

Modification proposal:	Balancing and Settlement Code (BSC) P230: Enabling Interoperability through the use of CoP10 and CoP5 Metering		
Decision:	The Authority ¹ directs that this proposal be made ²		
Target audience:	National Grid Electricity Transmission Plc (NGET), Parties to the BSC and other interested parties		
Date of publication:	25 November 2009	Implementation Date:	26 November 2009

Background to the modification proposal

On 6 April 2009, the government implemented a new supply licence condition which placed an obligation on electricity suppliers to ensure that where they newly install or replace an electricity meter at premises where the meter point falls within Profile Classes 5 to 8 (PC5-8)³, the meter should be an advanced meter. The licence condition stipulates that an "advanced meter" is an electricity meter that is able to:

- provide measured electricity consumption data for multiple time periods, at least half-hourly (HH); and
- provide the supplier with remote access to such data.

The licence condition also states that, subject to certain qualifications, electricity supplied after 6 April 2014 should not be provided other than through an advanced meter. This licence condition affects approximately 170,000 large business sites.

Advanced metering is already being provided in some parts of the electricity market without any arrangements on interoperability⁴. However, in the wake of the government's new licence condition, the government has signalled its view that it would be desirable, as far as possible, to promote interoperability. This is because the licence condition does not prescribe which types of advanced metering could be used, leaving the type of metering installed to the supplier and its own interpretation of the licence condition. This increases the risk of interoperability issues arising as advanced metering in the large business sector continues to roll-out.

At the end of 2008, Ofgem initiated a series of discussions with the industry with a view of identifying current problems of non-interoperability and finding ways of addressing them. The industry established an Advanced Metering Expert Group to consider, among other things, how to address the issues of interoperability within PC5-8. The Group concluded that meters compliant with Code of Practice 5 (CoP5)⁵ and Code of Practice 10 (CoP10)⁶ would be capable of meeting the requirements of the government's licence condition i.e., capable of providing HH interval data, while also meeting the requirements

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 This document is notice of the reasons for this decision as required by section 49A of the Electricity Act 1989.

³ If an electricity customer is non-domestic and there is a maximum demand register in the metering equipment, then the customer is allocated to PC5-8. The BSC requirements for Profile Class allocation are described in BSCP516. See: www.elexon.co.uk

⁴ Interoperability in metering ensures that meters stay on the wall when a customer switches supplier, and prevents the metering system becoming a barrier to a change of supplier. It does this by ensuring that the meter technology is of a specification that can be utilised by all suppliers, thereby facilitating competition in electricity supply.

⁵ When a metering system is first registered in settlement, it needs to meet certain requirements which are set out in the version of the CoP in place at that time. Each CoP states the practices that shall be employed and the facilities that shall be provided for the measurement and recording of the quantities required for settlement purposes, for different metering systems. CoP5 relates to the metering of energy transfers with a maximum demand of up to (and including) 1MW for settlement purposes. This CoP applies equally to "whole current" metering and metering supplied via measurement transformers operating at high or low voltages.

⁶ CoP10 relates to metering of energy via low voltage circuits for settlement purposes. Metering equipment compliant with this CoP can be traded either elective HH (Measurement Class E) or NHH.

of Elexon for balancing and imbalance settlement of the wholesale electricity market⁷ and retail competition in electricity supply⁸.

The modification proposal

P230 seeks to mandate the use of CoP5 or CoP10 (at a minimum) in those circumstances where suppliers are installing advanced meters in accordance with the government's new licence condition. This is intended to:

1. enable suppliers to demonstrate compliance with the licence conditions, and
2. ensure consistency of metering requirements and mitigate issues surrounding interoperability of advanced meters in the market.

The proposed amendments to the legal text have been drafted to ensure that suppliers comply with relevant CoP's when installing advanced meters in accordance with the licence conditions. In addition, the legal text ensures that when existing metering equipment is replaced by a supplier, it is replaced by metering equipment which is compliant with the latest version of the applicable CoP at the date at which such metering equipment is installed⁹. P230 also necessitates a change to the CoP's to ensure that BSC Parties are clear on which CoP's are relevant in relation to the supply licence requirement for the installation of specific metering equipment¹⁰.

The proposer considers that BSC Objective (c) and (d) would be better facilitated as a result of implementation of the proposal as set out below:

- *BSC Objective (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* by affording parties the opportunity of moving between non half-hourly (NHH) and HH segments of the market. The proposal will also improve customer access to, and transparency of, the market allowing customers to switch suppliers more easily, while also reducing the issues associated with interoperability.
- *BSC Objective (d): Promoting efficiency in the implementation and administration of the balancing and settlement code arrangements* by improving the accuracy of data flowing into settlement.

BSC Panel¹¹ recommendation

The Final Modification Report (FMR) was considered by the BSC Panel at its meeting on 12 March 2009. The Panel unanimously agreed that modification proposal P230 better facilitated applicable BSC objectives (c) and (d).

The Authority's decision

The Authority has considered the issues raised by the modification proposal and the Final Modification Report (FMR) dated 12 March 2009. The Authority has considered and

⁷ The imbalance settlement process settles discrepancies between the amount of electricity that a company has contracted to generate or consume and that which they actually generated or consumed. "Settlement" means the determination and settlement of amounts payable in respect of charges associated with the imbalance settlement process (Trading Charges) in accordance with the BSC.

⁸ Note that in the context of the government's new licence conditions, these meters, while capable of being settled on a half-hourly basis, would continue to be settled under non-half-hourly (NHH) arrangements, unless the supplier (or customer) chose otherwise.

⁹ We understand that although the proposed licence changes refer to PC5-8, the legal text will not preclude or mandate the solution from being relevant to other areas of the market.

¹⁰ For example, text will be included within CoP's 1-3, 5 and 10 along the lines of: "Metering Equipment that meets the requirements of this Code of Practice is also applicable where the Registrant is required by its Supply Licence...to install Metering Equipment that is capable of providing measured electricity consumption data for multiple periods (at least half hourly) and providing the Registrant with remote access to such data".

¹¹ The BSC Panel is established and constituted pursuant to and in accordance with Section B of the BSC.

taken into account the responses to Elexon's¹² consultation which are attached to the FMR¹³. The Authority has concluded that:

1. implementation of the modification proposal will better facilitate the achievement of the relevant objectives of the BSC¹⁴; and
2. directing that the modification be made is consistent with the Authority's principal objective and statutory duties¹⁵.

Reasons for the Authority's decision

P230 defines one approach to managing the risks/issues that may arise from interoperability, using existing frameworks - CoP5 and CoP10 at a minimum - to create a broad standard for advanced metering in the large business sector. We consider that this solution will ensure consistency of metering requirements and effective market operation, particularly in relation to the arrangements for settlement. Limiting the scope for interoperability issues will ensure that customers retain the flexibility and freedom to choose among suppliers, thereby promoting effective competition and innovation in the supply of customers and facilitating a high quality Change of Supplier (CoS) customer experience.

We note that nine responses were received to the P230 consultation, with all but one in favour of implementation of the proposal. We agree with the view of the Panel that P230 will better facilitate the achievement of the BSC's relevant objectives. In particular, we consider that P230 will better facilitate the achievement of applicable BSC objectives (c) and (d). These views are considered in more detail below.

Objective (c): "the promotion of 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"

We consider that P230 better facilitates the achievement of applicable objective (c) as it will enable a more consistent approach by suppliers installing meters in accordance with their licence obligations. This should limit the risk of interoperability issues occurring as a result of the roll-out of advanced metering in the large business sector, thereby promoting effective competition in the supply of electricity.

In order to comply with the requirements of the government's new licence condition, advanced meters must be capable of providing both measured electricity consumption data for multiple time periods, at least HH, and remote access to such data by the supplier. While the majority of advanced meters are being introduced in the NHH market, these meters nonetheless provide suppliers and customers with the opportunity to trade within the HH elective market if they so choose. While the key benefit of trading HH relates to improved accuracy in settlement, the benefits of using advanced metering to do so include:

- reducing the cost of entry to the HH elective market, thereby providing suppliers with a more cost effective option of trading these sites HH; and,
- enabling movement between the NHH and HH elective markets without the need for a site visit and meter exchange, giving suppliers and customers greater flexibility.

¹² The role and powers, functions and responsibilities of Elexon are set out in Section C of the BSC.

¹³ BSC modification proposals, modification reports and representations can be viewed on the Elexon website at: www.elexon.com

¹⁴ As set out in Standard Condition C3(3) of NGET's Transmission Licence, see: http://epr.ofgem.gov.uk/document_fetch.php?documentid=4151

¹⁵ The Authority's statutory duties are wider than matters which the Panel must take into consideration and are detailed mainly in the Electricity Act 1989.

However, unless an advanced meter is compliant with CoP5 or CoP10, a supplier is not free to trade within the HH sector of the market, in which case none of the aforementioned benefits will be realised.

Therefore, we agree with the proposer that mandating the use of CoP5 or CoP10 meters by suppliers installing meters in accordance with their licence obligations will assist suppliers and customers in realising the aforementioned benefits. We consider that by promoting consistency in metering requirements for the purposes of settlement, P230 effectively creates a level playing field between suppliers. This will provide all customers with an equal opportunity to move between the NHH and HH elective sectors of the market, avoiding certain customers having to face the risks and costs associated with asset stranding.

In addition, we also agree with the proposer that P230 will help enable suppliers to demonstrate compliance with the government's licence requirements, thereby increasing transparency in the market and easing potential issues associated with the CoS process. For example, suppliers will be in no doubt that the metering systems they inherit on CoS are capable of meeting the requirements of the licence condition, while customers will be assured that, where they wish to move into the HH market for the purposes of settlement, they will be free to do so without the need for a site visit and subsequent meter exchange.

For the reasons set out above, we consider that mandating the use of CoP5 and CoP10 meters by suppliers installing meters in accordance with their licence obligations will promote consistency in metering requirements, thereby reducing interoperability issues associated with the roll-out of advanced metering. We also consider that P230 will promote customer choice in relation to the supply of electricity, while also reducing potential barriers to switching. This in turn will promote competition and drive innovation in the supply of electricity to customers. We therefore consider that P230 will better facilitate the achievement of BSC objective (c).

Objective (d): "the promotion of efficiency in the implementation and administration of the balancing and settlement arrangements"

The proposer was of the view that the proposed change would improve the efficiency of the settlement process, and accuracy of the data flowing into settlement, which would promote efficiency in the implementation and administration of the BSC arrangements.

We agree that P230 better facilitates the achievement of applicable objective (d) as a consistent approach to metering requirements should assist with the transfer of information on a CoS, thereby adding to the efficiency of the settlement process. Further, as more customers chose to move into the HH elective sector, the accuracy of data flowing into settlement is likely to improve. These changes will further efficiency in the implementation and administration of the BSC arrangements. We therefore consider that P230 will better facilitate the achievement of relevant objective (d).

Other Issues

CoP10

The one respondent who disagreed with the proposal later provided clarification to Elexon that it did not have any concerns over the objectives or solution of P230, to its implementation date or to the Panel's recommendation. Rather, the respondent's primary concern related to issues with the principles behind CoP10 and its use within the relevant market. The respondent believed that it would be better to resolve all issues relating to the CoP's prior to raising a modification of this nature.

Both Ofgem and Elexon have considered this view and spoken to the respondent. We note that no alternate solutions to P230, in the form of alternative proposals, were

raised despite members of the industry having had the chance to do so. Further, all industry parties were given the opportunity to comment on CoP10 during the development phase and subsequent industry consultation phase. All views were considered at that time and, based on these views, the decision was made to implement CoP10. CoP10 is now live and the approval process for applicable metering systems is underway.

Given the above, and that there is an amendment mechanism available for changes to CoP10 via Elexon's Change Proposal process¹⁶, we do not consider the issue raised should affect our decision to accept the modification.

The Measuring Instrument Directive (MID)

The MID came into force in March 2004 and was enacted into UK Legislation via the Measuring Instruments (Active Electrical Energy Meters) Regulations 2006¹⁷. The MID is concerned with devices for legal measurements such as electricity and gas meters, and its primary aim is to create a single market for measuring instruments across EU countries, i.e. meters can be put on the market and used in any EU country irrespective of where in the EU the MID approval was given. The MID establishes requirements which all meters for use at premises below 100kW must comply with.

Having considered the implications of the requirements of P230 in the context of the MID, it is our view that P230 does not result in GB introducing any additional requirements over and above those set out in the MID. In other words, CoP10 does not introduce any requirements related to meter metrology, i.e. 'accuracy and margins for error'.

Technical Standards Directive

Directive 98/34/EC lays down a notification procedure for the transparency of technical regulations and is intended to help avoid the creation of new technical barriers to trade within the Community. It requires Member States to notify technical regulations, relating to products and information society services, to the Commission in draft, and then generally to observe a standstill period of at least three months before adopting the regulation, in order to allow other Member States and the Commission an opportunity to raise concerns about potential barriers to trade.

Ofgem notified P230 to the Commission on 11 June 2009. We received two responses to the notification: a comment from the Czech Republic; and an objection from the UK which was a replica of the response opposed to P230 received by Elexon in relation to the P230 consultation. With regard to the first query, the Czech Republic raised the issue of the MID to which our response is set out in the MID paragraph above. With regard to the second query, we have addressed these concerns in the context of the CoP10 paragraph above.

¹⁶ A Change Proposal (CP) is a proposal to amend a Code Subsidiary Document, a Configurable Item (such as a CoP) or an associated product. Change Proposals can be submitted by any BSC Party, any BSC Agent, the BSC Panel or its Committees and ELEXON.

¹⁷ SI 2006 No. 1679

Decision notice

In accordance with Standard Condition C3 of NGET's Transmission Licence, the Authority, hereby directs that modification proposal BSC P230: Enabling Interoperability through the use of CoP10 and CoP5 Metering be made.

Ian Marlee**Partner, Trading Arrangements**

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