

## P383 'Enhanced reporting of demand data to the NETSO to facilitate CUSC Modifications CMP280 and CMP281'

This Modification is intended to enable the aggregation of specific Metering Systems' metered data for network charging purposes, i.e. to support the operation of CUSC Modification Proposals CMP280 and CMP281. This Modification will introduce processes explaining how Suppliers, Half Hourly Data Aggregators (HHDAs) and the Supplier Volume Allocation Agent (SVAA) participate in the aggregation and reporting of storage facilities' HH Metering Systems' metered data and enable the BSC Panel and BSCCo to perform assurance activities in relation to the aggregation of this data.



ELEXON recommends P383 is progressed to the Assessment Procedure for an assessment by a Workgroup

This Modification is expected to impact:

- Operators of storage facilities
- Suppliers
- HHDAs
- SVAA
- Transmission Company



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### Contact

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**Danielle Pettitt**

020 7380 4314

Danielle.Pettitt@elexon.co.uk



## About This Document

This document is an Initial Written Assessment (IWA), which ELEXON will present to the Panel on 14 March 2019. The Panel will consider the recommendations and agree how to progress P383.

There are two parts to this document:

- This is the main document. It provides details of the Modification Proposal, an assessment of the potential impacts and a recommendation of how the Modification should progress, including the Workgroup's proposed membership and Terms of Reference.
- Attachment A contains the P383 Proposal Form.

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# 1 Why Change?

## What is the issue?

Connection and Use of System Code (CUSC) Modification Proposal [CMP281](#) and ELEXON's Workgroup Alternative CUSC Modification to [CMP280](#) both require aggregated metered data from specific storage facilities' half-hourly (HH) Metering Systems, should they be approved. The BSC has traditionally provided aggregated data to the Transmission Company<sup>1</sup> (TC) for network charging purposes. However, the BSC does not currently specify processes or rules for collecting and aggregating metered data from HH Metering Systems that measure the Imports (and Exports) for specific storage facilities that would be required for CMP280 and CMP281. This is because the aggregation of such site-specific metered data is not necessary for Settlement. Therefore, for the BSC to continue to support the Transmission Company ( ) with its network charging, new BSC processes will be required to enable the identification, aggregation and reporting of metered data, and to enable the BSC Panel to establish appropriate assurance.

## Background

On 24 July 2017, Ofgem challenged industry to resolve a perceived barrier to entry and operation by excluding storage from the calculation of certain network charges – in particular the residual demand TNUOS charge and BSUOS demand charge. Ofgem publicised this challenge in the [Smart Systems and Flexibility Plan](#), in the initial consultation and launch of the [Targeted Charging Review Significant Code Review](#), and in subsequent related publications.

Consequently, Scottish Power raised CUSC Modifications [CMP280](#) and [CMP281](#) in response to Ofgem's challenge<sup>2</sup>. CMP280 is the subject of a Workgroup Alternative CUSC Modification (WACM). The CMP280 original proposal only applies to storage facilities explicitly identified by their BMU(s) in Bilateral Connection Agreements (BCAs) or Bilateral Embedded Generation Agreements (BEGAs) – i.e. storage facilities registered for Central Volume Allocation (CVA). In addition to CVA storage facilities, the CMP280 WACM and CMP281 original proposal also apply to storage facilities registered for Supplier Volume Allocation (SVA).

CMP280 WACM and CMP281 original both require aggregated HH metered data for SVA registered storage facilities that have demonstrated that they are eligible to be excluded from the calculation of residual demand TNUOS charges and BSUOS demand charges.

In order to facilitate CMP280 WACM and CMP281 the Proposer, in collaboration with ELEXON, has identified two amendments to the BSC to enable the:

- Aggregation of storage facilities' metered data for network charging purposes; and
- Provision of assurance for these non-Settlement processes.

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<sup>1</sup> In accordance with Approved BSC Modification [P369](#), from 1 April 2019, the term 'Transmission Company' will be replaced by the term 'National Electricity Transmission System Operator' (NETSO).

<sup>2</sup> In November 2018, Scottish Power withdrew its support of both CMP280 and CMP281. Later in November 2018, Drax Power adopted CMP280 and Engie adopted CMP281.

## **CMP280 'Creation of a New Generator TNUoS Demand Tariff which Removes Liability for TNUoS Demand Residual Charges from Generation and Storage Users'**

CMP280 was raised on 22 June 2017 by Scottish Power.

Generators and storage operators are both liable to TNUoS Demand Residual charges. However, storage operators are potentially more exposed to these charges because their Imports typically exceed Exports, whereas other generators' Imports are usually a small proportion of Exports. This may create a competitive distortion between storage and other generators, who compete directly with each other in the provision of, amongst other things, Balancing Services.

The TNUoS Demand Residual tariff element is not intended to be cost-reflective and serves to ensure that the Total Allowed Revenue is recovered from CUSC Parties. As outlined in Ofgem's Targeted Charging Review consultation<sup>3</sup>, residual charges should be recovered on a basis which: reduces distortions, is fair and is proportional and practical in its application. Where storage and generators are not end users of electricity, and are connected to the network primarily for the purposes of exporting to provide flexibility and energy services, there is no rationale for them to contribute to both the generator and demand residual recovery mechanisms.

CMP280 aims to modify the CUSC so as to remove certain types of storage from the calculation TNUoS Demand Residual tariff. For the avoidance of doubt, both generator and storage parties would remain liable for the cost-reflective locational element of demand TNUoS to reflect the marginal impact of increasing demand at times of system peak demand.

### **BSCCo's CMP280 alternative**

In response to the [CMP280 Workgroup Consultation](#), Balancing and Settlement Code (BSC) Company (BSCCo) raised concerns that the original CMP280 proposal would only apply to CVA registered storage facilities, and so would unnecessarily discriminate against SVA registered storage facilities and may have unintended consequences for competition. Consequently BSCCo proposed a [CMP280 Workgroup Alternative CUSC Modification](#) (WACM). This WACM proposed that SVA and CVA registered storage facilities be excluded from the calculation of TNUoS demand residual charges.

## **CMP281 'Removal of BSUoS Charges from Energy taken from the National Grid System by Storage Facilities'**

CUSC Parties are liable for BSUoS charges on both their Import and Export volumes. Because electricity storage typically Imports more than it Exports (i.e. electricity is the 'fuel'), it means that storage operators make a significantly greater contribution towards the recovery of BSUoS charges than other generators.

Ofgem raised concerns that failure to address this difference in treatment may perpetuate a distortion in competition between storage operators and other generators, and could hinder the development of new storage that could meet the increasing demand for flexibility.



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### **Central Meter Registration Service (CMRS)**

CMRS means the service for registration of data relating to CVA Metering Systems maintained (for the purposes of the Code) by the Central Data Collection Agent).

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<sup>3</sup> [Ofgem Targeted Charging Review - Consultation](#)

CMP281 aims to modify the CUSC so as to remove certain types of storage from the calculation of BSUoS demand charges.

## Changes required to the BSC to support CMP280 and CM281

The data produced for Settlement purposes in accordance with the Balancing and Settlement Code supports a range of non-Settlement activities too, e.g. the calculation of EMR Charges and network charges, like TNUOS and BSUOS. Traditionally the Settlement data as required for Settlement has been sufficient to support these non-Settlement activities.

In response to innovative and non-traditional business models and the growth in alternative distributed energy resources, the industry arrangements are undergoing considerable change. These changes are identifying a need for greater visibility and disaggregation of activities so these specific activities can be used more flexibly and charged for more accurately. Whilst the BSC requires that metered data is collected from all Metering Systems at boundary points with the Total System, Settlement does not require the regular reporting of metered data specifically from certain storage facilities' SVA Metering Systems.

CUSC Modifications CMP280 and CMP281 are examples of this growing demand for more targeted and disaggregated data.

CMP280 WACM and CMP281 require that the HH Imports for certain SVA registered storage facilities are excluded from the calculation of TNUOS residual demand charges and BSUOS demand charges. In order to exclude these metered volumes, the NETSO will require that metered data for specific SVA registered storage facilities is aggregated and reported to it. The Proposer (and the CMP280/1 Workgroup) has identified a need that any processes used to aggregate metered data for SVA registered storage facilities is the subject of appropriate assurance measures.

As set out in Section 3 of the Modification Proposal, we concur with the Proposers assessment of why and what changes are needed to the BSC to support CMP280 WACM and CMP281.

## 2 Solution

### Proposed solution

The Proposer suggests a Modification of the BSC and a certain number of its Code Subsidiary Documents so that they describe processes that enable Imports and Exports from Half Hourly (HH) Metering Systems for specific SVA registered storage facilities to be aggregated and reported to the Transmission Company.

P383 is proposed to work as follows:

1. The operator of an eligible storage facility must provide a director-signed declaration to the SVAA, via its Supplier(s).
2. The SVAA will validate the declaration.
3. If validation is successful, SVAA will instruct the HHDA(s) for the declared MSID(s) to report HH Import and Export metered data to it.
4. The SVAA will aggregate the Import metered data to Supplier BMU level, and report the Imports to the NETSO for use in the calculation of network charges.
5. The BSC Panel will establish measures that provide assurance that the processes are followed correctly and accurately.

This process would build on processes which have been previously agreed by the BSC Panel to support the calculation of CM and CFD Charges<sup>4</sup> and the implementation of Agreed BSC Modification Proposal P344<sup>5</sup>. Therefore, this process will make use of existing and forthcoming interfaces that would enable Suppliers to instruct their HHDAs to report HH metered data for specific Metering Systems to SVAA.

The solution is set out in detail below, as the Proposer wishes to progress this Modification to consultation after one Workgroup meeting.

### Approach to aggregation

The following is a summary of the different elements of the proposed approach to aggregating and reporting metered data.

#### Self-declaration

In order to have its metered volumes excluded from the calculation of TNUOS and BSUOS charges, the SVA registered storage facility operator must send its Supplier(s) a director-signed declaration. The declaration will demonstrate that the storage facility meets criteria that will be defined under CMP280 and CMP281 and set out in the CUSC. Whilst the CUSC

<sup>4</sup> At its November 2018 meeting, the BSC Panel approved an interim solution for supporting the calculation of CM and CFD Charges (collectively 'EMR Charges'). The EMR interim solution describes a BSC process that enables customers to self-declare that their sites should be excluded from the calculation of EMR Charges, and for HHDAs to report metered data for related Metering Systems to EMRS, which aggregates and subtracts this data from its calculation of EMR Charges. The EMR interim solution was implemented in February 2019. See [BSC Panel Paper 284/07](#)

<sup>5</sup> Please see Business Requirements 4 and 5 set out in [P344](#) Final Modification Report – Appendix C

criteria have not been finalised, the primary requirements are that an SVA Storage Facility is:

- the facility is operated by a generation licence holder;
- the facility's primary function is that of 'electricity storage'; and
- The facility is metered by HH SVA Metering Systems which do not measure any other activity except for electricity storage.

The requirement that a storage facility is operated by a generation licence-holder has received considerable attention by the CMP280 and CMP281 workgroup. That is, Ofgem's challenge to industry in its TCR SCR launch letter did not suggest that this was a criterion that determined whether storage might be excluded from the calculation of TNUOS and BSUOS charges. The CMP280 and CMP281 workgroup noted that whilst Ofgem had not specified that holding a generation licence should determine eligibility for being excluded from TNUOS and BSUOS charges, they believed that there were administrative advantages to requiring that a storage facility demonstrating that it is operated by a licence holder. That is, in order to be granted a generation licence the operator will have needed to demonstrate itself to Ofgem and a record of the licence is public (i.e. available on Ofgem's electronic public register) and therefore easily auditable. Furthermore, the workgroup recognised that CMP280, CMP281 and this BSC Modification Proposal are likely to be 'stepping stones' toward an enduring solution for all generators as will be set out in Ofgem's final decisions on its TCR SCR and on changes to the generation licence standard conditions (intended to clarify the role of storage within the licensing arrangements), and which is likely to be facilitated by the arrangements developed under BSC Modification Proposal [P375 'Metering behind the Boundary Point'](#).

The declaration will also provide information about the storage facility that is necessary to enable the SVAA to instruct HHDA(s) to begin reporting metered data for the facility.

If the storage facility's Metering System Identifiers (MSIDs) are registered with more than one Supplier, it must ensure separate declarations are prepared and sent to each Supplier, but that each declaration identifies any related MSIDs.

The Supplier must send the declaration to SVAA. The Supplier may perform its own-validation of the declaration (as ultimate the Supplier is the BSC Party and CUSC Party responsible) but is not obliged to do so.

A standard declaration template will be defined in a new or existing BSC CSD to be confirmed by a Workgroup during the Assessment Procedure. ELEXON note that it may be possible to use the EMR Capacity Market (CM) and Contracts for Difference (CFD) declaration template as a model.

## Validation

SVAA must check that any declaration is completed properly and that it is valid i.e. that it satisfies the criteria that will be set out in the CUSC in accordance with CMP280 and CMP281. The SVAA will likely use ECOES and Ofgem's Electronic Public Register (ePR) to validate the declaration. If the declaration is incomplete or invalid, SVAA will inform the relevant Supplier and provide an explanation for its reason to reject the declaration.



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### SVAA Settlement Calendar

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For each BSC Year a Payment Calendar, setting out Payment Dates and Notification Dates in relation to each Settlement Day, will be established pursuant to Section N3. 288/05. The Settlement Calendar 2019 be consistent with the Payment Calendar in the Written Assessment

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## **Instruction to HHDA to report metered data**

If SVAA accepts that a declaration is complete and valid, it will use ECOES to identify/verify the HHDA(s) appointed to the declared MSID(s) and instruct it/them to report HH Import and Export metered data for the declared MSID(s). The SVAA and HHDA will use existing appointment DTC data flows, i.e. the D0354 'Metering System Reporting Notification' sent by SVAA to appoint, [D0355 'Metering System Reporting Confirmation'](#) sent by HHDA to accept appointment and D0356 'Metering System Reporting Rejection' sent by HHDA to reject appointment.

## **Report metered data to SVAA**

Once appointed the HHDA will report HH Import and/or Export metered data to SVAA according to the prevailing SVAA Settlement Calendar for data aggregation. The HHDA will cease to report metered data if the MSID(s) it is appointed to are the subject of a change of supplier (CoS) or change of Agent (CoA) event. The final solution will set out Business Requirements and Business Rules that describe what HHDA's and SVAA should do on CoS or CoA. We recommend that on CoA the SVAA will instruct the new HHDA to begin reporting metered data but on CoS the customer/storage operator and its new Supplier will submit a new declaration to SVAA.

## **Aggregate metered data**

In accordance with the SVAA Settlement Calendar, the SVAA will aggregate the HH Import data reported to it by HHDA's by Settlement Day, Settlement Period, Supplier BMU and Measurement Class. In addition, the SVAA will calculate distribution losses for these aggregated metered volumes. When aggregating metered data, the SVAA will check for MSID's with missing Imports and Exports investigate missing data and resolve these exceptions – for example, the absence of metered data for an MSID may indicate a change of Supplier or change of Supplier Agent event. We propose to define business rules that describe what the SVAA should do if it identifies missing metered data.

## **Report aggregated Metered Data**

The SVAA will report aggregate Metered Data and associated losses to the NETSO using the P0210 TUOS Report and in accordance with the current timetable for reporting the P0210, i.e. in accordance with the SVAA Settlement Calendar.

## **Approach to assurance**

As any process for collecting, aggregating, and reporting metered data from storage facilities to the NETSO for network charging would be a non-Settlement process, the Proposer wishes to introduce some general provisions into the BSC (as well as more detailed processes and requirements in the BSC's CSDs) that describe the overall requirements to declare specific sites and MSID's, and then collect, aggregate and report the storage facilities' metered data.

By explicitly recognising these new non-Settlement processes in the BSC, it will allow the BSC Panel (in accordance with Section B3.1.2(f)) to establish assurance measures that cover the specific processes necessary for aggregating and reporting storage facilities' Imports for use in the calculation of network charges.

Once the Panel is able to establish dedicated assurance measures, we would expect the BSC Panel to mirror the measures it agreed as part of the Interim Solution for reporting data to EMRS for the calculation of CM and CFD Charges. That is, SVAA would keep declarations made by Suppliers under review and periodically check related metered volumes for declared storage facilities, follow up any anomalies with Suppliers and escalate issues, via BSCCo, to the Panel who may decide to exclude Metering Systems from the aggregated volumes reported to the NETSO.

## Applicable BSC Objectives

The Proposer suggests that this Modification Proposal will better facilitate Applicable BSC Objectives (a), (c), and (d), as detailed below.

The Workgroup will consider the P383 solution against the Applicable BSC Objectives as part of the Assessment Procedure.

### Objective (a)

The Transmission Company is required by standard condition C4 of its licence to establish a Use of System Charging (UoS) Methodology and conform to it. The UoS methodology is set out in the CUSC. This Modification's primary purpose is to enable the CMP280 WACM and CMP281 which seek to change the UoS charging methodology set out in the CUSC. Should Ofgem approve these CUSC Modifications, the Transmission Company will require metered data from specific storage facilities' Metering Systems. This BSC Modification proposes to put in place processes that will collect, aggregate and report these metered volumes to the Transmission Company. By building on best practice and making best use of existing and forthcoming centralised BSC processes and Systems, this solution will enable the efficient discharge of the Transmission Company's licence obligations.

### Objective (c)

As part of its Smart Systems and Flexibility Plan, and its launch of the Targeted Charging Review, Ofgem recognised that the operation of storage facilities may be at a disadvantage when compared to other forms of generation. The CMP280 WACM and CMP281 original proposal seek to apply to as many storage facilities as possible, irrespective of how they are registered for Settlement and which public electricity network they are connected to. The CMP280 original proposal only applies to a smaller set of CVA registered storage facilities. To the extent that this BSC Modification is necessary to support the implementation of the CMP280 WACM and CMP281, the Proposer believes that this Proposal is essential to promoting effective competition in the generation of electricity.

### Objective (d)

This Proposal seeks to build on existing processes (i.e. those recently implemented to support EMR Reporting), and make use of forthcoming processes, systems and interfaces (i.e. the processes for instructing HHDA's to report Metering System metered data to SVAA e.g. for P344 'Project TERRE' and [P354](#) 'Use of ABSVD for non-BM Balancing Services at the metered (MPAN) level'). By making best use of existing and forthcoming processes and systems, this proposal should ensure an efficient implementation and ongoing operation of the BSC arrangements.



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### What are the Applicable BSC Objectives?

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(a) The efficient discharge by the Transmission Company of the obligations imposed upon it by the Transmission Licence

(b) The efficient, economic and co-ordinated operation of the National Electricity Transmission System

(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

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

(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]

(f) Implementing and administering the arrangements for the operation of contracts for difference and arrangements that facilitate the operation of a capacity market pursuant to EMR legislation

(g) Compliance with the Transmission Losses Principle

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## Implementation approach

ELEXON expect that, if approved CMP280 and CMP281, will take effect from April 2020. Therefore, the Proposer contends that this Modification Proposal be implemented as part of either the November 2019 or February 2020 BSC Systems Release, subject to the standard Impact Assessment processes.

Our initial assessment of this Modification Proposal is that we would not be able to implement this proposal in November 2019.

## Legal Text

The legal text to deliver the solution to this Modification Proposal will be developed during the Assessment Procedure.

As part of the Assessment Procedure, the Workgroup will determine whether it wishes for other Code Subsidiary Documents (CSDs) impacted by this Modification to be developed in advance of the Panel and Authority making their respective final decisions on the merits of the Modification or whether to develop them, following approval, as part of the implementation phase.

### 3 Areas to Consider

In this section we highlight areas which we believe the Panel should consider when making its decision on how to progress this Modification Proposal, and which a Workgroup should consider as part of its assessment of P383. We recommend that the areas below form the basis of a Workgroup's Terms of Reference, supplemented with any further areas specified by the Panel.

#### Alternatives

Engie, the Proposer, has developed this proposal closely with ELEXON. Collectively we have sought to develop a solution that makes use of existing and forthcoming processes and interfaces. By using existing and forthcoming processes and interfaces, many of the core elements of this solution should be familiar to BSC Parties and Party Agents and will have passed scrutiny by industry consultation, the BSC Panel and, for P344, the Authority.

Nevertheless, there are elements to this solution that are new or different to processes and interfaces being implemented for P344 or for the [EMR Interim Solution](#). In particular, this solution would require SVAA to take a more active role by reviewing director-signed declarations, regularly report to BSCCo and BSC Panel (or a committee of the Panel) on the metered volumes it receives and perform exception management (e.g. to check for missing data, which may be triggered following a change of Supplier or change of Agent event).

Also, there may be valuable lessons from developing the processes for P344 and EMR that can be applied as part of this solution. In particular, we are aware that HHDA's have previously raised concerns with regard to the operation of the P344 and EMR solutions – e.g. that by being instructed by SVAA to report metered data, they are unable to recover the costs for this activity from the registered Supplier(s), and that the use of the same data flows to instruct the HHDA for different purposes may result in metered data being sent to the wrong person. We propose that business rules are designed to reduce these risks, e.g. that Suppliers, SVAA and HHDA's follow new rules that use the 'Contract Reference' data item in the instruction from SVAA and Suppliers to the HHDA. By following these rules, the HHDA will be able to accurately identify from who an instruction has been sent and for what purpose.

We believe a Workgroup can quickly identify any obvious opportunities or issues so the changes to the solution can be considered and consulted on.

#### Relationship with other industry codes and arrangements

This BSC Modification Proposal is necessary to support two CUSC Modification proposals – CMP280 WACM and CMP281. This solution may also support the implementation of two DCUSA Modification Proposals that are due to be raised to make changes to the Common Distribution Use of System Charges Methodology (CDCM) and EHV Distribution Charging Methodology (EDCM<sup>6</sup>) – these changes are similar to those proposed by CMP280, i.e. that

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<sup>6</sup> Originally DCUSA Change Proposals DCP319 and DCP321 were intended to make changes to the CDCM and EDCM but these were withdrawn by the proposer. In order to meet Ofgem's challenge to address how storage is charged for UoS, we expect Change Proposals similar to DCP319 and 321 to be raised.

specific storage facilities metered volumes should be excluded from the calculation of DUoS charges.

A Workgroup should assess this solution in the context of these other industry code modifications to ensure that this solution effectively supports the CUSC modifications (at least) and that this BSC Modification's costs and benefits are considered with this wider context in mind.

Furthermore, the BSC Panel and any Workgroup should be aware that its recommendations for this proposal will be contingent on the outcome of CMP280 and CMP281. That is, should Ofgem decide not to approve CMP280 WACM or CMP281, then this BSC Modification Proposal will not be necessary. Whilst making 'contingent recommendations is unusual, as part of the Panel's consideration of Approved Modifications P348 and P349, ELEXON noted that, although the BSC does not explicitly allow contingent decisions, there is equally nothing in the BSC explicitly preventing the Panel from making its recommendation contingent on Ofgem's decision on any related CUSC Modification(s), provided there is no uncertainty in that recommendation.

## Approach to assurance

As well as enabling the aggregation of metered data for network charging purposes, this solution also proposes to enable the BSC Panel to establish assurance measures dedicated to these aggregation processes, i.e. specifically the aggregation of certain storage facilities' metered data for network charging purposes. It does not seek to enable the Panel to establish more general assurance measures for any other non-Settlement activity or activities.

Whilst the scope of assurance is intended to be limited to specific aggregation processes, this modification proposal does not seek to specify explicit assurance measures in the BSC. Instead it proposes that the BSC Panel establishes measures that it considers appropriate. To this end the proposal recommends that the BSC Panel might adopt similar measures as has been agreed in relation to the EMR Interim Solution, e.g. that the BSC Panel (or one of its committees) may consider regular reporting by SVAA and ad hoc reports by BSCCo, and consider whether to exclude certain MSIDs from the SVAA's aggregation of storage facilities' metered data.

Because the criteria set out in the CUSC limits eligibility, our understanding is that this solution is likely to only support a small number of storage facilities. We believe that by not specifying specific assurance measures in the BSC, this proposal will enable the BSC Panel to assess the risk of the processes and act proportionately and flexibly.

However, it may be appropriate for the workgroup to consider whether this flexible and risk-based approach is appropriate and also to consider whether there are particular assurance measures the Panel should consider adopting should this proposal be implemented.

## Enduring solution

This proposal is intended to resolve a specific challenge set by Ofgem regarding how storage facilities are charged for certain Use of System charges (i.e. residual TNUOS and DUOS, and BSUOS).

As CMP280 and CMP281 are intended to specifically exclude storage facilities from the calculation of demand residual TNUOS charges and demand BSUOS charges, the CMP280 and CMP281 workgroup recognised a need to differentiate between imports for different activities that may take place at a single site, i.e. that a complex site may have a Metering System or Metering Systems that measure a mixture of activities because the site comprises plant and apparatus performing different activities. For example, a storage facility may be co-located with another form of generating plant and/or with a factory.

The challenge of measuring 'Behind the Meter' activities is not limited to CMP280 and CMP281. ELEXON's EMR Interim solution and P344 recognised the need for an enduring solution for measuring 'Behind the Meter' activities. Specifically in response to P344, P375 proposes to settle Secondary Balancing Mechanism (BM) Units using metering equipment behind the defined Boundary Point for Balancing Services (known as 'behind the Meter'), rather than settling using Metering Equipment at the Boundary Point as per current BSC obligations. This will allow balancing-related services on site to be separated from imbalance-related activities, more accurately reflecting the balancing-energy volumes provided by the Balancing Service Provider (BSP).

In order to meet this challenge, whilst recognising that more general changes to the charging arrangements are anticipated following the publication of the TCR SCR recommendations and in the absence of a solution to metering 'Behind the Meter' activities, CMP280 and CMP281 have been designed to only apply to certain simply configured storage facilities. That is, those that are not co-located with other forms of generating asset or final demand, where Settlement boundary metering is dedicated to the measurement of the storage facility and to facilities that are either registered in a specific CVA BMU and recognised as such in a Bilateral Connection Agreement (BCA) or Bilateral Embedded Generation Agreement (BEGA) or where the facility is measured by SVA Metering System(s) that it is operated by a generation licence holder.

CMP280, CMP281 and this BSC Modification Proposal have been designed recognising that they will be stepping stones toward a more enduring and scalable solution. We expect that either industry will bring forward an enduring solution for complex sites based on the progress of [P375](#), or that the enduring solution for all generators will be made clear in Ofgem's final decision on its TCR SCR.

## Areas to consider

The table below summarises the areas we believe a Modification Workgroup should consider as part of its assessment of P383:

Areas to Consider
What changes are needed to BSC documents, systems and processes to support P383 and what are the related costs and lead times?
Are there any Alternative Modifications?
Should P383 be progressed as a Self-Governance Modification?
Does P383 better facilitate the Applicable BSC Objectives than the current baseline?
Based on the solutions for EMR reporting and P344, are there specific lessons or changes that should be incorporated into this solution?
Whether this solution clearly sets out consistent provisions that will effectively support the operation of CMP280 WACM and/or CMP281?

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## Areas to Consider

Whether the approach to assurance is appropriate and whether there are any particular assurance measures that should be specified in the BSC or CSDs or if not specified in the BSC or CSDs that the Panel should consider adopting?

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## 4 Proposed Progression

### Next steps

The Modification should be assessed by a Workgroup and submitted to the Assessment Procedure.

### Self-Governance

This Modification is likely to have a material and beneficial effect on competition in the generation of electricity as it will even the playing field for storage operators participating with other generators. It will also have a beneficial effect on the operation of the national electricity transmission system, as well as matters relating to sustainable development. Therefore, it should not be treated as a Self-governance Modification as it materially impacts Self-Governance criterion (ii), (iii) and (iv). Further, this will allow Ofgem to consider P383 and CMP280 and CMP281 in totality.

### Workgroup membership

We recommend that the Workgroup assessing this Modification Proposal has expertise in the following areas:

- TNUOS and BSUOS charging arrangements, in particular data requirements for network charging and CMP280/281;
- BSC Settlement data and reporting, including HH Data Aggregation and related activities; and
- BSC Settlement calculations and processes.

It is important that membership of the Workgroup incorporates these areas to fully assess this Modification. ELEXON will provide training for Workgroup members who request it.

### Timetable

In order to progress this alongside CMP280 and CMP281, a five month Assessment Procedure is proposed with two Workgroup meetings. To facilitate this, the Modification will be 'front-loaded' by drafting business requirements and conducting BSCCo impact assessments in advance of the first Workgroup meeting.

Proposed Progression Timetable for P383	
Event	Date
Present Initial Written Assessment to Panel	14 March 2019
Workgroup Meeting	W/B 23 April 2019
Assessment Procedure Consultation	03 June 2019 – 21 June 2019
Workgroup Meeting	W/B 01 July 2019
Present Assessment Report to Panel	8 August 2019



#### What is the Self-Governance Criteria?

A Modification that, if implemented:

(a) is unlikely to have a material effect on:  
(i) existing or future electricity consumers; and  
(ii) competition in the generation, distribution, or supply of electricity or any commercial activities connected with the generation, distribution, or supply of electricity; and  
(iii) the operation of the national electricity transmission system; and  
(iv) matters relating to sustainable development, safety or security of supply, or the management of market or network emergencies; and  
(v) the Code's governance procedures or modification procedures; and

(b) is unlikely to discriminate between different classes of Parties.

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Proposed Progression Timetable for P383	
Event	Date
Report Phase Consultation	13 August 2019 – 27 August 2019
Present Draft Modification Report to Panel	12 September 2019
Issue Final Modification Report to Authority	16 September 2019

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## 5 Likely Impacts

### Impact on BSC Parties and Party Agents

Party/Party Agent	Potential Impact
Suppliers	Suppliers may need to work with their storage customers to process declarations (i.e. receive them from a customer and send these to SVAA). They may choose to complete their own assurance of declarations sent to them by a customer. Following the submission of a declaration, the Supplier must be able to liaise with the SVAA to resolve exceptions, for example if SVAA rejects a declaration or requires additional information about a declaration, e.g. from the customer.
HHDA	HHDAs must be able to be instructed by SVAA to report (and cease reporting) HH metered data to SVAA for specific Metering Systems; HHDA's must equally be able to report HH metered data for specific Metering Systems to SVAA.

### Impact on Transmission Company otherwise known as NETSO

The Transmission Company will receive an updated version of the P0210 TUOS Report data flow which will include additional data items that identify aggregated SVA storage facility metered volumes, this will require updates to the Transmission Companies systems.

### Impact on BSCCo

Area of ELEXON	Potential Impact
Operations Department	BSCCo's Operations department will need to be able to give guidance on the processes proposed above to stakeholders, and perform or support assurance measures, e.g. investigating exceptions identified by SVAA and reporting these to the BSC Panel.

Impact on BSC Systems and processes	
BSC System/Process	Potential Impact
SVAA	<p>SVAA will need to develop new processes to enable it to: receive, validate and register declarations; liaise directly with Suppliers to resolve issues with declarations; perform assurance measures such as regular review of declaration validity, identifying anomalous or missing metered data and regular reporting of overall storage Imports and Exports; and aggregate HH Imports for SVA storage facilities to Supplier BMU level.</p> <p>In addition, SVAA will need to use existing processes and interfaces to: instruct HHDAs to report metered data for successfully declared HH storage facilities; receive HH Imports and Exports for these facilities; and report aggregated metered volumes to the Transmission Company.</p>

Impact on BSC Agent/service provider contractual arrangements	
BSC Agent/service provider contract	Potential Impact
CGI	As the BPO/AMD, CGI will be responsible for the operation of SVAA systems and manual processes necessary to support this proposal

Impact on Code	
Code Section	Potential Impact
Section S	General description of processes necessary to support this proposal.

Impact on Code Subsidiary Documents	
CSD	Potential Impact
BSCP503 – Half Hourly Data Aggregation	<p>Detailed descriptions of processes and interfaces necessary to support the proposal.</p> <p>Changes will likely be defined in detail as part of the Assessment Procedure.</p>
BSCP508 – Supplier Volume Allocation	
SVAA Service Description	
SVAA User Requirement Specification	
SVA Data Catalogue	

## Impact on Core Industry Documents and other documents

Document	Potential Impact
Connection and Use of System Code	P383 will be modifying the BSC to support the implementation of CMP280 and CMP281. It will be necessary to ensure that the provisions described in this and the CUSC proposal are consistent with each other, as well as the Implementation Approach. This may require the CUSC proposals to change to accommodate this Proposal and vice versa.

## Impact on a Significant Code Review (SCR) or other significant industry change projects

This proposal is not explicitly within the scope of an active Significant Code Review but is related to a wider initiative, which, in part, is being progressed as an SCR.

[Ofgem's Targeted Charging Review \(TCR\)](#) has a wide scope, some of which is being progressed under an SCR (the TCR SCR) and the remainder is being progressed outside of the TCR SCR. CMP280 and CMP281 respond to a specific challenge set by Ofgem, which is part of the TCR but outside the scope of the TCR SCR. That is, when Ofgem launched the TCR SCR in August 2017<sup>7</sup>, it confirmed that industry were best placed to bring forward modifications to the network charging arrangements for storage and that this work was outside the scope of the TCR SCR.

On 24 January 2019, in an open letter<sup>8</sup>, Ofgem recently confirmed its views that changes to the network charging arrangements for storage should continue to be progressed outside of the TCR SCR. We therefore requested to Ofgem on 6 March 2019 that this Proposal be treated as an SCR Exempt Modification Proposal.

## Impact on Consumers

Indirect impact on consumers, storage provides flexibility to system, solution WACM will enable smaller users, therefore consumers to participate in this process. In the context of wider change there are indirect consumer impacts. This proposal is likely to affect a small number of storage operators. That is, the CUSC requirements limit which storage facilities could be exempt from certain TNUOS and BSUOS charges.

Similar limitations apply for those seeking to be excluded from the calculation of CM and CFD Charges and responses to ELEXON's consultation on its Interim Solution suggest that there may be tens or possibly hundreds of sites that may be eligible.

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<sup>7</sup> Ofgem, 'Targeted Charging Review – Significant Code Review launch statement', August 2017 - <https://www.ofgem.gov.uk/publications-and-updates/targeted-charging-review-significant-code-review-launch>

<sup>8</sup> Ofgem, 'Open letter on implications of charging reform on electricity storage', January 2019 - <https://www.ofgem.gov.uk/publications-and-updates/open-letter-implications-charging-reform-electricity-storage>

## Impact on the Environment

We do not expect this Modification Proposal to have any specific environmental impacts.

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## 6 Recommendations

We invite the Panel to:

- **AGREE** that P383 progresses to the Assessment Procedure;
- **AGREE** the proposed Assessment Procedure timetable;
- **AGREE** the proposed membership for the P383 Workgroup; and
- **AGREE** the Workgroup's Terms of Reference.

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## Appendix 1: Glossary & References

### Acronyms

Acronyms used in this document are listed in the table below.

Acronym	
Acronym	Definition
BSC	Balancing and Settlement Code
BSCCo	Balancing and Settlement Code Company
BMU	Balancing Mechanism Unit
BSUoS	Balancing Services Use of System
BTM	Behind The Meter
CfD	Contracts for Difference
CM	Capacity Market
CMP	CUSC Modification Proposal
CSDs	Code Subsidiary Documents
CUSC	Connection and Use of System Code
CVA	Central Volume Allocation
ECOES	Electricity Central Online Enquiry Service
EMR	Electricity Market Reform
HH	Half Hourly
HHDA	Half Hourly Data Aggregators
MSID	Metering System Identifiers
SCR	Significant Code Review
SVA	Supplier Volume Allocation
SVAA	Supplier Volume Allocation Agent
TCR	Targeted Charging Review
TNUoS	Transmission Network Use of System
TUoS	Transmission Use of System
UoS	Use of System Charging
WACM	Workgroup Alternative CUSC Modification

### DTC data flows and data items

DTC data flows and data items referenced in this document are listed in the table below.

DTC Data Flows and Data Items	
Number	Name
D0354	Metering System Reporting Notification
D0355	Metering System Reporting Confirmation

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DTC Data Flows and Data Items	
Number	Name
D0356	Metering System Reporting Rejection

## External links

A summary of all hyperlinks used in this document are listed in the table below.

All external documents and URL links listed are correct as of the date of this document.

External Links		
Page(s)	Description	URL
3	CMP281 - 'Removal of BSUoS Charges From Energy Taken From the National Grid System by Storage Facilities'	<a href="https://www.nationalgrideso.com/codes/connection-and-use-system-code-cusc/modifications/removal-bsuos-charges-energy-taken-national">https://www.nationalgrideso.com/codes/connection-and-use-system-code-cusc/modifications/removal-bsuos-charges-energy-taken-national</a>
3	Alternate CMP280	<a href="https://www.nationalgrideso.com/sites/eso/files/documents/CMP280%20CUSC%20Workgroup%20Consultation%20Alternative%20Request%20Form%20-%20ELEXON%20v1.0.pdf">https://www.nationalgrideso.com/sites/eso/files/documents/CMP280%20CUSC%20Workgroup%20Consultation%20Alternative%20Request%20Form%20-%20ELEXON%20v1.0.pdf</a>
3	Smart Systems and Flexibility Plan	<a href="https://www.ofgem.gov.uk/publications-and-updates/upgrading-our-energy-system-smart-systems-and-flexibility-plan">https://www.ofgem.gov.uk/publications-and-updates/upgrading-our-energy-system-smart-systems-and-flexibility-plan</a>
3	Targeted Charging Review	<a href="https://www.ofgem.gov.uk/publications-and-updates/targeted-charging-review-significant-code-review-launch">https://www.ofgem.gov.uk/publications-and-updates/targeted-charging-review-significant-code-review-launch</a>
5	CMP280 Workgroup Consultation	<a href="https://www.nationalgrideso.com/codes/connection-and-use-system-code-cusc/modifications/creation-new-generator-tnuos-demand-tariff">https://www.nationalgrideso.com/codes/connection-and-use-system-code-cusc/modifications/creation-new-generator-tnuos-demand-tariff</a>