

Smart Metering Implementation Programme -
Regulation
Department of Energy & Climate Change
Orchard 3
Lower Ground Floor
1 Victoria Street
London
SW1H 0ET

Our Ref:CJA

Your Ref: Stage 2 Consultation

November 29, 2013

Dear Sirs

Consultation on New Smart Energy Code Content (Stage 2)

Northern Powergrid is the electricity distribution (DNO) business for the Northeast, Yorkshire and parts of northern Lincolnshire, operating through its two licensed subsidiaries, Northern Powergrid (Northeast) Ltd and Northern Powergrid (Yorkshire) plc.

We are grateful to the Department of Energy and Climate Change (DECC) for the opportunity to comment on its consultation on New Smart Energy Code Content (Stage 2) and the accompanying proposed legal text.

Our responses to the specific questions raised in the consultation are contained in Appendix 1 to this letter along with the rationale that supports our views. We have a range of views on DECC's proposals including some concerns and these are highlighted below.

- We are apprehensive regarding the proposals for Registration Data Provider obligations regarding the provision of refresh data;
- We believe that the DCC should continue to use profile class as a proxy to estimate the number of non-domestic meter points;
- We do not agree that it is sensible to measure provision of the DCC with a 'data refresh' within a set number of calendar days; instead we believe that the refresh process should remain in line with current MRA obligations;
- We are uncomfortable about the differences between Annex 5 of the consultation document (User Gateway Services Schedule) and the individual documents that define these services e.g. SMETS, CHTS, DUGC, GBCS especially as these source documents are still under development. There is a need to ensure that the SEC is aligned with these documents. The 'User Gateway Services Schedule' is referenced several times in the

consultation document, yet it's status and governance arrangements are unclear; it is not a document included in the list of Technical Specifications in Annexe 3;

- It is essential that Electricity Network Operator's schedules should not be removed from the meter as part of the Change of Supplier process;
- We would recommend that the Smart Meter Inventory contains a reference between DEVICE ID with MPXN ID; this data could possibly be contained with new D350 flow from the DCC;
- Given the significant uncertainties associated with estimating the volume of User Gateway Services, we do not agree with the proposed text for the SEC in respect of managing demand and believe that 110% is a potentially flawed measure that could encourage overinvestment in the CSP's / DSP's infrastructure;
- We are surprised and concerned about the implications of paragraph 400. (*All Services listed in this Schedule (including Alerts) will attract an Explicit Charge pursuant to K7.5(b)*). We are unaware of there having been any discussions on separate charging for alerts (outside of the fixed charges) and had assumed that costs for such alerts would be included in the DCC's fixed charges; our assumption being based on charging discussions held earlier this year, in which it was indicated that alerts did not affect the sizing or capacity (and hence the cost) of the communication infrastructure when compared to other DCC services. If the DCC's fixed charges do not cover the sending of alerts, then we would hope that the fixed costs would be reduced to reflect this. It would also be helpful if the DCC could communicate what other services may, or will, be charged for outside of the fixed charges arrangements. Furthermore, we have a number of other concerns about the proposed funding arrangements and the potential for some costs, e.g. those relating to communication hubs removed from service to be smeared across all DCC Users including DNOs, particularly as these items of hardware will be transported, installed, removed, stored and potentially disposed of by Suppliers. Our concerns are set out below.

Communication Hub Funding

Whilst the Communication Hubs will be initially financed by the Approved Finance Party we assume that the day-to-day physical management of these hardware assets will be managed by Suppliers in similar ways to how meter assets are managed by Suppliers today (meter assets are funded by Meter Asset Providers (MAPs)). There are issues in the way that meter assets are managed now, including how meters are handled and transported; unnecessary premature asset replacement; asset stranding and assets reported as faulty which are found to be sound upon testing. The application and recovery of charges to remunerate the Approved Finance Party should therefore carry appropriate signals and incentives for Suppliers to manage communication hubs appropriately.

In relation to charges following removal of a Communications Hub, including for 'no fault' removals, we do not agree that any outstanding asset costs should be smeared across all DCC Users. We believe that such costs should be borne by Suppliers to provide signals for appropriate behaviours, specifically to encourage efficient use and re-use of Communications Hubs.

Northern Powergrid supports DECC's 'minded to position' to reflect the Monthly Asset Charges as an Explicit Charge in the SEC that the Supplier is required to pay to the DCC on a monthly basis from the point they take delivery of each Communications Hub. We agree that this

should ensure that Suppliers have the appropriate incentives at that stage in the installation process. We do not support the alternative of smearing a Monthly Communications Hub Charge within the DCC's fixed cost base and thereby allocating it across all DCC Service Users, as we believe this could drive inappropriate installation market behaviours.

We are uncomfortable with the provisions as drafted in Section M of the SEC stage 2 in relation to Third Party Rights. We would welcome clarification on whether the intention was that the Approved Finance Party should have the ability to pursue all DCC Users or only Supplier Parties. If the intention is the latter then the drafting should make reference to Supplier Parties or include a new defined term of 'Supplier User'.

It is noted that DECC has planned for consultations on further stages of development of the SEC, including for Stage 3 and 4, and we appreciate the advance notice that has been provided to interested and affected parties. We look forward to commenting on and contributing to DECCs further proposals with the intention of developing a SEC with appropriate obligations on SEC parties.

Yours faithfully

Appendix 1: Northern Powergrid's responses to the consultation questions for SEC2.

Question 1: Do you agree with our proposed text for the SEC with respect to Technical Governance and Change Control? Please provide a rationale for your views.

Northern Powergrid would make an observation that the SEC Panel should consider selecting Technical Sub-Committee (TSC) members such that there are representatives from all key stakeholders so that the impact of any changes can be assessed against all User's requirements.

We note at paragraph 71 that the TSC will be required to maintain a Technical Architecture Document, describing the key elements of its technical architecture, potentially including the DCC's Solution Architecture. In the Service Management section the use of ITIL is explicitly referenced (paragraph 208) and we note that the SEC Panel can approve the use of alternative methodologies, we suggest that the use of a standards based framework could be better, e.g. TOGAF, to ensure a common repository and reusable artefacts.

http://en.wikipedia.org/wiki/The_Open_Group_Architecture_Framework

We note in paragraph 66 that the key rationale for establishing the TSC is that it would provide the SEC Panel, Change Board and Working Groups with specialist knowledge, this seems appropriate and practical. In due course we would welcome more clarity of the governance arrangements in respect of the engagement and provision of this specialist knowledge, including interaction with the Change Board to ensuring that proper change control system in place (ITIL standards used).

Question 2: Do you agree with our proposed text for the SEC with respect to Registration Data? Please provide a rationale for your views.

In terms of the registration interface documents Northern Powergrid is comfortable that the DCC should be responsible for the design and development of the Registration Data Interface, in cooperation with Registration Data Providers.

Northern Powergrid has concerns regarding Registration Data Provider provision of refresh data; please see our response to Q4.

Question 3: The DCC currently uses profile class data as a proxy to estimate the number of non-domestic meter points registered to users. Should this be replaced with a new data item which accurately reflects non-domestic meter registration, or should the DCC continue to use profile calls as a proxy? If you think it should be replaced, should the DCC rely on suppliers providing this information separately, or should a change be sought to electricity registration systems to collect this data? Please provide a rationale for your views.

Northern Powergrid believes the DCC should continue to use profile class as a proxy to estimate the number of non-domestic meter points.

Rationale:

The accuracy of using profile class data as a proxy of non-domestic meter points is unknown. The benefits of implementing an industry change to accurately record this data are therefore not clear. The costs could be substantial for amendments to Supplier and/or Registration systems and processes, however the benefits could potentially be minimal. With this in mind, Northern Powergrid's preference would be that prior to implementing any industry changes a detailed review is undertaken to assess accuracy levels and therefore benefit. Such a review should also be used to fully justify the associated costs and operational impacts of the various options for not using the profile class data, so that the industry can make an informed choice. The review should determine, for example, which industry party would be responsible for populating and ensuring accuracy of the data? Given that relying on the quality of existing Supplier data has in the past proved to be insufficient, should this approach be adopted the resulting workload to correct records may be substantial. If data quality is established to be an issue in this case it may either be preferable to undertake a data cleanse activity in addition to, or instead of, introducing a new data field within Registration Systems.

Question 4: The SEC will include a requirement for RDPs to provide the DCC with a 'data refresh' on request, within a set number of days. Do you agree that it is sensible to measure in calendar days? If so, what is the impact of providing data refreshes to the DCC within two calendar days? If this has too significant an impact, what should the correct value be? Alternatively, do you believe it should be a set number of working days? If so, how long should this period be?

No, Northern Powergrid does not agree that it is sensible to measure provision of the DCC with a 'data refresh' within a set number of calendar days. We believe that the refresh process should remain in line with current MRA obligations.

Rationale:

The impact of providing complete registration data refreshes to the DCC within two calendar days would result in significant investment and change being required to the existing registration systems. The processing capabilities of current registration systems would need to be significantly upgraded with fundamental redesign likely. Increased complexity and capability within the registration systems is likely to increase the cost of software maintenance, change and release services. In addition, irregular requests for data extraction during non-business hours would substantially increase costs with our IT service provider. Planned activity over weekends could be compromised, e.g. system maintenance, which could in turn lead to increased risk and therefore management overhead.

Significant disruption to existing operations is possible if timescales for delivery are too strict or unrealistic, introducing additional complexity and processing time to planned processing activities.

Currently, registration data provider's systems are designed to meet the MRA obligation set out below. We would, as a minimum, expect the DCC to demonstrate a cost benefit analysis and positive business case in order to justify the required additional investment to move to an enhanced requirement.

Extract from MRA on Selective Refresh, Clause 23.2

Clause 23.2 Where the MPAS Provider receives the Supplier's or Data Aggregator's request pursuant to Clause 23.1 by 15:00 hours on a Working Day which it Accepts, it shall provide the Supplier or Data Aggregator with the Selective Refresh by 06:00 hours on the following Working Day, provided that where the total number of Selective Refreshes to be provided by that MPAS Provider would otherwise exceed 50 in any Working Day, that MPAS Provider shall use its reasonable endeavours to provide as many Selective Refreshes as possible but shall only be required to provide 50 Selective Refreshes requested on that Working Day. Such Selective Refreshes shall be provided in the following manner:

23.2.1 a maximum of 5 Selective Refreshes per Supplier or Data Aggregator, allocated in the order in which those requests are received; and

23.2.2 where Clause 23.2.1 has been complied with, any extra requests which have been received shall be provided in the order in which they were received.

Any extra Selective Refreshes in excess of 50 requested in any Working Day or any received after 15:00 hours on a Working Day in relation to which the MPAS Provider has not provided responses shall be deemed to have been requested at the start of the following Working Day. Where the request for a Selective Refresh is Rejected, the MPAS Provider shall, within 1 Working Day, inform the Supplier or Data Aggregator that the request has been Rejected together with all the reasons for that Rejection.

Question 5: Do you agree with our proposed text for the SEC with respect to the DCC User Gateway? Please provide a rationale for your views.

Northern Powergrid is concerned about the differences between Annex 5 of the consultation document (User Gateway Services Schedule) and the individual documents that define these services e.g. SMETS, CHTS, DUGC, GBCS especially as these source documents are still under development. Annex 5 as drafted includes some inconsistencies with the current version of these documents. There is a need to ensure that the SEC is aligned with these documents. The 'User Gateway Services Schedule' is referenced several times in the consultation document, yet it's status and governance arrangements are unclear; it is not a document included in the list of Technical Specifications in Annexe 3.

Question 6: Do you agree with our proposed text for the SEC with respect to the DCC User Gateway Services and Service Request Processing? Please provide a rationale for your views.

Para 125

“Where the DCC executes a Change of Tenancy Service Request it will interrogate its schedules and remove those belonging to Other DCC Users as the permission of the customer can no longer be assumed”

Northern Powergrid believes it essential that Electricity Distribution Network Operator's schedules should not be removed from the meter as part of a Change of Supplier service request.

Rationale:

Electricity Distribution Network Operators' schedules relate to network specific data and exist for the benefit of the customer, e.g. management of network power flows and voltages.

Question 7: Do you agree with our proposed text for the SEC with respect to Parsing and Correlation? Please provide a rationale for your views.

Northern Powergrid would welcome further clarity on this aspect. Paragraph 158 describes the arrangements where Alerts are generated by Smart Metering Devices. Do the same arrangements apply where an Alert is generated via a CSP solution e.g. in the case of a Power outage alert? In addition what are the arrangements for alerts associated with CSP infrastructure e.g. alerts associated with a fault in part of a CSPs network?

Question 8: Do you agree with our proposed text for the SEC with respect to Enrolment in the Smart Metering Inventory and other associated processes? Please provide a rationale for your views.

No

Rationale:

Northern Powergrid recommends that the Smart Meter Inventory contains a reference between DEVICE ID with MPXN ID; this data could perhaps be contained with the new D350 flow from the DCC. The SEC text only covers half the exchange; it specifies the data to go from the DNO to DCC, but then generalises regarding the data coming back in the other direction so we can only comment on the partially complete wording. There are assumptions around the use of UPRN and the possibility of matching with MPXN ID from Registration Data. These may be flawed assumptions.

Question 9: Do you agree with our proposed text for the SEC with respect to the Communications Hub: Intimate Physical Interface? Please provide a rationale for your views.

No comments.

Question 10: Do you agree with our proposed text for the SEC with respect to DCC Service Management? Please provide a rationale for your views.

In respect of paragraph 208 we suggest that the proposed text is amended in the SEC to include all ITIL processes, e.g. Problem Management.

Rationale:

The SEC recognises the importance of Service Management in line with the principles of the IT Infrastructure Library and therefore needs to include all ITIL processes.

Question 11: Do you agree with our proposed text for the SEC with respect to Incident Management? Please provide a rationale for your views.

No comments.

Question 12: Do you agree with our proposed text for the SEC with respect to the Self-Service Interface? Please provide a rationale for your views.

No comments.

Question 13: Do you agree with our proposed text for the SEC with respect to the DCC Service Desk? Please provide a rationale for your views.

No comments.

Question 14: Do you agree with our proposed text for the SEC with respect to the Service Level Agreements for Testing? Please provide a rationale for your views.

No comments.

Question 15: Does the inclusion of DCC aggregate performance measures in the SEC, and the consequential reduction in future service charges, appropriately balance the need for the DCC to manage its Service Providers flexibly with the need for DCC Service Users to have a say regarding performance targets? Please give reasons for your answer.

No comments.

Question 16: Do you agree with our proposed text for the SEC with respect to Managing Demand? Please provide a rationale for your views.

No, accuracy of forecasts needs to be rewarded.

Rationale:

In the early years of the Smart Meter rollout the Users estimates will be subject to significant uncertainty. Whilst Suppliers will be in control of whether they will install the number of meters they planned to install in a specific period (and hence the likely service demand required from the DCC), network operators will be exposed to the uncertainties of Supplier's roll out plans. The purpose or benefits of a 110% threshold are unclear and we would welcome clarification from DEC on what it sees as the benefits; Users are not (and should not be) rewarded for forecasting with accuracy. This approach may lead to over estimations and unnecessary DCC costs to cater for User Gateway Service Demands that are not reflective of the actual demand on the Gateway.

Para 267 references discussions relating to aggregate demand estimates. These discussions explicitly excluded the receipt by Users of Alerts. Given that the receipt of Alerts now seems to be a chargeable service (para 400) the implications on 'Demand' should be considered.

Question 17: Do you have any comments on the security obligations set out in Section G of the SEC drafting or the way they are expressed?

DECC accepts the concept of a risk-based, proportionate response approach to application of the security requirements. This must be clear in the wording of Section G.

It is our understanding that DECC does not expect all personnel/staff who have access to smart meter data to be covered by Section G, e.g. call centre staff. This must be clear in the wording of Section G. Perhaps the definition of User Systems (terms section) could be developed to have an in and out of scope definition with examples.

It is our understanding that Users will be able to limit the scope of User Systems (as defined in the SEC) and therefore reduce the security requirements by reducing risk and ensuring a proportionate response. This must be clear in the wording of Section G.

Question 18: Do you have any comments on the appropriateness and / or the proportionality of the security obligations in relation to particular types of DCC Service Users and their rôle?

From a security perspective, there are three main areas where User Parties activity can impact the effective operation of smart meters:

1. Actions causing loss of supply.
2. Actions causing financial impacts to User parties and customers.
3. Actions compromising the security and integrity of smart metering equipment on customer premises.

Electricity Distribution Network Operators have a single critical command, 'Update Security Credentials'. Electricity Distribution Network Operators can therefore only initiate actions which relate to (3) and then only to impact Electricity Distribution Network Operator non-critical operations. Other Users can initiate actions which impact all areas, e.g. Suppliers.

The impact of an Electricity Distribution Network Operator compromising the security and integrity of smart metering equipment on customer premises is limited to Electricity Distribution Network Operator functionality only and therefore has no impact on the supply of electricity, the customer or other User functions.

Security obligations applicable to Electricity Distribution Network Operators outlined in Section G should be risk based and be commensurate and proportional to the impacts of compromising the security and integrity of Electricity Distribution Network Operator functionality only.

Northern Powergrid believes a two tier approach to User security obligations is appropriate. With those Users that can initiate actions causing a loss of supply event, an event having a financial impact, and an event that comprises the security and integrity of equipment, being subject to the full scope of the obligations, whilst Electricity Distribution Network Operators are subject to a sub-set of the obligations.

Northern Powergrid believes a proportionate response, using a risk-based approach, for Electricity Distribution Network Operator's security requirements would be addressed by the application of role based access with a strictly limited number of Users, plus stringent authorisation procedures (ring-fence key management). It is proposed that in due course a full risk assessment, containing a security threat assessment, is used to validate this approach; with timescales to be agreed via the SEC Panel.

Reference to ISO/IEC/BSO - Northern Powergrid's IT service provider already complies with the principles contained within these standards. Assurance will be provided by independent reviews in advance of implementation plus on-going audits. As the exact requirements are to be defined next year any requirement to amend existing policies and procedures is yet to be understood.

Question 19: Do you agree that the four additional provisions are proportionate responses to providing reliable and economic third party financing options for Communications Hubs?

No comments.

Question 20: Views are invited on the proposals in relation to Communications Hub asset charges and maintenance charges. This includes:

- Monthly Communications Hub Charge
- HAN Variant Pricing
- Monthly Maintenance Charge

No comments.

Question 21: Views are invited on the proposals in relation to charges following removal of a Communications Hub. In particular, views are invited on the proposals for no fault removals in split fuel households. Do you agree that any outstanding asset costs should be smeared across all users rather than being charged to the installing or removing Supplier when Communications Hubs that do not serve the second installer's equipment are removed from split fuel households? Please provide a rationale for your views.

No.

Rationale:

The funding of such charges should sit with Supplier to incentivise appropriate behaviours and minimise any asset stranding, including:

- the pursuance of interoperability of Communications Hubs with different smart meters/smart metering systems;
- The installation of the most appropriate Communications Hub by the installing Supplier;
- Efficient use and re-use of Communications Hubs by Suppliers;
- The avoidance of any premature swapping in relation to fault detection and resolution; and
- The avoidance of any premature scrapping of devices.