Robin Hood Energy	n/a	n/a
Npower Group Ltd	n/a	n/a
SSE Metering Ltd	No	As MOA I can offer the following, 30 min (15 min) : - Cewe Prometer R/W – 4 channel = 261 (130) days; 6 channel 186 (93) days Elster A1700 – 6 channels >70 days
Scottish Power Dataserve	n/a	We are not a Meter/Outstation manufacturer
IMServ	n/a	No comment
EDF Energy	n/a	This question is not applicable to EDF Energy.
Stark Software Int Ltd	n/a	N/A
TMA Data Management Ltd	n/a	No comment

### Question 3: Do you believe the minimum data storage capacity should be the same for each metering Code of Practice?

#### Summary

Yes	No	Neutral/No Comment	Other
7	2	1	0

#### Responses

Respondent	Response	Rationale
Solarplicity	Yes	Providing that all meters have to settle using the same reconciliation periods, it would be very beneficial for us to have access to this much data in case of non comms to the meter where we struggle to arrange a site visit within 30 days of the meter not communicating.
EDF Energy Generation	No	Storage Capacity should be fit for purpose for each individual metering Code of Practice.
Robin Hood Energy	Yes	Although there are additional safeguards for COP 3 and above, such as Check Meters, there should be no prohibitive reason Half-Hourly meters cannot also hold 13 months' worth of half hourly data.
Npower Group Ltd	Yes	From a metering MOA perspective npower sees no reason that this should be different depending on the COP. Whilst SMETS is not to be included in this Cop 1,2,3,4,5 and 10 should therefore be the same.
SSE Metering Ltd	No	For CoP 1 & 2, I believe the minimum should be higher; 120 days at 30 min or 60 days for 15 min
Scottish Power Dataserve	Yes	Due to the impact on Settlement/Billing.
IMServ	Yes	<p>It's counter intuitive for the higher materiality outstations to have smaller minimums than the lower ones.</p> <p>At the very least they should all be brought to the highest figure that currently exists even if the rest of this proposal does not go through.</p> <p>If there are still to be different values for each CoP then materiality should determine the capacity requirements with the higher sites having the longest storage period.</p> <p>Also as similar hardware is fitted across the board for CoP 3,5 &amp; 10 they should all be treated the same to simplify the rules.</p>

Respondent	Response	Rationale
		The minimum should still be 60 days @ 30 minutes and ideally as far as we're concerned it should be 100 days @ 15 minutes
EDF Energy	Yes	Yes. The vast majority of MOA's install the same meter type on COP10/5/3 (meters with integral outstations) and even on CoP1/2 sites with the exception of some CVA sites. If the metering system uses an internal or external outstation (For CoP1/2) the same data capacity rules should apply.
Stark Software Int Ltd.	Yes	It would make each metering CoP more manageable.
TMA Data Management Ltd	No comment	We do not have a strong opinion on the subject, if the minimum data storage is not the same for each code of practice, it should be higher for lower codes of practice as they are installed on site using or generating high volumes where loss of data has major impact on Settlement performance.

Question 4: Do you agree with the Proposer that Outstations are already being sold with considerably more memory than the current minimum BSC requirement?

## Summary

Yes	No	Neutral/No Comment	Other
10	0	0	0

## Responses

Respondent	Response	Rationale
Solarplicity	Yes	The meters we use have a much higher storage capacity than the BSC minimum.
EDF Energy Generation	Yes	During the last four years we have replaced all settlement meters and outstations on our Nuclear Power Stations (8 in total). This new equipment has large storage capacity and will be fit for purpose in the future.
Robin Hood Energy	Yes	If SMETS 2 meters are being produced this must be correct
Npower Group Ltd	Yes	The devices we use as a MOP/DC are above the minimum standard  Confidential part removed
SSE Metering Ltd	Yes	As MOA, the increase in memory has been driven more by meter manufacturer offer competitive products than MOA wanting more memory.
Scottish Power Dataserve	Yes	Our most commonly used meter types currently provide a memory capacity which is in excess of the current CoP requirements. As an agent we cannot answer the question with regards the memory costs
IMServ	Yes	We already fit metering as MOP with storage periods of 100 days or more with 6 measurement channels. There is no additional cost to us for this metering over our standard costs, the extended memory is the default option from this manufacturer.
EDF Energy	Yes	Yes. The new Cewe Prometer-100 can store five channels for 1000 days, the Cewe Prometer R/W can store 186 days with six channels, the EDM1 MK10A can store over 3600 days (10 years, two channels, 30-minute intervals). The cost of memory is a question for the manufactures, however compared with 30 years ago and looking at the data capacity for outstations already being sold, the cost seems relatively cheap.

Respondent	Response	Rationale
Stark Software Int Ltd.	Yes	Most meter types contain data memory from 4 weeks to 6 months.
TMA Data Management Ltd	Yes	No comment



Question 5: If the BSC requirements changed, would you need to seek re-approval for your product range?  
If so and with whom? How much would it cost to comply with the example options?

## Summary

Yes	No	Neutral/No Comment	Other
1	3	3	3

## Responses

Respondent	Response	Rationale
Solarplicity	Yes	The meters we use are compliant with the changes laid out except for Option D. If Option D was to be implemented, then we would need to discuss with our MOP etc – who in turn would need to talk with the meter manufacturers.
EDF Energy Generation	<b>?</b> <b>DEPENDS ON CHANGE</b>	All settlement meters and outstations at our Nuclear Power Stations were updated with BSC approved supplier and equipment during the last five years and has considerable data storage, so we are confident that these would be compliant.  If the BSC requirements changed considerably and these were deemed non-compliant resulting in a full replacement then the costs would be considerable circa. 100k minimum.
Robin Hood Energy	No	n/a
Npower Group Ltd	TBC	Any product range re-approval would be subject to reviewing the BSC requirement changes in detail. We currently believe that no re-approval would be required but this requires further work to be able to confirm.
SSE Metering Ltd	n/a MOA	No comment
Scottish Power Dataserve	?	We require clarification on whether this question is aimed at Meter Operators or Meter/Outstation manufacturers. If MOA, it depends on what the BSC requirement will be and what capacity is currently provided by our meter providers. If this question is intended for Meter/Outstation manufacturers we are unable to answer, as we are not a manufacturer.
IMServ	N/A	No comment
EDF Energy	No	No. Any legacy metering will comply to that CoP at the time of install, or a generic dispensation for the

Respondent	Response	Rationale
		<p>current product range would cover legacy metering regarding data capacity via Elexon.</p> <p>Regarding the 15 minute logger interval change, this is a concern as changing the logger interval on our current product range greatly reduces the data capacity and poses a risk to settlement data in the event of a communications failure.</p>
Stark Software Int Ltd.	No	No comment
TMA Data Management Ltd	N/A	No comment

## Question 6: Have you experienced instances of data being overwritten or lost which additional memory would have resolved?

### Summary

Yes	No	Neutral/No Comment	Other
4	3	3	0

### Responses

Respondent	Response	Rationale
Solarplicity	Yes	We have on a couple of instances where we have lost data from inherited meters that had lost memory as we have not been able to gain access to the meter for a while. This minimum requirement would give us more time to gain access on time in the future.
EDF Energy Generation	No	n/a
Robin Hood Energy	Yes	Sometimes the DC cannot immediately gain access to the meter, or a fault may prevent manual downloads until after it has been resolved by the MOP. This can often take longer than the minimum storage requirement allows.
Npower Group Ltd	n/a	No examples of this, however we do have cases in regards to faults where potentially if data cannot be gathered remotely from site in the allotted time e.g. 3 months, then we will send out an engineer to manually gather the reads to ensure that the data is present for settlement and for the customer. In certain cases we have also removed the faulty metering and brought this back in house to collate the data directly from the meter if required.
SSE Metering Ltd	n/a	As MOA we are not necessarily aware of data roll-over, unless investigating data issues via a fault investigation request. There are occasions when this data does not exist in the outstation, however the same would apply for the proposed minimum number of days
Scottish Power Dataserve	No	Not to our knowledge. The memory capacity available on our most commonly used meter types has proved to be sufficiently large enough to avoid data loss.
IMServ	YES	There are occasions where a site is on permanent or temporary hand held read, where access to the site cannot be organised within the current storage timescales, while they are not common, they do

Respondent	Response	Rationale
		<p>occur.</p> <p>These result in loss of data which has to be estimated by DC.</p> <p>Extending the storage requirements would greatly reduce these instances.</p> <p>It cannot be eliminated though as access issues could take more than the proposed extensions.</p>
EDF Energy	No comment	EDF Energy has no comments to make on this question.
Stark Software Int Ltd.	No	PPM and Calmu meter type could only hold up to 4 – 6 weeks data.
TMA Data Management Ltd	Yes	There have been instances where the comms line is down and access is difficult, by the time the fault is resolved and/or access arranged, some data has been overwritten. It is usually the case for more complex sites where many channels are recorded rather than for simpler sites.

Question 7: When performing data retrieval is there any constraint on the time required or the amount of data to be retrieved, either remotely or locally?

## Summary

Yes	No	Neutral/No Comment	Other
5	2	3	0

## Responses

Respondent	Response	Rationale
Solarplicity	Yes	Depending on the meter that is on site – we have had constraints in the amount of data that could be retrieved. Increasing this would definitely help.
EDF Energy Generation	No	n/a
Robin Hood Energy	Yes	For the reasons mentioned in answer 6.
Npower Group Ltd	Yes	From a data collection perspective further work is required to impact assess the changes that could be required if the Outstation were to store more data. There are possible system and resource impacts which would have associated costs.
SSE Metering Ltd	No comment	No comment
Scottish Power Dataserve	No	Question requires clarification. An attempt should be made to recover all the missing data. Increasing the COP memory requirements may increase the chances of being able to retrieve all the missing data, rather than only being able to retrieve partial data due to data over write.
IMServ	Yes	<p>There are commercial constraints on time available either to be on-site if the SVA is downloading more data then it follows that they will be on site for longer periods. Or when downloading remotely, the longer a site is connected and downloading data the less time available to collect from other sites.</p> <p>So what we are saying here is that increasing the storage duration could have a negative impact on collection from other sites, however overall it is still a good thing to reduce the amount of data in settlements that comes from estimated sources, and it is most likely that the actual real world impact will be minimal as sites with large data retention already exist in the market.</p>

Respondent	Response	Rationale
		<p>In addition, as these issues are commercial only they can be dealt with by increasing the number of people in the field and increasing the dialling capacity.</p> <p>Another option to remedy this would be to modify the meter protocol to allow a streaming mode or some form of data compression technology which would increase the throughput of data – this could require new approvals for the protocol though.</p>
EDF Energy	No comment	EDF Energy has no comments to make on this question.
Stark Software Int Ltd.	Yes	If the meter clock is out of tolerance or meter has been reprogrammed then no matter how much capacity the meter memory storage has, the lost data won't be available to retrieve remotely or locally.
TMA Data Management Ltd	No comment	We do not have any constraint for the retrieval of data locally. We have a time constraint for the remote retrieval of data. It is a business set constraint rather than a system constraint and can be amended if required.

## Question 8: Do you have further comments on Issue 80?

### Summary

Yes	No	Neutral/No Comment	Other
4	4	2	0

### Responses

Respondent	Response	Rationale
Solarplicity	No	n/a
EDF Energy Generation	n/a	n/a
Robin Hood Energy	No	n/a
Npower Group Ltd	No	n/a
SSE Metering Ltd	Yes	Should the CoPs also include a definitive number of channels that should be stored, i.e. all SVA is 6 channels by default and CVA 4 or 6 channel as per Registrant request.
Scottish Power Dataserve	Yes	<p>`, the potential impact on meters currently in service and the impact on contractual arrangements between the equipment manufacturers and their clients. Points to note as follows:</p> <ul style="list-style-type: none"> <li>The meter types we most commonly use already exceed the current COP requirements, so it may be a case of matching the new figure to what is already available</li> <li>An increase in minimum capacity to something that is in excess of what is currently being provided – or a change to the data retrieval frequency - may result in having to modify/change metering assets, some of which may only have been installed recently and would be expected to be in place for several years before the need for any work to be carried out. The cost of this would need to be factored in to the change proposal.</li> <li>Our expectation would be that metering equipment installed prior to any agreed changes should adhere to the memory storage requirements applicable at the time of meter installation.</li> </ul>

Respondent	Response	Rationale
		<ul style="list-style-type: none"> <li>The metering industry is currently going through several changes, notably the removal of traditional comms methods – touched on by Elexon Issue 75 – which may result in meters/equipment having to be changed and have an effect on contractual arrangement between equipment manufacturers and their clients. We therefore feel that the implementation of Issue 80, if it is anything other than a change of the COP wording to match the existing meter equipment capacities, should be delayed until the equipment manufacturers have confirmed the costs to the industry of potential changes to their hardware.</li> </ul>
IMServ	Yes	<p>As a DC if the integration period is changed to 15 minutes then our data storage requirements will effectively double, so while this is outside the scope of the RFI on some levels it should be considered when looking at the proposed changes to 15 minutes and determining whether the UK should take part in them.</p> <p>In addition to profile data a lot of MOPs have used instrumentation recording in current meters to record voltage/current/mobile signal alongside the settlement data, whilst this itself is not the industry's issue, it needs to be noted and could impact storage available.</p>
EDF Energy	No comment	EDF Energy has no comments to make on this question.
Stark Software Int Ltd.	Yes	No comment
TMA Data Management Ltd	No	No comment