

Modification proposal:	Balancing and Settlement Code (BSC) P415: Facilitating access to wholesale markets for flexibility dispatched by Virtual Lead Parties (P415)		
Decision:	The Authority¹ directs that the modification be made²		
Target audience:	National Grid Electricity System Operator (NGESO), Parties to the BSC, the BSC Panel and other interested parties		
Date of publication:	06 October 2023	Implementation date:	07 November 2024

Background

P415 is a proposed modification to the Balancing and Settlement Code (BSC) that aims to facilitate access to wholesale electricity markets for flexibility dispatched by Virtual Lead Parties (VLPs). A VLP is an independent aggregator that controls (potentially on behalf of a third party) power generation and/or electricity demand from a range of assets for the purposes of selling Balancing Services to National Grid Electricity System Operator (ESO).³

Consumers of electricity who can be flexible about their consumption (increase or decrease their demand) cannot currently obtain the value from that flexibility within the wholesale market unless they enter into arrangements with their supplier to do so. This is because the BSC currently assigns all flexibility delivered by a consumer to their supplier. As a result, consumers can only access the wholesale market through their supplier.

VLPs can currently support consumers to offer their flexibility in the Balancing Mechanism (BM) but not the wholesale markets. Extending these arrangements and allowing VLPs to

¹ References to the "Authority", "Ofgem", "we" and "our" are used interchangeably in this document. The Authority refers to GEMA, the Gas and Electricity Markets Authority. The Office of Gas and Electricity Markets (Ofgem) supports GEMA in its day to day work. This decision is made by or on behalf of GEMA.

² This document is notice of the reasons for this decision as required by section 49A of the Electricity Act 1989.

³ Guidance Document. Use of System - Virtual Lead Party (VLP)



access the wholesale electricity markets would remove a barrier to consumers who want to offer flexibility.

The modification proposal

P415 was raised by Enel X UK Ltd (the Proposer). The proposal aims to allow VLPs to participate in the GB wholesale electricity markets. The modification was raised on 30 September 2020, with an aim for it to be implemented as soon as practicable. The modification is expected to predominantly impact VLPs, suppliers, and Elexon, as the BSCCo.

P415 would enable VLPs to trade Deviation Volumes⁴ on the wholesale electricity markets on behalf of consumers. Deviation Volumes are a new type of settlement volume introduced for P415. However, a supplier will be commercially impacted if a VLP takes downward action (reduces consumer demand).⁵ This is because a supplier will have bought volumes of energy in accordance with its expectation of what the consumer would use, not accounting for any VLP action. As a result, the supplier cannot sell the energy which it has already purchased onto the consumer because the consumer is no longer consuming that energy. The workgroup therefore considered that supplier compensation is necessary as the suppliers could be left with a cost that they cannot recover.

The modification proposal therefore presents two options for supplier compensation arrangements.

- Proposed Solution: Under this solution suppliers that have been commercially impacted
 as a result of VLP action will be compensated and the compensation costs will be
 mutualised amongst suppliers.
- 2. <u>Alternative Solution</u>: Under this solution, suppliers that have been commercially impacted as a result of VLP action will be compensated and **VLPs will be liable to pay compensation costs** for volumes directly adjusted by the VLP taking the action.

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⁴ Deviation Volumes represent the difference between what is forecast to be consumed or generated and what was actually consumed or generated, where the difference can be attributed to VLP action.

⁵ It should be noted that compensation will flow both ways, e.g. if VLP activity results in an increase in demand, which the supplier will sell onto the consumer, then the VLP will be compensated for the costs incurred.



Under both solutions Elexon will calculate the Deviation Volumes to account for VLP flexibility actions and introduce the relevant compensation flows. Compensation will be paid at a price that represents the average supplier sourcing costs, and Ofgem's published Price Cap Methodology (PCM)⁶ will be used to calculate this figure.

On request of the BSC Panel and P415 workgroup, a Cost Benefit Analysis (CBA) of P415 was performed. This included assessing a compensation method where VLPs pay (the Alternative Solution), and a compensation method where costs are mutualised across suppliers (referred to in this document as the "mutualisation solution"). The mutualisation solution assessed mutualising costs across suppliers, as in the Proposed Solution, but differed in that it used the day ahead spot price for calculating the price of compensation, instead of Ofgem's PCM. It is therefore not the Proposed Solution, however we consider it a reasonable proxy.

The CBA identified the potential for significant benefits where P415 leads to the deployment of significant volumes of additional flexibility. The mutualisation solution allowed for greater volumes of flexibility deployment, due to the lower variable costs that exist for deployment of flexibility by VLPs, and therefore greater welfare benefits compared to the Alternative Solution.

BSC Panel⁷ recommendation

At the BSC Panel meeting on 08 June 2023, the Panel unanimously agreed that the P415 Proposed Solution better facilitates the BSC objective (b), and that the Alternative Solution better facilitates the BSC objectives (b) and (c).

The Panel unanimously agreed that the P415 Alternative Solution is better than the P415 Proposed Solution and that the Alternative Solution should be approved.

Our decision

We have considered the issues raised by the modification proposal and the Final Modification Report (FMR) dated 15 June 2023. We have considered and taken into account the responses

⁶ Price cap - Decision on changes to the wholesale methodology | Ofgem

⁷ The BSC Panel is established and constituted pursuant to and in accordance with Section B of the BSC and <u>Standard Special Licence Condition C3 of the Electricity Transmission Licence</u>.



to the industry consultations which are attached to the FMR⁸, as well as the BSC Panel's views and recommendation. We have concluded that:

- implementation of the **Proposed Solution** will better facilitate the achievement of the applicable objectives of the BSC;⁹ and
- directing that the modification be made is consistent with our principal objective and statutory duties.¹⁰

Reasons for our decision

We consider that both the Proposed Solution and the Alternative Solution will better facilitate BSC objectives (b) and (c) and have a neutral impact on the other applicable objectives. However, we consider that the Proposed Solution will better achieve BSC objectives (b) and (c) due to the increased levels of flexibility it is expected to deliver.

(b) the efficient, economic and co-ordinated operation of the national electricity transmission system

Proposed Solution

The Proposer, and a majority of the workgroup members, believe that the Proposed Solution better facilitates BSC objective (b). The Proposer believes that the additional revenue stream for flexibility should lead to more participation, including in the BM and other balancing services, needed to operate the National Electricity Transmission System (NETS). In their view, this should lead to greater competition for those services, allowing for a more efficient and economic operation of the system. A majority of the workgroup agreed with this. However, a minority believed that the Proposed Solution would not unlock enough flexibility to make a material difference against objective (b).

⁸ BSC modification proposals, modification reports and representations can be viewed on the Elexon website.

⁹ As set out in <u>Standard Condition C3(3) of the Electricity Transmission Licence.</u>

¹⁰ The Authority's statutory duties are wider than matters which the Panel must take into consideration and are detailed mainly in the Electricity Act 1989.



Alternative Solution

The workgroup members and the Proposer unanimously believe that objective (b) is better facilitated by the Alternative Solution. The reasons given were the same as for the Proposed Solution. The Proposer prefers the Alternative Solution.

Our views

We agree with the Proposer and the workgroup that allowing VLP access to the wholesale electricity markets should incentivise more VLPs to enter the markets and therefore increase the amount of flexibility available. We believe that this will lead to an increased amount of flexibility in the balancing market, as well as the wholesale markets, which provides the ESO with more options to balance and operate the NETS. We therefore agree that both the Proposed and Alternative solutions will better facilitate the BSC objective (b).

We also believe that both the Proposed and Alternative Solutions will incentivise increased participation by consumers who can adjust their demand or generation in response to price signals in the wholesale electricity markets. Otherwise known as load shifting, moving electricity consumption from one time-period to another allows demand and supply to be more closely matched, which optimises energy use and reduces the curtailment of generation. This should reduce the need for the ESO to take balancing actions and, therefore, contribute to the efficient and economic running of the NETS. Moreover, in periods of high renewable generation, when prices are typically low or even negative, VLPs can increase demand to absorb this excess generation. As well as a more efficient running of the NETS, the P415 CBA indicates that this will result in positive producer welfare. It is also likely to reduce the need to dispatch fossil fuel generation, resulting in a reduction in carbon emissions.

We consider that VLPs will be more incentivised to enter the market under the Proposed Solution, due to VLPs bearing lower costs than under the Alternative Solution. This paves the way for greater participation of flexibility, increased load shifting opportunities, and increased producer welfare relative to the Alternative Solution. We therefore believe there would likely be a greater optimisation of supply and demand on the NETS, along with more options available to balance and operate the NETS. We therefore consider that the Proposed Solution better meets the BSC objective (b).



Baselining

We recognise that the accompanying CBA stated that any baselining methodology for calculating the Deviations Volumes will be imperfect when applied to a heterogenous set of consumers. This is especially true for those with less predictable demand profiles, with the CBA noting that the approach is better designed for large, industrial consumers with consistent and predictable demand profiles.

The CBA highlights the potential for VLPs to 'beat the baseline' without deploying flexibility. This could occur when a VLP is better able to forecast the demand of a consumer than is possible using the baselining methodology. A VLP could then declare a flexibility action and deviation volume, while the consumer follows their existing demand profile. This could result in an inefficient running of the system, as demand is not being reduced as indicated.

The BSC Governance processes allow for new baselining methodologies to be introduced or amended over time. Due to the potential for inaccuracies and a risk of gaming, we expect industry to keep the baselining methodology for P415 under review. We expect industry to bring forward and develop alternative methodologies with Elexon if any detrimental consequences resulting from the baselining methodology are identified.

(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

Proposed Solution

The Proposer believes that the Proposed Solution better facilitates BSC objective (c) than the baseline. They believe it will create wider access to the wholesale market, allow more consumers loads to participate, and therefore increase competition. Only a minority of the workgroup agreed with this. As noted in the FMR, the majority who disagreed stated concerns that it would mutualise a risk that suppliers cannot manage, and then put the cost of that risk onto suppliers to pay for. They therefore believe the Proposed Solution is detrimental to competition.



Alternative Solution

The Proposer and a majority of the workgroup believe that the Alternative Solution better facilitates objective (c) than the baseline. They believe the Alternative Solution will create wider market access to the wholesale markets. Workgroup members also stated that the Alternative Solution does not put the cost of compensation onto suppliers, which they noted as presenting a potential detriment to competition on the supply side with the Proposed Solution. The Proposer prefers the Alternative Solution over the Proposed Solution.

One workgroup member who disagreed stated they did not think the Alternative Solution would unlock enough Demand Side Response to better facilitate competition. Another member said they did not support any form of compensation and felt this would harm competition.

Our views

We consider that both the Proposed and Alternative solutions better facilitate BSC objective (c) by allowing VLPs to enter the wholesale markets. Both solutions will introduce new parties into the market, who will compete with both suppliers and generators, and therefore promote competition in the generation, supply, sale, and purchase of electricity.

The CBA suggests that the wholesale market price will decrease as a result of increased competition. The rise in flexibility which is likely to be deployed following P415 indicates a decrease in the demand-weighted wholesale market spot price across all scenarios, years, and compensation variants. We expect these reductions to lead to lower sourcing costs for all suppliers and should translate into lower bills for consumers. We therefore consider that both the Proposed and Alternative Solutions better promote effective competition in the generation and supply of electricity, and sale and purchase of electricity.

We believe the Proposed Solution will better facilitate BSC objective (c) compared to the Alternative Solution. We agree that the Proposed Solution will create wider market access, and we believe more VLPs are likely to enter the market than under the Alternative Solution. The Alternative Solution results in higher costs for VLPs, which will reduce attractiveness and therefore limit market entry and competition. We therefore consider that the Proposed Solution will increase participation in the wholesale electricity markets to a greater extent and therefore have a greater impact on promoting effective competition.



Our view is informed by the CBA, which notes that as the flexibility deployed by VLPs increases over time, reductions in the wholesale electricity spot price become more significant. It further states that these reductions will be larger under the mutualisation solution, due to the increased deployment of load shifting flexibility. It also notes that although positive total welfare benefits were observed in all years and all scenarios modelled for both solutions assessed, total welfare benefits were larger where more flexibility is deployed. This led to greater total welfare benefits under the mutualisation solution, where flexibility is utilised more extensively due to the higher number of VLPs in the market. We therefore consider that the Proposed Solution will promote higher levels of market competition and better meet BSC objective (c) than the Alternative Solution.

We also consider that suppliers are likely to compete against VLPs for use of their own consumers' flexibility. Having access to their own consumers' flexibility allows greater visibility of consumer demand and enables suppliers to manage their hedging risk more effectively. Under the Proposed Solution, where we anticipate that there will be more VLP activity and therefore greater volumes of flexibility in the market, we consider there will be greater levels of competition between suppliers and VLPs for consumers' flexibility. We therefore consider that the Proposed Solution better facilitates effective competition between suppliers and VLPs than the Alternative Solution.

Mutualisation costs

We are aware of the potential for the Proposed Solution to lead to an uneven market between VLPs and suppliers, due to suppliers collectively bearing the costs of VLP activity under the Proposed Solution. This puts an additional cost on suppliers which VLPs do not have to pay. We anticipate that the market-wide competition benefits from greater levels of participation under the Proposed Solution outweigh this, however we expect industry to monitor and progress any changes required to maximise the benefits of VLP market access while facilitating a level playing field between suppliers and VLPs.

In addition to this, we also recognise that the Proposed Solution could lead to some increased costs for suppliers as they will be required to contribute to the mutualisation fund. This could increase financial risk, due to the imperfect foresight of the cost being mutualised. All suppliers will contribute to this fund, regardless of whether they have been subject to VLP



action or not. Although the mutualisation calculation will be based fairly on market share, we understand that this could potentially limit competition, particularly among smaller suppliers who may find this cost increase to be a larger burden than larger suppliers. However, on balance, all suppliers will benefit from the subsequent reductions in the wholesale electricity price, and we believe that the overall welfare across the market will significantly improve due to lower wholesale costs. In addition, Ofgem will monitor any changes to the costs incurred by suppliers that may ultimately impact consumers. Similarly, we will take into consideration any change in costs due to the implementation of P415, in the round with other changes in wholesale markets.

Gaming risk

We are aware of a potential risk of gaming that could occur with the Proposed Solution. This could happen when a supplier also acts as a VLP and utilises the flexibility of its own consumers. In this scenario, the supplier could benefit from utilising its consumer's flexibility in the wholesale markets as a VLP, whilst also receiving compensation from the mutualisation fund. We note that the workgroup responses were mixed on whether this is a material gaming risk.

We are aware that this could have negative implications for competition of the sale of electricity, as certain suppliers have the potential to benefit from this practice. In light of this potential risk, we will carefully monitor the implementation of P415 and its impacts. If we believe that suppliers are not acting within the best interests of consumers, we will not hesitate to intervene.

Compensation calculation

We also recognise that there may be inefficiencies in the compensation model for both the Proposed and Alternative Solutions, particularly in relation to the use of the Ofgem price-cap methodology for the supplier sourcing cost. For instance, if the price-cap methodology results in a compensation amount that exceeds what the supplier has paid for energy when 'shaping' their generation demand closer to delivery, then the supplier stands to gain compared to the action they were originally going to take. Conversely, if the compensation amount determined by the price-cap methodology is less than what the supplier has paid for shaping their



generation demand closer to delivery, then the supplier would incur a loss. This could have implications on competition and may create an uneven playing field for suppliers.

We acknowledge that there is no perfect methodology for estimating the supplier sourcing cost, and we recognise that the risk of over or under compensation applies to both the Proposed and Alternative Solution. However, we consider that using the price-cap methodology is a good proxy for estimating supplier sourcing costs. We expect industry to continue to assess the effectiveness of this methodology and work with Elexon to develop a suitable alternative if necessary.

Ofgem's Principle Objectives and Statutory Duties

Having concluded that the Proposed Solution overall better facilitates achievement of the objectives in our assessment above, we also assessed its approval against our statutory duties. This includes our Principal Objective to protect the interests of existing and future consumers and the various specific matters identified in section 3A of the Electricity Act 1989. We set out below some specific analysis of key aspects of our statutory duties.

S.3A(2)(b) of the Electricity Act 1989 requires Ofgem to have regard to the need to secure that licence holders are able to finance licensed activities. We recognise that the implementation of P415 could introduce a risk for suppliers, who will have their consumers' demand levels changed. The CBA notes that suppliers may face additional exposure when a flexibility action results in demand shifting. This is because the VLP is likely to initiate downward action but is less likely to take responsibility for the subsequent increase in demand. This may result in the supplier taking a short imbalance position and may lead to financial risk for suppliers.

The CBA concludes that demand side flexibility is likely to create similar challenges regardless of whether P415 is implemented. While the Proposed Solution may exacerbate these challenges compared to the Alternative Solution, due to the higher quantity of VLP action incentivised by the Proposed Solution, we expect that the growing presence of flexible technologies will mean that the market will need to develop increasingly sophisticated demand forecasting and hedging strategies regardless.



Consumer welfare

The CBA notes that, under the mutualisation solution, suppliers are likely to transfer any increased costs from contributing to the mutualisation fund through to consumers. As well as the potential to increase consumer bills, this could have distributional implications, as those who are able to utilise their flexibility are able to monetise this, whilst those who cannot end up paying. Similarly, by reducing the need for curtailment during periods of high renewable generation, VLPs help to avoid periods of very low or negative prices. In some circumstances this could lead to an overall increase in the average wholesale electricity price.

However, the accompanying CBA stated that for the mutualisation solution, total welfare was positive across all years and all modelled scenarios, including positive consumer welfare across all scenarios until 2029. This suggests that a reduction in demand-weighted wholesale costs resulting from increased flexibility should offset any potential increase in costs, at least over the next six years. As the flexibility market develops, we will continue to consider these impacts over the short to medium term to ensure the market is working in the best interests of consumers.

EBGL Article 18 terms and conditions

We agree with the Panel that P415 does impact EBGL Article 18 terms and conditions held within the BSC and has a positive impact against objectives (a) and (f). We note that a consultation took place and accept the changes to the relevant sections.

Decision notice

In accordance with Standard Condition C3 of the Transmission Licence, the Authority hereby directs that **Proposed** modification proposal *BSC P415: Facilitating access to wholesale markets for flexibility dispatched by Virtual Lead Parties* be made.

Grendon Thompson

Deputy Director - Energy Systems Management & Security

Signed on behalf of the Authority and authorised for that purpose