Judith Ross
Ofgem,
9 Millbank,
London,
SW1P 3GE

10 May 2017

Dear Judith,

ELEXON response to 'Targeted Charging Review: a consultation'

ELEXON welcomes the opportunity to respond to Ofgem's consultation 'Targeted Charging Review: a consultation'.

ELEXON is at the core of the electricity market in Great Britain. We compare how much electricity generators and suppliers said they would produce or consume with actual volumes. We establish a price for this electricity and settle around £1.5bn of funds accordingly. Our work ensures the smooth operation of the market, supports new entrants and innovative business models and ensures a level playing field for electricity wholesale market players. Our data supports wider industry cost recovery and validation mechanisms, is shared transparently and used to report on market trends.

Our response draws particular attention to the relationship between the Balancing and Settlement Code (BSC) and the Connection and Use of System Code (CUSC) and Distribution Connection and Use of System Agreement (DCUSA) in relation to network charging. That is, National Grid, as System Operator, and Distribution System Operators (DSOs) depend on BSC processes to obtain aggregated metered data, through receipt of reports from ELEXON, which they then use to set and levy network charges. We have also highlighted opportunities and challenges that may arise from other changes to industry arrangements, e.g. the rollout of smart meters, introduction of mandatory half hourly (HH) Settlement and development of non-traditional business models.

In addition our response comments on the applicability of any charging principles developed as part of your review to other cost recovery mechanisms, e.g. by providers of central services (e.g. Code Managers and Delivery Bodies).

We have structured our response as follows: a general response (which is the main body of this letter) and specific answers to questions you asked in your consultation (please see Appendix 1).

The views expressed in this response are those of ELEXON Limited, and do not seek to represent those of the BSC Panel or BSC Parties.

Cross code dependencies – provision and use of Settlement data for network charging purposes

National Grid and the DSOs use aggregated metered data to set and levy Transmission Network Use of System (TNUoS), Balancing Services Use of System (BSUoS) and Distribution Use of System (DUoS) charges. ELEXON primarily collects and uses the metered data for Settlement purposes. However, the BSC also requires ELEXON to aggregate and report certain Settlement data to National Grid and DSOs for non-Settlement purposes.

ELEXON produces and sends a variety of reports to National Grid that provide raw metered data, aggregated Settlement data and details of core Settlement calculations. These reports are used for network charging purposes. In particular, ELEXON sends the following daily reports:

- CDCA-I012 'Report Raw meter Data' - raw metered data from Metering Systems registered in non-Supplier Balancing Mechanism (BM) Units;
- CDCA-I042 'BM Unit Aggregation Report' - gross import and export volumes of energy for non-Supplier BM Units;
- P0210 'TUOS Report' - aggregated, net volumes of consumption in relation to Supplier BM Units; and
- SAA-I014 'Settlement Reports' - a detailed summary of the main outcomes of each Settlement Period's System Price calculation and the impacts on BSC Parties.

In addition, ELEXON and Supplier Agents send a variety of reports to DSOs for DUoS charging purposes.

- ELEXON:
  - D0030 'Aggregated DUOS Report' – aggregated and profiled non half-hourly (NHH) metered data by settlement class and either by Distributor or Supplier.
- Supplier Agents:
  - D0010 'Meter Readings' – actual meter readings from Metering Systems registered in Supplier BM Units;
  - D0036 'Validated Half Hourly Advances for Inclusion in Aggregated Supplier Matrix' – individual Metering System HH consumption; and
  - D0275 'Validated Half Hourly Advances' - individual Metering System HH consumption (where HH periods in UTC only).

The requirements for these reports are defined in the BSC, its subsidiary documents and in the Data Transfer Catalogue (DTC).

Therefore, changes to network charging arrangements can have consequential impacts on industry codes beyond the primary codes that set out the specifics for calculating and levying network charges.

For example, Ofgem is currently considering a number of changes to the way TNUoS and BSUoS charges are calculated, i.e. CUSC Modification Proposals CMPs 264, 265, 271, 274 and 275. To facilitate CMP264 and 265, EDF Energy and Scottish Power raised BSC Modification Proposals P348 and P349 to modify the way that ELEXON aggregates Settlement data and reports it to National Grid in the P0210 'TUoS Report'[1]. For more information on P348 and P349, we recommend reviewing the corresponding Assessment Reports and ELEXON's response[2] to Ofgem's consultation on its minded to position for CMP264 and CMP65.

Our experience of developing these CUSC and BSC modifications is that they may have benefitted from clearer and central coordination. In this case National Grid was the Code Administrator for the primary CUSC changes. We suggested that National Grid might consider coordinating both the CUSC and BSC changes (e.g. through a joint workgroup) but it was believed that the parallel but separate

[1] Please also note that two of the three options developed under P348/349 require changes to the DTC. ELEXON has initiated discussions under the DTC's governance arrangements to make these changes.

[2] Please see https://www.elexon.co.uk/wp-content/uploads/2017/04/CMP264_265_Minded_To_Consultation_0417_v1.0.pdf

development of the CUSC and BSC changes was sufficient, primarily as there was shared membership of the CUSC and BSC workgroups. We found that it was difficult to define the BSC requirements and identify solutions until the CUSC requirements had been agreed and understood. Unfortunately, because of the complexity, contentious nature and number (43) of the CUSC proposals, this process took longer than expected and meant that BSC requirements and solutions evolved over time until the CUSC requirements and legal text had been finalised. Furthermore, because the BSC changes are to facilitate another code's requirements and Ofgem has not yet decided which (if any) CUSC change to implement, the BSC Modification Workgroup and BSC Panel have needed to take an unconventional/flexible view of the BSC Objectives when considering the P348 and P349 Proposed and Alternative Modifications. For example, when providing its initial recommendations, a minority of BSC Panel Members felt they could not provide a view on the BSC proposals against the BSC Objectives because without a decision on the CUSC proposals, the 'baseline', against which it should consider the BSC proposals, was not clear. This was despite Ofgem's minded to position.

In light of our experiences, we believe it is important that any further changes to network charging arrangements should effectively co-ordinate the development and definition of overall, business and then solution/technical requirements that cut across Industry Codes.

We therefore support Ofgem's proposal to initiate a Significant Code Review because of the cross code dependencies that underpin network charging arrangements. An SCR should enable Ofgem to consider the overall implications and define and coordinate the primary and consequential changes that may be necessary to deliver its recommendations for changes to the network charging arrangements.

Opportunities

The energy sector is undergoing considerable change, predominantly driven by technological change. These changes present opportunities for improving existing or enabling new ways of operating.

We believe that the rollout of smart and advanced meters, and the implementation of mandatory HH Settlement may provide opportunities that enable more effective or new ways of reporting metered data to National Grid and DSOs.

There is a large body of work, including by Ofgem and ELEXON, which considers the costs and benefits of smart and advanced meters, and of mandatory HH Settlement. In general, these programmes should enable more accurate and timely collection and aggregation of metered data, which is currently collected over a 14 month period and based on estimates and profiles.

Of specific interest to Ofgem when considering its Targeted Charging Review is that these changes should enable ELEXON (or Suppliers or Supplier Agents) to report more timely and accurate import and export volumes at a HH level to National Grid and DSOs for charging purposes. This should enable more accurate charge setting, forecasting, more targeted and sophisticated tariff designs (e.g. time of use), and in theory could enable site specific charges for all Metering Systems (i.e. National Grid and DSOs could receive and charge for individual Metering Systems imports and exports).

However, our Impact Assessment (IA) on 'Mandatory Half Hourly Settlement for Customers in Profile Classes 1-4 and the Closure of Non Half Hourly Settlement'[3] was not able to identify clear costs and

[3] Please see https://www.elexon.co.uk/wp-content/uploads/2012/01/Profile-Class-1-4-HH-Settlement-Final-Report-v1-0.pdf

benefits because of the uncertainties over the Smart Metering Implementation Programme (SMIP), the lack of defined smart meter data processes and other related programmes at the time[4].

Whilst it is difficult to say with certainty what opportunities and benefits may exist until a clear Target Operating Model for mandatory HH Settlement is defined, we believe that the SCR should consider how smart and advanced meters, and mandatory HH Settlement might enable options for innovative charging arrangements. Furthermore, the SCR should consider how its findings and recommendations may (need to) influence the delivery of these related programmes of work.

Challenges

Technological changes and the development of new operating models inevitably pose challenges too.

Whilst the rollout of smart and advanced meters and introduction of mandatory HH Settlement should improve the availability and timeliness of accurate metered data, it is likely that a small number of sites will retain NHH meters or be settled NHH. That is, it is likely some customers will refuse to have a smart or advanced meter, or allow period level data to be used, e.g. for Settlement purposes, and some sites where a smart or advanced meter cannot be installed. In these circumstances, the existing NHH arrangements will need to continue. Any changes to the network charging arrangements and to the reporting of Settlement data will need to continue to accommodate these NHH sites.

Ofgem should also give careful consideration to how non-traditional business models, e.g. storage providers, aggregators and virtual BM Units, are treated. In this respect, we are encouraged that your consultation recognised the need to consider how storage providers might be treated.

However, we note that arrangements for storage providers and other non-traditional business models go beyond network charging. It is clear from discussions at different industry code panel and workgroup meetings that it is unclear how these new types of participant should operate in relation to the overall industry arrangements, e.g. in terms of how they should be registered, metered, provide Balancing Services, be exposed to Imbalance Settlement etc. Therefore we believe there may be sense in considering and setting the overall operational framework(s) (including network charging) for these non-traditional business models, rather than considering, in isolation, how they might fit into different aspects of the overall arrangements. A holistic approach would ensure a clear, consistent and co-ordinated framework, which minimises the risks of unintended consequences.

Charging principles

The proposed SCR is focused on a particular aspect of cost recovery by network operators, i.e. the recovery of residual charges, as defined in the CUSC and DCUSA. Your principles have been set specifically for assessing residual network charges only. As such, we have not commented on whether they are appropriate in relation to residual charging for network costs.

However, we note that residual network charging is similar to other forms of cost recovery by industry participants. For example, other industry codes set out requirements for the recovery of administration and other central system and process costs. In particular, the BSC sets out how BSC Charges should be set and levied in order to recover the administrative costs of running the BSC.

[4] For example see our report entitled 'Delivering Electricity Settlement Reform' https://www.elexon.co.uk/wp-content/uploads/2012/05/206_11_AttachmentA-Delivering-Settlement-Reform_Final_Report_PanelDraft.pdf

Whilst your principles appear to have been set for a specific purpose, we'd appreciate Ofgem's thoughts (and an opportunity to comment) if it had intended for these principles to apply more generally.

Delivery

Ofgem proposes to initiate an SCR to assess the existing residual charging arrangements and identify recommendations. It also proposes that it will direct licensees to raise any necessary modifications to implement these changes.

In general we support Ofgem's proposal to initiate an SCR. This is because the subject matter is complex and contentious, affects a range of stakeholders and, as we have described above, cuts across different industry code arrangements. An SCR will enable Ofgem to complete a holistic review and identify and direct a consistent and co-ordinated set of recommendations.

For similar reasons we also support Ofgem's proposal to establish a Charging Coordination Group. The CCG is intended to coordinate the development of a number of related reviews, including the SCR. We believe that given the scope and interconnected nature of these reviews, Ofgem should ensure the CCG's terms of reference are very clear and give it an active role sitting across and holding to account the reviews it is responsible for.

The membership of the CCG should also reflect the broad impact the various reviews may have on participants and industry arrangements. That is, membership should be extended beyond CUSC and DCUSA Parties, e.g. to consumer groups, participants (or representatives of) operating non-traditional business models and Code Administrators responsible for industry codes that may be directly impacted by changes to the network charging arrangements. ELEXON would be interested in being a member of the CCG.

We note that whilst Ofgem propose to chair the CCG, it has not described how the CCG might be administered. We envisage that the CCG will need support preparing for and running its meetings. ELEXON has a track record of effectively supporting standing and focused review groups, and the design and implementation of complex programmes of changes to industry codes. We would be happy to discuss in more detail how we might use our experience and impartiality to support the CCG's work. We are also able to report historical Settlement data to support any analysis under Ofgem's proposed SCR.

If you would like to discuss this response, please contact me at nicholas.rubin@elexon.co.uk.

Yours sincerely,

Nicholas Rubin
Market Advisor, Design Authority

List of enclosures

Attachment 1 – Responses to questions

Attachment 1 – Responses to questions

Question 6: Do you agree that our proposed principles for assessing options for residual charges are the right ones? Please suggest any specific changes, or new principles that you think should apply.

We have assumed that Ofgem's principles have been set specifically for assessing residual network charges. This is as opposed to having a broader application, e.g. to other forms of cost recovery, such as the recovery of Code Administration and other Industry Code Central System costs. As such, we have not commented on whether they are appropriate in relation to residual charging for network costs. However, we would appreciate Ofgem thoughts (and an opportunity to comment) if it had intended for these principles to apply more generally.

Question 17: Do you agree with our view that storage should not pay BSUoS on both demand and generation?

Generally, we are pleased that Ofgem is considering how storage should be charged for under network charging arrangements. Consideration of how existing industry arrangements apply to storage and other non-traditional business models is essential as technology and business models evolve.

Whilst we welcome Ofgem's consideration in this area, we believe there may be a case for considering how storage and non-traditional business models should fit into the overall market arrangements, rather than considering a narrow aspect in isolation. That is, consideration of whether or not storage should pay BSUoS on both demand and generation leads one to ask many related questions to do with how storage should be treated within the broader arrangements. Specifically from a BSC point of view, how should storage be charged for BSC Charges, Imbalances, Residual Cashflow Reallocation Cashflow etc.? Considering storage in terms of network charging only may set unhelpful precedence and lead to a piecemeal and inconsistent overall operating model.

We believe that a holistic consideration of these business models would provide a clearer and consistent target operating model and minimise unintended consequences.

Question 19: Do you think the changes in this chapter should be made ahead of any wider changes to residual charging that may happen in future? Do you agree with our view that these changes should be implemented by industry through the standard code change process?

Please see our answer to Question 17.

Question 20: We would welcome your thoughts on the potential make-up of a Charging Coordination Group (CCG). Please refer to the potential role, structure, prioritisation criteria and assessment criteria.

Your consultation proposes a CCG to coordinate the interaction and development of a number of related reviews, including your proposed SCR on residual charges.

Given that these different reviews are interrelated and the changes that they may require cut across a number of industry codes, we believe it is important that the CCG's terms of reference are very clear about its role and relationship with these reviews. In this respect, we believe the CCG should have an active role influencing the direction of the reviews it sits across to ensure they deliver a consistent and co-ordinated set of solutions. The CCG should also be responsible for ensuring the reviews deliver these solutions in a timely manner. In general, this is likely to require the CCG to monitor the progress of each review and hold them to account but may also require it to comment on, recommend or even decide how issues that arise from these reviews should be resolved.

In addition to ensuring the CCG's role and responsibilities are clear, Ofgem should ensure that membership of (or at least participation at) the CCG is not only limited to CUSC and DCUSA Parties. That is, the reviews the CCG would oversee impact a wider audience, including consumers, potential new entrants and participants operating non-traditional business models, and the Code Administrators of industry codes that support the network charging arrangements. ELEXON would be interested in being a member of the CCG.

We support your proposal to chair the CCG. However, we note that you have not explained how the CCG will be administered. Do Ofgem plan to take responsibility for the administration of the group and preparation of material for its meetings? Alternatively, ELEXON has extensive experience coordinating and supporting review groups and the delivery of cross-code programmes of work. Most recently we have used our impartiality and in depth knowledge of the electricity industry to lead the Profiling and Settlement Review Group and have been asked by Ofgem to lead the design of the target operating model for mandatory HH Settlement.

Question 21: Do you agree with our proposed delivery model, including its scope?

We support Ofgem's plan to establish a SCR. We believe this will ensure the review and any recommendations take account of how network charging arrangements affect a wide range of stakeholders and industry codes.

We note that Ofgem's preference in relation to the SCR is for it to direct licensee(s) to raise modification proposals. This approach would require the industry to interpret Ofgem's recommendations and ensure that all necessary changes are raised and progressed in a co-ordinated manner, potentially under different code governance rules. The co-ordination of these large and time sensitive programmes of work have already proven a challenge.

If Ofgem decide to proceed on this basis, it should ensure that its recommendations are sufficiently clear so that the licensee(s) and industry can effectively raise, develop and implement necessary changes. It would therefore make sense to include the actual drafting of the Modification Proposals within the scope of the SCR. Ofgem would need to give thought to the scope of these changes, how each change is related to the other and the timings for raising and implementing these changes. Assuming the SCR prepares draft Modifications, which Ofgem consults on and are well defined, they could be raised and entered into the Report Phase without needing additional development by a Modification workgroup. Ofgem may also need to identify how or who is responsible for ensuring issues between related changes are resolved. As noted above, this may be a role for the CCG.

Question 22: Do you agree that our proposed SCR process is most appropriate for taking forward the residual charging and other arrangements for smaller EG discussed in this document?

As noted above, we believe an SCR is an appropriate way of reviewing residual charging arrangements. We also agree with Ofgem's initial conclusion that storage should not be included within the SCR's scope. This is because, as noted above, storage, and other non-traditional business models, are likely to be best served by their own holistic reviews that consider they fit into the wider industry arrangements.

Please note, ELEXON are able to support Ofgem's SCR through the provision of impartial industry experts and are able to aggregate and provide historical Settlement data to support Ofgem's analysis.