## ELEXON

**BSC Panel 324** 

Public Slides



## PART I: NON-MODIFICATION BUSINESS (OPEN SESSION)

## ELEXON

Application for a derogation under BSC Section K5.2.1 for the Isle of Man Interconnector

324/04 - Katie Wilkinson

## **Application**

- BSC Section K5.2.1 allows a Distribution Interconnector to be treated as a Single BM Unit as
  opposed to an Interconnector with the agreement of the BSC Panel
- Derogation Expires on change of Lead Party
- Interconnector between Isle of Man and Mainland Great Britain currently treated as a single BM Unit under this derogation
- Change of BM Unit Lead Party to Smartest Energy planned 4 May 2022. Smartest Energy have applied for a derogation from K5.2.1 to carry on treating the Interconnector as a Single BM Unit.

## Recommendations

We invite the Panel to:

a) APPROVE Smartest Energy Limited's request to treat the Isle of Man Interconnector as a Single BM Unit from the date that Smartest Energy Limited becomes responsible for the BM Unit.



# PART II: MODIFICATION AND CHANGE BUSINESS (OPEN SESSION)

## ELEXON

**Change Report and Progress of Modification Proposals** 

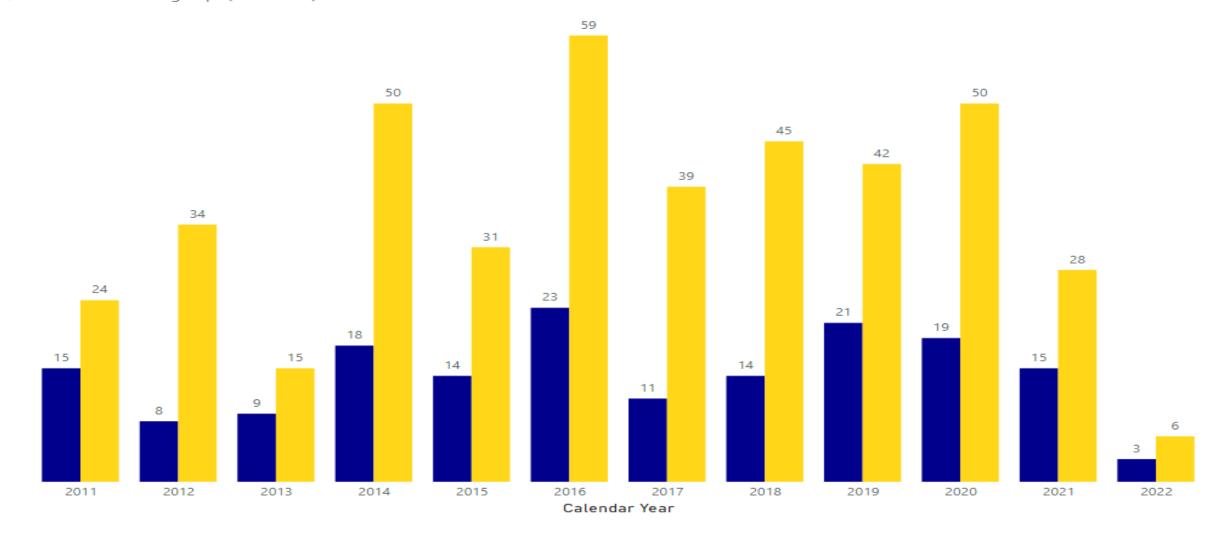
324/02 – Lawrence Jones

10 March 2022

## **BSC Modifications raised by year and Workgroups held**

### How many Modifications raised and Workgroups held?

Mods raised
 Workgroups (excl. Issues)



## **BSC Modifications overview**

Initial Written Assessment	-
Assessment Procedure	P395, P412, P415, P425, P426, P427, P430, P432, P434
Report Phase	P435, P436
Urgent	-
With Authority (decision cut-off)	P332, P419, P421

Authority Determined (implementation date)	P429 (24 Feb 22)
Self-Gov. Determined	-
Fast Track Determined	-
Withdrawn	-

Open Issues Issue 91, Issue 93, Issue 95, Issue 96, Issue 97, Issue 98

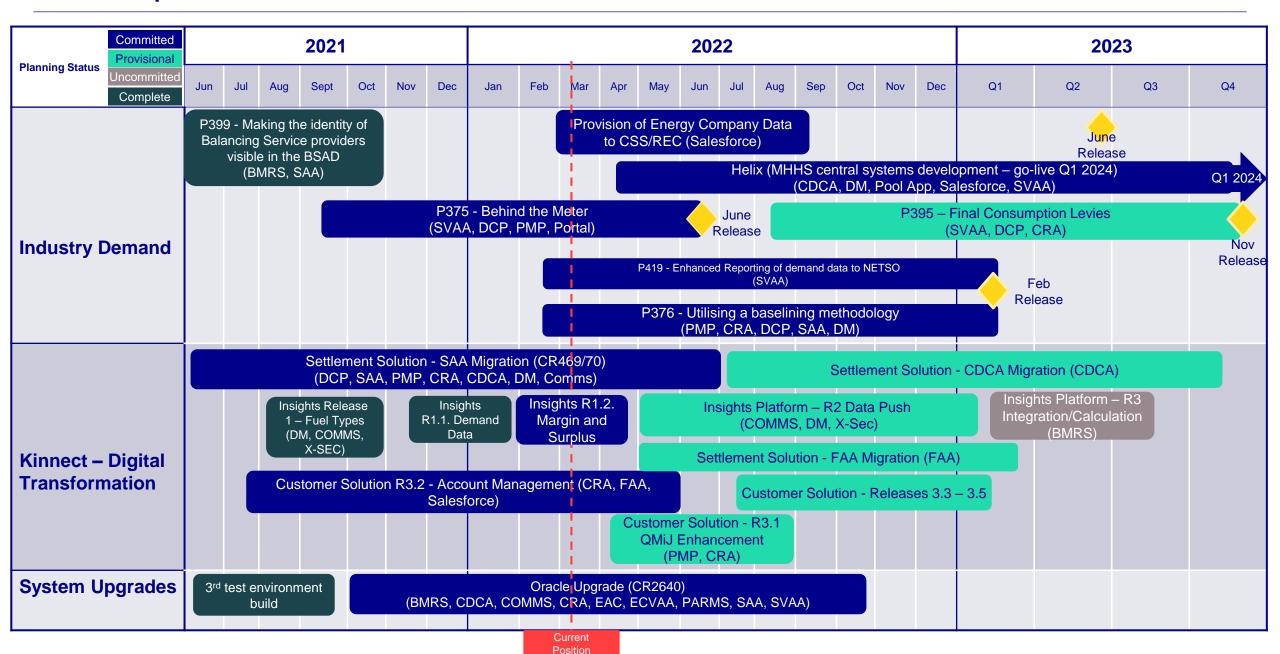
## **BSC Modifications approved timelines**

	Feb 22	Mar 22	Apr 22	May 22	Jun 22	<b>Jul 22</b>	Aug 22	Sep 22	Oct 22	Nov 22	Dec 22
P395 'Final Consumption Levies'				AR		DMR					
<b>P412</b> 'Non-BM Balancing Providers pay for non-delivery imbalance'							AR		DMR		
P415 'VLP access to wholesale market'											AR
<b>P425</b> 'Amend Shared SVA Metering Arrangement definition'					AR	DMR					
<b>P426</b> 'Combining Credit Cover for groups of related Parties'			AR <b></b>	- ĐMR							
<b>P427</b> 'Publish Parties impacts on Settlement Risks'			AR	- ĐMR							
P430 'Extend P375 solution to Suppliers'							AR	DMR			
P432 'HH Settlement for CT Advanced Meters'			AR	DMR							
P434 'Mandate Half Hourly Settlement for NHH UMS'	IWA				AR	DMR					
<b>P436</b> 'REC V3.0'	IWA		DMR								

## **BSC Change Release Roadmap**

2022	2022	2	Un-allocated		
Ad-hoc	Jun	Nov	Feb	Nov	
P332 'Revisions to Supplier Hub principle'	P375 'Asset Meters'	P427 'Publish Parties impact on Settlement Risks'	P376 'Baselining Methodology'	P395 'Final consumption levies'	P412 'Non-BM BS providers pay non-delivery'
P421 'Align BSC with Grid Code for TERRE Market Suspension'	P433 'Fix P375 legal text issues caused by P420'		P419 'BSUoS data'		P415 'VLP access to wholesale market'
P425 'Shared SVA Metering Arrangements'	CP1527 'Increase meter storage capacity'		P428 'Correct P376 drafting error'		P426 'Combining Credit Cover for groups of related Parties'
P432 'HH Settlement for CT Adv. Meters'	CP1546 'Use DTS for UMS summary inventories'				P430 'P375 extension to Suppliers'
P434 'HH Settlement for NHH UMS'	CP1550 'Voltage failure alarms'				MHHS
P436 'REC V3.0'					
	CP1552 'Updating BSCP520 timescales'				
	CP1553 'Meters and CT min. accuracy classes'				
	CP1554 'Updating meas. transformer standards'				Key
	P431 'Brexit Mod'				Approved With Authority
	CP1556 'CVA Qualification improvement for VLPs'				Report Phase Assessment Phase
	CP1532 'Reduce HH CoS to meet SF' & CP1557 'CP1532 HK CP'				Direction

## **Portfolio Pipeline and Plan**



## **Modification Update: P426**

## 'Combining related BSC Parties' Energy Indebtedness positions for the Credit Cover Percentage calculation'

- First Workgroup meeting planned for November 2021
- We formed a quorate Workgroup in February 2022
- We tried to first arrange meeting in March, but could not reach quoracy
- We are now trying to arrange first meeting for week commencing 18 April, five months later than planned
  - Flagged quoracy issue at November 2021 Panel meeting
  - Also needed to ensure range of experience represented
- We therefore request a five month extension, returning with the P426 Assessment Report by the August 2022 Panel meeting, or sooner if possible

## **Modification Update: P427**

## 'Publication of Performance Assurance Parties' impact on Settlement Risk'

- First Workgroup meeting planned for November 2021
- We were unable to schedule the first meeting until January 2022, due to forming a quorate Workgroup, two months later than planned
  - Flagged quoracy issue at November 2021 Panel meeting
- First meeting focused on what data should be published regarding performance and what requirements there would be to publish the data
- We have been engaging with the Performance Assurance Board and the Technical Assurance Metering Expert Group for their thoughts on whether we should publish Technical Assurance Agent data
- Second meeting held on 1 March and agreed solution for consultation
- One more meeting needed to consider costs and impacts and gather initial Workgroup views
- We therefore request a three month extension, returning with the P427 Assessment Report by the July 2022 Panel meeting, or sooner if possible

## **Modification Update: P432**

## 'Half Hourly Settlement for CT Advanced Metering Systems'

- Two Workgroup meetings have been held, one in January 2022 and one in February 2022
- We are now preparing to issue the Assessment Consultation week commencing 21 March
- However, there were some delays holding the first meeting, due to Workgroup availability and we have since had to take some unplanned time to consider some analysis from a Workgroup member that was not originally planned for
- We therefore request a one month extension, returning with the P432 Assessment Report by the May 2022 Panel meeting, or sooner if possible

## **Modification Update: P419 (1 of 2)**

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

- On 2 March, Ofgem alerted Elexon that it may be unable to provide a decision on P419 by 31 March 2022
- This is the 'decision by' date in the P419 Final Modification Report
- P419 will time out and close if a decision is not made by the 'decision by date' → a new Modification would be needed
- Ofgem considers that a decision on P419 must follow the decision on CMP308 given the interdependencies. It is currently
  preparing its final decision but may not publish prior to 31 March 2022
- This poses significant risk to the delivery of P419 on 23 February 2023, and of other knock-on impacts to the wider delivery pipeline
- Ofgem therefore requests that the Panel initially recommend an extension of the decision deadline until 1 June 2022
- This will be subject to a 5WD consultation, as per Section F 2.11.18
- Following the consultation the Panel will be asked for its final views, before submitting the recommendation to Ofgem for decision
- Ofgem's decision must be received before 31 March 2022 or P419 will timeout

## **Modification Update: P419 (2 of 2)**

- To meet the P419 Implementation Date of 23 February 2023, work on building P419 must begin in April 2022.
- Therefore, if a decision is not received by 31 March Elexon will be working at risk
- The expected committed costs of progressing P419 in April and May\* are:
  - April £45k £55k
  - May £25k £35k
- It is Elexon's view that the risk of P419 timing out and the consequential impacts on the overall delivery pipeline outweigh the risk of beginning on P419 before a decision is received from Ofgem

<sup>\*</sup>Please note that any costs relating to rework caused by the removal (or deactivation) of code related to P419 are not included in these estimates

### **Release Dates**

- We previous alerted the Panel to the REC's plans to move releasing changes from a Thursday to a Friday in August 2021
- We were minded to align with the REC proposal for the benefit of industry
- We last provided an updated in October 2021 to confirm we had raised the issue with CACoP and were working with CACoP and REC to minimise the impact on industry
- In November 2021, we presented the responses we received to a stakeholder survey on the REC proposal
  - The responses were mixed, with some objecting and some saying they could accommodate with minimal impact
- Following engagement with code bodies, via CACoP:
  - Similar risks were raised by other codes as were raised via our survey, ESO and Elexon (increased risk of work needing to be done at weekends, which may increase delivery costs and not all parties have these commercial arrangements)
- Main industry benefit to moving to a Friday, would be to maintain alignment across codes, but not all codes have confirmed their position
- ESO and Elexon are of the view that there are increased risks for participants (including ESO and Elexon) moving to a Friday, with little to no benefits to Parties.
- Further, if we approve BSC changes requiring consequential REC changes, for implementation on a Thursday, REC are obligated to implement on that date. Further, this will ensure delivery risks between ESO and Elexon do not increase.
- We therefore propose to keep the current arrangement of releasing on a Thursday

## **Potential Urgent Modification (1 of 2)**

- Giving effect to a sanctions order would be a legal requirement and so would have to be complied with
- The BSC currently has no arrangements that authorise Elexon or BSC Parties to give effect to sanctions
- There would therefore be risks to Elexon and Parties if a BSC Party was designated under a sanctions order
- By giving effect to a sanction, Elexon could be in breach of contract (the BSC) and open Elexon up to potential claims from the designated entity
- Sanction orders do sometimes incorporate wording that designated entities can't bring a claims for breach of contract, but that is not certain
- Two other risks have been identified:
- 1. The wording of sanction orders can be vague and it is not always obvious what steps need to be taken to comply with them
- As a result, even if a sanctions order included the breach of contract wording above, there would be a risk that Elexon would take a step that went beyond the scope sanctions order, or conversely Elexon does not fully comply
- This might particularly be the case for the BSC as sanctions won't be designed to align to BSC concepts
- 2. There might also be a risk of claims against Elexon from other BSC Parties if they were negatively impacted by steps taken to comply with the BSC but which were not authorised by the BSC

## **Potential Urgent Modification (2 of 2)**

- We have been seeking expert legal advice from Dentons on these risks
- Dentons' view was that we should be looking to address the sanctions risk in the BSC.
- They suggested that this could take the form of an Urgent Modification
- We are considering the scope of a potential modification. Options include a simple modification (e.g. 'BSCCo shall comply with sanctions order') or something more detailed which would potentially address the scope risk referred to above by including a BSC right to take specified steps regardless of the scope of a sanctions order
- We are undertaking some work to understand how an asset freeze under a sanctions order would impact BSC processes (e.g. suspension of payments, suspension of notifications/registrations etc) and the governance and approvals that might sit around this
- Could be conceptually similar to the Defaulting Parties process
- There might also be some benefit to Parties if a BSC Modification addressed some of the uncertainty for them as to what a sanctions order did, and did not, require of them in terms of their dealings, under BSC processes, with a designated entity
- We are engaging with Ofgem and other code bodies on this, as they were likely to have similar risks, so there might be an opportunity for there to be a co-ordinated approach across industry
- A Modification Proposal may therefore be needed to mitigate these risks. There is a strong argument for treating the Modification Proposal as Urgent:
- Be linked to an imminent issue7 or a current issue that if not urgently addressed may cause:
  - a. A significant commercial impact on parties, consumers or other stakeholder(s); or
  - b. A significant impact on the safety and security of the electricity and/or gas systems; or
  - c. A party to be in breach of any relevant legal requirements.

## **Recommendations**

## We invite the Panel to:

- a) APPROVE a four month extension to the P426 Assessment Procedure;
- b) APPROVE a three month extension to the P427 Assessment Procedure;
- c) APPROVE a one month extension to the P432 Assessment Procedure;
- d) RECOMMEND a new "decision by" date for P419 of 1 June 2022;
- e) COMMENT on the need for an Urgent Modification Proposal; and
- f) **NOTE** the contents of the March Change Report.

## ELEXON

Allowing non-BSC Parties to request Metering Dispensations

324/03 - Stanley Dikeocha

## **Background and Issue**

## **Background**

- BSC Section L 'Metering' outlines the requirements, roles and responsibilities for the Metering Dispensation Application
- A Metering Dispensation is utilised if the applicable Metering Equipment will not or does not comply with the requirement in the relevant Code of Practice (CoP)
- The expectation is that the application is submitted at least 14 weeks before the energisation of the applicable Metering Equipment site

### Issue

- Section L permits only the Registrant of a Metering System to apply for a Metering Dispensation. Registrants are typically appointed very close to or later than the recommended 14 weeks
  - Therefore, an early submission (at least 14 weeks before the site's energisation) of the application is prevented, lowering the opportunity for resolving any identified Settlement issues in time

## **Proposed solution**

## **Proposed solution**

- This Modification seeks to allow Meter Operator Agents (MOAs) to apply for Metering Dispensations on behalf of a non-BSC Parties (e.g. Meter manufacturers, site developers)
- The Proposer would also like the Workgroup to consider whether to include a generic Metering Dispensation as part of the proposed solution

## **Applicable BSC Objectives**

### This Modification better facilitates:

• Applicable BSC Objective (d) – By allowing non-BSC Parties to request Metering Dispensations, it will enable an earlier submission and assessment of the Application by the ISG/SVG. This increases the likelihood that Settlement issues, when identified, are addressed in a timely manner. Additionally, the administrative burden of submitting 'time critical' Metering Dispensation application will be removed

## **Benefits and outcome**

## **Benefits**

• This Modification will allow for amendments proposed by the ISG/SVG to be properly considered and implemented in a timely manner, thus improving Settlement accuracy of the relevant Metering Systems

## **Outcome**

 This Modification should put in place a provision for non-BSC Parties to request a Metering Dispensation, and the relevant MOA (SVA or CVA) to submit the application on their behalf

## **Areas to consider**

- In addition to the standard Workgroup's Terms of Reference, we aim to verify with the Workgroup:
  - If the scope of this Modification should be extended to allow non-BSC Parties to apply for Generic Metering Dispensation?
  - What mitigation(s) should be implemented to manage the impact on Registrants and what role will the Registrants play?

## **Proposed Progression**

- 4 month Assessment Procedure
- Workgroup membership
  - Metering Assurance and Compliance;
  - Settlement Risks;
  - Metering; and
  - · Members from the ISG and SVG

Event	Date		
Workgroup Meeting 1	W/C 18 April 2022		
Workgroup Meeting 2	W/C 16 May 2022		
Assessment Procedure Consultation (15WDs)	13 June 2022 – 5 July 2022		
Workgroup Meeting 3	W/C 11 July 2022		
Present Assessment Report to Panel	11 August 2022		
Report Phase Consultation (10WDs)	17 August 2022 – 31 August 2022		
Present Draft Modification Report to Panel	8 September 2022		
Final Modification Report submitted to Authority	15 September 2022		

## **Recommendations (Assessment Phase)**

We invite the Panel to:

- a) RAISE the Modification (in accordance with F2.1.1(d)(i));
- **b) AGREE** that this Modification progresses to the Assessment Procedure;
- c) AGREE the proposed Assessment Procedure timetable;
- d) AGREE the proposed membership for the Modification Workgroup; and
- e) AGREE the Workgroup's Terms of Reference.

## ELEXON

P435 'Enabling EMRS to undertake preparatory work for potential future settlement services to LCCC'

324/04 – Stanley Dikeocha

## **Background, Issue and Proposed solution**

## **Background**

- Elexon's "vires" defines what Elexon is allowed to do and are outlined in the Balancing and Settlement Code (BSC)
   Section C annex C-1
- EMRS was set-up via a direction from the Secretary of State (SoS) to support the Contracts for Difference (CfD) and Capacity Market (CM) schemes

### **Issue**

 The current provisions in BSC Section C does not allow LCCC to award or contract any new associated administration and settlement services to EMRS

## **Proposed solution**

- Amend the provisions in BSC Section C to enable EMRS (wholly owned subsidiary of Elexon) to complete the necessary
  preparatory work in relation to schemes established by the Secretary of State (SoS) outside of the Capacity Market (CM)
  and Contracts for Difference (CfD)
- The costs for the <u>preparatory work</u> will not be funded by BSC Parties

### P435: Panel's initial views

After raising P435 at its meeting on 10 February 2022, the Panel initially:

- a) **DESIGNATED** LCCC to raise the Modification Proposal;
- **b) AGREED** that this Modification progresses directly to the Report Phase;
- c) AGREED that this Modification:
- i. **DOES** better facilitate Applicable BSC Objective (b); and
- ii. **DOES** better facilitate Applicable BSC Objective (d)
- d) AGREED that this Modification DOES NOT impact the EBGL Article 18 terms and conditions held within the BSC;
- e) AGREED an initial recommendation that this Modification should be approved;
- f) AGREED an initial view that this Modification should **not** be treated as a Self-Governance Modification;
- **g) AGREED** an initial Implementation Date of:
- i. **5WDs** after Authority approval
- h) AGREED the draft legal text; and
- i) NOTED that Elexon will issue the Draft Modification Report (including the draft BSC legal text) for a 10WDs consultation and will present the results to the Panel at its meeting on 10 March 2022.

## **P435: Report Phase Consultation responses**

- The Report Phase Consultation opened on 15 February 2022 and closed on 1 March 2022, for a total
  of 10WDs
- Industry were reminded to respond through the standard BSC communication channels
- We did not receive any response to the Consultation

## **P435: Recommendations**

We invite the Panel to:

- a) AGREE that P435:
  - i. **DOES** better facilitate Applicable BSC Objective (d);
- b) AGREE that P435 DOES NOT impact the EBGL Article 18 terms and conditions held within the BSC;
- c) AGREE an initial view that this Modification should **not** be treated as a Self-Governance Modification;
- d) APPROVE an initial Implementation Date for P435 of **5WDs after Authority approval**;
- e) APPROVE the draft legal text for P435; and
- **f) APPROVE** the P435 Modification Report.

## ELEXON

**P415 CBA Methodology** 

324/05 – Lewis Heather/Ivar Macsween



## P415 CBA Methodology

Presentation to the Panel

BSC Panel 10 March 2022



# Important information



This document was prepared by CEPA LLP (trading as CEPA) for the exclusive use of the recipient(s) named herein.

The information contained in this document has been compiled by CEPA and may include material from other sources, which is believed to be reliable but has not been verified or audited. Public information, industry and statistical data are from sources we deem to be reliable; however, no reliance may be placed for any purposes whatsoever on the contents of this document or on its completeness. No representation or warranty, express or implied, is given and no responsibility or liability is or will be accepted by or on behalf of CEPA or by any of its directors, members, employees, agents or any other person as to the accuracy, completeness or correctness of the information contained in this document and any such liability is expressly disclaimed.

The findings enclosed in this document may contain predictions based on current data and historical trends. Any such predictions are subject to inherent risks and uncertainties.

The opinions expressed in this document are valid only for the purpose stated herein and as of the date stated. No obligation is assumed to revise this document to reflect changes, events or conditions, which occur subsequent to the date hereof.

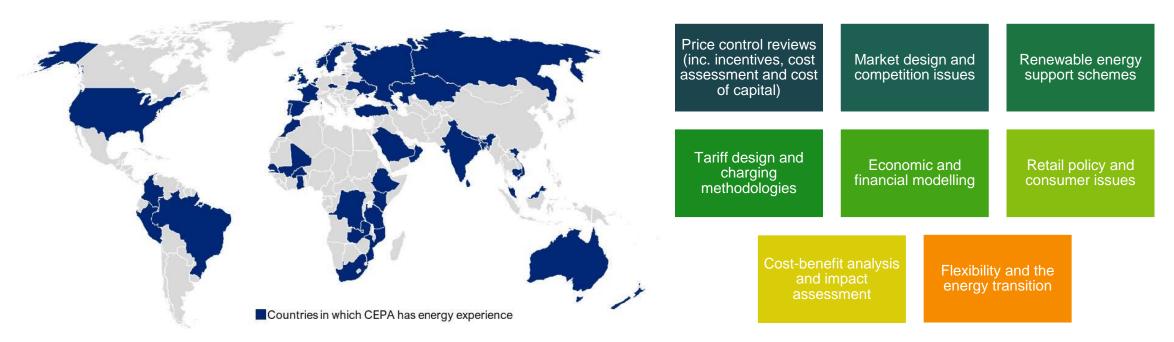
CEPA does not accept or assume any responsibility in respect of the document to any readers of it (third parties), other than the recipient(s) named herein. To the fullest extent permitted by law, CEPA will accept no liability in respect of the document to any third parties. Should any third parties choose to rely on the document, then they do so at their own risk.

The content contained within this document is the copyright of the recipient(s) named herein, or CEPA has licensed its copyright to recipient(s) named herein. The recipient(s) or any third parties may not reproduce or pass on this document, directly or indirectly, to any other person in whole or in part, for any other purpose than stated herein, without our prior approval.

## About us



- CEPA is an economics consultancy based in London, with an office in Sydney, Australia.
- We advise private and public-sector clients worldwide about matters where economics, finance and public policy overlap.
- Our energy sector experience spans the globe and features projects from across the supply chain.



- We have extensive experience in undertaking cost benefit analyses (CBAs) for clients across the energy, transport, and water sectors.
- We recently supported Elexon with a CBA of modification P379 (meter splitting).

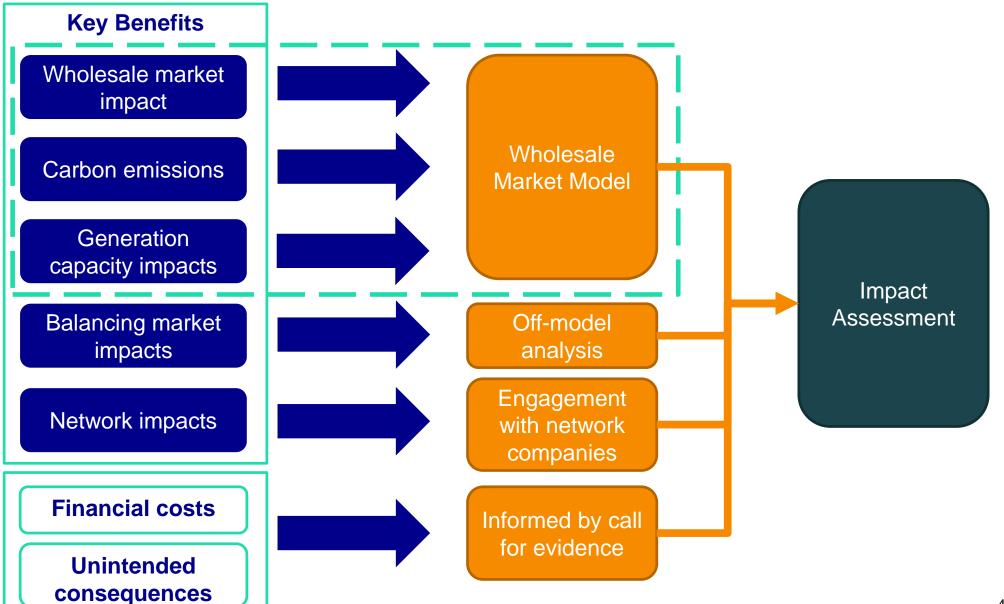
## Introduction



- CEPA has been appointed to carry out a CBA of P415 'Facilitating access to wholesale markets for flexibility dispatched by Virtual Lead Parties'.
- We have been finalising our approach and have engaged with the Workgroup to test our methodology.
- A Methodology Note has been circulated to the Panel alongside these slides.
- In today's session, we provide a chance for final comments on our methodology before we progress to the analysis.
- We present some questions for the Panel on key assumptions but welcome wider questions on our methodology.
- We expect to report to the Panel in July with findings from the CBA.

# Key elements of the methodology





# Questions for the Panel



• Engagement with Workgroup has informed our development of assumptions. We want to test some of these views with the Panel:

Workgroup view	Questions for Panel
Only BSCCo and VLPs are likely to face significant direct financial costs of P415 implementation. Other than the costs of socialised compensation, they did not expect suppliers to face significant implementation costs.	Are any market participants other than BSCCo and VLPs likely to face any financial costs of implementation?
VLPs will deliver the majority of future DSR in the wholesale market if P415 is implemented.  Very little flexibility would be delivered in the wholesale market if P415 is not implemented (e.g. by suppliers).	How dependent is the delivery of future flexibility in the wholesale market on VLP participation? To what extent would alternative business models (supplier contracting of DSR from large businesses, responses to ToU tariffs) deliver flexibility even in the absence of P415?
Engagement with the Workgroup has raised the potential for unintended consequences captured on slide 7.	Are there any other potential unintended consequences of P415 that need to be considered?
Engagement has led us to assumptions of the cost base of VLPs included on slide 8.	Do you have any comments on these cost assumptions?

# Unintended consequences



- We will use a 'Call for Evidence' to consider the potential for unintended consequences.
- We will include consideration of:
  - Impacts of compensation on supplier costs
  - Cannibalisation of DR participation through suppliers i.e. undermining 'additionality' of benefit Cannibalisation of DR participation in other markets e.g. potential for lower volumes of aggregator participation in other markets if unable to provide a response in both
  - Additional complexity/confusion for consumers
  - Risk of non-delivery of volumes, increasing market uncertainty and potentially undermining generation/network capacity savings. We will consider the extent to which financial penalties for non-delivery in the wholesale and balancing markets would alleviate this risk.

## VLP cost estimates



• Submissions from VLPs have informed the following assumptions for fixed and variable cost of VLP participation.

	Residential customers - load shifting and peak reduction	Industrial and commercial – load shifting	Industrial and commercial – peak reduction
Up front fixed costs (£/MW)	Similar customer acquisition costs to a supplier + fixed costs of enabling technology	C. £2.5k - £6k/MW	C. £2.5k - £6k/MW
Ongoing fixed costs (£/MW/yr)	Similar costs to serve to a supplier + enabling technology operation and maintenance	C. £1.2k - £5k/MW/yr	C. £1.2k - £5k/MW/yr
Variable costs (£/MWh)	~£0 (assuming minimal disruption for the flexibility provider)	~£0 (assuming minimal disruption for the flexibility provider)	Multiple tranches: 1 <sup>st</sup> tranche: c. £50/MWh 
			Nth tranche: c. VoLL – 10%



### UK

Queens House 55-56 Lincoln's Inn Fields London WC2A 3LJ

T. +44 (0)20 7269 0210

E. info@cepa.co.uk

www.cepa.co.uk

Australia

Level 20, Tower 2 Darling Park 201 Sussex Street Sydney NSW 2000

T. **+61 2 9006 1308** 

E. info@cepa.net.au

www.cepa.net.au











Annexes – Further detail on approach



# Annex – Benefits assessment

# Estimating impacts on generation capacity



 We will adopt the following approach for assessing the potential benefit of a reduction in generation capacity requirements:

**Scenario-based potential capacity**: Model generation capacity in line with each FES scenario

**Endogenous dispatch**: Allow model to solve dispatch given VLP DSR participation under the options

'Capacity margin' calculation: Use modelled results to measure the 'capacity margin' – i.e. the minimum generation capacity headroom in any annual period

**Hypothesis**: The 'capacity margin' should increase relative to the counterfactual if aggregator participation allows for a reduction in generation capacity requirements

**Valuing spare capacity**: We can value the spare capacity of each technology type at capex/FOM+VOM estimates, therefore approximating monetary value of unneeded nameplate capacity

# Balancing market



- We put forward two hypotheses for the impact on the balancing market:
- Positive externalities: Additional revenue opportunities will increase volumes of VLP aggregation in the market. This will have positive externalities for other markets, including the balancing market.
- 2. Imbalance reduction: Additional volume of flexible VLP aggregation in the wholesale market will generally work in the opposite direction to the imbalance position. This mechanism assumes that this activity will tend to reduce imbalance relative to the counterfactual.
- The workgroup expected the **first mechanism (positive externalities)** to be more material. We will focus our analysis on this mechanism.
- From our market model, we will observe the volume of VLP participation in the wholesale market.
- Working with the Electricity System Operator, we will consider the interactions between volumes and costs of VLP wholesale market participation, and the potential to deliver cost efficiencies in the balancing market and system services.
- While we cannot commit to precise quantification of balancing market benefits, we will seek to develop a sense of the order of magnitude in comparison to other benefits and cost categories.

## Network costs/benefits



- The hypothesis is that by reducing demand and therefore the need for dispatch at peak, VLP participation in the wholesale market may alleviate the need for network capacity expansion.
- We will test this hypothesis through engagement with the network companies.
- This mechanism will not be modelled. Analysis will be largely qualitative but supported by numerical estimates based on information provided by network companies if/where possible.
- We want to test several questions:
  - 1. To what extent will networks be able to build potential VLP volumes into peak network planning and defer/avoid reinforcements by 2033 (i.e. within the next two price control periods)?
    - a) Given necessary risk aversion in network security standards, would this result in a material reduction in network capacity planning?
  - 2. Could there be positive externalities of greater VLP participation in relation to DSO/ESO procured flexibility (similar to the balancing market hypothesis)?
  - 3. Are there any potential cost impacts on networks to manage greater localised flexibility/volatility of demand and dispatch?

## Wider benefits



- Several further benefits were put forward by Workgroup participants previously. These include:
  - positive externalities of additional DSR availability for CM prices (where additional to capex benefits of capacity reduction) and wider system services<sup>1</sup>;
  - security of supply and resilience from diversification;
  - providing choice and competitive pressures for customers looking to provide flexibility in the wholesale market;
  - additional source of DSR which can support distributed energy and renewables integration;
  - additional source of DSR which can support electrification of heat and transport; and
  - benefits in the supply chain for demand side response services and products;
- We will explore these potential wider benefits qualitatively, including through further engagement with the Workgroup.

<sup>&</sup>lt;sup>1</sup> Care needs to be taken not to double count externalities across multiple markets.



# Annex – Costs assessment

## Financial costs



- Previous work identified several stakeholders who may face financial cost impacts
- We will explore these cost categories through a 'Call for Evidence'
- Wherever possible, we will draw on numerical cost estimates provided to quantify costs to the extent possible. We request that cost submissions are supported with as strong an evidence base as possible. Evidence-based submissions will be weighted more highly in our cost assessment.

Market participant	Potential costs
BSCCo	Implementation of processes and systems. Ongoing operation of processes and systems.
Suppliers	New data and governance requirements? Costs depend on chosen compensation mechanism. If compensation is mutualised then additional costs fall on suppliers.
Virtual Lead Parties	New data and governance requirements?
NGESO	Implementation of processes and systems. Ongoing operation of processes and systems.

# **Compensation variants**



• Based on Workgroup discussion, we will assess the following compensation variants of P415.

Variant	Who pays?	Compensation price	Analytical approach
Proposer	Virtual lead parties	Estimate of supplier sourcing costs (with methodology being developed by Elexon)	Incorporate compensation as additional variable cost on aggregator participation. It is likely that the sourcing cost methodology will need to be approximated in the model – e.g. as a fixed discount on a historical average of the spot price.
Alternative	Socialised across all suppliers	Spot price	Assume that socialised compensation has negligible impact on variable costs of market participants so no additional cost is included in the model.  We will estimate the total level of socialised compensation based on outputs of aggregated volumes of DSR from the model.



Annex – Key elements of modelling methodology

# Modelling methodology (recap)



To appraise modelled benefits, we will set up the wholesale market model as follows:

Feature	Model definition
Overarching structure	<ul> <li>Single wholesale market model</li> <li>Endogenous dispatch, price formulation and carbon intensity assessment</li> </ul>
Model runs	<ul> <li>Modelling against three background scenarios, drawing on NG Future Energy Scenarios (see slide 40)</li> <li>Modelling of two compensation variants and counterfactual</li> </ul>
Temporal definition	<ul> <li>10-year modelling horizon (2024 – 2033)</li> <li>Modelling of three spot years (2024, 2029 and 2033) with interpolation of key variables between years</li> <li>Hourly granularity of dispatch and price formulation</li> </ul>
Generation and demand	<ul> <li>Modelling of c. 20 generation archetypes and c. 10 demand archetypes</li> <li>Incorporate VLP archetypes who deploy flexibility from consumer technologies, drawing on data provided to us by aggregator Workgroup participants.</li> <li>Endogenous volume of VLP flexibility deployment and assessment of required generation capacity to meet demand.</li> </ul>

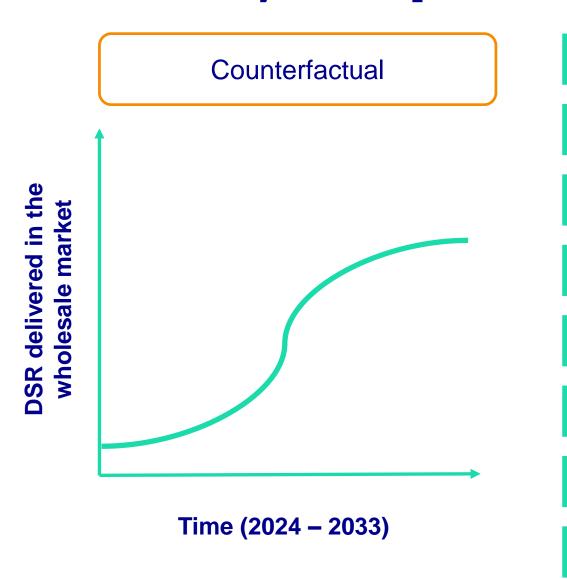
# 'Additionality' of VLP provision

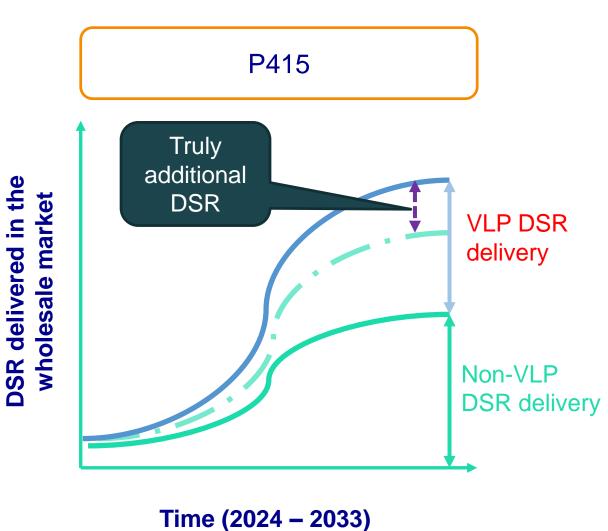


- The impacts of P415 will be compared against the counterfactual i.e. what would happen if P415 was not approved.
- A key challenge is considering the true 'additionality' of any DSR delivered by VLPs in the wholesale market. I.e. the volume of flexibility that would not have been delivered under the counterfactual.
- Some proportion of DSR delivered by VLPs may have been delivered anyway through other mechanisms - e.g. directly contracted by suppliers or delivered by consumers on time-of-use meters.
- We need to account for this by reducing 'non-VLP' delivered DSR in the market under the P415 options relative to the counterfactual.

# 'Additionality' of VLP provision







## **P415: Recommendations**

We invite the Panel to:

a) NOTE the update



# PART III: NON-MODIFICATION BUSINESS (OPEN SESSION)

Minutes of previous meetings and Actions arising

Fionnghuala Malone

**Chair's Report** 

Michael Gibbons

# **Elexon Report**

324/01 – Sara Vaughan

# **Distribution Report**

Fungai Madzivadondo

**National Grid Report** 

Jon Wisdom

**Ofgem Report** 

Colin Down

Application for a derogation under BSC Section K5.2.1 for the Isle of Man Interconnector

323/09 - Katie Wilkinson

**Review of BSC Specified Charges** 

324/07 - Kathy Ferrari

## **Recommendations**

We invite the Panel to:

- a) APPROVE the new SVA Specified Charge of £0.00992/SVA MSID per Month
- b) APPROVE the new MHHS Monthly Implementation Charge of £0.05074/SVA MSID per Month
- c) APPROVE a reconciliation of the SVA Specified Charge rate in the 2021/22 Final Reconciliation process

**Updates to Panel Committees ToR** 

324/09 - Victoria Moxham

### Recommendations

## We invite the Panel to:

- a) APPROVE the proposed changes to ISG's Terms of Reference
- **b) APPROVE** the proposed changes to SVG's Terms of Reference
- c) APPROVE the proposed changes to PAB's Terms of Reference
- d) APPROVE the proposed changes to TDC's Terms of Reference
- e) APPROVE the proposed changes to CC's Terms of Reference



# PART IV: CONFIDENTIAL BUSINESS (CLOSED SESSION)

# MEETING CLOSE