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Mandatory Half-Hourly Settlement: aims and timetable for reform

EDF Energy is one of the UK's largest energy companies with activities throughout the energy chain. Our interests include nuclear, coal and gas-fired electricity generation, renewables, and energy supply to end users. We have over five million electricity and gas customer accounts in the UK, including residential and business users.

We support the introduction of Mandatory Half-Hourly Settlement for import and export. The proposed approach outlined in the document, will provide the best chance of meeting the timescales for settlement reform. However, it is important that the Significant Code Review and licence modification process is conducted in an open and consultative manner.

Ofgem must provide appropriate time for discussion, development and examination of the proposed changes to ensure the outcome is the right answer for customers, and does not create any detrimental unintended consequences. Mandatory Half-Hourly Settlement is a key step in facilitating the development of a smarter, flexible energy system, but Ofgem should resist any pressure to rush the change process. Ofgem also need to consider import and export separately in their decision, planned to be made the first half of 2018. The volume of export meters settled in the Non Half-Hourly market is currently very low; the amount of system change required by suppliers to support the Half-Hourly Settlement of export means that it should be considered separately from the decision on import.

We believe all export energy should be settled accurately to maximise visibility to the wider system, and to ensure all parties bear an appropriate share of costs. These costs include network and balancing costs.

Given the size of the task between now and the decision in the first half of 2018, the number of variables should be minimised. Advanced metered sites in PC1-4 should be settled using the same Half-Hourly Settlement process as all other advanced meters (i.e. the current process). Once they have had a SMETS meter installed, and data is collected via the DCC, they should be settled in the same way as the other PC1-4 customers. The final date for all smart metered sites to be Half-Hourly settled should be after the end of SMETS 1 enrolment and adoption, when all such smart meters will be accessible via DCC services. The creation of temporary processes for SMETS 1 customers enrolled outside of the DCC would not be cost effective. Wherever possible there should be one process

used for traditionally metered customers and for Smart Metered customers, to avoid dual systems and processes having to be supported.

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We are concerned about availability of skilled/specialised resources, both internally and across industry, over the next two to three years given the demands of other significant industry change that is underway or being planned over this period. The smart metering rollout, enrolment and adoption, Nexus, faster switching and the Smart, Flexible Energy System programmes will all need to be supported at the same time. Robust and joined up planning will be required across these change programmes to ensure sufficient skilled resource is available at the right time to deliver the right outcomes.

Currently, no DC/DA is able to deal with the volume of meters, let alone the new processes, that Mandatory Half-Hourly Settlement will create. To avoid multiple new systems having to be built, with customers bearing this substantial cost, it would be more economic, resource and time effective to build one central system to be shared by all suppliers. Furthermore, we support validation of consumption data by the customer's supplier as they have the best understanding of the customer's consumption behaviour. This would also simplify the new centralised DC/DA system, and the dataflows it would have to manage. Obviously this validation role would have to have robust governance to ensure that accurate data is passed to the new DC/DA.

We support early decisions being made on customer protection regarding the distributional impacts both by customer group and geographical location. This is needed by innovators, to understand where they should focus their efforts in bringing new ideas to the market.

Customers who do not have a smart meter, particularly those who cannot have one installed for technical reasons, should not bear the rump of unallocated costs that the introduction of Half-Hourly Settlements may provide. Due consideration as to how these customers will be supported, and what approach will be adopted for closing down expensive processes for a small number of customers managed at the expense of all other customers is required.

Our detailed responses are set out in the attachment to this letter. Should you wish to discuss any of the issues raised in our response or have any queries, please contact Ashley Pocock on 0 1342 413838, or myself.

I confirm that this letter and its attachment may be published on Ofgem's website.

Yours sincerely,

A handwritten signature in blue ink that reads "Paul Delamare".

Paul Delamare
Head of Customers Policy and Regulation

Attachment

Mandatory Half-Hourly Settlement: aims and timetable for reform

EDF Energy's response to your questions

CHAPTER: Two

Q2.1 Do you have views on our proposed approach?

EDF Energy believes that the only way a decision can be made, and the transitional schedule determined, in early 2018 is by using the combination of the Significant Code Review process and Ofgem's licence modification powers. However, Ofgem must run an open and consultative process, providing appropriate time for discussion, development and examination of the proposed changes, in order to ensure the outcome is the right answer for customers and will not create detrimental unintended consequences.

Half-Hourly Settlement is a key step in facilitating the development of the Smart, Flexible Energy System, but Ofgem should resist any pressure to rush the change process because of this. The process of a phased transition seems reasonable as it allows suppliers to move earlier if possible, and not delay implementation to that of the slowest participant. We previously explored the idea of a quicker bulk transition to Half-Hourly Settlement, but the risk it creates if not implemented by all parties correctly, and in a timely manner, outweighs any advantages.

We support the distributional analysis work feeding in to the Impact Assessment. There will be winners and losers with the mandating of Half-Hourly Settlement. Reducing the distributional effects will negatively impact the economic case driving this reform, by blunting the advantages of customers altering their loadshapes. If the two were undertaken independently their conclusions could conflict with each other.

We support early decisions being made on customer protection regarding the distributional impacts both by customer group, and geographical location. This is needed by innovators, to understand where they should focus their efforts in bringing new ideas to the market.

Alongside the Impact Assessment, customer research should be carried out by Ofgem to understand customers' views and perceptions about the changes to settlements and how this will impact them. Such research should include; the distribution of benefits, suppliers being able to introduce new TOU tariffs that create a non-regular structure and bills being different to those of friends and family. Such insight can then be used to determine what customer communications will be needed during the transition stage to maintain trust and ensure customer acceptance and buy in.

We believe all export energy should be settled in order to maximise visibility to the wider system, and to ensure all parties bear an appropriate share of costs, such as network and balancing costs. We acknowledge that delivering Half-Hourly Settlements for export provides a different challenge, as most export energy in PC 1-4 is not settled at all. The level of system change needed to settle export will be significant, and as such it needs a separate decision process to the import go-live to ensure a successful delivery of the functionality and processes.

EDF Energy has concerns around where mandated half-hourly settlement fits in to the wider industry change programme. These concerns include:

- The availability of those with the appropriate skill sets and expertise (settlements, IT, process etc.) due to other significant industry change projects taking place at the same time i.e. faster switching, the wider Smart Flexible Energy system work and smart metering (including enrolment and adoption).
- Our system change capacity which is already stretched in the near term by DCC and other smart metering activity and in the medium term work is looking challenging even without settlement reform.
- The smart metering programme itself, specifically:
 - what percentage of customers will have smart meters by 2020 after all reasonable steps has been taken in to account,
 - when enrolment and adoption will take place,
 - the volume of smart meters (SMETS 1) not enrolled in the DCC – waiting for a stable DCC with full functionality.
- Lessons being learnt from programmes such as Faster Switching and P272 to help ensure the deliverables are achieved within the targeted timelines.

Q2.2 Our Impact Assessment will evaluate the costs and benefits of mandatory HHS for domestic and smaller non-domestic consumers. We will be seeking evidence of costs and benefits as part of that process. Do you have initial views on the costs and/or benefits? If so, please provide these with your supporting evidence.

Without a clear view of the Target Operating Model (TOM) we cannot provide an accurate assessment of the costs or benefits at this stage.

We believe that single shared processes should be developed, and variables reduced where possible. One central DC/DA system for all PC1-4 customers should be procured and built, which does not include advanced meters. These should continue to be settled using existing Half-Hourly Settlement processes. Without a central system, many separate systems will have to be built across the industry, which will be inefficient and not cost effective. Currently, no HH DC/DA is able to fulfil this role today given the volume of meters covered in PC1-4, so there is not a quick temporary solution available.

Advanced meters in PC 1-4 should continue to be settled using the existing half-hourly settlement, and only migrated to the Mandated Half-Hourly solution once a SMETS meter is installed at the end of its life. This simplifies systems and processes.

The enrolment and adoption of SMETS 1 meters into the DCC should take place before all meters have to be settled Half-Hourly. To create separate processes for SMETS 1 meters outside the DCC for a small period of time is not cost effective for the customer.

We are pleased to see the inclusion of the COMC process in the consultation. The COMC process created for the elective half-hourly reform is a significant improvement over the previous industry process, but we do believe there are further refinements that can be made, creating a cost saving. Given that 30 million customers will need to go through a COMC in the migration period, we would support investigating what improvements are possible.

CHAPTER: Three

Q3.1 Do you think we have identified the necessary reforms? Are there other reforms that should be listed? If so, what are they and how would they fit in the proposed plan?

We agree that the necessary reforms have been identified.

However, in the consumer engagement and protection section, it does not highlight those customers who will still have a traditional meter in the longer term, either by choice or due to technical issues. Due consideration is required as to how these customers will be supported, and what approach will be adopted for closing down expensive processes for a small number of customers managed at the expense of all other customers. We would expect those customers who technically cannot have a smart or advanced meter to be protected from any negative impacts that arise due to factors out of their control, especially unallocated costs.

There is a concern that SMETS 1 customers who have been enrolled and adopted in to the DCC may only have limited functionality. While they will be able to be settled on a Half-Hourly basis, it may limit such customer's ability to take advantage of additional services in the same way as SMETS 2 customers are able to access through HHS. This is also a risk for the Smart, Flexible Energy System. As mandated half-hourly settlements will be delivered first this should be an area further explored as it could affect the Impact Assessment.

We highlighted the need for better understanding of customer reaction to the outputs of the reform in our response to Q2.1.

Q3.2 What industry expertise is needed to deliver these reforms in the timetable we have given?

The impact of mandated half-hourly settlements is extensive. The non-exhaustive list of expertise needed includes:

- most importantly, those who can take a strategic end to end view, with expertise of settlements processes and architecture. To be a success the programme should only focus on how to turn the current processes in to a working solution, even if it is not ideal.
- Data flow expertise: not only for settlements, but with the DCC and the COMC processes as well.
- Settlements expertise: the interaction of traditional meters and SMETS metered customers will be important to understand.
- Data access: both the mandated access that will be needed to deliver the benefits of the reform and the changing of the current monthly, daily and half-hourly smart meter access rules.
- Transmission and Distribution charging.
- IT expertise: for the amount of system change and new system interactions.
- Customer engagement and protection for those with smart meters and those without.
- People who can build an impact assessment.

Q3.3 How much expertise and time can your organisation provide? How does this interact with other Ofgem initiatives?

We are in favour of this initiative and as such we will be proactive in supporting the project and raising changes where it is helpful. However, our resources are limited in what can be dedicated to this initiative, but we will ensure we will attend the new and existing work groups that have been set up where they are most relevant.

We have a concern with the SCR, and Ofgem's use of their powers to hasten the change timetable. This may mean that we will have to dedicate resources to reviewing complex changes in short timescales. This may have knock on impacts on EDF Energy's support to other industry programmes.

Our resources are already spread across the many extensive industry change programmes, including in particular; faster switching, smart metering and the Smart, Flexible Energy System. Within the window before the decision and transition schedule there may be some available resource capacity provided that the DCC's Release 1.2 proves to be capable of being able to support large volumes of credit meter installs, and Release 1.3 goes live in the first half of 2017 in a stable manner with its full expected functionality.

Even during the production of this consultation response, we have had resourcing challenges due to the planning needed for the Faster Switching RFI and the Smart, Flexible Energy System call for evidence. These two pieces of work have reduced our IT, settlement and general industry experts' availability.

One area which is stretched in the near term is our IT system change resources. Due to the Smart Metering Programme in particular, we have no additional capacity in 2017 and 2018 capacity is already starting to be allocated. The sooner Nexus and DCC Releases 1.2 and 1.3 are stable, and SMETS 2 meters are rolled out in volume, the more capacity for focusing on mandatory half-hourly settlements will become available. The primary concern for our IT change programme going forward is that the size of the change to enable export energy to be settled could swamp our ability to support other internal and industry changes for a period of time, especially if it has to be delivered in the same constrained time period as the import changes.

Q3.4 What are the key risks and constraints to delivering to the timetable outlined?

Our greatest concern is if the changes are required to be delivered in an unrealistic timescale, leading to sub-optimal change and the wrong long term solution for the customer.

It may seem an easier decision to require suppliers to build individual DC/DA systems, but it is not cost efficient nor the simplest most effective solution.

The amount of time the industry will have to review changes and understand how they fit in to the wider process is likely to be shorter than is currently experienced; this may lead to sub-optimal solutions and secondary impacts.

The lack of industry resources available during the timetable is a key concern. The only opportunity for the right resources to become available within our business is dependent upon the DCC delivering on time, with its' full functionality and being stable enough to allow a volume rollout of SMETS 2 meters. During this consultation resources have had to be diverted from inputting in to mandated half-hourly settlements, to look at issues

associated with Release 1.3 go live, the Faster Switching programme and Smart, Flexible Energy System.

We have not yet seen a customer engagement plan. We believe customer insight is required in order to fully assess the impacts of settlement reform. The settlements programme impacts part of the wider dialogue with customers about the change in the market to the Smart, Flexible Energy System. One of the dangers of settlement reform and the Smart, Flexible Energy System is that we assume it is in the customer's interest. However, without engagement they may only see negative impacts rather than accepting this is the best approach to a cost effective, secure and low carbon future.

Q3.5 Do you agree with the dependencies in Figure 1? If not, please explain what changes you suggest and why.

There seems no obvious place for the improvement of the COMC process. We note that it is discussed in the section text, however, we believe this issue needs more focus and in particular how change will be achieved and in what time frame.

Q3.6 What are the barriers to making changes to central systems and industry rules by the first half of 2018?

The lack of a suitable DC/DA system in the industry is a barrier. We support a decision on a centralised DC/DA being made early in the timetable as it will have longer lead times and wider impacts on the other decisions than any other areas impacted by the reform.

The amount of work the DCC and the rest of the industry needs to perform to get smart metering systems and Nexus live and stable will be a priority for industry participants and will take up relevant expertise which will be required for this programme.

The interactions with other industry programmes, particular faster switching has to be understood and incorporated in to all the impacted programmes.

The TOM is not scheduled to be finalised until the end of the first half of 2018. Without this having been finalised it will not be possible to ensure any earlier decisions and system changes are the right solutions for the end consumer.

The amount of change being considered is large and is being fast tracked; this creates an environment where we may not achieve the right solution with minimal change to existing Non Half-Hourly systems and processes.

Nearly all industry parties will have to change their systems and processes for mandated half-hourly settlements to work, so there is a lot of reliance on individual activities being appropriately undertaken by a large number of stakeholders.

Q3.7 Do you have any other comments on the proposed plan?

If the DCC is not able to enrol and adopt SMETS 1 meters in a reasonable timescale, excluding such meters from a target completion date for all other meters may be most sensible, rather than creating a short-lived solution at a time when there is limited resources available in the industry to develop and build the robust processes needed to support them.

CHAPTER: Four

Q4.1 Do you agree with the conclusions of the ESEG and the PSRG (see paragraphs 1.8 – 1.10.)? Do you think anything has changed since they considered these issues?

Roles and responsibilities (see paragraphs 4.2. – 4.7.)

We agree with the scoping for parts 4.2 to 4.7.

Q4.2 Do you agree with the scope of issues identified in this section? Are there any others we should be considering?

Any customers who have a long term technical issue preventing a smart or advanced meter being installed, need special consideration in all areas of Chapter 4 except 4.19 (advanced metering) and parts of 4.29-4.32 (data access) and possibly 4.17, dependent on the COMC approach to traditionally metered customers. Such customers may become disadvantaged in the new Smart, Flexible Energy System through no fault of their own.

Settlement process (see paragraphs 4.8. – 4.17.)

Q4.3 Do you agree with the scope of issues identified in this section? Are there any others we should be considering?

4.15: Grid Supply Point Group Correction Factors is an area where customers without smart meters may quickly become disadvantaged unless this area is carefully considered. Therefore, it is correct that this is within the scope.

Q4.4 Do you agree with the scope of issues identified in this section? Are there any others we should be considering?

The key consideration, as pointed out in 4.12, is the level of non-smart metered customers being settled and how this data will be treated within the settlement runs. Our current thinking is non-smart metered customers would follow the same process, which may mean there is an opportunity to shorten the timetable, but in restricted way to begin with.

Consumer issues (see paragraphs 4.28. – 4.38.)

Q4.5 Do you agree with the scope of issues identified in this section? Are there any others we should be considering?

In general, we agree with the scope of the issues.

Regulated data suppliers should have access to HH settlement data in an aggregated form for use in forecasting. This will help reduce customer bills.

Depending on how the DC/DA works, suppliers may also need the half-hourly data in a ring-fenced manner for validation purposes. This data would be received from the DCC before sending the data to the DC/DA. The supplier has to have access to all the data it needs to complete validation and to build this ability in to a DC/DA maybe more expensive and time consuming. Suppliers have the best view of their customer's consumption, validation by a third party actually risks the accuracy of data settled, as we see in the current NHH reading validation processes.

As stated in previous sections, we feel there is a need for research customer attitudes to the impacts to the customer of Half-Hourly Settlements.

CHAPTER: Five

Q5.1 What is the best way for us to use the expertise of stakeholders? What have you found helpful in the past?

A key function will be reviewing and validating the outputs from working groups before they are finalised. We see a risk in changes being raised and accepted in short timescales creating inefficiencies and unintended consequences. A robust review process is required to reduce costs and ensuring a timely delivery.

EDF Energy
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