










BSC Modification Proposal Form		At what stage is this document in the process?
<h1>Half Hourly Settlement and remote communication obligations for CT Advanced Meters</h1>		<div>01 Modification</div> <div>02 Workgroup Report</div> <div>03 Draft Modification Report</div> <div>04 Final Modification Report</div>
<p>Purpose of Modification:</p> <p>This Modification seeks to amend the BSC requirements for CT Advanced Meters requirement to align with the Supplier Standard Licence Conditions in respect of provision of remote communications and to require HH settlement for all CT operated meters.</p>		
<p>Is this Modification likely to impact any of the European Electricity Balancing Guideline (EBGL) Article 18 Terms and Conditions held within the BSC?</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>		
	<p>The Proposer recommends that this Modification should:</p> <ul style="list-style-type: none"> Be assessed by a Workgroup and submitted into the Assessment Procedure <p>This Modification will be presented by the Proposer to the BSC Panel on 13 August 20. The Panel will consider the Proposer's recommendation and determine how best to progress the Modification.</p>	
	<p>High Impact:</p> <ul style="list-style-type: none"> none 	
	<p>Medium Impact:</p> <ul style="list-style-type: none"> Suppliers Meter Operator Agents (MOAs) Half Hourly Data Collectors (HHDCs) 	
	<p>Low Impact:</p> <ul style="list-style-type: none"> Distributors Non-Half Hourly Data Collectors (NHHDCs) 	

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Timetable		 [Andrew.grace@elexon.co.uk]
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The Proposer recommends the following timetable:		
Initial consideration by Workgroup	Week commencing: 21/09/2020	
Assessment Procedure Consultation	26/10/2020 - 13/11/2020	
Workgroup Report presented to Panel	10/12/2020	
Report Phase Consultation	14/12/2020 - 15/01/2021	
Draft Modification Report presented to Panel	11/02/2021	
Final Modification Report submitted to Authority	18/02/2021	

1 Why Change?

What is the issue?

As a result of [P272](#), [P300](#) and [P322](#) the BSC introduced the definition of an Advanced Meter and required former Profile Class 5-8 Metering Systems to be settled on a Half Hourly (HH) basis. This BSC definition is currently constrained to only one aspect of the Advanced meter definition within the standard clauses of the Supplier Standard Licence Conditions ([SLC](#)). As a result, although the SLC requires Advanced Meters to be fitted to all Current Transformer (CT) operated Meters by the end of 2020 the BSC definition of Advanced Meters does not require these to be settled on a HH basis, this Modification seeks to align the requirements. When P272 was raised in 2011 it was not appropriate to consider CT operated Metering Systems as the SLC requirement was many years away, but now the obligation is less than six months away.

In addition, the BSC does not align with the SLC requirement that all Advanced Meters should have remote communications equipment, this Modification seeks to require all CT Advanced Meters align with the SLC requirements for remote communications equipment. The inability to perform site visits during the Covid-19 lockdown has highlighted the reliance by Parties on site visits to meet the BSC obligations on HH (and NHH) data collection, with the industry failing to achieve the expected level of performance. It is therefore opportune to review the BSC obligations on provision of remote communications equipment to reduce this BSC Performance Risk of large energy consuming sites having detrimental impact on accurate Settlement.

Consideration should be given to monitoring compliance of these new obligations through either new tools or repurpose the existing SP04 Supplier charge from 100kW Metering Systems to CT operated Metering Systems not settling Half Hourly.

This Modification may facilitate removal of the redundant P272 go live date and associated text in Section S. This ensures the BSC remains clear and fit for purpose.

Desired outcomes

The Modification would extend the requirement to settle all CT operated Metering Systems on HH basis by a date beyond the end of 2020 to allow migration, such as October 2021.

It would introduce an explicit BSC requirement to require all CT operated Metering Systems to have remote Communications.

Monitoring of compliance through a mechanism, such as a repurposed SP04. Drafting and compliance monitoring should reflect the SLC clauses reflecting 'where reasonably practical'.

2 Solution

Proposed Solution

The definition of the Advanced Meter in the BSC differs from that in the SLC. This Modification seeks to align the requirements for CT operated Metering Systems to ensure clarity for all stakeholders and customers.

The current BSC definition of Advanced Meter in the BSC constrains the definition to only SLC 12.18 as follows:

“Advanced Meter”: means Metering Equipment installed in accordance with the obligation set out in condition 12.18 of the Standard Conditions of each Supply Licence;

It is proposed to remove this limitation so that the BSC definition includes Advanced Meters installed as a result of any of the SLC references to advanced meters, notably 12.17 to 12.29, and condition 39.5 to 39.22. In practice extending the definition will include within scope an estimated additional 50,000 CT operated Metering Systems.

The exact wording is subject to legal advice and the views of the Workgroup.

Benefits

All CT operated Metering Systems to be Half Hourly settled

The current BSC obligation requires Half Hourly (HH) settlement of:

- all over 100kW Metering Systems, and
- previously NHH PC5-8 Metering Systems.

The 100kW requirement is an arbitrary number included in the Electricity Act in 1989 to progressively open up the electricity market to competition. As the whole market is now open to competition the linkage between the 100kW threshold from 1994 in the Act and the BSC is now less relevant. The over 100kW definition has been always required some interpretation, including determinations by Ofgem. Currently there is a judgment being made whether the site is over/under 100kW determined in the BSC triggered by [BSCP504](#) section 3.4.1.8 by the Supplier and NHHDC. A Supplier Charge (SP04) encourages compliance.

The previous Profile Class 5 to 8 requirement follows from the SLC 12.18 requirements but has the difficulty that over time the knowledge of the fact that the Metering System was formally a NHH PC5-8 site is lost. This makes the requirement difficult to comply with (or enforce) through change of Supplier events. There is no robust method of knowing which Metering Systems were formally PC5-8 making enforcement of the BSC obligations extremely difficult and/or resource intensive. As result former PC5-8 Metering Systems could revert to NHH trading with the associated detrimental impact on Settlement accuracy.

Smart meters are designed to only be installed on whole current Metering Systems. The SLC recognised that approach and therefore required that all CT operated Metering Systems, whether they are domestic or non-domestic, should have Advanced Meters fitted by the end of 2020 (the original deadline for completion of the smart meter deployment).

The SLC allows exceptions under condition 12.19 having taken all reasonable steps. These conditions were introduced in 2009, allowing stakeholders over ten years notice to achieve compliance. Information

from Distributors provided through the Distribution Charging Methodologies Development Group ([DCMDG](#)) indicates about 50,000 CT operated Metering Systems are trading NHH. Anecdotal evidence from Meter Operators suggest about half of these CT operated Metering Systems already have an Advanced Meter fitted, although it is being settled on a NHH basis. Therefore, it is estimated that about 25,000 CT operated Metering Systems still require Advanced Meters to be fitted by the end of 2020.

The AMO has produced guidance, [Advanced Metering for CT Metering Systems](#) on the issues surrounding the application of CT operated metering.

In the autumn of 2019 BEIS consulted on the roll-out time frame for smart metering as it was clear the end of 2020 deadline was not going to be met. BEIS confirmed that there was no intention to change the existing SLC requirement for CT operated Metering Systems, the requirement remains the end of 2020¹.

P272, P300 and P322 were implemented in the BSC to ensure that where an Advanced Meter was fitted as a result of the SLC in a PC5-8 site then it was then used to provide Half Hourly data for Settlement. It was recognised by stakeholders that the provision of actual Half Hourly data is more accurate than the Non-Half Hour profiling arrangements. As we now approach the end of 2020 and the SLC requirements for all CT operated Metering Systems to have Advanced Meters fitted, it follows that there is a similar rationale to require these to be settled on a Half Hourly basis.

The existing SP04 Supplier charge could be repurposed from 100kW Metering Systems to CT operated Metering Systems not settling Half Hourly. It is not possible to have an over 100kW metered premise which is not metered by a CT operated Metering System.

Provision of remote communications to Advanced Meters

The BSC does not *require* the provision of remote communications to any Half Hourly settled SVA Metering Systems. The provision of communications is a commercial issue between the Supplier, Meter Operator, Data Collector and Customer. The BSC places an obligation on the Supplier to achieve 99% actual data at the Initial Settlement (SF) run. In practice, the only way to achieve this obligation is by the installation of working communications at the majority of Half Hourly settled sites. Therefore, the provision of remote communications is an *implicit*, rather than *explicit*, BSC requirement.

It is the view of the Proposer that this lack explicit obligations in the BSC is one of the underlying issues under the extended debate by the [P332](#) Modification Group discussions.

The SLC requires all CT operated Metering Systems to be Advanced Meters by the end of 2020, the SLC definition of an Advanced Meter is:

12.19 For the purposes of this condition, an advanced meter is an Electricity Meter that, either on its own or with an ancillary device, and in compliance with the requirements of any relevant Industry Code:

- (a) provides measured electricity consumption data for multiple time periods, and is able to provide such data for at least half-hourly time periods; and
- (b) is able to provide the licensee with remote access to such data.

As a result of the SLC all Advanced Meters should have remote communications, subject to the reasonable steps clause.

¹ Suppliers are likely to use Covid-19 as an argument for being unable to reach full compliance under the 'reasonable steps' clause in discussion about compliance with Ofgem.

The [Electricity Act](#) states:

SCHEDULE 7 - USE ETC. OF ELECTRICITY METERS

(1) Where a customer of an authorised supplier is to be charged for his supply wholly or partly by reference to the quantity of electricity supplied, the supply shall be given through, and the quantity of electricity shall be ascertained by, an appropriate meter.

(1A) An authorised supplier may give a supply otherwise than through an appropriate meter in such circumstances as may be prescribed.

(2) If the authorised supplier agrees, the meter may be provided by the customer (who may provide a meter which belongs to him or is made available otherwise than in pursuance of arrangements made by the supplier); but otherwise it shall be provided by the authorised supplier (who may provide a meter which belongs to him or to any person other than the customer).

(2A) An authorised supplier may refuse to allow one of his customers to provide a meter only if there are reasonable grounds for his refusal.

(3) ...

(4) The authorised supplier may require the replacement of any meter provided and installed in accordance with sub-paragraphs (2) and (3) above where its replacement—

(a) is necessary to secure compliance with this Schedule or any regulations made under it; or

(b) is otherwise reasonable in all the circumstances;

and any replacement meter shall be provided and installed in accordance with those sub-paragraphs.

(5) If the customer refuses or fails to take his supply through an appropriate meter provided and installed in accordance with sub-paragraphs (2) and (3) above, the supplier may refuse to give or may discontinue the supply.

(6) For the purposes of this paragraph a meter is an appropriate meter for use in connection with any particular supply if it is of a pattern or construction which, having regard to the terms on which the supply is to be charged for, is particularly suitable for such use. ...”

As the result of the Electricity Act the Supplier has the ability to ensure that the metering for any customer is “an appropriate meter”. For example, a prepayment customer requires an appropriate meter to allow for prepayment capability, a CT connection customer needs an appropriate meter for a CT connection.

In this context, from the end of 2020, an “appropriate meter” for a CT operated Metering System is an Advanced Meter to enable the Supplier to comply with the SLC, subject to the reasonable steps clause. An Advanced Meter is defined in the SLC as requiring “...remote access to such data”. Therefore, aligning the BSC requirements to require remote communications equipment for all CT operated Metering Systems, should incur no additional cost, other than that already incurred through compliance with the SLC. Making the change to the BSC has the benefit of making the obligations more explicit to customers and all industry stakeholders.

Comprehensive provision of working remote communications for all Half Hourly settled Metering Systems ensures robust collection of actual Half Hourly data. This has become particularly apparent during the Covid-19 lockdown where reliance on site visits to collect Half Hourly data has resulted in a detrimental impact on Suppliers being able to achieve the 99% actual data obligations. It will also become even more important if Ofgem progress with proposals being developed under the Significant Code Review (SCR) considering market wide Half Hourly settlement which includes reducing the timescale for the Initial

Settlement Run. Ensuring compliance with 99% actual data at Initial Settlement by Suppliers involves considerable resource by stakeholders, customers, ELEXON and the Performance Assurance Board.

3 Relevant Objectives

Impact of the Modification on the Relevant Objectives:	
Relevant Objective	Identified impact
a) The efficient discharge by the Transmission Company of the obligations imposed upon it by the Transmission Licence	Neutral
(b) The efficient, economic and co-ordinated operation of the National Electricity Transmission System	Neutral
(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	Positive
(d) Promoting efficiency in the implementation of the balancing and settlement arrangements	Positive
(e) Compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency [for the Co-operation of Energy Regulators]	Neutral
(f) Implementing and administrating the arrangements for the operation of contracts for difference and arrangements that facilitate the operation of a capacity market pursuant to EMR legislation	Neutral
(g) Compliance with the Transmission Losses Principle	Neutral

(c) As considered by P272, P300 & P322 the larger consuming electricity sites have the largest impact on settlement accuracy. The CT operated Metering Systems have the capability to consume more energy than whole current metering systems, using the actual data available in the already installed Advanced Meter is a minimal additional cost. It enables a smooth transition to the SCR TOM for advanced meters (subject to SCR progression).

(d) Identification of “100kW metering systems” is not clear and is a legacy from the opening up of competition. Correct identification of previously NHH PC5-8 metering systems is not possible through a robust solution. Identification of requirements by CT operated vs. whole current Metering Systems is a clear physical differentiator. Making the separation by CT vs. whole current Metering Systems could allow future rationalisation of the Measurement Classes and/or simplification of the Metering CoPs. Explicit requirement to install and maintain remote communications equipment will ensure wider compliance and improve settlement accuracy as evidenced by the reduction in settlement performance during the Covid-19 lockdown. Ensuring compliance with 99% actual data at Initial Settlement by Suppliers involves considerable resource/cost by stakeholders (to arrange visits), customers (to facilitate visits), ELEXON and the Performance Assurance Board (to manage performance).

4 Potential Impacts

Impacts on Core Industry Documents

Impacted Core Industry Documents			
<input type="checkbox"/> Ancillary Services Document	<input type="checkbox"/> Connection and Use of System Code	<input type="checkbox"/> Data Transfer Services Agreement	<input type="checkbox"/> Use of Interconnector Agreement
<input type="checkbox"/> Master Registration Agreement	<input type="checkbox"/> Distribution Connection and Use of System Agreement	<input type="checkbox"/> System Operator Transmission Owner Code	<input type="checkbox"/> Supplemental Agreements
<input type="checkbox"/> Distribution Code	<input type="checkbox"/> Grid Code	<input type="checkbox"/> Transmission License	<input type="checkbox"/> Other (please specify)

It is not anticipated there is any impact on the other Codes.

The DUoS charges differ between whole current and CT Operated metering so ensuring all CT operated meters are settled on a Half Hourly basis will allow more accurate DUoS charging. To date there has not be the similar split in TUoS but making this change could allow a future differentiation in TUoS, rather than the current NHH vs. HH split. Although not directly relevant to the BSC, but DCUSA would be positively impacted as the allocation of DUoS charges would be more equitable.

Impacts on BSC Systems

Impacted Systems				
<input type="checkbox"/> CRA	<input type="checkbox"/> CDCA	<input type="checkbox"/> PARMS	<input type="checkbox"/> SAA	<input type="checkbox"/> BMRS
<input type="checkbox"/> EAC/AA	<input type="checkbox"/> FAA	<input type="checkbox"/> TAAMT	<input type="checkbox"/> NHHDA	<input type="checkbox"/> SVAA
<input type="checkbox"/> ECVA	<input type="checkbox"/> ECVA Web Service	<input type="checkbox"/> ELEXON Portal	<input type="checkbox"/> Other (Please specify)	

None expected – all existing systems expected to be able to accommodate this small change in activity.

Impacts on BSC Parties

Impacted Parties			
<input checked="" type="checkbox"/> Supplier	<input type="checkbox"/> Interconnector User	<input type="checkbox"/> Non Physical Trader	<input type="checkbox"/> Generator
<input checked="" type="checkbox"/> Licensed Distribution System Operator	<input type="checkbox"/> National Electricity Transmission System Operator	<input type="checkbox"/> Virtual Lead Party	<input checked="" type="checkbox"/> Other (Please specify) Meter Operators & and Data Collectors

Suppliers have to comply with the SLC requirement in provision of Advanced Meters including remote communications for CT Metered customers.

Legal Text Changes

The exact wording is subject to legal advice and the views of the Workgroup. The expected changes will include:

- Section L – To include obligations for provision of Communications Equipment for CT operated Metering Equipment.
- Section S - The opportunity could be used to remove the now unnecessary text in 2.6.1A & 2.6.1B with associated references to P272 Implementation Date, which has now passed. Or the workgroup may consider repurposing the approach used by P272 to implement this change.
- Section S, Annex S-1 2.4 could be modified to repurpose the Supplier Charge SP04 to encourage compliance with the revised CT operated Metering Systems requirements.
- Section X – Annex X-1 The definition of Advanced Meter will requirement amendment. Inclusion of definitions identifying whole current and CT operated Metering Equipment, utilising the same definitions in the SLC would be appropriate.

5 Governance

Self-Governance

<input checked="" type="checkbox"/> Not Self-Governance – A Modification that, if implemented materially impacts:	
<input type="checkbox"/> the Code's governance or modification procedures	<input type="checkbox"/> sustainable development, safety or security of supply, or management of market or network emergencies
<input type="checkbox"/> competition	<input checked="" type="checkbox"/> existing or future electricity consumers
<input type="checkbox"/> the operation of national electricity Transmission System	<input type="checkbox"/> likely to discriminate between different classes of Parties
<input type="checkbox"/> Self-Governance – A Modification that, if implemented:	
Does not materially impact on any of the Self-Governance criteria provided above	

Suppliers will need to modify the Settlement arrangements for CT metered customers. This may impact on the charges the Supplier seeks to apply to customers. Although the SLC already requires the installation and maintenance of an Advanced Meters by the end of 2020 so any additional costs for Half Hourly settlement are expected to be marginal.

Progression route *(choose one)*

<input checked="" type="checkbox"/> Submit to assessment by a Workgroup – A Modification Proposal which:	
does not meet any criteria to progress via any other route.	
<input type="checkbox"/> Direct to Report Phase – A Modification Proposal whose solution is typically:	
<input type="checkbox"/> of a minor or inconsequential nature	<input type="checkbox"/> deemed self-evident
<input type="checkbox"/> Fast Track Self-Governance – A Modification Proposal which meets the Self-Governance Criteria and:	
is required to correct an error in the Code as a result of a factual change including but not limited to:	
<input type="checkbox"/> updating names or addresses listed in the Code	<input type="checkbox"/> correcting minor typographical errors
<input type="checkbox"/> correcting formatting and consistency errors, such as paragraph numbering	<input type="checkbox"/> updating out of date references to other documents or paragraphs
<input type="checkbox"/> Urgent – A Modification Proposal which is linked to an imminent issue or current issue that if not urgently addressed may cause:	
<input type="checkbox"/> a significant commercial impact on Parties, Consumers or stakeholder(s)	<input type="checkbox"/> a Party to be in breach of any relevant legal requirements.
<input type="checkbox"/> a significant impact on the safety and security of the electricity and/or gas systems	

Does this modification impact a Significant Code Review (SCR) or other significant industry change projects, if so, how?

The Ofgem Significant Code Review (SCR) considering [Settlement Reform](#), also known as Market Wide Half Hourly Settlement (MHHS) was launched in July 2017. The Proposer believes this Modification is complimentary to the SCR. This Modification would result in around 50,000 additional Metering Systems to be settled on a Half Hourly basis. There are currently 345,000 half-hourly settled Metering Systems which account for about half of the Import Settlement volume. The current proposals for implementing the MHHS would require all Metering Systems to settle on a Half Hourly basis. Migrating the CT operating Metering Systems with Advanced Meters into the current Half Hourly Settlement arrangements will provide a smooth transition reducing the risks of migration to the proposed new arrangements under the Target Operating Model, if agreed.

The Design Working Group [Final Stage 2 Report](#) to Ofgem in August 2019 included in the Transitional Approach under Advanced Meters included the following statement;

“CT metering systems are the largest consuming metered sites remaining NHH settled, and therefore will provide the greatest settlement improvement benefit by moving them to HH. The DWG consider these MPANs are a good candidate for early migration.”

Does this Modification impact any of the EBGL Article 18 Terms and Conditions held within the BSC?

The proposed Modification is not expected to impact any of the EBGL Article 18 Terms and Conditions held within the BSC.

Does this modification impact on end consumers or the environment?

The Proposer does not anticipate any environmental impacts resulting from this Proposed Modification, although the Ofgem Significant Code Review (SCR) considering [Settlement Reform](#) identifies that use of accurate Half Hourly settlement data ensures the correct cost allocation which in turn encourages energy use to be optimised.

The Proposer believes that use of remote communications should result in less site visits to obtain meter readings, this will reduce energy use for travelling. Although in the scale of the change this will not be significant.

Implementation approach

Information from Distributors and anecdotal information from stakeholders indicates about 50,000 CT operated Metering Systems are not trading Half Hourly. Of these about half have an Advanced Meter already fitted. So, to comply with the SLC additional Advanced Meters will be fitted by the end of 2020 (subject to any Covid-19 constraints). It is therefore proposed that subject to the Modification being considered by industry during 2020, the obligations should be included by Oct 2021 to allow stakeholders time to migrate the Metering Systems to Half Hourly Settlement.

The existing SP04 Supplier charge could be repurposed from 100kW Metering Systems to CT operated Metering Systems not settling Half Hourly.

The timescales would be subject to discussion by the Workgroup.