

Phase

[Initial Written Assessment](#)[Definition Procedure](#)[Assessment Procedure](#)[Report Phase](#)[Implementation](#)

P419 'Enhanced Reporting of Demand Data to the NETSO to facilitate BSUoS Reform'

This Modification will enable the aggregation and submission of the metered demand data of Non-Final Demand Sites, such as eligible service facilities and electricity generation facilities, to facilitate Connection and Use of System (CUSC) Modification CMP308 'Removal of BSUoS charges from Generation'. It will also make clear how Suppliers, Half Hourly Data Aggregators (HHDA) and the Supplier Volume Allocation Agent (SVAA) participate in the aggregation and reporting of this data, as well as ensuring appropriate assurance measures are applied.



The P419 Workgroup recommends **approval** of P419



The P419 Workgroup **does not** believe P419 impacts the European Balancing Guideline (EBGL) Article 18 terms and conditions related to balancing held within the BSC

This Modification is expected to impact:

- The National Electricity Transmission System Operator (NETSO);
- Suppliers;
- Generators;
- Half Hourly Data Aggregators; and
- Elexon

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About This Document



Not sure where to start? We suggest reading the following sections:

- Have 5 mins? Read section 1
- Have 15 mins? Read sections 1 and 7
- Have 30 mins? Read all except section 6
- Have longer? Read all sections and the annexes and attachments

This document is the P419 Workgroup's Assessment Report to the BSC Panel. Elexon will present this report to the Panel at its meeting on 13 January 2022. The Panel will consider the Workgroup's recommendations, and will agree an initial view on whether this change should be made. It will then consult on this view before making its final recommendation to the Authority on 16 February 2022.

There are three 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 redlined changes to the BSC for P419.
- Attachment B contains the draft redlined changes to the Code Subsidiary Documents for P419.
- Attachment C contains the full responses received to the Workgroup's Assessment Procedure Consultation.

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Why Change?

The second Balancing Services and Use of System (BSUoS) Task Force concluded that Non-Final Demand should be exempt from BSUoS charges. Connection and Use of System Code (CUSC) Modification [CMP308 'Removal of BSUoS Charges from Generation'](#) is being progressed to ensure only Final Demand is subject to BSUoS charges. With the current data available, NGESO is not able to effectively identify all Non-Final Demand volumes, and is therefore unable to accurately apply BSUoS exemptions. Using existing Settlement Data, the BSC remains the primary source of aggregated metered data for a variety of non-Settlement activities, such as network charging.

Solution

Expand the systems and processes introduced by [P383 'Enhanced reporting of demand data to the NETSO to facilitate CUSC Modifications CMP280 and CMP281'](#) to allow eligible facilities to declare exemption from BSUoS charges and provide NGESO with aggregated Non-Final Demand data via the P0210 'TUoS Report' data flow.

Impacts & Costs

Costs Estimates			
Organisation	Implementation (£k)	On-going annual costs (£k)	Impacts
Elxon	450 – 600	10 - 15	Costs are associated with the required system changes and increased scope of registration and assurance activities
NGESO	500 – 1000	N/A	The implementation costs are related to system changes, with the upper range covering the risk that changes may be required to legacy IT systems
Industry	N/A	N/A	No impact
Total	950 - 1600	10 - 15	

Costs are expected to be significantly outweighed by the benefits generated by CMP308, which P419 will facilitate. Total benefits of CMP308 between 2022-2040 are forecast to be between £0.61bn and £0.86bn. Further details around the impacts, costs and benefits can be found in section 4 of this paper.

Implementation

The Workgroup recommends an Implementation Date for P419 of 23 February 2023 as part of the **February 2023 Release**. This will allow the SVAA to process declarations from Suppliers before the implementation of CMP308 on 1 April 2023, in line with Ofgem's expectation.

Recommendation

The Workgroup unanimously agree that P419 should be **approved**. There was unanimous agreement that the Modification better facilitates BSC Applicable Objectives **(a)**, **(c)** and **(d)**. All Members agreed that P419 was neutral against all other Objectives and that it should be submitted to Ofgem for decision. The Workgroup do not believe P419 impacts or extends the EBGL Article 18 balancing terms and conditions.

2 Why Change?

What is the issue?

Balancing Services Use of System (BSUoS) Reform has been initiated to further develop and implement the [recommendations of the Second BSUoS Task Force](#) and the subsequent [Ofgem response letter](#). The Second BSUoS Task Force concluded only Final Demand should pay all BSUoS charges.

With the current data available, NGESO is not able to effectively identify all Non-Final Demand volumes, and is therefore unable to accurately apply BSUoS exemptions. Using existing Settlement Data, the BSCCo remains the primary source of aggregated metered data for a variety of non-Settlement activities, such as network charging.

Following P383, the BSC allows the identification of and reporting of metered data for declared SVA Storage Facilities. After CMP308, imports to Generation and Eligible Services Facilities will also be exempt from BSUoS charges and need to be identified and data provided to NGESO in the same way.

In respect of CVA Non-Final Demand Sites, NGESO should be able to collate the data itself, but it is recognised that having separate CVA and SVA solutions could be sub-optimal, so the group explored the possibility of alignment, bearing in mind time constraints for delivery.

Background

Balancing Services Use of System (BSUoS) Charges

BSUoS charges recover the cost of day-to-day operation of the Transmission System and comprise the following costs, services and special provisions:

- The total costs of the Balancing Mechanism;
- Total Balancing Services Contract costs;
- Payments/Receipts from NGESO incentive schemes;
- Internal costs of operating the Transmission System;
- Costs associated with contracting for and developing Balancing Services; and
- Costs invoiced to NGESO associated with Manifest Errors;

Both Generators and Suppliers are currently liable for these charges, which are calculated daily as a flat tariff for all users (Interconnectors have been exempt from BSUoS charges since 2012). The sum total of BSUoS charges depends on the balancing actions that NGESO take each day. They are then apportioned based on a half hourly £/MWh basis and are applied proportionally according to responsible parties' portfolio share. It is worth highlighting that [CMP361 'BSUoS Reform: Introduction of an ex ante fixed BSUoS tariff'](#) will, if approved by Ofgem, amend how the BSUoS tariff is calculated. The Modification would introduce an ex ante fixed volumetric BSUoS tariff set over a total fixed and notice period of 14 months. Further details can be found on the [CMP361 webpage](#).



What is Final Demand?

Final Demand is demand at the point of energy consumption for purposes not related to energy generation or storage e.g. energy used to boil a kettle or power a smelting plant.

Non-Final Demand refers to demand related to the generation or storage of energy e.g. the energy required to fire up a Combined Cycle Gas Turbine or energy related to charging batteries on storage sites.



What are Eligible Service Facilities?

tNGESO defines Eligible Service Facilities as pathfinder projects that have contracts with the NGESO. These sites import or export reactive energy but do not result in the production or export of any active energy.

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Second BSUoS Taskforce

Following [Ofgem's Final Decision on its Targeted Charging Review \(TCR\) Significant Code Review \(SCR\)](#) (published in December 2019), Ofgem requested NGENSO launch an industry taskforce to provide analysis to support decisions on the future direction of BSUoS charges. Specifically, the taskforce was established to consider who should pay balancing charges and on what basis. This taskforce concluded on 30 September 2020 with the publication of its [final report](#).

The taskforce had two deliverables to consider:

- Who should be liable for BSUoS charges; and
- How should these charges be recovered.

It is the first of these deliverables that this Modification is concerned with. On this point, the taskforce recommended that Final Demand should pay all BSUoS charges, subject to sufficient notice to industry prior to implementation. This recommendation is in line with Ofgem's position set out in its TCR decision letter, which laid out rationale for residual network charges being paid by Final Demand consumers. The key reasons the taskforce came to this conclusion were:

- Levying BSUoS charges on to Final Demand only will mitigate the existing distortions between GB transmission connected generators who are currently liable for BSUoS charges and interconnected and distributed generation who are not;
- Expanding the charge base to include distributed generation would create a new distortion boundary between behind the meter generation and network connected generation and have a negative impact on the business case of new distributed and community generation which is overwhelmingly renewable or low carbon; and
- The first Task Force concluded that BSUoS should be a cost recovery charge, the addition of BSUoS related risk premia and transaction costs into both wholesale and retail prices is an inefficient method of cost recovery.

In [its response to the second BSUoS taskforce's conclusions](#), Ofgem noted its view that April 2023 would be an appropriate target for this change to take effect.

CMP308 'Removal of BSUoS Charges from Generation'

To take the recommendation of the second BSUoS taskforce forward, Connection and Use of System (CUSC) Modification [CMP308 'Removal of BSUoS Charges from Generation'](#) is being utilised which seeks to amend the BSUoS Charging Base to include Final Demand only. The Proposer and Workgroup also believe that doing so will allow GB generation to be more competitive in comparison with their European trading partners, who are not subject to equivalent charges.

NGESO currently rely on Elexon to collect and report aggregated metered data for Supplier Volume Allocation (SVA) registered Metering System Identifiers (MSIDs), which is reported in the P0210 'TUoS Report' data flow. This is then used by NGENSO to calculate network charges (BSUoS/TNUoS). In addition to the existing Supplier Metered Data provided in the P0210, [P383 'Enhanced reporting of demand data to the NETSO to facilitate CUSC Modifications CMP280 and CMP281'](#), implemented on 1 April 2021, introduced requirements for demand volumes associated with storage facilities to be reported separately and a 'corrected' Supplier BM Unit data position to be provided.

However, these volumes still include metered data for certain eligible facilities that CMP308 would seek to exclude. P419 therefore seeks to introduce a solution that would allow NGESO to identify and exclude demand volumes associated with Generation and Eligible Services facilities.

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

BSC Modification P383 enables the aggregation of specific Metering Systems' metered data for network charging purposes, i.e. to support the operation of CUSC Modification Proposals CMP280 and CMP281. It introduced processes explaining how Suppliers, HHDA's and the SVAA participate in the aggregation and reporting of storage facilities' metered data and enable the BSC Panel and BSCCo to perform assurance activities in relation to these sites.

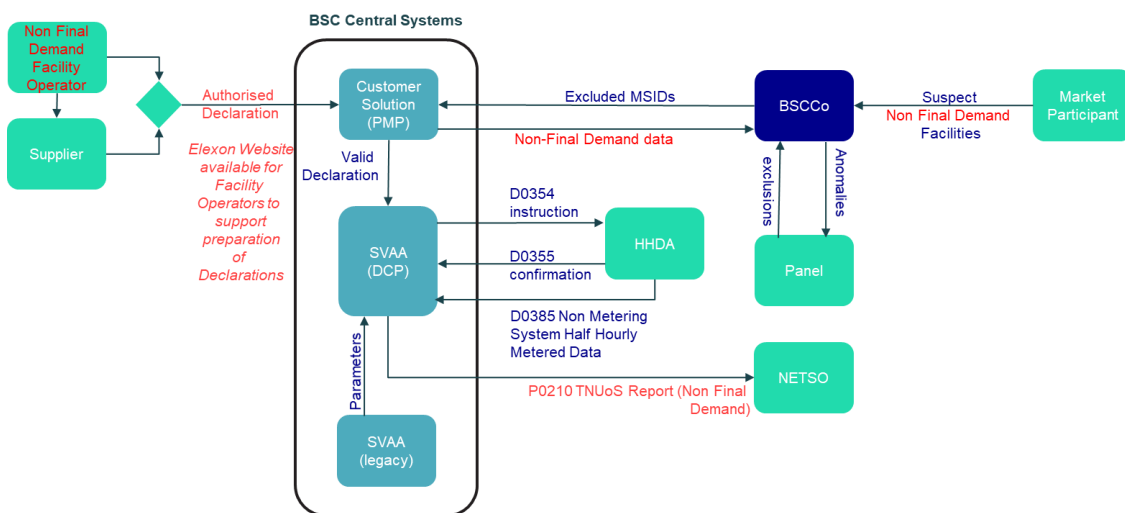
Desired outcomes

This Modification seeks to expand the processes introduced under P383 to ensure that BSC Systems are responsible for managing the declaration of eligible facilities (Generators, Storage and Eligible Services sites – non-Final Demand). It also seeks to ensure that NGESO receives Supplier BM Unit Metered Data that excludes Imports to declared eligible facilities as set out in the BSUoS task force recommendations and agreed by Ofgem.

Proposed solution

Expansion of P383 solution

P419 will expand the solution currently in place for P383 to take account of Generation and Eligible Services sites. In addition to this, P419 is an opportunity to make the current, paper-based declarations process more digital and user-friendly using [Elexon's Kinnect](#) customer solution. A summary of the P383/P419 process is below, with those aspects being amended by P419 highlighted in red text.



P0210 changes

Aggregated demand volumes for Non-Final Demand sites will be sent to NGESO in the P0210 'TUoS Report' data flow. Since BSCCo already use this flow to send aggregated demand volumes for storage facilities, there will be no change to the structure of the flow.

Declarations

The process for declaring sites under P383 involved Storage Facility Operators working with their Supplier(s) to gather the information in the [BSCP602 form](#). This was then submitted to SVAA to be manually entered into BSC systems.

Under P419 we intend to make this declarations process considerably quicker and more user-friendly, with more options for submission:

- Option A: The Site Operator uses a form on the BSC website to fill in technical details about the site and its metering systems. Upon submission, a prompt is created for the Supplier in Kinnect to fill out the remaining information and submit the declaration for validation checks.
- Option B: The Supplier uses Elexon Kinnect to provide all necessary information about the site, including technical details about the facility and metering systems. Upon submission, an email will be generated for a director of the facility to provide a digital signature.
- Option C: As a last resort, and in the case of a website outage, the current method of submission will still be available via the paper based BSCP602 form.

Initial Bulk Upload

In order to process the large volume of declarations expected before the go-live date of CMP308, provisions for bulk uploads will be put in place. Suppliers will be able to submit multiple declarations in a single form, without having to repeat certain information.

DUoS Exempt Sites

Suppliers of sites that already have a valid declaration to be exempt from Distribution Use of System (DUoS) charges will be able to use a fast-track approach for BSUoS declarations for 6 months after implementation. In this scenario, Suppliers will be able to complete the declaration process without seeking a signature from the Facility Operator. Instead, it will be sufficient to provide evidence of the DUoS declaration in the form of a Non-Final Demand Site Certificate of Compliance.

Retroactive Declarations

Due to the short implementation timescales, P383 allowed retroactive applications for exemption of up to one year. P419 will not allow retroactive declarations, i.e. declarations that start from a date in the past. This is because the Proposer and Workgroup unanimously agreed that there is sufficient time for impacted parties to apply for declarations, and the volumes involved would likely result in significant reconciliation payments.

Reporting

At present, Elexon publishes a list of SVA BSUoS exempt storage facilities on the BSC website, along with demand data for these facilities aggregated by Settlement Period and GSP group. This data is published on a monthly basis. Following P419 we will include the additional categories of non-final demand in this published data. It is envisaged that this data will migrate from the BSC Website to the Kinnect platform in the future, outside of this Modification. NGESO will provide a list of all CVA BMU IDs that constitute final demand, updated on a monthly basis, which Elexon will publish on its website alongside the data associated with SVA non-final demand.

Assurance

As with P383, Elexon will undertake assurance activities under P419. This will involve initial data assurance to assess whether sites are behaving as they claim to (e.g. that for generation sites, their exports exceed their imports). If these data checks flag anomalous sites, BSCCo can send an assurance agent to investigate the site. If the agent discovers that the site is not eligible for a declaration, the BSC Panel may rescind the declaration.

Alternative solution

The Workgroup did not consider there to be an Alternative solution for P419 that better facilitated the Applicable BSC Objectives compared to the proposed solution.

Legal text

The redlined changes to the BSC can be found in Attachment A. The redlined changes to the Code Subsidiary Documents can be found in Attachment B, except for the SVA Data Catalogues, which will be drafted as part of the implementation of P419, if approved.

Estimated implementation costs of P419

Implementation cost estimates			
Organisation	Item	Implementation (£k)	Comment
Elexon	Systems and documents	450 - 600	The implementation costs are mostly associated with the required system changes
NGESO	Systems	500 - 1000	The implementation costs are related to system changes, with the upper range covering the risk that changes may be required to legacy IT systems
Industry	Systems & processes	N/A	
Total		950 - 1600	

Benefits

It is important to put the costs of P419 implementation in context against the benefits of the implementation of CMP308, which this Modification facilitates. Over the course of CMP308, NGESO commissioned an external assessment of the impacts of recovering BSUoS costs entirely from demand. This assessment found that recovering BSUoS costs entirely from demand is likely to reduce overall system and customer costs:

System Benefits

System benefits principally arise due to levelling the playing field between transmission-connected generation and other sources of supply, namely, distributed generation and interconnection.

Customer Benefits

Customer benefits principally arise because the increase in the BSUoS demand charge is more than offset by reductions in wholesale prices and low carbon support payments.

The NGESO impact assessment concludes that, between 2022-2040, CMP308 could deliver system benefits of between £0.29bn and £0.49bn, and consumer benefits between £0.32bn and £0.37bn. Total benefits of CMP308 between 2022-2040 can therefore be summarised as between **£0.61bn and £0.86bn**. Further details can be found in Annex 6 of the [CMP308 Final Modification Report](#).

Estimated on-going costs of P419

On-going cost estimates		
Organisation	Ongoing annual costs (£k)	Comment
Elexon	10 - 15	Primarily driven by estimated assurance activities per year and expansion of registration activities
NGESO	N/A	-
Industry	N/A	-
Total	10 - 15	

There is minimal impact on Elexon BAU as P419 is an expansion of existing processes established under P383. The expansion of the number of eligible sites (from SVA storage facilities to all SVA non final demand) means a potentially higher number of site visits to investigate anomalies. As no site visits have yet been carried out for eligible sites under P383, estimates are based on a per-visit basis until clarity of frequency improves. Initial estimates suggest that there will be an additional 10 - 20 site visits per year as a result of P419.

P419 impacts

Impact on BSC Parties and Party Agents		
Party/Party Agent	Impact	Estimated cost
Suppliers	Suppliers will be required to submit declarations of exempt-status. Number of declarations expected to increase but no significant impact expected as processes should be in place following P383 implementation and use of Kinnect expected to make the process more efficient.	L
Generators	Generators will have the option to complete the majority of their exemption declarations. Additionally, this Modification will allow them to realise the benefits of CMP308 and be exempt from BSUoS charges.	L
HHDAs	No system impacts expected as these should be in place following implementation of P383. Expect a higher volume of metered volumes to be reported separately once declared as exempt, though expect minimal impact as these processes are automated	L

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Impact on the NETSO	
Impact	Estimated cost
The NETSO highlighted that the changes required to accept the additional data in the P0210 is between £0.5m to £1.0m, with the upper range covering the risk that changes may be required on legacy IT systems.	M/H

Impact on BSCCo		
Area of Elexon	Impact	Estimated cost
Assurance	Expansion of audit agent contracted under P383 to include all SVA non-final demand sites rather than just storage. No process changes expected, but number of sites requiring monitoring expected to significantly increase (from 31 sites to ~1300)	L
Participant Management	Screens must be amended to allow additional eligible sites to submit declarations of exemption from BSUoS charges. Higher number of queries and registrations in relation to non-Final Demand Sites would also be expected	L
Analysis & Insight	Required to monitor import/export volumes of BSUoS-exempt sites to identify any anomalies and flag to Assurance for investigation. Similar to P383 processes, development of processes expected to be minimal	L
Settlement & Invoicing	Minor internal documentation amendments required to detail the data contained within the P0210	L

Impact on BSC Settlement Risks
This Modification is not expected to significantly impact BSC Settlement Risks as it is expanding existing processes and is not Settlement-related

Impact on BSC Systems and process	
BSC System/Process	Impact
SVAA	The SVAA currently provides NGESO with Final Demand data for the purposes of BSUoS charging. It currently has a process in place to exclude Final Demand Metering Data from licensed storage. This Modification would increase the scope of the sites to be excluded from Final Demand data sent to NGESO although the process will remain the same.

Impact on BSC Agent/service provider contractual arrangements	
BSC Agent/service provider contract	Impact
SVAA (CGI)	CGI will be responsible for the operation of SVAA systems and manual processes necessary to support this proposal.
Facility Operator Assurance Provider (FOAP (C&C))	Renamed from the agent introduced for P383, scope expanded to include all non-final demand sites rather than just storage

Impact on Code	
Code Section	Impact
Section S – Supplier Volume Allocation	Extension of existing process to cover more eligible sites
Section S, Annex S-2 – Supplier Volume Allocation Rules	Extension of existing process to cover more eligible sites as Allocated Metering System Metered Consumption and within scope of the declaration process.
Section X, Annex X-1 – General Glossary	Define new eligible sites
Section X, Annex X-2 – Technical Glossary	

Impact on EBGL Article 18 terms and conditions
This Modification is not expected to impact or expand the BSC provisions that constitute EBGL Article 18 Terms and Conditions, as described in BSC Section F, Annex F-2 .

Impact on Code Subsidiary Documents	
CSD	Impact
BSCP503	Extension of existing process to cover more eligible sites
BSCP602	Amend declaration form and process to include all eligible sites
SVA Data Catalogue Volume 1	Updating P0210 field names
SVAA Service Description	Extension of existing process to cover more eligible sites
SVAA User Requirement Specification	Extension of existing process to cover more eligible sites

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Impact on Core Industry Documents and other documents	
Document	Impact
Connection and Use of System Code	This Modification will be amending the BSC to support the effective implementation of CMP308. It will be necessary to ensure NGESO can identify Non-Final Demand and exclude it from BSUoS charges.

Impact on a Significant Code Review (SCR) or other significant industry change projects
This proposal is not explicitly within the scope of an active SCR but is related to a wider initiative which was, in part, progressed as an SCR (Targeted Charging Review SCR). On 11 May 2021 Ofgem confirmed that this Proposal be treated as an SCR Exempt Modification Proposal.

Impact of the Modification on the environment and consumer benefit areas:	
Consumer benefit area	Identified impact
1) Improved safety and reliability This Modification would have no impact on safety and reliability.	Neutral
2) Lower bills than would otherwise be the case BSUoS Reform is expected to unlock cost savings for consumers by creating more certainty over BSUoS pricing through a fixed BSUoS price. This is expected to facilitate suppliers' pricing decisions and remove consumer risk premia caused by the current high volatility and uncertainty of BSUoS. This modification, alongside CMP308 facilitates this change by allowing BSUoS charges to be applied only on Final Demand.	Positive
3) Reduced environmental damage This change will level the playing field for generation by removing the BSUoS liability and is expected to increase competition, efficiency and support more flexible low carbon forms of generation.	Positive
4) Improved quality of service This Modification would have no impact on quality of service to consumers.	Neutral
5) Benefits for society as a whole This Modification would not have a clear impact, positive or negative, on society.	Neutral



What are the consumer benefit areas?

1) Will this change mean that the energy system can operate more safely and reliably now and in the future in a way that benefits end consumers?

2) Will this change lower consumers' bills by controlling, reducing, and optimising spend, for example on balancing and operating the system?

3) Will this proposal support:

i) new providers and technologies?

ii) a move to hydrogen or lower greenhouse gases?

iii) the journey toward statutory net-zero targets?

iv) decarbonisation?

4) Will this change improve the quality of service for some or all end consumers. Improved service quality ultimately benefits the end consumer due to interactions in the value chains across the industry being more seamless, efficient and effective.

5) Are there any other identified changes to society, such as jobs or the economy.

Recommended Implementation Date

The Workgroup recommends an Implementation Date for P419 of **23 February 2023** if the Authority's decision is received on or before 31 March 2022.

It is crucial that P419 is implemented on this date to allow the SVAA to process declarations from Suppliers before the implementation of CMP308 on 1 April 2023, in line with Ofgem's expectation. If Ofgem is unable to make a decision on P419 by 31 March 2022, P419 will time out. A decision is needed this date as BSC system build needs to start in April 22 to meet the P419 Implementation Date.

As the P419 solution seeks mainly to expand existing P383 processes, the discussions of the P419 Workgroup centred on the initial and enduring declarations processes, reporting, and assurance.

One point of note is that P419 expands the P383 solution to include all non-final demand, that is: Storage, Generation and eligible service facilities. Members were not clear on what could be defined as an eligible service facility and NGESO clarified that this currently meant pathfinder projects that have contracts with the NGESO. These sites import or export reactive energy but do not result in the production or export of any active energy.

Assessment Procedure Consultation

The Assessment Procedure Consultation was circulated for 15WD between 15 November and 6 December 2021. One response was received to the consultation. This was from NGESO. The response aligned with their views as Proposer, that were voiced during the various Workgroup meetings. A copy of the response can be found in Attachment C.

Declarations

The process for SVA storage sites to declare their BSUoS-exempt status under P383 is paper based, with site operators completing the relevant form in BSCP602 and passing to the Supplier of the site. The Supplier then completes the form and emails it to the SVAA. The intent of P383 was to transfer the declarations process on to the Kinnect user platform once fully implemented as an enduring solution. The Proposer and Workgroup agreed that digitalising this enduring solution should be progressed as part of P419 as it would be the most efficient route to realise the benefits.

The Workgroup considered whether the Supplier or site operator should be responsible for the submission of the declarations via Kinnect. Alternatively, either one or the other could provide the relevant information, but the Supplier would still be responsible for final submission. Members highlighted that most sites are not BSC Parties and thus not Kinnect users. They questioned whether it would be efficient to require these site operators to register for Kinnect for a process they would rarely use, and suggested maintaining the paper-based solution for these users.

Elxon considered this, and noted that giving site operators the agency to apply for exemptions would potentially allow them to gain exempt-status more efficiently. It noted that paper-based models of submission would not be the preference as it is inefficient to process and manually input the information into the relevant systems. It suggested including a separate form on the Elxon website that site operators could populate with the relevant information. This would then flow directly into the Kinnect systems without requiring the site operators to register – Workgroup Members were supportive of this approach.

A Workgroup Member queried whether Suppliers should be required to formally submit a declaration within a certain period of time after receipt from the site operator. Elxon confirmed that this was considered as part of P383 and that the Supplier has 5WD to formally submit the declaration post-receipt.



What is the difference between active and reactive energy?

The most significant difference between active and reactive energy is that the active energy is the actual energy which is dissipated in the circuit. Reactive energy is the power which only flows between the source and load, and is often seen as useless.

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The Workgroup and Proposer therefore agreed on a declarations process with three different options:

1. Site Operator led process

- Site Operator uses Elexon Website form to fill in declaration details;
- This populates site information on Kinnect and prompts supplier to complete remaining section of the form within 5WD
- Elexon validates the information

2. Supplier-led process

- Supplier obtains site and supplier information
- Supplier obtains Director signature from Site Operator.
- Supplier enters details into Elexon Kinnect
- Elexon validates information

3. Current process

- Site Operator/Supplier collate relevant information
- Complete declaration is emailed to Elexon
- SVAA manually enter data into Kinnect
- Elexon validates info

It was the Workgroup's view that allowing any of the above declaration processes provides site operators and Suppliers with the agency to complete the process in the way that is most efficient for them. Maintaining the current process allows a backstop for declarations to be submitted if Kinnect or the BSC website were down for any reason.

However, they did acknowledge that maintaining all three routes may not be efficient given the long term direction of travel towards enduring digitalisation. The Workgroup agreed to seek industry views via consultation, though noted that the users most likely to benefit from the maintenance of the current process are those small users that are least likely to respond to consultations. Only one response was received to the consultation, and this did not give a view on the rationalisation of the declaration routes. Therefore the Workgroup agreed to maintain the three routes on which it had initially agreed.

Alignment with P395 'Aligning BSC Reporting with EMR Regulations – an enduring solution'

In the course of developing the declarations process for P419, it became clear that there was significant overlap with the declarations process being developed for [P395 'Aligning BSC Reporting with EMR Regulations – an enduring solution'](#), which is still being assessed by a Workgroup and due to be submitted to the Panel by May 2022. As such, Elexon worked internally to ensure that the two processes were aligned to provide industry with the most efficient solution. The agreed process is as described above, and was presented to both the P419 and P395 Workgroups. Both Workgroups agreed that the approach delivered the intent of their respective solutions whilst providing a single, efficient declaration process.

CVA Declarations

The Proposer and Workgroup noted that Non-Final Demand sites currently have to fill out separate exemption declarations for:

- Distribution Use of System (DUoS) charges;
- Transmission and Use of System (TNUoS) charges;
- BSUoS charges; and
- Contracts for Difference (CfD) and Capacity Market (CM) final consumption levies.

All of these declarations have slightly different criteria and different start dates. Some are charged on volume, others on a per day basis. The Workgroup recognised that action should be taken to align all of these declarations into a single process, but that it should not form part of the P419 solution due to the complexity involved and the requirement to implement P419 before 1 April 2023.

NGESO is now beginning a project to align these declarations processes, and the output will likely be several Modifications over numerous Codes. However, the Proposer flagged that P419 could be a stepping stone to get some alignment in place before this project starts delivering.

P383 only applies to SVA-registered storage facilities, whereas the exemption declarations and metered volumes for CVA storage facilities are managed by NGESO. The Proposer suggested using P419 to combine these processes, wherein the declarations and import volumes of both CVA and SVA non-final demand sites are processed by Elexon, rather than an expansion of the existing, fragmented approach. The Workgroup noted that the export volumes of CVA sites are not processed by the SVAA, but the Central Data Collection Agent (CDCA). Therefore system changes would be required to aggregate and submit the relevant data, as this was not done as part of P383. The Proposer and Workgroup acknowledged that the cost of doing so would not be worth the benefit to industry, especially when viewed in the context of the overarching alignment project in the near future.

The Workgroup considered whether the CVA declarations process could be aligned with the SVA process as described above. This would achieve some alignment and potentially reduce confusion for industry. The Workgroup noted that the existing process in place for CVA sites to declare exemption was relatively straightforward, and the Proposer opted to withdraw this piece of solution to ensure the Modification could progress efficiently and without delay.

Initial Implementation – Bulk Upload

The Workgroup highlighted its concern that the requirement for a Director's signature for each site would be a significant burden for site operators with large portfolios. Members agreed that some form of bulk upload of declarations should be allowed following the implementation of P419. The Workgroup agreed that allowing a single Director's signature for an entire portfolio could effectively reduce this burden, whilst maintaining the control. It was also agreed that this interim measure should be time-limited for 6 months post-implementation before the enduring solution of having a Director's signature for each site is required.

DUoS Declarations

An industry Member representing a Supplier also highlighted their concern that site operators who had recently completed exemption declarations for DUoS charges may be required to do a similar process for BSUoS. Their concern focused on the difficulty in engaging generators on this issue due to the complexity involved, and that doing so again may prove problematic. They noted their belief that if the process is not made more straightforward for sites that have already declared as non-final demand for DUoS purposes, it is likely that there would be some sites classed as non-final demand for DUoS and not BSUoS.

Exelon noted that it was possible to include a field in the declarations form where a Supplier could upload proof of DUoS exemption for a site (i.e. a PDF of the Non-Final Demand Site Certificate of Compliance Form). This would allow Suppliers to process the declarations for site operators without requiring the operators' input, mitigating the Members' concern. However, Members were not clear on the scale of the issue and questioned whether expanding the solution (and therefore increasing the cost) was worth the benefit. Analysis of the number of sites with Line Loss Factor Class IDs consistent with site imports exempt from residual DUoS charges suggests that we can expect a maximum of approximately 1300 sites seeking equivalent exemptions from BSUoS charges.

Through the impact assessment it became clear that the inclusion of this functionality would be insignificant. In the absence of any feedback from industry opposing this approach, the Workgroup agreed to allow the use of existing DUoS declarations in lieu of a Director's signature for the first 6 months post-implementation of P419.

Retroactive Declarations

Due to the short implementation timescales, P383 allowed retroactive applications for exemption of up to one year. Exelon highlighted that this is not the case for P419 and that the volumes involved would likely result in significant reconciliation payments. Therefore Exelon suggested that P419 not allow retroactive declarations, which the Proposer and Workgroup unanimously supported.

Reporting

Reporting SVA Metering Systems

A Workgroup Member highlighted the requirement for reporting all non-final demand import volumes. Members noted the importance of understanding BSUoS-exempt volumes for the identification of trends and calculation of future BSUoS liabilities. The P383 solution had a requirement to report the BSUoS-exempt volumes on a monthly basis, aggregated by GSP Group. All SVA-registered exempt sites are also listed on the [same page on the BSC website where this information is published](#).

Exelon suggested aligning the P419 reporting requirements with that of P383. A Member questioned whether it could be published more frequently. Exelon noted that the current process involves a manual update of the relevant information, and any increase in frequency would mean additional administrative effort.

At the time of writing, the webpage holding the data published under P383 has 24 page views since its publication on 1 April 2021. The list of SVA Storage facilities published on

the page has been downloaded five times, and the SVA Storage Facilities Metered Volume per GSP Group data has been downloaded once.

Given the relatively low engagement with the data and the additional administrative effort required to update it more frequently, Elexon recommended maintaining the current reporting frequency. It also noted its intent to publish the data on the upcoming Elexon Insights solution, allowing the data to be accessed more frequently and at a more granular level. A Workgroup Member highlighted their preference for more frequent reporting and queried whether its inclusion in the Insights solution could be explicitly included as part of the Modification. Elexon noted that it did not believe codifying this requirement would be beneficial, as it reduced flexibility in its reporting in the future. Other Workgroup Members, including the Proposer, agreed with Elexon's approach.

Reporting CVA Metering Systems

Workgroup Members also expressed their interest in understanding the BSUoS exempt volumes of CVA-registered sites, as this information would give them a full picture of non-demand import volumes across the system. They indicated that, ideally, this should be in line with the reporting for SVA-registered sites but, as a minimum, could comprise of a published list of non-final demand sites. This list would detail the Balancing Mechanism Unit Identifier (BMU ID), exemption effective-from-date, and exemption effective-to-date. Market participants could then use this list to extrapolate the volumes exempt from BSUoS from BM Unit Metered Volumes published by Elexon in the Settlement Administration Agent (SAA) Settlement Report (SAA-I014) flow.

The Proposer questioned whether this was in scope of the Modification, given it was not outlined in the Proposal Form. Elexon determined that it was ultimately up to the Workgroup and Proposer as to whether this was included in the Modification and in what form, as it was a logical extension of the conversation around the reporting of BSUoS exempt volumes, whilst noting that no reporting was strictly necessary to address the P419 issue. However, it would be much more efficient to include any reporting requirements within P419, rather than under a separate BSC change, so long as this did not impact the P419 delivery timescales.

In summary, the Workgroup was discussing whether the data should be published on:

- NGESO's Portal; or
- Elexon's website

Further, they were determining what data should be published of either:

- A list of BSUoS-exempt CVA sites (with minimum information of BMU ID, Effective-from-Date, Effective-to-Date); or
- A list of BSUoS-exempt CVA sites and aggregated CVA non-final demand volumes

NGESO performed a ROM assessment of the impacts of reporting the requested data. If it was to generate and publish the data on the NGESO Portal, it would cost ~£100k. If this data was generated by NGESO and submitted to Elexon for publication on the same webpage as the SVA data the cost would be <£10k. These costs are the same regardless of whether or not the BSUoS-exempt volumes aggregated by GSP Group are also published, in line with SVA reporting. As with SVA reporting, it would be expected that this data is published on a monthly basis.

The Workgroup considered that the publication of a list of all of those CVA sites that constitute final demand would enable industry to better understand their liabilities in regards to BSUoS charges. Members reasoned that, though this information may be available in some form, the full extent of these sites may not necessarily be clear in the future based on the current reporting as more complex sites go live. The Proposer agreed with this and the solution was amended to include the requirement of the publication of a list of CVA sites that constitute final demand on the Elexon website, to be updated on a monthly basis, in the same area as the equivalent SVA data is reported.

Assurance

The Workgroup agreed that the processes put in place for P383 should be expanded for P419. That is, the import/export volumes of exempt sites should be monitored for anomalies and, where an anomaly is detected, be subject to further investigation, including site visits.

In line with this, Members agreed that export volumes should be collected to assist in the validation of an SVA generation site's exemption status. Given the differing nature of Generation and Storage sites, this will be different from the P383 data validation. P383 data validation requires a site to be investigated if the variance of a site's import/export volumes is greater than 10%, this is because it is reasonable to expect the Import/Export volumes of a Storage site to be similar. This cannot be applied to Generation sites, as the Export would always be expected to be greater than the Import, though the expected normal range is not defined. Elexon agreed to develop this assurance in line with its normal processes and will have measures in place in time for the implementation of P419, if approved.

It was agreed that this level of data validation was not necessary for eligible service facilities, as the bespoke nature of these services means predicting expected import/export volumes across all the sites would be unreliable. Additionally, the unique nature of each site would be identified in the declaration process and it would be clear if they did not meet the criteria.

7 Workgroup's Conclusions

The Workgroup Members unanimously believe that P419 would **better facilitate** Applicable BSC Objectives (a), (c), and (d) and so **should be approved**. The Workgroup believes that P419 is neutral against all other Objectives.

A Workgroup Member highlighted that their views were based on the assumption that CMP308 is approved by the Authority, otherwise the benefits of P419 would not be realised.

Does P419 better facilitate the Applicable BSC Objectives?		
Obj	Proposer's Views	Other Workgroup Members' Views ¹
(a)	• Positive	• Positive (unanimous)
(b)	• Neutral	• Neutral
(c)	• Positive	• Positive (unanimous)
(d)	• Positive	• Positive (unanimous)
(e)	• Neutral	• Neutral
(f)	• Neutral	• Neutral
(g)	• Neutral	• Neutral

Applicable BSC Objective (a)

The Workgroup unanimously agreed that the P419 Proposed Solution ensures the effective discharge of the NETSO's obligations under its Transmission License.

CMP308 and [CMP361 'BSUoS Reform: Introduction of an ex ante fixed BSUoS tariff'](#), if approved, will amend NGESO's Transmission License in relation to how it calculates network charges. P419 will enable it to effectively fulfil these obligations.

Applicable BSC Objective (c)

The Workgroup unanimously agreed that the P419 Proposed Solution will better promote effective competition.

In its Proposal Form, the Proposer highlights that, since the implementation of [CMP202 'Revised treatment of BSUoS charges for lead parties of Interconnector BM Units'](#) in August 2012, interconnectors are exempt from BSUoS charges whilst UK generation is not. This proposal would ensure UK generation is on a level with interconnectors.

Applicable BSC Objective (d)

The Workgroup unanimously agreed that the P419 Proposed Solution promotes efficiency in the implementation of balancing and settlement arrangements.

All Members agreed that the most efficient way for NGESO to access the data required to exempt non final demand from BSUoS charges is through BSCCo. As such, P419 is promoting the most efficient operation of the system. It also maintains the status quo of



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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¹ Shows the different views expressed by the other Workgroup Members – not all Members necessarily agree with all of these views.

the BSC providing metered data for BSUoS calculations, which is more efficient than alternative methods.

Self-Governance

The Workgroup unanimously agreed that P419 should not be progressed as Self-Governance as it impacts Self-Governance criteria (b) (ii), (iii) and (c). This Modification will exclude certain metering points from Final Demand and thus payment of BSUoS in line with changes to the CUSC. This will be required for NGESO to bill BSUoS correctly. As a result, changes are needed to the BSC and relevant CSDs to deliver the correct interpretation of Final Demand. This Modification will impact competition when put in the context of CMP308, and as summarised above. It will impact NGESO as it is reliant on the solution to enable the implementation of CMP308. Moreover, this Modification discriminates between classes of Parties as only Suppliers can submit declarations, and only certain types of generator are eligible.

Impacts on EBGL Article 18 Terms and Conditions of Balancing

The Workgroup unanimously agreed that P419 does not impact or expand the BSC provisions that constitute EBGL Article 18 Terms and Conditions, as described in [BSC Section F, Annex F-2](#).



What is the Self-Governance Criteria?

A Modification that, if implemented:

(a) does not involve any amendments whether in whole or in part to the EBGL Article 18 terms and conditions; except to the extent required to correct an error in the EBGL Article 18 terms and conditions or as a result of a factual change, including but not limited to:

(i) correcting minor typographical errors;
(ii) correcting formatting and consistency errors, such as paragraph numbering; or
(iii) updating out of date references to other documents or paragraphs;
(b) is unlikely to have a material effect on:
(i) existing or future electricity consumers; and
(ii) competition in the generation, distribution, or supply of electricity or any commercial activities connected with the generation, distribution, or supply of electricity; and
(iii) the operation of the national electricity transmission system; and
(iv) matters relating to sustainable development, safety or security of supply, or the management of market or network emergencies; and
(v) the Code's governance procedures or modification procedures; and

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

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8 Recommendations

The P419 Workgroup invites the Panel to:

- **AGREE** that P419:
 - **DOES** better facilitate Applicable BSC Objective (a);
 - **DOES** better facilitate Applicable BSC Objective (c); and
 - **DOES** better facilitate Applicable BSC Objective (d);
- **AGREE** an initial recommendation that P419 should be **approved**;
- **AGREE** that P419 **DOES NOT** impact the EBGL Article 18 terms and conditions held within the BSC;
- **AGREE** an initial Implementation Date of 23 February 2023 as part of the standard February BSC Release if an Authority decision is received on or before 31 March 2021;
- **AGREE** the draft legal text;
- **AGREE** the amendments to the Code Subsidiary Documents;
- **AGREE** an initial view that P419 should not be treated as a Self-Governance Modification;
- **AGREE** that P419 is submitted to the Report Phase; and
- **NOTE** that Elexon will issue the P419 draft Modification Report (including the draft BSC legal text) for a 10 Working Day consultation and will present the results to the Panel at its meeting on 10 February 2022.

Appendix 1: Workgroup Details

Workgroup's Terms of Reference

Specific areas set by the BSC Panel in the P419 Terms of Reference	Conclusion
Is the CVA declarations process an appropriate means to exclude CVA non-Final Demand from BSUoS charges?	Potentially, but the costs and time to include this in the solution threatened to delay implementation
If a signed declaration is made, should export metered values be collected to validate a site's eligibility for exemption?	Yes, as detailed in Section 3
How will P419 impact the BSC Settlement Risks?	No impact expected
What changes are needed to BSC documents, systems and processes to support P419 and what are the related costs and lead times? When will any required changes to subsidiary documents be developed and consulted on?	Detailed in Section 4, subsidiary documents have been developed in the Assessment Phase
Are there any Alternative Modifications?	No
Should P419 be progressed as a Self-Governance Modification?	No, impacts Self-Governance Criteria (b) (ii), (iii) and (c).
Does P419 better facilitate the Applicable BSC Objectives than the current baseline?	Yes, as detailed in Section 7
Does P419 impact the EBGL provisions held within the BSC, and if so, what is the impact on the EBGL Objectives?	No, as detailed in Section 4

Assessment Procedure timetable

P419 Assessment Timetable	
Event	Date
Panel submits P419 to Assessment Procedure	6 May 21
Workgroup Meeting 1	23 July 21
Workgroup Meeting 2	12 October 21
Workgroup Meeting 3	4 November 21
Assessment Procedure Consultation	15 Nov 21 – 6 Dec 21
Workgroup Meeting 4	17 December 21
Panel considers Workgroup's Assessment Report	13 January 22

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Workgroup membership and attendance

P419 Workgroup Attendance					
Name	Organisation	23 Jul 21	12 Oct 21	4 Nov 21	17 Dec 21
Lawrence Jones	Elxon (<i>Chair</i>)			x	
Elliott Harper	Elxon (<i>Deputy Chair</i>)	x	x		x
Craig Murray	Elxon (<i>Lead Analyst</i>)				
Sean Donner	NGESO (<i>Proposer</i>)				
Phil Russell	Self-Employed				
Andrew Colley	SSE				
Mike Jarman	IMServ				x
Ian Hall	IMServ	x	x	x	
Joshua Logan	Drax				
Nik Wills	Stark				x
Lauren Jauss	RWE	x		x	
Binoy Dharsi	EDF	x	x	x	x
Callum Chalmers	Elxon (<i>Design Authority</i>)				
John Lucas	Elxon	x		x	x
Felix Leong	Ofgem	x			
George Player	Elxon	x		x	x
Dnieper Cruz	Elxon		x	x	x
Katie Wilkinson	Elxon	x		x	x
Sabahat Zafar	Elxon	x		x	x
Shamaila Jawaid	Elxon	x			x
Andres Alvarez	Elxon	x	x		x
Chris Spence	Elxon	x		x	x
Sophie Bentley	Elxon	x		x	x
Beth Procter	Elxon	x		x	

Appendix 2: Glossary & References

Acronyms

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

Acronyms	
Acronym	Definition
BAU	Business as Usual
BMU	Balancing Mechanism Unit
BSC	Balancing and Settlement Code
BSCCo	Balancing and Settlement Code Company
BSUoS	Balancing Services Use of System [charge]
CDCA	Central Data Collection Agency
CfD	Contracts for Difference
CSD	Code Subsidiary Document
CUSC	Connection and Use of System Code
CVA	Central Volume Allocation
DUoS	Distribution Use of System [charges]
EBGL	European Balancing Guideline
EMR	Electricity Market Reform
FOAP	Facility Operator Assurance Provider
GSP	Grid Supply Point
HHDA	Half Hourly Data Aggregator
MSID	Metering System Identifier
MWh	Megawatt-Hour
NETSO	National Electricity Transmission System Operator
NGESO	National Grid Electricity System Operator
ROM	Rough Order of Magnitude
SAA	Settlement Administration Agent
SCR	Significant Code Review
SVAA	Supplier Volume Allocation Agent
TCR	Targeted Charging Review
TNUoS	Transmission and Use of System [charges]

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	CMP308 'Removal of BSUoS Charges from Generation'	https://www.nationalgrideso.com/industry-information/codes/connection-and-use-system-code-cusc-old/modifications/cmp308-removal
3	P383 'Enhanced reporting of demand data to the NETSO to facilitate CUSC Modifications CMP280 and CMP281'	https://www.elexon.co.uk/mod-proposal/p383/
5	Recommendations of the Second BSUoS Task Force	http://www.chargingfutures.com/media/1477/second-balancing-services-charges-task-force-final-report.pdf
5	Ofgem response to the second BSUoS Task Force	https://www.ofgem.gov.uk/system/files/docs/2020/12/response_to_the_second_bsuos_task_force_report.pdf
5	Ofgem's Final Decision on its Targeted Charging Review (TCR) Significant Code Review (SCR)	https://www.ofgem.gov.uk/publications-and-updates/targeted-charging-review-decision-and-impact-assessment
6	CMP308 'Removal of BSUoS Charges from Generation'	https://www.nationalgrideso.com/industry-information/codes/connection-and-use-system-code-cusc-old/modifications/cmp308-removal
8	Elexon Kinnect	https://www.elexon.co.uk/operations-settlement/bsc-central-services/elexon-kinnect-platform/
8	BSCP602 'SVA Metering System Register	https://www.elexon.co.uk/csd/bscp602/
14	BSC Section F 'Modification Procedures'	https://www.elexon.co.uk/documents/bsc-codes/bsc-sections/bsc-section-f-modification-procedures/
19	P395 'Aligning BSC Reporting with EMR Regulations – an enduring solution'	https://www.elexon.co.uk/mod-proposal/p395/
22	SVA Storage Facility Data	https://www.elexon.co.uk/data/trading-operations-report/sva-storage-facility-data-from-the-trading-operations-report/
24	CMP361 'BSUoS Reform: Introduction of an ex ante fixed BSUoS tariff'	https://www.nationalgrideso.com/industry-information/codes/connection-and-use-system-code-cusc-old/modifications/cmp361-cmp362
24	CMP202 'Revised treatment of BSUoS charges for lead parties of Interconnector BM Units'	https://www.nationalgrideso.com/industry-information/codes/connection-and-use-system-code-cusc-old/modifications/cmp202-revised

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