

**Phase**

Initial Written Assessment

Definition Procedure

Assessment Procedure

**Report Phase**

Implementation

## 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 Connection and Use of System Code (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. It will also enable the Balancing and Settlement Code (BSC) Panel and Balancing and Settlement Code Company (BSCCo) to perform assurance activities in relation to the aggregation of this data.

This Report Phase Consultation for P383 closes:

**5pm on 27 August 2019**

The Panel may not be able to consider late responses.



The BSC Panel initially recommends **approval** of P383

This Modification is expected to impact:

- Operators of storage facilities
- Suppliers
- HHDAs
- SVAA
- The National Electricity Transmission System Operator

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## About This Document

This is the P383 Draft Modification Report, which ELEXON is issuing for industry consultation on the BSC Panel's behalf. It contains the Panel's provisional recommendations on P383. The Panel will consider all consultation responses at its meeting on 12 September 2019, when it will agree a final recommendation to the Authority on whether or not the change should be made.

There are six parts to this document:

- This is the main document. It provides details of the solution, impacts, costs, benefits/drawbacks and proposed implementation approach. It also summarises the Workgroup's key views on the areas set by the Panel in its Terms of Reference, and contains details of the Workgroup's membership and full Terms of Reference.
- Attachment A contains the draft legal text to the BSC for P383.
- Attachment B contains the illustrative draft redlined changes to BSCP503.
- Attachment C contains the illustrative draft redlined changes to BSCP508.
- Attachment D contains the illustrative P383 Business Requirements.
- Attachment E contains the full responses received to the Workgroup's Assessment Procedure Consultation.
- Attachment F contains the specific questions on which the Panel seeks your views. Please use this form to provide your responses to these questions, and to record any further views/comments you wish the Panel to consider.



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### Why Change?

CUSC Modifications [CMP280](#)<sup>1</sup> and [CMP281](#)<sup>2</sup> were raised in response to Ofgem's challenge to industry that storage facilities should be excluded from certain Transmission Network Use of System (TNUOS) and Balancing Services Use of System (BSUoS) charges.

In order that Supplier Volume Allocation (SVA) registered storage facilities can be excluded from TNUOS and BSUoS charges, in accordance with CMP280 and 281, metered data for these facilities must be aggregated and reported to the NETSO.

The BSC has traditionally been the primary source of aggregated metered data for network charging purposes.

### Solution

P383 will introduce processes into the BSC and its Code Subsidiary Documents (CSDs) that will enable:

- Suppliers (on behalf of their customers, SVA Storage Facility Operators) to submit declarations to SVAA for eligible SVA Storage Facilities - ie confirm compliance with
- CUSC criteria and provide details about the facilities, e.g. MSIDs;
- SVAA to check declarations, maintain records of valid and invalid declarations and register details of successfully declared SVA Storage Facilities;
- SVAA to instruct HHDAs to report HH Imports and Exports for successfully declared Storage Facilities' MSIDs - using existing appointment flows, i.e. the D0354<sup>3</sup>, D0355<sup>4</sup> and D0356<sup>5</sup>;
- HHDAs to report HH Imports and Exports to SVAA for SVA HH Metering Systems - HHDAs will use the new D0385<sup>6</sup> data flow being introduced for P344;
- SVAA to centrally aggregate the Imports; and
- SVAA to report aggregated Imports to the NETSO.

In addition to the up-front validation of declarations, P383 will establish ongoing assurance measures, i.e. periodic review of all declarations to ensure continuing validity and provision of descriptive/performance statistics. These measures will be described to give the BSC Panel the flexibility to amend, remove or add measures and to take appropriate actions to provide assurance to BSC Parties and CUSC Parties that only metered data for eligible Storage Facilities are reported and aggregated. These measures would sit outside the

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<sup>1</sup> 'Creation of a New Generator TNUoS Demand Tariff which Removes Liability for TNUoS Demand Residual Charges from Generation and Storage Users'

<sup>2</sup> 'Removal of BSUoS Charges From Energy Taken From the National Grid System by storage Facilities'

<sup>3</sup> Metering System Reporting Notification

<sup>4</sup> Metering System Reporting confirmation

<sup>5</sup> Metering System Reporting Rejection

<sup>6</sup> Metering System Half Hourly Metered Data

Performance Assurance Framework (PAF), as the processes described above would likely be considered a non-Settlement activity.

P383 should not preclude SVA Storage Operators from having a concurrent relationship with a Supplier and a Virtual Lead Party.

## Impacts & Costs

P383 introduces new non-Settlement processes that will impact Suppliers, their customers (SVA Storage Facility Operators), HHDAs, SVAA, BSCCo and the NETSO.

Further details of the impacts and costs of P383 can be found in section four.

Following impact assessment, we estimate that P383 will cost approximately £470k and require nine weeks to make changes to the BSCCo's and the SVAA's systems and processes.

## Implementation

The Panel initially recommends that P383 be implemented on **1 April 2021**, as part of a standalone BSC Release to align with the expected [CMP280](#) and [281](#) implementation.

## Recommendation

The BSC Panel unanimously believes that P383 **would better facilitate** Applicable BSC Objectives (a), (c) and (d) compared to the current baseline, and so should be **approved** for implementation on 1 April 2021.

## 2 Why Change?

### What is the issue?

CUSC Modification Proposal [CMP281](#) and ELEXON's Workgroup Alternative CUSC Modification to [CMP280](#) both require aggregated Import metered data from specific storage facilities' HH Metering Systems, should they be approved. The BSC has traditionally provided aggregated data to the NETSO 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 NETSO 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 measures.

### 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. CMP280 is the subject of a Workgroup Alternative CUSC Modification (WACM). The CMP280 original proposal only applies to storage facilities explicitly identified by their Balancing Mechanism (BM) Units 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 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.



#### BCAs and BEGAs

##### Bilateral Connection Agreement

– This agreement states how generators will need to comply with grid codes, CUSC and Balancing and Settlement Code.

##### Bilateral embedded generation agreement

– This agreement type is available to embedded generators that need access to the transmission network. A BEGA will provide a generator with TEC and allow them to operate in the energy balancing market.

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

On 22 June 2017, Scottish Power<sup>7</sup> raised CMP280. In the original proposal, Scottish Power made the following points when explaining why CMP280 was necessary.

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 NETSO is able to recover its allowed revenue from CUSC Parties. As outlined in Ofgem's Targeted Charging Review consultation<sup>8</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 to remove certain types of electricity storage from the calculation TNUoS Demand Residual tariff. For the avoidance of doubt, imports to generator and storage plant 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. Please note that the information in this sub-section has been provided by Scottish Power.

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

In response to the [CMP280 Workgroup Consultation](#), the 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, the BSCCo proposed a [Workgroup Alternative CUSC Modification](#). This WACM proposed that Imports to 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'**

On 22 June 2017, Scottish Power<sup>9</sup> raised CMP281. In the original proposal, Scottish Power made the following points when explaining why CMP281 was necessary.

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

<sup>7</sup> In November 2018, Scottish Power withdrew its support of CMP280, which Drax Power subsequently adopted.

<sup>8</sup> [Ofgem Targeted Charging Review - Consultation](#)

<sup>9</sup> In November 2018, Scottish Power withdrew its support of CMP281, which Engie subsequently adopted.



### **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).

'fuel'), it means that storage operators make a significantly greater contribution towards the recovery of BSUoS charges than other generators.

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.

CMP281 aims to modify the CUSC to exclude Imports to certain types of storage from the calculation of BSUoS demand charges.

### **CMP319 Consequential changes to Section 11 of the CUSC as a result of CMP280 and/or CMP281**

[CMP319](#) was raised on 22 July 2019 to support CUSC Modifications CMP280 and CMP281. As part of the Workgroup analysis, the Workgroup identified that CMP 280 and 281 are charging modification and as such can only change section 14 of the CUSC. If either modification is approved changes to other non-charging sections of the CUSC will be required. These changes cannot be achieved with CMP280 and CMP281. The principle addition related to the definitions of storage as a class. The definitions are common to CMP 280, 281 and their alternates

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

The data produced for Settlement purposes in accordance with the BSC supports a range of non-Settlement activities, e.g. the calculation of Electricity Market Reform (EMR) Charges<sup>10</sup> 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 CMP280/281 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.

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<sup>10</sup> EMR Charges are collectively Capacity Market (CM) Charges and Contract For Difference (CFD) Charges

As set out in the P383 Modification Proposal form, we concur with the Proposers assessment of why and what changes are needed to the BSC to support CMP280 WACM and CMP281.

### Proposed solution

The Proposer suggests changes to the BSC and certain CSDs to describe processes that enable Imports and Exports from HH Metering Systems for specific SVA registered storage facilities to be aggregated and reported to the NETSO. The Proposer also intends to put in place assurance measures to check and ensure that only Imports to valid storage facilities are reported to NETSO.

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. BSCCo and SVAA will regularly review declarations and metered data, and where necessary escalate matters to the Panel, to provide assurance that the processes are followed correctly and accurately.

This process will build on processes previously agreed by the BSC Panel to support the calculation of EMR Charges<sup>11</sup> and the implementation of Approved Modification proposal [P344<sup>12</sup> Project TERRE implementation into GB market arrangements](#). Therefore, this process proposes to mimic an EMR Settlement (EMRS) certification process and will make use of existing and forthcoming interfaces that would enable SVAA to instruct HHDA to report HH metered data for specific Metering Systems to it.

The solution is summarised in more detail below. In addition, please refer to Attachment E 'Business Requirements' the draft legal text in Attachment B and the illustrative draft redlining in Attachments C and D, which set out in detail how the proposed solution will work. Section 6 of this paper summarises the Workgroup's consideration of the proposal.

### Approach to declaration, aggregation and reporting

The following is a summary of the different elements of the proposed approach to declaring an SVA Storage Facility, and aggregating and reporting metered data.

<sup>11</sup> At its November 2018 meeting, the BSC Panel approved an interim solution for supporting the calculation of 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 HHDA 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>12</sup> Please see Business Requirements 4 and 5 set out in [P344](#) Final Modification Report – Appendix C

## Self-declaration

In order to have its Imports 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 confirm that the storage facility meets criteria that will be defined under CMP280 and CMP281 and set out in the CUSC. Whilst the CUSC criteria have not been finalised, at the time of writing the definition of an SVA Storage Facility is:

performs Electricity Storage as its sole function;

is operated by a Storage Facility Operator who also holds a generation licence;

has its imports and exports, measured only by Half Hourly Metering Systems which are registered in the Supplier Meter Registration Service (SMRS) as part of a Supplier BM Unit, and where those Half Hourly Metering Systems only measure activities necessary for performing Electricity Storage; and

is the subject of a valid Declaration.

The declaration will also provide information about the storage facility that will enable the SVAA to check the validity of the declaration and that is necessary to enable the SVAA to instruct HHDA(s) to begin reporting metered data for the facility. In particular, the Storage Facility's name, location and details about the Metering Systems measuring both Imports and Exports to and from the facility. Whilst only Imports are aggregated and reported to NETSO to be excluded from the calculation of network charges, it is necessary to know that there is HH Export metering and to receive the Export Metered data in order to validate the activity of the facility, i.e. that its sole function is that of Electricity Storage.

If the storage facility's Metering System are registered with more than one Supplier, the SVA Storage Facility Operator must ensure separate declarations are prepared in respect of each Supplier and the Metering Systems the Supplier is the Registrant for.

Within five Working Days (WDs) of an operator sending its declaration to a Supplier, the Supplier must send the declaration to SVAA. The Supplier may perform its own-validation of the declaration (as ultimately the Supplier is the BSC Party and CUSC Party responsible for the facility's Metering Systems and directly liable for the network charges) but is not obliged to do so. The specification of a timescale within which Suppliers should submit declarations should ensure the process is operated in a timely manner and subject to BSC governance.

A standard declaration template has been included in BSCP508 'Supplier Volume Allocation Agent', which can be viewed in Attachment B. The draft declaration template is based on the Director's Certificate published in EMRS Working Practice 25 'EMR Aggregation Rules'<sup>13</sup>.

## Validation

SVAA must check that any declaration is completed properly and that it is valid i.e. that its contents support the declaration that the facility/ies satisfy the criteria that will be set out in the CUSC in accordance with CMP280 and CMP281. The SVAA will use its own records and public records (e.g. Electricity Central Online Enquiry Service (ECOES) and Ofgem's Electronic Public Register (ePR)) to validate the declaration. If the declaration is incomplete or invalid, SVAA will liaise with the relevant Supplier to try and resolve, and, where resolution is not possible, provide an explanation for its reason to reject the



### SVAA Settlement Calendar

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.

The Settlement Calendar shall be consistent with the Payment Calendar.

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<sup>13</sup> <https://www.emrsettlement.co.uk/documentstore/workingpractice/wp25-emr-aggregation-rules.pdf>

declaration. SVAA will maintain records of all declarations, SVA Storage Facilities and Metering Systems.

### **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 DTC data flows, i.e. the D0354 'Metering System Reporting Notification' to instruct, and the [D0355 'Metering System Reporting Confirmation'](#) and D0356 'Metering System Reporting Rejection' to confirm or reject an instruction. These data flows are already used to instruct HHDA's to report metered data to SVAA in support of EMR Settlement and the Settlement of Primary and Secondary BMUs following the introduction of approved BSC Modifications [P344 'Project TERRE'](#) and [P354 'Use of ABSVD for non-BM Balancing Services at the metered \(MPAN\) level'](#)

### **Report metered data to SVAA**

Once instructed, the HHDA will begin to report HH Import and/or Export metered data to SVAA according to the prevailing SVAA Settlement Calendar for data aggregation (i.e. for each Volume Allocation Run). The HHDA will only cease to report metered data if it ceases to be the appointed HHDA for the MSID(s) in SMRS, e.g. following a Change of Supplier (CoS) or Change of Agent (CoA) event, or if the SVAA sends an instruction (D0354) to cease reporting. The final solution will set out Business Requirements and Business Rules that describe what HHDA's and SVAA should do on CoS or CoA. That is, on a CoA the SVAA will instruct the new HHDA to begin reporting metered data but on CoS SVAA will not appoint any new HHDA and will stop aggregating Imports for the old Supplier for Settlement Days after the CoS and wait for the customer/storage operator and its new Supplier(s) to 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 and Group Correction for these aggregated metered volumes.

SVAA will produce four new calculated values:

Period BM Unit Gross Storage Demand - is the sum of HH settled Active Import Corrected Components (CORC) per Settlement Day, Settlement Period, Supplier BMU and Measurement Class collected via D0385 for MSIDs in valid and current (i.e. (live) declarations;

Corrected Period BM Unit Gross HH Demand - is, for every Settlement Period, the difference between the existing 'Period BM Unit Gross HH Demand' and the new 'Period BM Unit Gross Storage Demand';

Corrected Daily BM Unit Gross HH Demand - is the sum of 'Corrected Period BM Unit Gross HH Demand' in a Settlement Day; and

Daily BM Unit Gross HH Storage Demand - is calculated similarly to the existing 'Daily BMU Gross HH Demand' except is the sum of Period BM Unit Gross Storage Demand for each Settlement Day.

When aggregating metered data, the SVAA will check for MSIDs with missing Imports and Exports or any other anomaly, investigate 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 the SVAA should continue to use the process described in BSCP508 Section 3.2A.3 for investigating missing but expected metered data.

As noted above, SVAA will only aggregate Imports for Storage Facilities that continue to be the subject of a valid declaration and whose Metering Systems remain registered by the Supplier(s) that declared them (i.e. not subject of CoS) and are not subject to exclusion from calculation, as may be determined by the BSC Panel.

### **Report aggregated Metered Data**

The SVAA will report Period BM Unit Gross Storage Demand, Corrected Period BM Unit Gross HH Demand, Corrected Daily BM Unit Gross HH Demand, and Daily BM Unit Gross HH Storage Demand to the NETSO using the P0210 TUoS Report and in accordance with the current timetable for reporting the P0210 TUoS Report, i.e. in accordance with the SVAA Settlement Calendar.

Please note that Settlement Data may be the subject of correction following the Final Reconciliation Settlement Run (RF), i.e. a post-final Settlement Run. Whilst corrections to Settlement Data can be made post-RF, the CUSC only accounts for corrections up to RF in its reconciliation of TNUOS and BSUOS charges. P383 will not make any changes to the way the BSC allows Settlement Data to be corrected in accordance with its established Settlement Calendar or the impacts post-RF corrections may have on the compilation of data in the P0210 TUOS Report and the timing of its production and delivery to NGESO.

### **Approach to assurance**

Processes for collecting, aggregating, and reporting metered data from storage facilities to the NETSO for network charging are non-Settlement processes. Therefore, the Proposer wishes to introduce general provisions (as well as more detailed processes and requirements in the BSC's CSDs) that describe the overall requirements to declare specific sites and MSIDs, 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.

The solution proposes to mirror the measures agreed as part of the Interim Solution for reporting data to EMRS for the calculation of Capacity Market (CM) and Contracts for Difference (CfD) Charges. That is, SVAA would keep declarations made by Suppliers under review by checking their validity each month, or as determined by the BSC Panel, SVAA will maintain a public register of all participating SVA Storage Facilities (i.e. a table showing the facilities' names and the GSP Group they are located in).

BSCCo will produce a monthly public report that summarises overall performance of the processes (e.g. total volumes reported to NETSO, numbers of declarations etc). It will check related metered volumes for declared storage facilities on a monthly basis follow up any anomalies with Suppliers and escalate issues, to the Panel. The Panel may decide to exclude certain Metering Systems from the aggregated volumes reported to the NETSO or to instruct that a declaration is deemed invalid. It was highlighted in the Workgroup that the Panel shall consider the implications of such decision, and the Party implicated may have an opportunity to put their perspective forward to the Panel for consideration.

Suppliers and SVA Storage Facility Operators (who are also BSC Parties) must notify BSCCo of changes that may affect the validity of a Declaration.

## Self-Governance

The Workgroup believes that this Modification does not meet the Self-Governance Criteria due to it having a material and beneficial impact 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 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 CMP290 and CMP281 in totality.

The P383 Workgroup **unanimously** voted that P383 **should not** be treated as a Self-Governance Modification.

## Legal text

The proposed redlined changes to the BSC to deliver P383 can be found in Attachment A.

Six respondents to the Assessment Procedure Consultation agreed that the draft legal text delivers the intention of P383. Two respondents did not agree, they both concluded that the draft legal text fails to take into account the role of VLPs.

## Applicability to Virtual Lead Party's

Two respondents said the draft legal text only refers to Suppliers as the potential registrants for a storage facility operator, and does not take into account the role of Virtual Lead Parties.

ELEXON responded to the respondents by confirming that VLPs are not subject to TNUOS or BSUOS charges. As such only Suppliers (Lead Party for a Supplier BMU and registrant for associated Metering Systems) have a direct interest in the Storage Facilities' Imports (and Exports) which they are responsible for (per K1.2.2) and will be charged TNUOS and BSUOS on.

The P383 solution is focussed on Suppliers submitting declarations to SVAA as they are the BSC Party liable for TNUOS and BSUOS charges. However, the P383 solution is not intending to preclude the relationship between storage operators and VLPs. There will be an obligation drawn out within the accompanying legal text which will ensure Suppliers are

responsible for submitting declarations within five working days, if they fail to do this they will be non-compliant under the BSC.

ELEXON advised the respondents that P383 is not intended to preclude an SVA Storage Facility from being the subject of a concurrent relationship with a Supplier and a VLP.

## **Redlined CSDs**

The proposed changes to BSCP503 can be found in Attachment B, and the proposed changes to BSCP508 can be found in Attachment C. Please note that these are illustrative changes to the BSCPs, they will be fully developed and sent for industry review as part of the implementation phase of this Modification.

## **Alternative solutions?**

The Workgroup did not consider there to be any reasonable Alternative solutions to deliver P383 and hence concluded there are no alternative solutions that would better facilitate the Applicable BSC Objectives.

### Estimated central implementation costs of P383

ELEXON's cost to implement P383 are approximately £465k. These costs are driven by the BSC Central System development costs, along with costs to amend internal processes and documents:

- BSC Central System development and implementation costs;
- 18 Working Day's effort to implement new internal processes and documents; and
- 14 Working Day's effort to implement document changes to the BSC and Code Subsidiary Documents (CSDs).

### Indicative industry costs of P383

Suppliers and their customers (SVA Storage Facility Operators) will need to work together to declare SVA Storage Facilities to SVAA and to ensure such declarations remain up to date or are rescinded.

HHDAs may be instructed by SVAA to report HH metered data to SVAA. In this respect P383 proposes to reuse processes being introduced for Approved BSC Modifications P344 and P354.

SVAA will be responsible for reviewing (and keeping under review) declarations made by SVA Storage Facility Operators, via their Suppliers, instructing HHDAs to report HH metered data, aggregating this data and reporting it to the NETSO.

BSCCo will be responsible for producing a monthly report on overall operation of the processes, investigating anomalous activities and where necessary escalating issues to the BSC Panel.

NETSO will must be able to receive and use the aggregated metered data in its calculation of network charges.

In the Assessment Procedure consultation six out of the eight respondents said they would incur a cost. However, these costs would be minimal or one off.

### P383 impacts

Impact on BSC Parties and Party Agents	
Party/Party Agent	Impact
Suppliers	Suppliers will 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.

#### Impact on BSC Parties and Party Agents

Party/Party Agent	Impact
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 the NETSO

The NETSO 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 NETSO's systems. The NETSO responded to the P383 Assessment Report and confirmed that P383, CMP280 and CMP281 will cost approximately £1.5m. They did not have an isolated cost for P383, but without CMP280 and CMP281 they do not believe P383 would be necessary, therefore no costs would be incurred.

#### Impact on BSCCo

Area of ELEXON	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. monthly performance reporting, the identification and investigation of anomalous data and exceptions and reporting these to the BSC Panel, where appropriate.

#### Impact on BSC Settlement Risks

P383 potentially influences risks related to HHDA's and the SVAA as it may affect the HHDA's and SVAAs ability to carry out normal Settlement duties due to the undertaking of new tasks. However, the Workgroup, ELEXON and Market Participants do not expect this risk to be materially significant, given that P383 builds on existing and forthcoming processes.

Impact on BSC Systems and process	
BSC System/Process	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 and identifying anomalous or missing metered data; 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 NETSO.</p>

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

Impact on Code	
Code Section	Impact
Section S – Supplier Allocation	General description of processes necessary to support this proposal.

Impact on Code Subsidiary Documents	
CSD	Impact
BSCP503 – Half Hourly Data Aggregation	<p>Detailed descriptions of processes and interfaces necessary to support the proposal.</p> <p>Indicative changes to BSCPs were prepared as part of the Assessment Procedure and will be finalised as part of the implementation phase of this Modification, subject to its approval. These indicative changes to BSCP503 and BSCP508 are outlined in attachments C and D.</p> <p>ELEXON will develop redlining for the SVAA SD, URS and Data Catalogue and submit such redlining for industry review as part of the implementation phase of this Modification, subject to its approval.</p>
BSCP508 – Supplier Volume Allocation	
SVAA Service Description (SD)	
SVAA User Requirement Specification (URS)	
SVA Data Catalogue	

#### Impact on other Configurable Items

Configurable Item	Impact
None	

#### Impact on Core Industry Documents and other documents

Document	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, 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, 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. ELEXON received confirmation on 11 March 2019 that P383 is outside the scope of all open SCR's.

#### Impact on Consumers

The Workgroup notes an indirect impact on consumers. Storage provides flexibility to the total system, and the 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.

#### Impact on Environment

The P383 Workgroup does not expect this Modification Proposal to have any specific environmental impacts.

### Recommended Implementation Date

The Workgroup and Panel recommend an Implementation Date for P383 of:

- 1 April 2021, as part of an ad-hoc BSC Release.

Implementation on 1 April 2021 will align with the implementation dates of related CUSC Modifications CMP280 and CMP281.

The P383 Final Modification Report is scheduled to be issued to the Authority by 16 September 2019, this is to align with the CUSC and DCUSA Modifications which are also aiming to be issued to the Authority in September 2019.

### The Declaration Process

Storage operators must send a declaration (signed by a Director) to their Supplier(s) that confirms that the Facility/Facilities described therein comply with criteria that will be defined in the CUSC, that is:

- Confirms that the facility/facilities comply with the CUSC requirements to be exempt from charges;
- Contains specific information necessary to support the BSC process, i.e. details about the facility's/facilities' Metering Systems; and
- Confirms that they are happy for the Supplier to share the details of the facility with SVAA.

### Requirements to submit declarations

The workgroup discussed different aspects of the requirements to provide a declaration – e.g. its purpose, responsibility/liability for providing accurate declarations and maintaining declarations, and practicalities of the process.

The Proposer noted that the requirement on storage operators and Suppliers to submit declarations is not intended to be a general barrier to storage participating in the market but is necessary to confirm that the storage facilities comply with the CUSC criteria should an operator wish for the facility's Imports to be excluded from the calculation of network charges. The Workgroup noted that the proposed declaration process mirrors a process used by generators seeking to be excluded from the calculation of EMR Charges. The process is intended to provide a simple and practical means of providing information necessary to check the validity of a storage facility.

The workgroup also considered the purpose of the declaration as a means of providing assurance to Suppliers. That is, it was noted that where a facility's Metering Systems are registered for SVA, it is the Supplier that the BSC Party responsible for the storage facility's Metering Systems and the CUSC Party liable for the associated network charges.

The Workgroup discussed whether storage operators that are also BSC Parties should be responsible for submitting declarations to SVAA and be obliged to maintain the accuracy of those declarations, even if they are not the registrant for the Metering Systems or the CUSC Party liable for related network charges. The Workgroup noted that this approach would reduce the burden on Suppliers to facilitate the declaration process and also ensure that any operators that are also BSC Parties are directly accountable under the BSC. However, the Workgroup also noted that ELEXON had already sought an impact assessment from its service provider based on Business Requirements that only envisaged Suppliers submitting and managing declarations on behalf of operators. Consequently, the Workgroup agreed that the legal text ought to reflect that operators who are BSC Parties, alongside Suppliers, ought to be responsible for the accuracy of declarations but that only Suppliers submit declarations to SVAA and point of initial contact regarding declarations.

## Supplier Responsibilities

The Workgroup considered responsibilities for ensuring storage operators provide accurate information for declarations. It was noted that as a Supplier is a party under the BSC they could be held accountable. The Workgroup considered who would be responsible if the storage facility provider was a party under the BSC. It was decided that each SVA storage facility operator who is a BSC party would acknowledge and agree that:

- the information contained in any Declaration submitted to the SVAA on their behalf is accurate and complete in all material respects; and
- they will promptly notify the Supplier(s) who is the Registrant of the Metering System(s) on the Declaration of any amendments or updates to the Declaration.

At the final CMP280 and CMP281 workgroup meeting (following ELEXON's request to its service provider for an impact assessment of P383), a member asked whether the P383 solution would provide Suppliers with a report that shows the Imports SVAA had aggregated for each of their Supplier BM Units. The member noted that Suppliers may need this information in order to assure themselves that the correct SVA Storage Facility metered volumes are reported and to check that NETSO subsequently calculates TNUOS and BSUOS charges correctly. As it stands the P383 solution only provides aggregated SVA Storage Facility Imports to NETSO. ELEXON would likely need to request a second assessment of impacts to BSC Central Systems if the Proposer or an alternative BSC Modification introduced a requirement to report aggregated volumes to Suppliers, as well as to NETSO.

## Assessment Procedure Consultation Response

Is it appropriate for a storage operator to submit their own declarations where such storage operator is a BSC Party?			
Yes	No	Neutral/No Comment	Other
2	2	4	0

Two Market Participants voted in favour as they believed that this would then ensure accountability under the BSC and acknowledgement of all responsibilities. Four respondents were neutral. Two respondents voted against, one believed that the submissions should be through the Supplier as they are the party with the obligation and who receive relief that can potentially be passed on the storage customer.

Further to this National Grid ESO also voted against, they believe that the Supplier should be responsible for submission in order to ensure that they have visibility of the MSID(s) and contracts affected to aid in their own forecasting and internal process. They noted that the Supplier is accountable for settlement and therefore should have all requisite information to enable them to fulfil their obligations.

The Workgroup believe that by allowing just the Supplier to be responsible to submit declarations will create a consistent process. Suppliers are BSC Parties, have existing interfaces with BSC systems, and are liable for TNUOS and BSUOS charges, therefore would be better placed to submit declarations.

## False declarations

The Workgroup considered how the Supplier may need/want to protect itself against the risk of an operator knowingly providing a false declaration. It was noted that the proposed process intentionally requires declarations to be submitted to SVAA by Suppliers. This is to ensure the Supplier has visibility and control of declarations, and so whilst the solution does not require Suppliers to check declarations, they have an opportunity to. Therefore a signed declaration provides Suppliers (and other BSC and CUSC Parties) with comfort that the operator's facility is eligible, and if there are any problems, evidence they can use in bilateral contractual discussions with their customer. The Workgroup also noted that whilst the Supplier acts as a gateway to SVAA and may choose not to submit a declaration, should the storage operators be dissatisfied with the Supplier's performance they have the opportunity to switch Supplier.

## Invalid declarations

The Workgroup considered the likely consequences if an invalid declaration was identified having been originally accepted. The workgroup noted that should an invalid declaration be identified then either certain or all Metering Systems would be excluded meaning related Metered Data would no longer be aggregated and reported to NETSO. The SVAA's reconciliation process would mean that any previously reported Metered Data for 'invalid' Settlement Periods would be excluded from the SVAA reconciliation aggregation calculation. Consequently updated metered data would be reported to NETSO and would result in an adjustment to the supplier's overall network charges bill. The Supplier would then resolve/recover any differences with its customer(s).

Whilst the onus is on operators to produce and sign a declaration, the Workgroup considered that Suppliers should nevertheless be responsible for reporting changes if they become aware. The Workgroup also noted that the declaration letter template, which operators are expected to use when declaring facilities, makes clear that operators/declarants agree to maintain the accuracy of declarations and notify SVAA/BSCCo of changes.

## Overlap with proposed changes to Generation Licence Standard Conditions

The Workgroup considered one respondent's concern that proposed changes to the Generation Licence may duplicate requirements proposed by P383. In conclusion the Workgroup noted the respondent's concerns but considered that whilst there may be some duplication of effort, the P383 requirements are necessary to ensure the operation of the P383 and related CUSC modifications.

The respondent noted that on 26 June 2019 Ofgem published a statutory consultation seeking views on proposed changes to the Generation Licence Standard Conditions. These changes included new requirements on licensees to share with Suppliers and to publish details about storage facilities they own or operate. The respondent recommended that the P383 requirements to declare details about SVA Storage Facilities should be reviewed in the context of the proposed licence changes to avoid duplicating requirements.

The Workgroup noted the respondent's concern and sympathised with the concern that the combination of the proposed licence condition, P383 and other related requirements placed an increasing burden on market participants to share, declare and/or publish details about storage facilities they own, operate or may be responsible for.

However, ELEXON and the Proposer both recognised that there was very limited time left to redesign the requirements for P383. That is, P383 and its corresponding CUSC modification proposals are targeted for implementation in April 2021. Because NGESO requires at least 12 months and ELEXON requires at least nine months to implement these changes, any delay in submitting the P383 and the related CUSC modifications to Ofgem would put their implementation by April 2021 at risk. As Code Managers, ELEXON, NGESO and ElectraLink have worked together to target sending the CUSC, DCUSA and BSC modifications to Ofgem in late Summer 2019 to ensure an April 2021 implementation is achievable.

The Workgroup also noted that the declaration requirements set out by P383 are designed specifically to supporting the overall P383 solution. Relaxing the P383 requirements in preference to the licence requirements would not provide ELEXON with the data it requires to operate P383. ELEXON noted that its understanding was that Ofgem had designed its licence proposals to be compatible with the P383 and related CUSC and DCUSA modifications' requirements, rather than to replace them.

The Workgroup also noted that the licence changes are not certain to take effect. That is, Ofgem had published a consultation, not a final decision, and so may yet change its proposals.

ELEXON noted that whilst the Workgroup did not consider it appropriate or necessary to change the P383 Business Requirements, it would be sensible to consider whether a future change could be made that sought to simplify and centralise the registration of and publication of details about storage facilities. Such a common, centralised solution could satisfy a range of licence and industry code requirements.

## Overlap with related BSC Modifications

The Workgroup discussed if P383 would have interactions with Modification [P375 'Settlement of Secondary BM Units using metering behind the site Boundary Point'](#) or [P379 'Enabling consumers to buy and sell electricity from/to multiple providers through Meter Splitting'](#), which are in the Assessment Procedure stage.

ELEXON advised that in principle each Modification is designed to build on the BSC baseline as it stands. However, ELEXON noted where there is potential overlap, it encourages the efficient development of solutions with Workgroups to use aligned technical solutions where common systems are used. In this respect ELEXON noted that as far as could be understood at this time, P383 would be compatible with P375 and P379.

ELEXON noted that it expects the solution for P375 to provide a basis for enabling more complex, collocated storage facilities to also seek relief from Final Consumption Levies and certain network charges.

## A 'common registry' - interaction with related BSC modifications

P383 proposes to establish a 'register' containing details of declared SVA Storage Facilities and related Metering Systems. ELEXON is working with industry to develop similar requirements to support other BSC processes. For example, P344, P354, P375 and P388 all require (or are considering) a 'registry' to store details about particular Metering Systems.

In order to align the P383 solution with these other related BSC Modifications' solutions, the Workgroup agreed with ELEXON's proposal that changes to BSCPs and the final detail

### Final Consumption Levies

Storage 'consumes' electricity in order to be able to store it. When energy is exported again to the end consumer, this can result in a 'double counting' of the supply of electricity to the end consumer and in a payment of levies by both the storage provider and the consumer of the same electricity. It can also add to the operational cost of storage projects (which might be passed on to the end consumer) and makes storage less competitive than other flexibility providers. These costs can make up a significant additional cost for storage, which storage should not be required to pay if they are not the end consumer of the imported electricity.

of certain Business Requirements should be determined as part of the implementation project, should P383 be approved. This approach would provide ELEXON with the flexibility to determine common Business Requirements and a common technical solution to support P383 and the related BSC Modifications.

In presenting its proposal, ELEXON noted that each of the related modifications is at a different stage of development or implementation. It became clear to ELEXON toward the conclusion of the P383 Assessment Phase that the P383 final technical solution may benefit from being aligned with the technical solution(s) for the other related modifications. That is, rather than design and build separate 'registers' to support the specific requirements of each individual modification, it would be more efficient to develop common requirements and ultimately a common registry that contains Metering System details for a wide range of purposes.

Should P383 be approved by Ofgem, the Workgroup asked that ELEXON provide industry with as much timely visibility of proposed changes to BSCPs as part of the implementation project. ELEXON agreed and noted that changes to BSCPs would be the subject of further consultation and would require the BSC Panel or a Panel Committee's approval before changes could be finalised and implemented.

## SVAA's instruction to HHDA's

SVAA will use the D0354 data flow to instruct HHDA's to report HH metered Imports and Exports for SVA Storage Facilities' Metering Systems. Once appointed HHDA's will report HH Import and/ or Export metered data to SVAA using D0385, in accordance with the prevailing SVAA Settlement Calendar.

ELEXON noted that reusing an existing process and data flows, P383 is intended to make participation in the process simpler for HHDA's.

The Workgroup considered the scenario if SVAA sends a D0354 to instruct HHDA, but the HHDA does not send the D0355 back. They noted that 1WD may be too short, particularly when managing requests during peak holiday periods. ELEXON noted that P383 mirrors the timescales agreed for P344. In principle, the Workgroup supported aligning timescales for P383 with the existing P344 process. The Workgroup agreed if after 1WD the HHDA does not send neither D0355 nor D0356, then SVAA should liaise with the Supplier and/or HHDA to resolve the issue.

As the D0354 and D0385 data flows are intended to support more than one BSC process, i.e. P383 and also for P344 and P354, the workgroup considered how SVAA could use the D0354 to identify the reason for instructing the HHDA to report metered data. The Workgroup considered using the ten character contract reference (J0048) which is an optional data item in D0354 file structure. For example, SVAA could populate the data item with a rules-based reference that provides information that helps the HHDA to identify the purpose of the instruction.

On reflection, ELEXON noted that elsewhere in the Business Requirements, SVAA would not send multiple instructions using the D0354 for the various different processes for which it may require metered data. That is, if SVAA determined that a HHDA was already reporting metered data for one process, it would not send another instruction for any subsequent process. Consequently, ELEXON noted that populating the contract reference would not provide much information to the HHDA because they may only ever receive one instruction even though the data they report is used for a variety of purposes. ELEXON

proposed that P383 should not specify any particular rules for populating the contract reference data item. The Workgroup and proposer agreed.

Following the Assessment Procedure Consultation, the Workgroup considered a response which sought clarification over what should happen following a change of supplier. That is, would the SVAA send a D0354 to instruct the HHDA to cease reporting metered data. ELEXON advised the workgroup that if a Storage Facility's Metering System(s) were the subject of a change of Supplier then the SVAA would consider whether it still required Metered Data for the affected Metering Systems, whether to support P383 or another BSC process (e.g. TERRE). If the SVAA concluded that Metered Data was no longer necessary for any reason then it would send a D0354 to the HHDA to instruct it to stop reporting Metered Data from the date of the CoS. In the absence of an instruction from SVAA to cease reporting, HHDA's must continue to report Metered Data for as long as SMRS records it as being registered to the Metering System.

## Interaction with other Codes

Ofgem's challenge to industry to exclude storage from certain network charges applies to TNUoS, BSUoS and DUoS. Where CMP280 and CMP281 seek to make changes to how TNUoS and BSUoS charges are calculated, Distribution Connection and Use of System Agreement (DCUSA) change proposals [DCP341 'Removal of residual charging for storage facilities in the CDCM'](#) and [DCP342 'Removal of residual charging for storage facilities in the EDCM'](#) seek to make similar changes to how DUoS charges are calculated.

ELEXON noted that changes to the CUSC and DCUSA have a common need to identify eligible storage facilities and their related Imports. Consequently, there may be benefits to aligning the CUSC and DCUSA changes. For example, to ensure consistent treatment of storage facilities across TNUoS, BSUoS and DUoS charging arrangements, and that the NETSO and the LDSO may benefit from a common process and centralised systems for identifying, validating and registering details of eligible storage facilities, and that collects, aggregates and reports Imports for these declared facilities to the relevant network companies.

ELEXON advised the Workgroup that in response to an action set at a DCP341/342 workgroup meeting, at the beginning of May 2019 it held a meeting with the Code Administrators for the CUSC and DCUSA change proposals, NETSO and ElectraLink. The purpose of the meeting was to discuss the possibility of aligning the DCUSA, CUSC and BSC Modifications. ELEXON noted that the meeting identified the key differences between the CUSC and DCUSA proposals – that in order for a facility to be excluded from network charges, the CUSC proposals will require a storage operator to be a generation licensee and the DCUSA proposals will require that a facility is metered using a specific type of HH Metering System, i.e. one with a current transformer. The Code Administrators also recognised that Ofgem had previously encouraged industry to develop its proposals as a matter of urgency and so in order to deliver final modification reports to Ofgem as quickly as possible (i.e. Summer 2019) there was less than a month in order to develop aligned cross-Code modification proposals.

The Workgroup agreed that the changes should align where possible. They noted the potential benefits to a common solution and to aligning timetables to deliver final modification reports so Ofgem could consider all modifications together. The CMP280/281 and DCP341/342 workgroups held similar views but advised that they did not believe there was time to develop a common solution and that the proposals should stay focused on the scope and limits of the industry codes the modifications intended to change, i.e.

CMP280/281 should stay focused on CUSC and DCP341/342 should stay focused on DCUSA.

The P383 Workgroup noted that the definition of an SVA Storage Facility will be defined by CMP280/281 and exist in the CUSC. They recognised that a consequence of the proposed definition is that not all storage facilities will be eligible to be excluded from certain network charges. ELEXON noted that the CUSC modifications have been designed recognising limitations in the current arrangements and a need to progress a pragmatic solution as quickly as possible. Therefore future changes to the CUSC and BSC may be necessary to allow wider participation. In particular, ELEXON noted that Ofgem has yet to publish its decision on proposed changes to the Generation Licence standard conditions relating to the role of storage and an ongoing BSC Modification, P375, is developing arrangements that seek to introduce new metering arrangements to allow secondary/operational metering to be used in Settlement. The outcome of these initiatives are important because they should help to identify how more complex site arrangements should be catered for, i.e. to separate Imports for storage and non-storage purposes where a storage facility is co-located with other non-storage activities. However, it was noted that P383 should put in place the foundations for an enduring solution.

## Assurance

The Workgroup discussed the measures proposed to provide assurance to BSC Parties and CUSC Parties that the processes introduced by P383 are working. These measures include requirements on SVAA and BSCCo to check initial declarations and to keep under review the validity of declared SVA Storage Facilities, to report to the BSC Panel on the overall operation of the processes and to publish a register listing all participating SVA Storage Facilities (i.e. facility name and location/GSP Group).

In particular, they considered the frequency and content of reporting. They agreed that BSCCo should send the BSC Panel a report at least every nine months to summarise the following:

- The total Imports and Exports (by Supplier) over the reporting period
- The numbers of declarations submitted, accepted and rejected
- Details of any exceptions

## Frequency of checks

The Workgroup agreed that SVAA must every month check the validity of all live declarations, i.e. that they remain compliant with CUSC criteria, carry out any necessary follow up investigation/ analysis and report its findings to BSCCo. However, the workgroup considered the consequences of checking more or less frequently. That is, there were concerns that infrequent checking may mean that Suppliers struggle to recover changes in TNUoS or BSUoS liabilities. A Workgroup member explained that if an assurance check is too infrequent, the Supplier may not be able to recover any correction to network charges from the customer/operator responsible for the facility that caused the issue. This is because the customer/operator may have switched supplier by the time the issue is identified and corrected. The Workgroup considered that if checks were infrequent then it may be appropriate that any correction is limited in terms of its retrospective effect so as to minimise the risk that a Supplier cannot recover any correction to its network charges. Alternatively, if checks and corrections are performed frequently then this should reduce

the size of any correction to charges and increase the Suppliers likelihood of being able to recover any change in charges from the responsible customer/operator.

As a result, the P383 solution and business requirements are drafted such that the SVAA checks declarations and the BSCCo produces reports for the BSC Panel on a monthly basis.

The Proposer clarified that whilst the frequency of checks may, in principle, cause problems for Suppliers, in practice they suggested the materiality for Suppliers would be low. This is because they did not expect large numbers of eligible facilities and because under the current TNUoS charging arrangements the likelihood is that storage facilities would avoid Importing during TRIAD periods, it is unlikely that they would face high TNUoS Demand Residual charges in any case. Therefore, any correction to Suppliers TNUoS charges would likely be small.

### Assessment Procedure Consultation Response

**If any issue identified by SVAA were to be corrected from the Settlement Day the issue first took effect (up to 14 months), what is the longest period of time between checks by SVAA that you would be willing to accept? Please explain your rationale.**

Yes	No	Neutral/No Comment	Other
1	0	7	0

One BSC Party commented that this should follow the normal Settlement Process. National Grid ESO agreed that checking for issues was something Suppliers and BSCCo are best placed to do. However, they noted that submission of incorrect data will affect Parties' UoS liabilities which can only be corrected up to 14 months. That is, NG does not correct UoS charges post RF and suggested that more frequent regular checks may be more appropriate to ensure corrections to UoS charges can be considered before RF.

The Workgroup discussed if BSC processes relating to the aggregation and reporting of metered data to NETSO should be aligned with the CUSC, so Settlement Runs post-RF are no longer reported. The Workgroup noted that NETSO already receives post-RF data and so they concluded that the process should remain the same.

**How far back should any issue be corrected? For example if an issue is identified 14 months after the date it first started, should the correction be made from the point at which it first started or should the point at which a correction is applied be limited? If you believe it should be limited, by how much? Please explain your rationale.**

Yes	No	Neutral/No Comment	Other
1	0	7	0

The majority of Market Participants voted neutral on this question, the question tied into discussions to the previous question. That is, the workgroup concluded that corrections should be made in accordance with existing Settlement timetable and provisions – i.e. that corrections typically made within 14 months notwithstanding any correction that might be made as part of DF run, post RF. However, group noted that even though corrections may

be made post RF, National Grid don't use post RF changes in their correction/reconciliation of network charges.

## **NETSO involvement**

Seeing as the P383 processes are specifically intended to support the calculation of network charges, the Workgroup considered to what extent the NETSO should have a more active role in assurance measures. For example, instructing the carrying out of particular checks or advising on or directing specific corrections.

The Workgroup noted that the NETSO, like any other BSC Party, may raise concerns with BSCCo or the BSC Panel to investigate possible inaccuracies in the data. Furthermore, the Workgroup noted that as the NETSO has a permanent role on the BSC Panel. As a result, they will have an active role in all BSC Panel decisions related to the operation of the P383 processes (e.g. where the Panel is asked to decide whether to take action to invalidate suspicious SVA Storage Facilities or exclude certain Metering Systems from the aggregation of Storage metered volumes).

Workgroup decided that SVAA must make P383 data available/accessible to the BSC Panel, BSCCo and NETSO to facilitate effective investigation and decision-making. The Proposer suggested that public reports should identify the total gross volumes of Imports to registered/declared Storage Facilities at GSP Group level.

### Applicable BSC Objectives

The P383 Workgroup believe that P383 would better facilitate the Applicable BSC Objectives and so should be **approved**.

#### Applicable BSC Objective (a):

The **majority** of the Workgroup believed P383 **would better facilitate** BSC Objective (a), one voted neutral. The Workgroup concluded that P383 would put in place processes to collect, aggregate and report metered volumes to NETSO which are necessary to support the NETSO's calculation of network charges (in accordance with its licence).

The NETSO is required by standard condition C4 of its Transmission Licence to establish a Use of System Charging (UoS) Methodology and conform to it. The UoS methodology is set out in the CUSC. P383'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 NETSO 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 NETSO. 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 NETSO's licence obligations.

#### Applicable BSC Objective (c)

The Workgroup **unanimously** agreed that P383 **would better facilitate** BSC Objective (c). They believe that P383 is essential to promoting effective competition in the generation of electricity.

As part of its Smart Systems and Flexibility Plan, and 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 CVA registered storage facilities (which account for a smaller number of facilities in comparison to the number of SVA facilities). To the extent that P383 is necessary to support the implementation of the CMP280 WACM and CMP281, the Workgroup believes that P383 is essential to promoting effective competition in the generation of electricity.

#### Applicable BSC Objective (d)

The Workgroup unanimously agreed that P383 would better facilitate BSC Objective (d). P383 builds upon 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 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 Modification should ensure an efficient implementation and ongoing operation of the BSC arrangements.

### Applicable BSC Objectives (b), (e), (f) and (g)

Workgroup members unanimously believe that the P383 solution is neutral against Applicable BSC Objectives (b), (e), (f) and (g).

Does P383 better facilitate the Applicable BSC Objectives?		
Obj	Proposer's Views	Other Workgroup Members' Views <sup>14</sup>
(a)	<ul style="list-style-type: none"> <li>Positive – will put in place processes to collect, aggregate and report metered volumes to NETSO, will also build on best practise.</li> </ul>	<ul style="list-style-type: none"> <li>Positive – as per Proposer</li> </ul>
(b)	<ul style="list-style-type: none"> <li>Neutral</li> </ul>	<ul style="list-style-type: none"> <li>Neutral</li> </ul>
(c)	<ul style="list-style-type: none"> <li>Positive – will support CMP280 WACM and CMP281</li> </ul>	<ul style="list-style-type: none"> <li>Positive – as per Proposer</li> </ul>
(d)	<ul style="list-style-type: none"> <li>Positive – will build on existing processes</li> </ul>	<ul style="list-style-type: none"> <li>Positive – efficient as using existing systems and processes</li> </ul>
(e)	<ul style="list-style-type: none"> <li>Neutral</li> </ul>	<ul style="list-style-type: none"> <li>Neutral</li> </ul>
(f)	<ul style="list-style-type: none"> <li>Neutral</li> </ul>	<ul style="list-style-type: none"> <li>Neutral</li> </ul>
(g)	<ul style="list-style-type: none"> <li>Neutral</li> </ul>	<ul style="list-style-type: none"> <li>Neutral</li> </ul>

### Respondent's views on BSC Objectives

Do you agree with the Workgroup's initial unanimous view that P383 does better facilitate the Applicable BSC Objectives than the current baseline?			
Yes	No	Neutral/No Comment	Other
6	0	1	1

The majority of the respondents (six of the eight respondents) agreed with the Workgroup that the Proposed Modification better facilitates the Applicable BSC Objectives than the current baseline (so it should be approved). One respondent voted neutral, as they agreed that P383 better facilitates Objective (c). However, they noted that additional processes are required to deliver the proposed solution, which is administratively complex.

National Grid ESO raised concerns that P383 could be negative against Applicable BSC Objective (e). They referred to the Clean Energy Package which states that "...network charges shall not discriminate either positively or negatively against energy storage". In the final P383 Workgroup meeting, Ofgem did not express a particular view and agreed they would consider the matter when making its decision on P383 and the related CUSC Modifications. The Workgroup concluded that National Grid's point is relevant to the



### What are the Applicable BSC Objectives?

(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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<sup>14</sup> Shows the different views expressed by the other Workgroup members – not all members necessarily agree with all of these views.

package of cross-Code modifications but not directly to the BSC Modification in isolation. This is because P383 by itself does not set or levy network charges.

## Legal Text

The Workgroup **unanimously** supported the P383 proposed draft Legal Text in delivering the P383 solution.

The draft Legal Text covers proposed changes to BSC Section S, S-2, X-1 and X-2. The draft Legal Text can be found in Attachment A.

Please note that whilst the Assessment Phase Consultation sought views on changes to BSCP503 and 508, these are included for illustrative purposes and will be finalised as part of the implementation phase for this Modification should it be approved. The illustrative changes to BSCP503 and 508 can be found in Attachment C and D of this paper.

## Alternative Modifications

The Workgroup **unanimously** believed that there are no Alternative Modifications that would better facilitate the Applicable BSC Objectives.

## Self-Governance

Following considerations outlined in section three of this paper, the Workgroup **unanimously** believes that P383 should not be progressed as Self-Governance.



### What are the Self-Governance criteria?

A proposal 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

### Cost benefit case

The BSC Panel Chairman asked for an explanation of the benefits case for P383. ELEXON explained there was not an explicit benefits case identified for P383 by itself, this is primarily because the solution does not improve Settlement processes. However, ELEXON noted that P383 is essential in supporting the CUSC Modifications [CMP280](#) and [CMP281](#) and it is when considered as a package with the CUSC modifications that the benefits case becomes clearer. That is, the combined solution will address [Ofgem's challenge to industry](#) to remove a perceived barrier to entry and operation of storage by excluding storage from the calculation of certain network charges. Ofgem believe that by removing the liability for Storage facilities to pay TNOUS demand residual and BSUOS demand charges it will level the playing field between storage facilities and other forms of generation.

A Panel Member observed that this Modification seeks to publish a register of participating storage facilities. This will provide greater visibility to industry of participating storage facilities for assurance purposes, but also supports greater visibility and understanding of distributed generation more generally. The Panel Member also noted a number of other industry initiatives seeking to establish records and registers of distributed generation assets. ELEXON replied that it is aware of these initiatives and that there may be benefit in the coordination of a shared registry of distributed generation assets in the future.

Another Panel Member sought an explanation for what he considered to be relatively substantial costs expected by National Grid and ELEXON. National Grid took an action to provide more detail on breakdown of their costs. ELEXON noted that National Grid's estimated costs covered the combined implementation of P383, CMP280 and CMP281, as opposed to an isolated cost for P383. The costs National Grid are expecting were identified as part of CMP280 and 281 which included the creation and forecasting of new tariffs and charging exemptions for storage.

ELEXON noted that the P383 solution has been designed to take advantage of existing systems and interfaces between Suppliers, SVAA and HHDAs, so far as is possible. However, it will nevertheless introduce new processes for aggregating data, storing information about storage facilities and the declaration process. ELEXON also clarified that the bulk of specific BSC central costs in implementing P383 were derived from our Service Provider Impact Assessment which, as is usual at this stage of a Modification's development, was an initial standalone assessment and did not consider how this Modification would be implemented alongside other changes.

Therefore, the cost does not take into account the potential efficiencies from implementation using shared systems and resources. These benefits will be drawn out as part of the implementation programme. The P383 solution does take advantage of existing systems and interfaces between Suppliers, SVAA and HHDAs, so far as is possible.

Additionally, through taking advantage of the Foundation Programme architecture and designing a common technical solution that supports this and other related BSC Modifications will aid in lowering the price. However, it will introduce new processes for aggregating data and storing information about storage facilities and the declaration process, which will try to mirror existing processes, however they are new

## Application of solution

A Panel Member asked how this solution would apply to storage facilities that are co-located with generator and final demand sites. ELEXON responded by confirming that the CUSC solution has defined SVA and CVA storage facilities in such a way that only storage facilities that have dedicated half-hourly metering systems would be eligible for this solution. Therefore, only storage facilities whose Imports and Exports can be isolated and measured separately from any other activity would be eligible. ELEXON added that only storage facilities operated by a generation licensee would be eligible.

## Panel's initial views against the Applicable BSC Objectives

- Applicable BSC Objective (a): unanimous view that P383 better facilitates;
- Applicable BSC Objective (c): unanimous view that P383 better facilitates; and
- Applicable BSC Objective (d): unanimous view that P383 better facilitates;

The Panel initially **unanimously** agreed that P383 **better** facilitated Applicable Objectives (a), (c) and (d), for the reasons given by the Workgroup and so should be approved. The Panel was neutral against all other objectives.

## Panel's views on draft legal text and redlining

The Panel **unanimously** agreed that the draft legal text and redlined changes to the BSC for P383 delivers the intention of P383.

## Panel's view on the proposed Implementation Date

The Panel **unanimously** agreed with the Workgroup's recommended Implementation Date of 1 April 2021.

## Panel's views on Self-Governance

The Panel **unanimously** agreed with the Workgroup that P383 does not meet the Self-Governance criteria, as there is a material impact on competition, the operation of the National Electricity System, as well as matters relating to sustainable development.

### Report Phase Consultation Questions

Do you agree with the Panel's initial unanimous recommendation that P383 should be approved?

Do you agree with the Panel that the redlined changes to the BSC deliver the intention of P383?

Do you agree with the Panel's recommended Implementation Date?

Do you agree with the Panel's initial view that P383 should not be treated as a Self-Governance Modification?

Do you have any further comments on P383?

## 9 Recommendations

The BSC Panel initially recommends to the Authority:

- That P383 **should not** be progressed as a Self-Governance Modification;
- That P383 should be **approved**;
- An Implementation Date for P383 of:
  - 1 April 2021, to align with related CUSC Modifications;
- The draft BSC legal text for P383.

### Workgroup's Terms of Reference

Specific areas set by the BSC Panel in the P383 Terms of Reference
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 Electricity Market Reform (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?
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?
What wider data provisions could be made available once the data has been collected as this would be useful for Parties trading in the market, and what data flows would be appropriate to use?
In Ofgem's open letter on storage it had indicated that it is looking at a distribution site solution, the Workgroup should consider the solution being developed to support CUSC and also to support DCUSA.

### Assessment Procedure timetable

P383 Assessment Timetable	
Event	Date
Panel submits P383 to Assessment Procedure	14 March 2019
Workgroup Meeting 1	29 April 2019
Workgroup Meeting 2	11 June 2019
Assessment Procedure Consultation	2 July – 22 July 2019
Workgroup Meeting 3	29 July 2019
Panel considers Workgroup's Assessment Report	8 August 2019
Report Phase Consultation	13 August – 27 August 2019
Present Draft Modification Report to Panel	12 September 2019
Submit Final Modification Report to Ofgem	16 September 2019

## Workgroup membership and attendance

P383 Workgroup Attendance				
Name	Organisation	29 April 2019	11 June 2019	29 July 2019
Elliott Harper	ELEXON ( <i>Chair</i> )	✓	✓	✓
Danielle Pettitt	ELEXON ( <i>Lead Analyst</i> )	✓	✗	✓
Simon Lord	Engie ( <i>Proposer</i> )	✓	☎	✓
Andrew Colley	SSE	☎	☎	☎
Nik Wills	Stark	✓	☎	✓
Meg Wong	Stark	✓	☎	✓
Binoy Dharsi	EDF	✓	☎	☎
Ian Hall	IMServ	☎	☎	☎
Bill Reed	RWE Supply & Trading GmbH	✗	☎	☎
Robert Langdon	SMS	✓	☎	✗
Nick Rubin	ELEXON ( <i>Design Authority</i> )	✓	✓	✓
Nick Brown	ELEXON ( <i>Lead Lawyer</i> )	✓	✓	✗
Chiara Redaelli	Ofgem	✓	☎	✗
Ankita Mehra	Ofgem	✗	✗	✓

## Appendix 2: Glossary & References

### Acronyms

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

Acronyms	
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
DUoS	Distribution Use of System
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

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DTC Data Flows and Data Items	
Number	Name
D0355	Metering System Reporting Confirmation
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>
5	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>
5	Targeted Charging Review - Significant Code Review launch	<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>
6	'Creation of a New Generator TNUoS Demand Tariff which Removes Liability for TNUoS Demand Residual Charges from Generation and Storage Users'	<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>
6	Workgroup consultation alternative request form	<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>
9	P344 'Project TERRE'	<a href="https://www.elexon.co.uk/mod-proposal/p344/">https://www.elexon.co.uk/mod-proposal/p344/</a>

External Links		
Page(s)	Description	URL
16	Open letter on implications of charging reform on electricity storage	<a href="https://www.ofgem.gov.uk/publications-and-updates/open-letter-implications-charging-reform-electricity-storage">https://www.ofgem.gov.uk/publications-and-updates/open-letter-implications-charging-reform-electricity-storage</a>
23	P375 'Metering behind the Boundary Point'	<a href="https://www.elexon.co.uk/mod-proposal/p375/">https://www.elexon.co.uk/mod-proposal/p375/</a>
23	P379 'Multiple Suppliers through Meter Splitting'	<a href="https://www.elexon.co.uk/mod-proposal/p379/">https://www.elexon.co.uk/mod-proposal/p379/</a>
25	DCUSA Change Proposal DCP341 - Removal of residual charging for storage facilities in the CDCM	<a href="https://www.dcusa.co.uk/Lists/Change%20Proposal%20Register/DispForm.aspx?ID=370&amp;Source=https%3A%2F%2Fwww%2Edcusa%2Eco%2Euk%2FSitePages%2FActivities%2FChange%2DProposal%2DRegister%2Easpx">https://www.dcusa.co.uk/Lists/Change%20Proposal%20Register/DispForm.aspx?ID=370&amp;Source=https%3A%2F%2Fwww%2Edcusa%2Eco%2Euk%2FSitePages%2FActivities%2FChange%2DProposal%2DRegister%2Easpx</a>
25	DCUSA Change Proposal DCP342 - Removal of residual charging for storage facilities in the EDCM	<a href="https://www.dcusa.co.uk/Lists/Change%20Proposal%20Register/DispForm.aspx?ID=371&amp;Source=https%3A%2F%2Fwww%2Edcusa%2Eco%2Euk%2FSitePages%2FActivities%2FChange%2DProposal%2DRegister%2Easpx">https://www.dcusa.co.uk/Lists/Change%20Proposal%20Register/DispForm.aspx?ID=371&amp;Source=https%3A%2F%2Fwww%2Edcusa%2Eco%2Euk%2FSitePages%2FActivities%2FChange%2DProposal%2DRegister%2Easpx</a>