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James Earl
Settlement Reform,
Ofgem,
9 Millbank
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Dear James

ElectraLink response to Ofgem's consultation on Mandatory Half Hourly Settlement: aims and timetable for reform.

ElectraLink welcomes the opportunity to provide Ofgem with comments to its consultation on Mandatory Half Hourly Settlement: aims and timetable for reform. ElectraLink supports the introduction of mandatory Half Hourly Settlement (HHS) and looks forward to assisting Ofgem in its consultation and subsequent implementation. Our response to the consultation questions is detailed within Appendix 1 and we are happy for you to make this response public.

ElectraLink is responding in its capacity as the operator of the Data Transfer Service (DTS) and a provider of code administration services.

Since 1998 ElectraLink has been the provider of the DTS discharging a licence condition (SLC 37) of its shareholders, the Distribution Network Operators. This dual fuel data transfer service supports competition in the retail electricity and gas markets. The DTS is provided by ElectraLink under the DTS Agreement which is regulated by Ofgem and is governed by industry via the DTS User Group. The DTS currently processes data defined under an array of existing industry codes including the Master Registration Agreement (MRA), the Balancing and Settlement Code (BSC) and the Supply Point Administration Agreement (SPAA).

Following a series of consents provided by Ofgem to the shareholders of ElectraLink, the company has grown a commercial code administration business, winning a number of contracts under competitive procurement. ElectraLink is currently the code administrator for two central industry codes the Distribution Connection and Use of System Agreement (DCUSA) in electricity and the SPAA in gas. In addition, ElectraLink provides governance services to the Smart Metering Installation Code of Practice (SMICoP), the Community of Meter Asset Providers (CMAP) and the Distribution Charging Methodology Forum (DCMF).

The DTS supports the operation of the current electricity settlement system through the transfer of data between electricity market participants and the BSC Parties in support of the Supplier Volume Allocation Agent and Market Domain Data Agent. Through the DTS, the BSCCo communicates with 20 Half Hourly (HH) Data Aggregators, 21 HH Data Collectors, 37 Non Half Hourly (NHH) Data Aggregators, 37 NHH Data Collectors and 108 Suppliers. Use of the DTS for these settlement related transactions is voluntary. As more consumers move from NHH settlement to HH settlement, use of the DTS will increase as the roles of HHDA and HHDC become dominant and NHH traffic reduces.

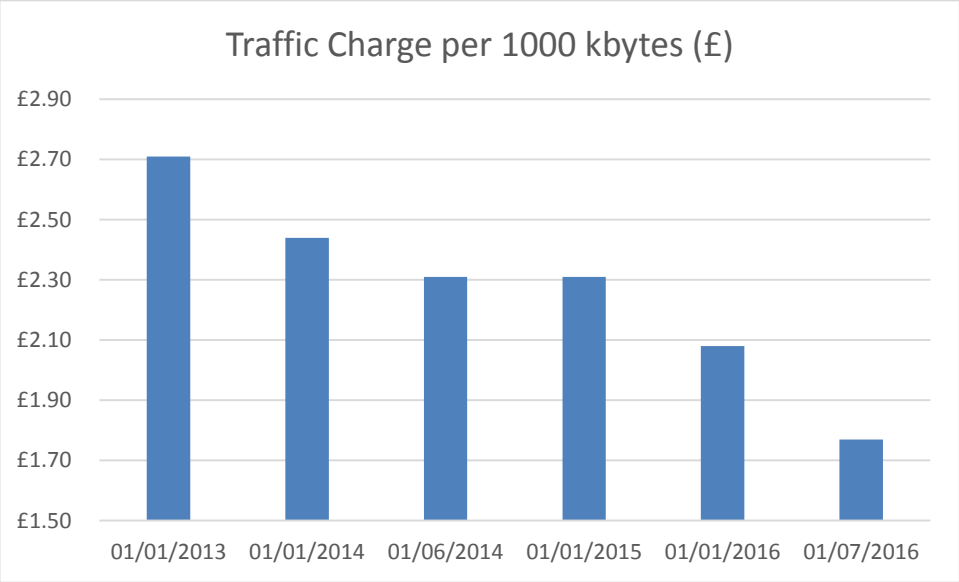
The DTS flows that support Settlement can be broken down into two categories: MPAN-level metered data and aggregated data sent to/by the Settlement Agent. It is the growth in MPAN-level data that will have the biggest impact on volumes on the DTS following the introduction of mandatory HHS. If the current processes remain in place, all 28.5m NHH MPANs

would switch from irregular meter readings (using flow D0010) producing EAC/AAs (using flow D0019) to daily files producing actual readings (using flows D0036 and D0275).

The DTS currently transfers 111GB of data per month of which HH settlement data equates to 23GB. If all NHH MPANs were to switch to HH Settlement, the total volume would grow to 3TB per month. This increase would be offset slightly by the reduction in the NHH MPAN-level data. The DTS would also see a growth in Change of Measurement Class flows during the transition period. The aggregated data related to the HH Settlement process would remain largely unchanged; however, there would be further reductions with the NHH aggregated flows no longer being sent, and any flow containing both reducing in size.

ElectraLink competitively procures the technology service providers that underpin the DTS and provides the service to the UK energy industry on a cost recovery basis. Over the past 18 years the number of energy market participants connected to the DTS has grown to 246 and the volume of data exchanged is currently growing at a year on year rate of 21%. In order to accommodate this growth in 2015 ElectraLink completed a transformation of the DTS to prepare the service or the implementation of mandated HHS. The DTS now operates in a virtual private cloud environment providing data volume scalability at very low incremental cost.

Although many market participants choose to use the DTS in support of flat-file/batch processes, the service already supports near real time data transfer and XML message formats. New market entrants in particular are using these new capabilities to provide flexible integration to industry data. ElectraLink recovers the cost of providing the DTS through a combination of fixed and volume related charges. The scalability of the transformed DTS means that as volume increases the DTS unit charges for users decrease. ElectraLink has consistently reduced the DTS Traffic Charges since 2013 as detailed in the following chart:



We expect this trend of cost reduction to continue into the foreseeable future as the UK energy industry utilises the DTS for more and more regulated data transfer requirements.

Please note that the views expressed in this response are those of ElectraLink Ltd and not those of the DCUSA and SPAA governing Panels or the Data Transfer Service Agreement (DTSA) User Group. ElectraLink would be pleased to engage with Ofgem to discuss this response in greater detail. Should you require any further information please in the first instance contact Dan Hopkinson, at dan.hopkinson@electralink.co.uk.

Yours sincerely

Stuart Lacey, Chief Executive Officer, ElectraLink

List of enclosures:
Appendix 1 – ElectraLink response to Ofgem's consultation on Mandatory Half Hourly Settlement: aims and timetable for reform.

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Chapter 2

Question 2.1 Do you have views on our proposed approach?

Electralink agrees with the proposed approach provided that there is the correct level of engagement with all industry parties to understand the impact. We provide our view of who those parties should be in our response to question 3.2. It is important to recognise that the structure of the energy industry is changing with the introduction of new actors (such as aggregators and third party service providers) who are now delivering industry processes for a significant proportion of consumers. It will be necessary to include these parties in the working groups so that the impact of HHS on a changing market is fully understood.

In addition to ensuring the right parties are engaged on the programme, it will also be important to fully understand the current industry settlement operations and to provide a baseline on which both the new processes and the cutover plan can be evaluated. ElectraLink would welcome the opportunity to assist with the creation of this baseline by facilitating access to current settlement data transferred on the DTS. This data would allow the modelling of the current end to end process across all market participants and enable the impact of change to be assessed. Settlement data of this type is already provided to Elexon to be used with the BSC audit process.

Question 2.2 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.

The rollout of smart meters to domestic consumers is expected to provide most consumers with access to near to real time electricity usage information and costs through the In Home Display (IHD). The smart metering impact assessment, published by BEIS, assumes that as a result of access to this information, consumers will, on average, reduce their demand and some will shift their peak demand to a lower cost period. Under the current NHH arrangements the shifting of demand to lower cost periods will not result in a reduction in balancing and settlement costs for Suppliers.

One of the key benefits of mandatory HHS for domestic and smaller non-domestic consumers is to shift demand patterns to result in lower balancing and settlement costs for Suppliers, which should result in lower tariffs for consumers. Mandatory HHS for all consumers is expected to also encourage the Suppliers to rollout time of use tariffs, further encouraging consumers to better manage the load on the network thereby reducing long term investment costs. Without mandatory HHS there is no incentive for suppliers to introduce new tariffs to shift demand, as the Supplier will not face lower balancing and settlement costs.

Finally, HHS will also enable the realisation of active domestic Demand Side Management (DSM) by ensuring that reductions in energy usage is reflected in energy settlement costs. Without this there is a risk that the full benefit of DSM will not be passed on to consumers, potentially reducing the delivery of DSM services. Increasing the market for DSM services should increase competition for the provision of DSM and so reduce costs to consumers overall. In addition, DSM has the potential to reduce electricity network system investment required to meet increasing peak electricity demand, thereby avoiding investment costs.

The increase of energy awareness delivered through the implementation of smart metering will lead to some consumers wanting to take advantage of behaviour and technology change to drive savings from energy bills. Other consumers, may be less engaged or could require support to realise these benefits. This latter group may be made up of the fuel poor and vulnerable consumers who have less access to technologies that allow the consumer to exploit time of use tariffs to reduce energy bills. The introduction of HH settlement and the subsequent ability to drive innovation in tariffs needs to empower those engaged with energy usage reduction, whilst not adversely impacting those unable to adopt. If this is not achieved, then the benefits of peak load reduction on the networks will not be realised and a proportion of consumers may even see the introduction of smart metering as a detriment to them, linked to a perception of increased prices and inaccessible incentives. There is a risk that the CMA price cap on legacy metered pre-payment consumers may lead to delays in the smart programme as consumers perceive a benefit to refusing SMETs meters.

Whatever the solution, transition management will be key. HH settlement will need to be enabled by smart metering so the introduction of mandatory HHS will need to be closely aligned with the smart programme and a clear set of dependencies established.

The costs associated with the implementation of HHS are likely to include the following:

1. Data Collection / Processing. The data required for HH settlement will be delivered by DCC access to SMETs 2 meters. It should be noted the competition within traditional data collection leads to significant cost reductions in the provision of the service (both from a field perspective and data processing) a fact which should be considered when evaluating the benefits of a central settlement process. The central agent model may drive economies of scale but it is unclear how continuous improvement and value generation will be driven in a non-competitive environment?

2. Investment in new systems and processes. Data volume associated with mandated HH settlement will significantly increase compared to NHH settlement. ElectraLink has modelled the increase in DTS data if the existing settlement processes supported by the DTS (detailed in our cover letter to this response) were simply scaled up to support mandated HH settlement. Our current forecasting model estimates that there would be an increase in DTS data of **2779%** by the completion of the smart meter rollout[1]. As a result of the transformation the DTS, it can be scaled to accommodate these volumes at low incremental cost but it is unlikely that existing DC/DA systems would be capable of processing this data volume without significant investment. This could also be a catalyst for a completely new approach to settlement with the DCC being a conduit for data directly into the settlement processes. The cost and benefit impact of this will depend on which operating model is chosen to deliver mandated HH settlement. The creation of a central settlement process linked to the DCC would have the advantages of scale and a direct link to data. One disadvantages could be a lack of competitive tension driven innovation to reduce costs and increase benefits. An alternative would be to embed aggregation at the supplier end of the DCC 'pipe' this could allow innovation in the delivery of the process and therefore differentiation in cost. Either of these options would require significant investment.

As highlighted in 2.1 the use of DTS data in the modelling of the current settlement baseline can inform the programme as to the impacts of the change to HH settlement on individual participants.

Chapter 3

Question 3.1 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?

ElectraLink suggests the performance assurance framework should also be in scope for the review. The current framework may need to be reviewed due to the changes in data volume and delivery linked to HHS and smart metering. A reform to the performance assurance framework would also be required if a central agent model were adopted and should form part of the settlement process review within the plan. We would recommend a change from market participant self-reporting, which can lead to inconsistencies in approach, to an independent, central reporting mechanism based on a common standard utilising actual industry data.

Question 3.2 What industry expertise is needed to deliver these reforms in the timetable we have given?

Ofgem should ensure representation from all sections of the settlement value chain. This should include Suppliers (large and small), DNOs, National Grid, DC, DA, MOP, electricity market data networks (DCC, ElectraLink), and relevant central bodies (such as ElectraLink and ELEXON), BEIS and Citizens Advice. In addition, the market landscape is changing and a number of supplier entrants use third party service providers to deliver industry processes as a managed service. It may be beneficial to include representatives from these organisations as they represent a number of Supplier organisations as well as independent agents. This group will be able to consider not only the impact of process change on the industry but also the commercial and consumer impact enabling a thorough evaluation of the business case provided by different solution options.

[1] Based on 100% implementation of domestic smart metering.

It is inevitable that the implementation of HH settlement in whatever form will require changes to systems. On this basis it would be beneficial to involve representatives of technology firms who can inform this area of debate. Tech UK is an organisation with good representation from technology providers from across the energy industry as well as access to other sectors such as telecommunications who have similar challenges with resolving very large billing and settlement data.

Question 3.3 How much expertise and time can your organisation provide? How does this interact with other Ofgem initiatives?

The introduction of mandated HH settlement is likely to have a major impact on the DTS and therefore we expect that the DTS User Group will be supportive of ElectraLink providing the mandated HH settlement programme with expertise and other support. ElectraLink's expertise relates to the transmission of settlement data and the interaction of industry parties in the programme. There is also the opportunity for the use analysis of DTS data to inform the programme in terms of current operations and therefore the potential impacts of change as described in Q2.1. ElectraLink holds a data set of every transaction across the DTS since April 2012.

ElectraLink has recently increased the size of its DTS team to cater for the level of industry change but will still have to manage its involvement in both this reform and the Switching Programme. We would expect the DTS User Group to provide ElectraLink with guidance on how best to allocate resources between different Ofgem initiatives.

Question 3.4 What are the key risks and constraints to delivering to the timetable outlined?

The key constraints and risks to delivering the outlined timetable are as follows:

The current scale of industry change will impact organisations' ability to resource the programme. Associated industry change during the same period includes faster switching, smart implementation / DCC ramp up, and the go live of project Nexus. Some companies (especially smaller suppliers) may struggle to resource across all of these programmes. Thought should be given to the engagement mechanisms for the programme to facilitate the widest possible participation. This could include the adoption of collaboration technology which has proven successful in increasing engagement with the Switching Programme.

Any delay to the Smart Meter Implementation Programme would have a detrimental impact on the implementation of mandated HH settlement. It is very early in the smart implementation programme but there are indications that significant ramp up of resources is required to hit the rollout targets. This could delay the HHS programme if there are fewer than anticipated smart meters installed.

Commercial impacts; If the HSS programme decides to go for a central agent model there may be complex commercial considerations. These, along with the transition model, will need to be factored into the timeline.

Complexity; The adoption of mandatory HHS will be highly complex and will impact the systems architecture of most parties. Setting a realistic timeline will be key especially in the light of recent delays to central projects.

Question 3.5 Do you agree with the dependencies in Figure 1? If not, please explain what changes you suggest and why.

We agree with the dependencies in figure 1.

Question 3.6 What are the barriers to making changes to central systems and industry rules by the first half of 2018?

As a central system, the DTS will be impacted by the new rules; however, following the completion of its transformation in 2015, the DTS is now flexible and scalable and will be able to accommodate the changes required by the first half of 2018. ElectraLink made similar changes, albeit on a smaller scale, to support the increase of HH settlement as a result of industry change P.272 which brought Profile Classes 5-7 into the HH regime. These changes were completed within a 3-month period.

Whilst we do not expect significant changes to the DTS Agreement as a result of the introduction of full HH settlement, any changes which may be required will be proactively managed by ElectraLink in accordance with the change processes defined within DTS Agreement. This well-established change process includes full DTS user consultation followed by formal DTS User Group approval and has been used successfully to implement changes ranging from the additional of regulated

gas data flows; accession by new types of party such as Green Deal Providers and gas suppliers; as well as more day to day changes to accommodate new Internet-based connection options and improves Service Level Agreements etc.

There is a challenge between the statement in 3.4 that the decision on if, when and how to implement HHS will be taken in the first half of 2018 and the implementation of systems and industry rules in the same timeframe. The changes will need to be based on that decision and changes could be complex, especially if there is to be a central agent model. Further clarity on this timeline is required. Barriers include the complexity of the potential change, the impact on industry participants and the other major industry change programmes currently underway. To facilitate the delivery of this change we believe it would be prudent to appoint a lead body who would be responsible for co-ordinating and facilitating changes to the various codes. This would align with the recommendations from the CMA and Ofgem's most recent consultation, whilst ensuring that a single project manager is appointed who would be responsible for delivering and facilitating change.

Question 3.7 Do you have any other comments on the proposed plan?

ElectraLink would highlight the necessity to underline the requirement to co-ordinate this plan with other industry changes and Ofgem initiatives.

Chapter 4

Question 4.1 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?

We agree with the conclusions of the ESRG and PSRG. The main change since the publication of their conclusions is the market context. Their conclusions need to be reviewed against the current timelines for other industry programmes namely smart metering implementation, faster switching and project Nexus. In addition, the impacts of other CMA remedies including the pre-payment price cap should be assessed in terms of the impact on the rollout of smart metering and the potential for certain consumer groups to disengage from the programme due to perceived price benefits of staying on legacy meters.

Roles and responsibilities (see paragraphs 4.2. – 4.7.)
Question 4.2 Do you agree with the scope of issues identified in this section? Are there any others we should be considering?

We agree with the scope of the identified issues. We would increase the scope to directly address the roles and responsibilities associated with any transitional arrangements and how consumers are impacted through this process. It will be important to assess the benefits of the current agent model and the potential for future innovation and cost reduction through competitive tension. A central model may achieve economies of scale but recent projects have demonstrated the potential risk associated with the implementation of central systems.

Settlement process (see paragraphs 4.8. – 4.17.)
Question 4.3 Do you agree with the scope of issues identified in this section? Are there any others we should be considering?

We agree with the scope of issues identified in this section. In terms of other issues that should be considered we would also suggest adding performance assurance framework within the scope of settlement processes. This will need to be considered as part of the transitional arrangement. There are a growing number of parties operating in the market. The delivery of HHS will be more complex than the initiation of the current process. Visibility of performance and implementation will be crucial in ensuring a consistent consumer experience that allows interoperability between supplies and their agents on behalf of HHS consumers. We recommend a change from self-reporting assurance, which can lead to inconsistencies in approach, to an independent, central reporting mechanism based on a common standard utilising real industry data.

Policy enablers (see paragraphs 4.18. – 4.27.)
Question 4.4 Do you agree with the scope of issues identified in this section? Are there any others we should be considering?

ElectraLink agrees that all issues have been identified in this section. We would like to highlight that DCUSA Ltd is looking to issue a second consultation in early 2017 to consult on DCP 268. This change seeks to facilitate a transition to HH settlement for NHH consumers by moving to a time banded charging methodology based on profiled HH data used in settlement. Should this change be approved then the settlement frequency would be de-coupled from the common distribution charging methodology within DCUSA. This would remove the need to make any further changes to DCUSA in preparation for mandatory HH settlement.

Consumer issues (see paragraphs 4.28. – 4.38.)

Question 4.5 Do you agree with the scope of issues identified in this section? Are there any others we should be considering?

Ofgem should consider the CMA pre-payment price cap when reviewing issues effecting consumers. There may be a perception that a price cap associated with a legacy meter is beneficial compared to the benefits delivered through a smart meter (including HHS). This could impact take up of Smart Meters.

Chapter 5

Question 5.1 What is the best way for us to use the expertise of stakeholders? What have you found helpful in the past?

We would recommend a combination of mechanisms which have worked well in the past for similar programmes of work, including hothousing, working groups and a structured dissemination and communications strategy. ElectraLink is London based so attendance at hothouses, industry working groups and meetings is straightforward; however, we recognise that other organisations are resource / geographically constrained. The use of networking tools such as Skype or Webex will allow participation from a more diverse group. This can be combined with collaboration tools such as SharePoint that allow the sharing of documentation, and enable multiple users to work on material in parallel.