ELEXON

Issue Report

Issue 96 'Assessing the reporting to EMRS of chargeable volumes for SVA Metering Systems that record both exempt and licensed supply'

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This document is the Issue 96 Group's Report to the BSC Panel. Elexon will table this report at the Panel's meeting on 9 March 2023.

There are two parts to this document:

- This is the main document. It provides details of the Issue Group's discussions and proposed solutions to the highlighted issue and contains details of the Workgroup's membership.
- Attachment A contains the Strawman Proposals developed by Elexon that contain further details of the proposed solutions, as discussed and amended by the Workgroup.

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[1] https://www.elexon.co.uk/glossary/?show=all

1. Summary

Background

In order to aid the Electricity Market Reform Settlement (EMRS) company in correctly calculating Capacity Market (CM) and Contracts for Difference (CFD) charges, Elexon provides BSC Metered Volumes. Issue 96 aimed to explore potential enduring solutions, which allow correct reporting of chargeable volumes to EMRS for Supplier Volume Allocation (SVA) Metering Systems that record both exempt supply and licensed supply. The current interim solution is restrictive, time consuming, and does not allow for allocation of appropriate volumes where a portion should be exempt and another portion should be licensable.

Conclusions

The Workgroup (WG) concluded that a BSC Modification should be raised to allow a Supplier, or a third party acting on their behalf, to be involved ex post in splitting metered volumes recorded on an SVA Metering System into exempt and licensed supply. The new role responsible for allocating these metered volumes would be known as the Exempt Supply Calculation Agent (ESCA). This Modification has now been raised as P442 'Reporting to EMRS of chargeable volumes for SVA Metering Systems that record both exempt and licensed supply'[2], and is based on Option 3 as described in this paper and in Attachment A.

The WG considered if other solutions should be progressed simultaneously but ultimately concluded that this would not be efficient use of industry resources.

[2] http://www.elexon.co.uk/mod-proposal/p442/

2. Background

What is the issue?

The Balancing and Settlement Code Company (BSCCo) is required to provide EMRS with the BSC Metered Volumes required to accurately calculate Capacity Market (CM) and Contracts for Difference (CFD) charges. Currently this volume data may include volumes of electricity supplied by an exempt supplier, for which the Supplier is not required to pay Electricity Market Reform (EMR) charges.

The interim solution currently operated by the Supplier Volume Allocation Group (SVG) is very limited in when it can be applied and is extremely time consuming for Parties and the SVG Committee. The interim solution also does not allow correct reporting of chargeable volumes for SVA Metering Systems that record both exempt and licenced supply.

This Issue seeks to explore enduring solutions that allow correct reporting to EMRS of chargeable volumes for SVA Metering Systems that record both exempt supply and licensed supply.

Further Information

Licensed Suppliers are required by legislation to pay a number of charges on the electricity they supply to premises in Great Britain. These charges include the Renewables Obligation (RO) and charges to fund CFD and CM. Energy supplied by an exempt supplier should not be subject to these charges, even though it may be recorded on an SVA Metering System registered by a Licensed Supplier. A Licensed Supplier should therefore be charged based on its total supply minus any exempt supply.

In the case of CFD and CM charges, BSC Systems (not the individual Suppliers) calculate the chargeable volumes for each Licensed Supplier, and report them as gross demand data to EMRS. These systems cannot currently net off exempt supply volumes from each Supplier's gross demand.

Licence exempt suppliers are not able to sign up to all the industry codes that a licensed Supplier can, and are therefore required to obtain certain services from a licensed Supplier. As a result, the portfolio of Metering Systems registered by a licensed Supplier may include their own customers as well as customers supplied by an exempt supplier, where the licenced Supplier is providing metering services.

For other charges, for example relating to trading, distinguishing between exempt and non-exempt supply is not important, as all volumes are subject to the charges. However, as Suppliers are only required to pay EMR charges on electricity they supply themselves, the EMR Settlement Service Provider (SSP) needs to receive volume data excluding exempt supply.

As a workaround to this issue, the BSC Panel agreed on 8 November 2018 (284/07[3]) to delegate to the SVG the power to agree that SVA Metering Systems should be treated as recording exempt supply. Where the SVG makes such a decision, the SVA Metering System will be treated as non-chargeable for CFD and CM purposes using similar interim processes to those established by EMRS for SVA registered licensed Generation.

Licenced Suppliers and licence exempt suppliers

'Suppliers' is a defined term within the BSC, meaning a Party which holds a Supply Licence. Licence exempt suppliers are not a BSC Party and do not hold a Supply License.

Defined terms within the BSC should be capitalised, and for this reason, you will notice Supplier will be capitalised when referring to Licenced Suppliers only.

[3] https://www.elexon.co.uk/documents/groups/panel/2018-meetings/284-november/284-07-aligning-bsc-reporting-with-emr-regulations/

The interim solution currently operated by SVG assesses applications from Parties to have a supply considered as exempt. Any volume associated with an exempt Metering System Identifier (MSID) would therefore not be reported for the purposes of EMR charging. The interim process operates on the basis that an application can only be approved if it relates to:

- An Import Metering System with accompanying evidence that, under normal circumstances, the exempt supplier would always be generating enough electricity to meet the demand; or
- An Export Metering System with accompanying evidence that, under normal circumstances, the exempt supplier would have enough customers to use the generation.

Types of Charges

Several types of charges are discussed within this report, each of which is briefly explained in the following sections.

Capacity Market Charges

The Capacity Market (CM) Supplier charge funds the payments made by the Electricity Settlements Company (ESC). It is invoiced monthly based on a supplier's share of net demand for periods of high demand in the delivery year multiplied by Total Annual Capacity Provider Payments.

Contracts for Difference Charges

Contracts for Difference (CFD) is a long-term contract between an electricity generator and Low Carbon Contracts Company (LCCC). The contract enables the generator to stabilise its revenues at a pre-agreed level for the duration of the contract. Under the CFD, payments can flow from LCCC to the generator, and vice versa.

Renewables Obligation

The Renewables Obligation (RO) supports renewable electricity projects in the UK. The RO places an obligation on suppliers in the UK to provide a specified number of RO Certificates (ROCs) per MWh of electricity supplied.

Feed in Tarrif

The Feed-in Tariffs (FIT) scheme was designed by government to promote the uptake of renewable and low-carbon electricity generation. The scheme requires participating licensed electricity suppliers to make payments on electricity generated and exported by accredited installations.

Related Changes

BSC Modification P395 'Aligning BSC Reporting with EMR Regulations - an enduring solution'[4] addresses the related issue of ensuring that Imports to sites with licensed Generation are correctly reported to the EMR SSP, but does not address the issue of exempt supply. P395 will be implemented as part of the November 2023 BSC Release.

Issue 88 'Clarification of BSC Arrangements relating to Complex Sites'[5] was raised with a view to discussing a number of issues and ambiguities relating to the complex site arrangements. Elexon proposed a set of principles, which may have addressed some issues relating to exempt supply by allowing a solution based on netting Imports and Exports. However, these solutions did not address an enduring solution for comparing generators' metered data with customers' metered data in order to calculate volumes of exempt supply. The recommendations of the Issue 88 group only consider very local supplies and schemes, therefore do not deal with the broader issues.

BSC Modification P441 'Creation of Complex Site Classes'[6] looks to progress a recommendation of the Issue 88 WG to introduce Complex Site classes. These classes would categorise the types of Complex Site, each having clearly defined criteria within the BSC. A new type of Complex Site, a Class 6 Complex Site, would also be introduced to allow approval of non-standard complex sites. This Modification would also clarify when the netting of Imports from Exports for multiple Metering Systems registered in SVA is permitted. This would facilitate consistency across the market and as Local Energy Schemes become more popular.

BSC Modification P425 'Amendment to the definition of Shared SVA Meter Arrangement'[7] addressed an unnecessary restriction in the Shared SVA Meter Arrangements that such an arrangement had to involve two or more Suppliers. The Modification expanded the definition to allow single Suppliers to enter into these agreements also. This Modification is Equivalent to Option 2A as discussed in this report, and would help facilitate the solutions described in Options 2B and 2C.

Justification for Examining Issue

In November 2020 (308/06[8]) the BSC Panel requested that Elexon investigate potential Modification Proposals that a BSC Party, or the Panel itself, could raise to allow correct reporting to EMRS of chargeable volumes for SVA Metering Systems that record both exempt supply and licensed supply. A number of possible options were identified and presented to the SVG in their meeting on 6 April 2021 (242/03[9]), after which the committee recommended that an Issue be raised to explore the process and proposed options further.

The issue has been examined so that an enduring solution could be found to address the key limitation of the current interim process, which can only be used for SVA Metering Systems that, under all normal circumstances, record only exempt supply. Through examining the issue, potential consequences of the changes have been identified and industry interest for each option has been gauged during the discussions.

[4] https://www.elexon.co.uk/mod-proposal/p395/
[5] https://www.elexon.co.uk/smg-issue/issue-88/
[6] https://www.elexon.co.uk/mod-proposal/p441/
[7] https://www.elexon.co.uk/mod-proposal/p425/
[8] https://www.elexon.co.uk/documents/groups/panel/2020-meetings-panel/308-november/308-06-update-on-reporting-of-exempt-supply-volumes-to-emrs/
[9] https://www.elexon.co.uk/documents/groups/svg/2021-meeting-svg/242-april/svg242-03-options-for-evolving-exempt-supply-for-emr-purposes-v1/

Potential Solutions

Five potential solutions were identified. The Issue Group explored these solutions in order to recommend which, if any, to take forward.

Option 1

Option 1 is for Suppliers to use the existing rules for Shared SVA Meter Arrangements under BSC Procedure BSCP550 'Shared SVA Meter Arrangement of Half Hourly Import and Export Active Energy'[10], which allows the splitting of metered data between multiple Suppliers or Supplier Identifiers (IDs). This option could therefore be used to split metered data between exempt and licenced supply, potentially using the Capped Block method[11].

This option has the advantage that it can be used immediately, under current rules, without requiring a Modification or Change Proposal. However, there are several limitations, including:

- BSCP550 requires that the Allocation Schedule includes specific kWh values and is notified to the Half Hourly Data Collector (HHDC) before Gate Closure which limits flexibility as it does not permit any ex post matching of Import and Export volumes;
- Only Suppliers with access to multiple IDs would be able to use it;
- Increasing numbers of applications for new IDs, (to enable meter splitting under BSCP550) which could increase costs to industry parties and create additional admin.

Option 2

Option 2 would address the limitations of Option 1, but still utilises a Shared SVA Meter Arrangement in which the Supplier provides their HHDC with an Allocation Schedule (ahead of Gate Closure) instructing them how to allocate the metered volumes between Primary and Secondary Metering Systems. This can be achieved in three ways:

Option 2A

Amend the definition of a Shared SVA Meter Arrangement, removing the need for an arrangement to involve two or more Suppliers. This would require a Modification.

Option 2B

Amend BSCP550 to recognise a new type of Allocation Schedule, in which the Supplier tells the HHDC which Export Metering Systems are providing power to which Import Metering Systems, but does not actually specify kWh values (which will not be known until the HHDC collects the metered data ex post). This would be similar to Change Proposal CP1369 'Increased Flexibility in BSCP550 Data Splitting Algorithms'[12], which introduced a new type of Allocation Schedule for splitting Boundary Point meter readings based on metered data collected ex post from non-Settlement sub-meters.

Option 2C

Amend BSCP550 to recognise a new type of Allocation Schedule and create a new third party role, known as the Exempt Supply Calculation Agent (ESCA). The HHDC would provide metered data to the ESCA to calculate the volumes of licenced and exempt supply. The HHDC would then would submit separate volumes for licensed and exempt supply into Settlement using Shared SVA Metering Arrangements. Information about the exempt supply arrangements would be provided to the HHDC via the Allocation Schedule.

[10] https://bscdocs.elexon.co.uk/bsc-procedures/bscp550-shared-sva-meter-arrangement
[11] https://bscdocs.elexon.co.uk/bsc-procedures/bscp550-shared-sva-meter-arrangement#4-4.2-4.2.2
[12] https://www.elexon.co.uk/change-proposal/cp1369-increased-flexibility-in-bscp550-data-splitting-algorithms/

Option 3

Option 3 would be a Modification Proposal to allow the Supplier (or a third party acting on their behalf) to be involved ex post in splitting metered volumes recorded on an SVA Metering System into exempt and licensed supply. This new role would be known as the Exempt Supply Calculation Agent (ESCA). Such an option might allow a peer-to-peer trading platform to allocate customers and exempt Suppliers ex post (based on data retrieved from meters), without needing to become a Qualified HHDC. Some Suppliers might welcome this flexibility, but a number of issues would need to be considered, including:

- Appropriate assurance requirements to protect both Settlement, and the quality of the data reported to EMRS under Section V of the BSC;
- Potential risks to Settlement if the third party was using different metered data (actual or estimated) to that submitted into Settlement by the HHDC; and
- The appropriate route for the third party to submit data into Settlement e.g. through the HHDC, or directly to the Supplier Volume Allocation Agent (SVAA).

3. Issue Group's Discussions

The WG discussions focussed on the options presented by Elexon to decide which, if any, should be progressed. The WG discussed the fact that more than one option could be progressed, but that they would have to consider the benefits and efficiency of doing so. It was highlighted that it may be a more efficient use of Elexon's and industry's time to progress just one solution.

Elexon presented the proposed options for initial discussion and, once the options were shortlisted, developed strawman solutions to facilitate detailed discussions. In order to fully consider the benefits and drawbacks, the WG considered the development that would be required, including possible system impacts, and the process details of each option.

Option 1

Elexon presented the opinion that Option 1 would not adequately address the limitations experienced by the interim solution. The SVG would still have to be involved in assessing exempt applications, and there would be limited flexibility, as volumes must be identified in advance. The WG agreed that the lack of flexibility meant that the applications for this solution would be limited and that it should not be considered further.

Option 2A

Option 2A would increase the flexibility of Shared SVA Meter Arrangements, allowing a single Supplier to enter into an arrangement without the need for multiple IDs. The WG questioned why Shared SVA Meter Arrangements had been restricted to two or more Suppliers in the first place, and Elexon explained that this type of application for a Shared SVA Meter Arrangement was not considered at the time of writing the BSC.

The WG discussed how Option 2A could be applied to exempt supply, and any limitations in different potential scenarios. The WG felt that, as BSCP550 does not allow for splitting of volumes to be done ex-post, this option would have limited applications. For example, a member commented that where the end consumer is receiving electricity from multiple different renewable sources, the exact volumes would not be known in advance. In this scenario the calculations would have to be done ex-post, meaning Option 2A would not be a viable solution.

The WG concluded that, as Option 2A would not allow for splitting volumes ex-post, it was not a viable enduring solution for exempt supply. They felt that this option could have benefits for exempt supply in conjunction with amendments to BSCP550, but that it would not be applicable for more complicated arrangements if progressed in isolation.

A WG member shared that their company intended to propose a Modification similar to Option 2A to aid businesses wanting to split shared assets. The WG expressed support for this Modification, and therefore agreed that Option 2A should not be considered further as part of Issue 96. This Modification was then raised as P425 'Amendment to the definition of Shared SVA Meter Arrangement'.

At a subsequent Issue 96 WG meeting, after Option 2C had been developed and discussed, it was noted that applying Option 2A in tandem would increase its flexibility. As such, several Issue 96 WG members joined the P425 WG to support the progression of the Modification. P425 has now been approved and was implemented in October 2022.

Option 2B

Elexon presented Option 2B, which involved each exempt supply customer creating a Shared SVA Meter Arrangement, where the Secondary MSID would be used for exempt supply. An Allocation Schedule would be used to indicate how the exempt supply should be allocated across the different customers. This allocation can also be called matching, as the exempt supply is matched with demand.

A WG member commented that the idea of 'matching', which was in the initial proposal for Option 2B, was unhelpful and suggested that 'allocation' be used instead to better reflect what will happen in reality. This is because an amount of exempt supply would be allocated to a demand, but they will not necessarily 'match' as there could be more demand or more supply. There is nothing stopping an exempt supplier from supplying multiple customers.

Elexon noted that Option 2B could be progressed via a BSC Change Proposal, while several of the other options would require a Modification. From a governance point of view, this would make the pre-implementation phase for Option 2B quicker than, for example, Option 3. However, the implementation may still be time-consuming and costly, particularly due to any central system and HHDC system changes required.

There was some discussion of whether Option 2B would restrict data visibility for Balancing Services Use of System (BSUoS) charges or EMRS charges. Elexon clarified that the solution would not avoid other charges, as the HHDC would split consumption into exempt and licenced but normal charges would still apply. The split would be done on Meter Point Administration Numbers (MPANs) not Balancing Mechanism (BM) Units, with some identified as not needing to be charged.

Role of the HHDC

There was some discussion of how much information the HHDCs would need to have to complete the allocation process. One WG member felt that the HHDC would not have to know how much supply was going to each customer, and would only need to know which MPANs were exempt. The HHDC could then compare exempt generation with demand. Another WG member disagreed, stating that it did matter who the customer is, as some do not pay levies and some pay at a reduced rate. This meant that for audit purposes the HHDC would need visibility of the customers.

A WG member noted that Option 2B would be complicated by the fact that different customers could nominate different Half Hourly Data Collectors (HHDCs). It is unlikely that all customers would have the same HHDC, unless that was mandated as part of this solution. Having multiple HHDCs involved would make the calculation processes very complicated. Additionally, for more complicated peer-to-peer trading, multiple HHDCs would have to develop complex IT solutions to calculate the exempt supply volumes, or develop interfaces with trading platforms. This could be resolved by only allowing trading with Suppliers utilising the same HHDC, but this would be very restrictive.

It was also noted that the requirement for significant IT development by HHDCs could delay the implementation of Option 2B, particularly with the significant developments currently underway for other Modifications. One member felt that, to encourage innovation, it was important that those innovating be in control of the development. It is not fair to ask HHDCs to develop their systems in order to keep up with innovation from other business models.

Due to the anticipated impacts and substantial system development that Option 2B would cause for HHDCs, the WG felt that HHDC involvement in the solution development was important. This led several WG members from HHDCs to offer to participate in further discussions of the HHDC role. Elexon developed a more detailed proposed solution for Option 2B and liaised with HHDCs to gain an understanding of the complexities, costs, and timescales associated with pursuing it.

One WG member noted that Option 2B relies on the HHDC doing the allocation, which would result in signification development that they may feel should not be their responsibility. The member questioned whether it would be possible to have a Supplier or third party handle the allocations and then share the volumes with the HHDC. This discussion prompted development of Option 2C.

Allocation Schedule

A WG member noted that the Allocation Schedule within the Option 2B strawman solution would require Parties to be very prescriptive regarding which output would be matched with consumption in advance. Another WG member commented that if there was a mechanism to deal with volumes not being as expected and correcting this after the fact then this would not be an issue. If the volumes could not deviate from the expected then this option would have limited practical application.

The WG questioned what agreeing the Allocation Schedule in advance would really mean. The volume allocation would have to be clear prior to the Settlement calculations being run, but if they must be specified too far in advance, such as ex-ante, then flexibility would be severely limited. Elexon confirmed that the Allocation Schedule would relate to more than one Settlement Period and would contain the intended volume allocation, but that they could be adjusted each time. They also explained that it is a requirement of BSCP550 that the Allocation Schedule is set before gate closure, which would be ex-ante. The solution could be less prescriptive, but then it would move further away from BSCP550, potentially making the change more complicated to implement.

A WG member noted that BSCP550 states that the Allocation Schedule should be set five working days in advance and questioned if that would just be for initial set up or also for any further adjustments. Two members from HHDCs explained that Shared SVA Metering Arrangements were not often utilised and the appointments were received by email. The five working day lead-time is helpful to allow time for questions, verification, and notification. For this reason, they felt that real-time changes would not be suitable within a process based on BSCP550. Another WG member also felt that adjusting Shared SVA Metering Arrangements closer to real time or retrospectively could cause problems with Supplier positions.

The WG had several concerns about the practicality of creating allocations in advance. One stated that some business models would need to be able to move between different customers and suppliers quite quickly, with significant variation in the allocation. Another member questioned the suitability for renewable generation such a solar power that cannot be accurately predicted. Several members expressed the view that this solution was trying to solve today's problems with yesterday's methodologies.

The WG discussed whether Option 2B could be utilised for more complicated allocation arrangements, with many suppliers and many customers. One member wondered if they would have to list every generator against every customer with a small volume allocated in order to ensure that all exempt supply would be utilised. Another WG member suggested that a percentage split could be used in this scenario to reduce the risk that any exempt supply remain unallocated. However, this would still be complicated in cases where there were multiple HHDCs.

Conclusion

Several WG members felt that Option 2B would be quick and simple to implement. However, it would only be simple if the solution were very restrictive such as requiring all parties to utilise the same HHDC. It would also take time for HHDCs to make the required software developments, which could delay implementation.

The consensus of the WG was that Option 2B would be suitable for stable, long-standing arrangements, but that it would be difficult to facilitate more complex or flexible

arrangements. For example, it may not be flexible enough to support matching across many generators with many customers, or unpredictable renewable generation. It would be possible to implement Option 2B as a short-term solution to allow simple allocation, but progressing only this option would block certain business models.

The WG decided that Option 2B should not be progressed, as it would not be suitable for more complex exempt supply arrangements and progressing it alongside another option would not be an efficient use of industry resource.

Option 2C

Option 2C was developed by Elexon following WG discussion of the initially developed options. It is similar to Option 2B, as each exempt supply customer will have a Shared SVA Meter Arrangement, and exempt supply will be allocated using an Allocation Schedule. However, the process of calculating exempt supply volumes will be performed by a third party, as in Option 3, rather than the HHDC. The third party, the ESCA, would send the allocation volumes to the HHDC, reducing HHDC involvement and system development requirements significantly.

Upon discussing the detailed process for Option 2C, there was an agreement that existing data flows should be utilised where possible, rather than creating new ones. There was some discussion around how the HHDC would know that a given Export MSID should be treated as exempt supply. The WG concluded that this could be included within the Allocation Schedule or as a separate dialogue between the Supplier and HHDC, as it fell outside the scope of the existing data flows.

In Elexon's strawman solution, it stated that once the ESCA has calculated the exempt and licenced volumes, both volumes would be entered into Settlement. A WG member questioned why this occurred. Elexon explained that the Supplier is responsible for all energy the customer has used, and so the total of licenced and exempt volumes must be entered into Settlement.

The WG also discussed whether Option 2C would require the same HHDC to be used by participants. In general, the WG did not think this necessary, but one WG member stated that if the same metering system were recording Import and Export then it would make sense for the same HHDC to collect the data. This would be particularly beneficial if communications were to fail.

Validation of exempt volumes by HHDC

The WG discussed whether validation of the exempt volumes would be required in Option 2C. One WG member felt that this would depend on the expected role and assurance of the third party. Assurance of the ESCA role had been discussed previously, during discussions for Options 3. The WG had agreed that the ESCA should require qualification - the full discussion is detailed in the Option 3 section of this report. The focus here is on whether there should be additional validation by the HHDC.

Under Option 2C, the role of the HHDC is to submit into Settlement exempt supply volumes that have been calculated by a third party. The question therefore arises of how much validation of these volumes the HHDC should perform. There was discussion around data validation vs qualification, as it would be potentially disproportionate to have both but at least one would be needed if the information from the ESCA were entering settlement. There were also concerns raised that extensive process and system changes for HHDCs would impact the ability to implement the solution quickly.

A WG member from a HHDC shared the view that HHDCs would be ambivalent about performing validation. Significant validation would add extra work, but they could perform checks to stop infeasible values entering settlement. The WG agreed that mandated

validation by HHDCs would not be necessary, but that HHDCs would likely implement some checks, such as flagging and questioning extraordinary values.

HHDC system changes

The WG discussed the HHDC system changes that would be required to facilitate Option 2C. A WG member from a HHDC predicted that there would be significant development of HHDC systems, as data would need to be sent to a new type of Party Agent, and the data received from the ESCA would then need to be processed. More development would be required should additional HHDC validation be required.

The WG were concerned that the need for HHDC system development may impede the progress of this Option if it were to be raised as a BSC change. However, it was noted that HHDC development would not be compulsory and would only be required for those wishing to participate. This created concerns over how likely HHDC involvement would be. One WG member queried how likely it would be for a HHDC to offer this service to a small supplier with only a few customers. While the HHDCs present could not comment without a full business case and impact assessment, the WG generally felt that uptake from HHDCs would be unlikely. This would make it much harder for smaller suppliers to be correctly allocate their exempt supply.

There were already concerns that all involved in the Shared SVA Metering Agreement would be required to have the same HHDC, as this would be very limiting. Should only a limited number of HHDCs offer this solution, this would exacerbate the issue, as the choice of HHDC would be restricted. For example, a local housing authority wanting to do peer-to-peer trading with customers that have different existing Suppliers and different HHDCs would not be possible unless the customers changed Suppliers and/or the Suppliers changed HHDCs. The WG felt it would be impractical to have to contract with someone new for a small number of customers.

Conclusion

The WG generally supported progressing Option 2C if it could be implemented in a timely manner with efficient use of industry resources. The main factors to consider were the type of BSC change required to facilitate this option, and the system changes required.

Option 2C would require updates to BSCP550 to add a new type of Allocation Schedule, which could be amended using a Change Proposal. However, there would also be amendments to the BSC required in order to define the new role of the ESCA and to allow an Allocation Schedule to be submitted to the HHDC by someone other than the Primary Supplier, which would require a Modification. Modifications are likely to require more time and resource to progress than a Change Proposal.

Additionally, during WG discussions HHDCs stated that signification development of HHDC systems would still be required to facilitate Option 2C, even with the reduced HHDC involvement when compared to Option 2B. This could cause delay to the implementation of Option 2C, were it to be progressed.

Option 3

The WG noted that Option 3 would see the costs to develop systems borne by the parties who wish to develop innovative solutions, not the HHDCs. This would be preferable, as it would allow for more complex solutions and peer-to-peer trading, without HHDCs having to undertake costly and time-consuming development that they would not directly benefit from. More innovative business models would be possible, without being restricted by what Suppliers or HHDCs are able to accommodate.

The WG felt that third party system development would allow for more complex trade arrangements. For example, trades would not have to be limited to customers with the same Supplier or HHDC, as was suggested for Option 2B. One WG member commented that the shape of generation and supply is never the same, and this is the only option that really allows for that. For example, where there is more exempt supply than customer demand it should be possible to supply that to someone else.

A WG Member commented that Option 3 would bring exempt supply in line with other charges such as the Renewables Obligation (RO) and Feed in Tariffs (FIT). They felt that this would be positive, as these processes are well understood and aligning them would make it easier. Another member pointed out that RO charges are calculated ex-post and outside of Settlement, with applications made to Ofgem annually. The reconciliation for exempt supply would be more frequent, potentially in real-time within each Settlement period.

A WG Member worried that Option 3 may end up like BSC Modification P379, where it was decided after cost benefit analysis that the solution was too costly. However, another WG member felt that, as the time and costs for the development would be on the parties that desired the solution and would be dependent on how complex the required trading was, the issues faced by P379 might not be relevant.

Timescales for data transfer

The WG discussed the timescales around sending and receiving the data. Within Elexon's initial strawman solution, data would be sent on the Settlement schedule and invoiced on the II run at WD+5. One WG member commented that this is a very tight timescale and may require development of a mechanism to ensure timely data transfer from HHDC to ESCA. They expressed concern that this timescale would allow no opportunity to correct data and if the data is not validated then the solution does not work. Elexon explained that it would be possible to relax the timescales and charge on SF run which would be more accurate, but that after the move to Market-wide Half Hourly Settlement (MHHS) this would be 5-7 days so may still be tight.

Another WG member commented that access to HH data and how quickly it comes through is the limiting factor, as matching can be done instantly. Issues around missing or incorrect data should be resolved anyway through standard processes. Another WG member agreed that any timeline issues for this option would not be a matching issue but a data receipt/validation issue. There are existing processes to deal with data validation issues, so the solution could be to extend the timeline or to involve HHDCs.

Settlement

The WG discussed who would be responsible for submitting information into Settlement under Option 3. The ESCA could submit information to the Licenced Supplier, who would then submit into Settlement, or the ESCA could submit it directly. The Supplier submitting to Settlement could allow the ESCA role to be less strictly controlled, as the Supplier would be a qualified Party that would be ultimately responsible for the data being correct. This would also align with how RO and FIT are submitted.

Some WG members showed a preference for the ESCA becoming a BSC Party or Party Agent who would be qualified to submit directly into Settlement. However, others felt that the ESCA role should just be splitting licenced and exempt portions so that they can be correctly reported to EMRS, and that this solution should not be changing who is responsible for Settlement or network charges.

In order to decide on appropriate assurance for the ESCA role, it was important for the WG to understand whether the role would have an impact on Settlement. If the role were to affect Settlement and be undertaken incorrectly, this could have an impact upon other Parties.

Elexon explained that imbalance would not usually be affected by the ESCA exempt volume allocations, and that exempt supplier arrangements will not impact Settlement. Submitting exempt supply shows that a supplier should not be charged, so through error or fraud this could be done incorrectly, causing incorrect charging but would have no impact on imbalance. Elexon then presented their proposed solution for ensuring that any impacts to imbalance are mitigated, and the WG concluded that this solution should be included as part of any change progressed as a result of Issue 96.

A WG member questioned whether a licenced exempt supplier would need to submit an Energy Contract Volume Notification (ECVN). If this were not required, then BSCCo would not be aware of the volumes being traded, which could affect imbalance. Elexon explained that exempt suppliers cannot submit an ECVN themselves, and historically Elexon has not had visibility of these volumes.

One WG member stated another reason that Option 3 may be preferred was that risk to Settlement would be reduced if the exempt supply calculations were not being done by the HHDC.

Assurance of ESCA role

The WG discussed whether the ESCA would need any assurance, to ensure that allocation was performed to the correct standard. They agreed that some form of control was required for the role, as Parties would need BSC assurance that the process was being done correctly, but there was debate over what type would be appropriate.

Various options for assurance were considered, including accreditation, qualification and audit. The WG discussed assurance in other areas of the industry, and the fact that many roles in the BSC require qualification. The WG also raised the fact that RO and FIT are audited, and that these exempt supply charges could be handled in a similar manner. One WG member stated that relying solely on audit comes with risks, as problems are only identified after the fact.

Several WG members felt that, in order for the data to be trusted, it would need to be checked by someone who is subject to qualification or assurance. They felt that any exempt supply allocation platforms would need to be tied into assured parties such as a BSC Party or a qualified party. This could mean that the ESCA role would require qualification, or that the data go via a qualified party such as the Supplier or HHDC.

The ESCA role may be undertaken by parties that are already qualified, such as Suppliers or Party Agents, who would be bound by their current role frameworks. A WG member felt that this would make further qualification unnecessary, as the additional ESCA responsibilities could fit into their current roles and performance assurance frameworks. They felt that, particularly for those already completing the calculations for FIT and RO, the ESCA role could just be an extension of a similar role and should not require additional qualification. However, the FIT and RO processes are done at the end of the year, while this would be in real time, meaning it would be quite a different process.

The majority of the WG felt that qualification for anyone undertaking the role should be required. It was raised that we cannot know who will take on the role going forwards, including those with no existing role or qualification. Many felt it would be an unnecessary barrier to entry to have some requiring a more rigorous qualification process than others when the role being undertaken was the same. It is right and reasonable that all undertaking the ESCA role have the same qualification requirements. This would be in line with the processes in asset metering added by P375, in which there is a need to qualify if the additional role is outside of the existing role.

It was also raised that there is a vast range in complexity of the ESCA role dependant on the number of customers and suppliers involved in the matching. The role may be IT intensive, particularly where complex peer-to-peer trading was involved, requiring

calculations on an ongoing daily basis. However, the role could also be performed with much lower technology requirements where fewer customers were involved in the allocation. The assurance requirements could depend on the activities being carried out. For example, if an ESCA is simply matching one to one for a small number, then a lot less verification may be required in comparison to a complex IT platform matching many to many. The WG agreed that the full range of ESCA function should be enabled by the solution.

Line Loss Factors

A WG member questioned whether Line Loss Factors (LLFs) are applied to exempt supply. Elexon confirmed that exempt supply is still part of Settlement and LLFs should be applied. Another WG member queried if there is a risk of double counting the LLFs, and Elexon explained that this should not happen as the Data Aggregators apply the losses to the total meter read. This is done without knowing whether that meter read contains exempt supply or not. Net exempt volumes are needed in SVAA, which include losses.

Another WG member commented that LLFs apply for renewable generators and questioned how LLFs are applied for local exchange. Elexon confirmed that in local energy trading the same LLFs are applied where the voltage is the same, which means they are loss adjusted to the same level and continue to match.

Supplier Assurance

Elexon asked the WG if they felt that additional Supplier assurance should be required under Option 3. They explained that the Supplier role is quite small, unless they are acting as the ESCA, but that the Supplier should be aware that exempt supply is occurring. The WG felt that additional Supplier assurance would not be required for the current solution under Option 3, but that this may need to be revisited by the Modification WG.

Source of Metered Data

The WG considered how a third party would get the data required to complete the volume allocation. They discussed the possibility of getting the data from the Supplier or the HHDC and the timeframe of sending this data. The ESCA would require ex-post half hourly data, but where there is missing data the HHDC can calculate estimates based on current processes.

A WG member pointed out that transmitting smart meter data can take longer, and that this should be considered in the design of the solution to future-proof it. Another WG member commented that HH data would be required for complex allocation via a platform, which would rely on smart meter data. They questioned where HHDCs have access to this data. Currently this data is only accessible to Suppliers, but after the implementation of Market-wide Half Hourly Settlement (MHHS) HHDCs will be able to access this data. The WG agreed that the inclusion of smart meters will be essential and so the Option 3 solution should allow for this. As part of this, the solution should allow for the ESCA to access data from either Suppliers or HHDCs.

A WG member raised the possibility of the ESCA being able to access HH metered data, including smart meter data, directly. Another WG replied that this could cause issues, as the Data Communications Company (DCC) is Supplier funded. Additionally, the data from smart meters would not be Settlement data. The data after HHDC validation would be the correct data for this purpose. The WG generally felt that including options for direct access to smart meters or in home devices would take longer to assess and make Modification approval more difficult. These could be added later if required, but currently were not required and would decrease the efficiency of the Mod process.

4. Conclusions

The WG concluded that Option 3 should be raised as a BSC Modification to allow a Supplier, or a third party acting on their behalf, to be involved ex post in splitting metered volumes recorded on an SVA Metering System into exempt and licensed supply. They felt that Option 3 would allow for the full range of exempt supply arrangements, from simple one to one matching facilitated by a Supplier through to complex peer-to-peer trading platforms. The WG also identified that, in contrast to the other options considered, Option 3 would see the development requirements fall upon the innovating parties rather than HHDCs, which is more appropriate. This Modification has now been raised as P442.

The WG considered the detailed process for Option 3, and made the following decisions:

- Mitigation for impacts to imbalance should be included
- The ESCA should require qualification
- Additional Supplier assurance should not be required
- The ESCA should be able to receive data from Suppliers or HHDCs.

These decisions should be validated by the Modification WG as the solution is developed.

The WG also considered if any other solutions should be progressed simultaneously, but ultimately concluded that this would not be efficient use of industry resources.

Appendix 1: Issue Group Membership

Issue 96 Group Attendance				
Name	**Organisation**	**10/09/21**	**16/03/22**	**01/06/22**
Claire Kerr	Elexon (*Chair*)	✓	×	×
Lawrence Jones	Elexon (*Chair*)	×	✓	×
Keren Kelly	Elexon (*Chair*)	×	×	✓
Jenny Sarsfield	Elexon (*Lead Analyst*)	✓	✓	✓
Lorna Lewin	Elexon (*Design Authority*)	✓	✓	✓
John Lucas	Elexon (*Design Authority*)	✓	✓	✓
Christopher Day	Elexon (*Subject Matter Expert*)	×	✓	✓
Somayeh Taheri	Urban Chain (Proposer)	✓	✓	✓
Carolyn Burns	Dentons	×	✓	×
David Shepherd	BPG Energy	×	✓	×
Ian Hall	IM Serv	✓	×	✓
Imtiaaz Sali	F & S Energy	✓	×	×
James Hall	BPG Energy	✓	✓	✓
James Orme	Juno Energy	×	✓	✓
Jeff Withingham	Sitigrid	×	✓	✓
Jo Gilbert	Euston Energy	✓	×	×
Joshua Logan	Drax Group	✓	✓	✓
Lee Stone	E.ON Energy	✓	✓	×
Lisa Waters	Waters Wye Associates	✓	×	×
Lyndsey Antrobus	BPG Energy	✓	✓	✓
Mark Bygraves	Sitigrid	×	✓	✓
Mary Gillie	Energy Local	×	✓	✓
Mike Jarman	IMServ	×	✓	×
Neil Edney	Salient Systems	✓	×	✓
Nik Wills	Stark	✓	✓	×
Phil Russel	Self Employed	✓	×	×
Rob Johnson	Low Carbon Contracts Company	×	×	✓
Robert Newton	Zenobe	✓	×	✓
Ross Haigh	Low Carbon Contracts Company	✓	×	×
Sophie Payne	Opus Energy	✓	✓	✓
Steven Funnell	F & S Energy	✓	✓	✓
Urszula Thorpe	Pozitive Energy	✓	×	×