

Modification proposal:	Balancing and Settlement Code (BSC) P280: Introduction of New Measurement Classes		
Decision:	The Authority ¹ has decided to reject this proposal		
Target audience:	National Grid Electricity Transmission Plc (NGET), Parties to the BSC and other interested parties		
Date of publication:	6 November 2012	Implementation Date:	n/a

Background to the modification proposal

Settlement is the process for comparing the amount of energy that an electricity supplier has arranged to be put on to the network with the amount that their customers have consumed. This is carried out for each half hour of the day. At present, only the largest metered sites are settled half-hourly (HH). For these sites, actual half-hourly meter reads are entered into settlement. Other sites are settled non-half-hourly (NHH) using estimates of consumption. Settlement arrangements are contained in the Balancing and Settlement Code (BSC).

Under these arrangements, sites are assigned to one of five Measurement Classes that reflect how they are settled. There is one measurement class for NHH settlement (A), two for HH settlement (C and E) and two for sites which do not have a meter (B and D). Larger sites, defined as those with a maximum demand greater than 100kW, are settled HH and allocated to Measurement Class C. Below this threshold, sites can elect to be settled HH and are allocated to Measurement Class E.

Distribution network operators (DNOs) use data from settlement to calculate charges for the use of the distribution system ('Use of System (UoS) charges'). For all HH settled sites, whether on Measurement Class C or E, the DNOs receive site specific data and charge on a site specific basis, ie one bill is generated for each site. DNOs bill suppliers for use of the network, and suppliers in turn pass this charge onto their customers.

The roll-out of advanced and smart meters will result in more sites with meters capable of recording HH consumption. This could result in a large increase in the number of HH settled sites and therefore increases in the number of site specific bills that DNOs will be required to generate. The current settlement process does not allow for aggregation of HH data and therefore does not facilitate billing HH settled sites for UoS on an aggregated basis.

These concerns were discussed in the working group assessment of DCP103,² a change proposal under the Distribution Connection Use of System Agreement (DCUSA).³ Responses to a consultation as part of the assessment of this change proposal indicated that there was limited capacity on DNOs' billing systems to accommodate increased volumes of site specific bills without further investment. The cost of such further investment was estimated in the tens of millions of pounds. This issue was also raised in response to a BSC consultation as part of the Profiling and Settlement Review Group (PSRG).⁴

¹ The terms 'the Authority', 'Ofgem' and 'we' are used interchangeably in this document. Ofgem is the Office of the Gas and Electricity Markets Authority.

² The intent of DCP103 (DUoS charges for sub-100kW HH settled sites) was to allow for a HH site to be charged the same UoS as an equivalent NHH site. This change proposal has now been withdrawn.

³ The DCUSA provides a single multi-party contract relating to the connection and use of the electricity distribution networks. All licensed electricity distributors and suppliers must be parties to the DCUSA.

⁴ For further details of the work of this group see: <http://www.elexon.co.uk/group/profiling-and-settlement-review-group-psrg/>

The modification proposal

BSC modification P280 was raised by Electricity North West Limited (the proposer) on 25 November 2011. The proposer considers that the current situation, in which every HH settled site is billed for UoS on a site specific basis, will result in high industry costs if volumes of HH settlement increase. The cost reflects the need for DNOs to invest in their billing systems and additional costs to suppliers in processing and validating site specific bills. The proposer considers these industry costs will be disproportionately expensive, ie the cost of site specific billing will outweigh any benefits.

The intent of this modification proposal is to allow for aggregation of HH metering data in order that DNOs can charge for UoS on an aggregated rather than site specific basis. The proposer considers that to resolve this issue new Measurement Classes should be introduced. The proposal would also make it mandatory for the Supplier Volume Allocation Agent (SVAA) to aggregate the HH metering data for these new Measurement Classes. During assessment by the working group the modification proposal was developed to propose the introduction of three new Measurement Classes into the BSC:

- Measurement Class F: HH aggregated metered (Domestic);
- Measurement Class G: HH aggregated metered (Non domestic whole current metered); and
- Measurement Class H: HH aggregated metered (Non domestic current transformer metered).

The new Measurement Classes (F, G and H) would apply to sites with a maximum demand that is sub-100kW. The proposal does not seek to remove any of the current Measurement Classes.

The proposer considers there is a need for more than one new Measurement Class in order to support different UoS tariffs for different types of customer. The chosen differentiator was to split domestic and non-domestic customers. Non-Domestic customers were further split based on the type of metering equipment in place, whole current or current-transformer. This was considered the most appropriate solution available. In order for changes as a result of this modification proposal to take effect there would need to be a change to the DCUSA to provide for an applicable UoS tariff for sites allocated to one of the new Measurement Classes.

The proposer, and working group members, considered that the proposal would better facilitate the achievement of Applicable BSC Objectives (c) and/or (d).⁵ The unanimous view of the working group was that the modification proposal would be neutral to Applicable BSC Objectives (a), (b) and (e).

BSC Panel⁶ recommendation

The draft Final Modification Report, and responses to the Report Phase Consultation, were considered by the BSC Panel at its meeting on 9 August 2012. The BSC Panel recommended approval of P280. The BSC Panel's unanimous view was that P280 would better facilitate Applicable BSC Objectives (c) and (d) and should therefore be approved.

In making this decision the BSC Panel discussed the proposed implementation date of October 2013. Noting responses received to the Report Phase Consultation, it amended

⁵ Some members considered it would facilitate both objective (c) and (d) while others considered it would only better facilitate one of these objectives.

⁶ The BSC Panel is established and constituted pursuant to and in accordance with Section B of the BSC.

the implementation date to April 2014. The views of the Panel are set out in the Final Modification Report (FMR).⁷

The Authority's decision

We have considered the issues raised by the modification proposal and the FMR dated 10 August 2012. We have considered the BSC Panel's decision to approve the proposal and have taken into account the responses to Elexon's⁸ consultations conducted as part of the assessment of the modification proposal. These are attached to the FMR. We have concluded that implementation of P280 will not better facilitate the achievement of the Applicable BSC Objectives.⁹ We have therefore decided to reject this proposal.

Reasons for the decision

The P280 proposal alone does not facilitate any change to the way sites will be settled and charged for UoS. A change to the UoS charging methodology is required in order for any benefits to be realised.¹⁰ Until we are able to make an assessment of the most appropriate UoS charging structure for sites with demand below 100kW that wish to be settled HH, we do not consider we can approve this modification. This is because it is not certain whether the P280 proposed change will be required if a different approach is taken in developing the UoS charging methodology. Approving the P280 proposal may therefore result in wasted costs to the industry.

Currently, a HH settled site receives a UoS charge based on its capacity and the time at which it uses electricity, ie different charge rates are applied depending on the time of day. This tariff structure allows for the customer to reduce its UoS charge by both reducing usage and changing its pattern of energy use. A tariff structure that will make use of aggregate HH data, as provided through the P280 proposal, may not provide these individual customer signals. We are therefore concerned that the P280 proposal may facilitate a change to the UoS charging methodology which may not allow DNOs to apply an appropriately cost reflective UoS charging structure to both demand and generation sites. We would expect any change to the charging methodology for these HH sites to consider the cost of site specific billing and the impact on settlement, against the benefits to the network, eg reduced reinforcement costs.

We present below our assessment against the Applicable BSC Objectives relevant to our decision and our further thoughts on this proposal.

Applicable BSC Objectives

We agree with the BSC Panel and working group members' assessment that this modification proposal is neutral to Applicable BSC Objectives (a), (b) and (e). We consider that the modification proposal would not better facilitate Applicable BSC Objective (c) and (d) and provide our reasons below.

(c) Promoting effective competition in the generation and supply of electricity and (so far as consistent therewith) promoting such competition in the sale and purchase of electricity

⁷ See P280 Final Modification Report at the following link: <http://www.elexon.co.uk/mod-proposal/p280-introduction-of-new-measurement-classes/>

⁸ The role and powers, functions and responsibilities of Elexon are set out in Section C of the BSC.

⁹ As set out in Standard Condition C3(3) of NGET's Transmission Licence.

¹⁰ Changes to the UoS charging methodology are raised through the DCUSA change proposal process.

The working group considered that this objective would be better facilitated by the modification proposal. The reasons stated were that it would:

- facilitate more effective management of increased volumes of HH data;
- ensure systems and processes are in place to enable suppliers to move into the new HH market when they wish to; and
- allow flexibility for a supplier to choose site specific or aggregated billing.

Some respondents to the Assessment Consultation¹¹ did not agree with the working group's assessment against this Applicable BSC Objective. In particular, they suggested that competition would be better supported by the use of site specific billing as it increases the transparency of costs for use of the distribution system.

We agree that this modification leaves flexibility. It does not remove suppliers' and customers' ability to receive site specific bills because it does not affect the current Measurement Classes. We do not however support the view that this modification on its own will promote effective competition in either the supply or generation of electricity.

We consider that competition is most effective when the costs which parties impose, on the electricity distribution and supply systems, are accurately reflected in their charges. Suppliers have, through the assessment of this modification and through other industry discussions, indicated that the cost of receiving site specific bills for UoS acts as one barrier to settling customers on a HH basis. The removal of costs associated with site specific billing, through approval of P280, may therefore lead to an increase in HH settlement in markets that have previously been settled NHH. Using an actual HH meter read in settlement can promote competition by increasing the accuracy of energy cost allocation between suppliers. This in turn can reduce barriers to entry and encourage the development of new products and services.

However, for the benefits of the P280 modification to be realised, a change is required to the UoS charging methodology. The P280 modification facilitates a change to the way HH settled sites are charged but does not alone represent a change. Therefore, we consider that Applicable BSC Objective (c) would not be better facilitated because without a change to the UoS charging methodology the potential benefits of competition in the supply market will not be realised. A change to the UoS charging methodology has yet to be approved.

(d) Promoting efficiency in the implementation and administration of the balancing and settlement arrangements

The working group considered that this objective would be better facilitated by the modification proposal. The reasons stated were that it would:

- provide an efficient and cost effective mechanism to deal with large increases in HH data; and
- increase the accuracy in the settlement arrangements (in the context of an expanding HH market).

Some respondents to the Assessment Consultation did not agree with the working group's assessment against this Applicable BSC Objective. It was noted that the solution allowed for a number of potential outcomes, ie it would establish processes that may never be used, and this in itself could be inefficient.

¹¹ See Assessment Consultation Responses, question 17: http://www.elexon.co.uk/wp-content/uploads/2012/01/P280_AC_Responses_Public-version.v1.0-.pdf

We agree that in relation to the management of increased volumes of HH data (and subject to changes to the DCUSA to allow use of the relevant Measurement Classes) the evidence brought forward in support of this proposal suggests that it provides an efficient method of transferring data between the parties that require such data. It would make use of existing systems and processes and therefore minimise the central implementation costs.

However, and as noted by some respondents to the consultation, it is currently unknown whether the new Measurement Classes established by this modification proposal will be used. Their use relies on a change to the UoS charging methodology. Therefore, we have concluded that P280 does not better meet Applicable BSC Objective (d). It may introduce industry-wide costs to establish processes that are never used if the UoS charging methodology does not support the use of aggregated HH data. Introducing unnecessary costs to industry parties is itself inefficient.

Further comment on this proposal

We support the removal of undue disincentives to settle sites on a HH basis. Increased use of actual data from HH metering will provide industry-wide benefits, through improvements in the accuracy of settlement. However, this modification proposal, when assessed on its own, does not provide us with the evidence that it facilitates the most effective outcome for consumers. In order to assess the overall outcome we need to make an assessment of the impact on the structure of UoS charges for sites affected by this modification proposal.

We consider that it is not prudent to progress a proposal where no change will be realised until a change is made to the UoS charging methodology, without accessing the merits of such a change. The arrangements that P280 would facilitate may turn out not to be the right solution for calculating UoS charges for affected HH sites. The new Measurement Classes and process would then not be used. The costs of implementing this modification proposal would therefore be wasted. Ultimately, these costs will be paid by consumers. We consider that, in this regard, accepting P280 prior to the outcome of a review into the appropriate UoS charging solution would not be in line with best regulatory practice. We note that the industry is considering what changes may be required to the charging methodologies in order to facilitate an increase in the take up of HH elective settlement. We will continue to provide assistance to ensure that the outcome of this work is in the best interests of consumers.

We considered the merits of leaving this modification proposal open until the wider charging work has concluded and therefore it is clearer what the longer term charging arrangements will be for these HH sites. In making our decision to reject the P280 proposal at this time, we conclude that we do not want to pre-judge the outcome of any change to the UoS charging methodology. We also consider that it would be inefficient to leave this modification proposal open, given the number of ongoing developments related to both charging, settlement, and the Smart Metering Programme which may result in developments that supersede the P280 proposal.

We recognise that industry change will be needed to realise the potential benefits of using more granular data from smart and advanced meters in settlement. Therefore we welcome and will continue to support the industry work to remove undue disincentives to settle sites electively on a HH basis in the short term through any required modifications of the charging methodologies and reform of settlement arrangements. In addition, we have already asked the BSC Panel to deliver a report by the end of the year with proposals for how it would develop and deliver longer-term reform of settlement

arrangements.¹² In developing potential changes in the short and longer-term, it is important that industry takes account of the interactions between settlement arrangements and UoS charging arrangements. The P280 modification proposal does not allow us to assess, at this time, whether the approach it is facilitating is in the best interests of existing and future consumers.

Andy Burgess

Associate Partner, Transmission and Distribution Policy

Signed on behalf of the Authority and authorised for that purpose.

¹² See Open letter to BSC Panel on longer-term electricity settlement reform:
<http://www.ofgem.gov.uk/Markets/sm/strategy/Documents1/Open%20letter%20to%20BSC%20Panel%20on%20longer-term%20electricity%20settlement%20reform.pdf>