P415 Microsoft Teams Meeting

- Welcome to the P415 teleconference we'll start in a moment
- No video please conserve bandwidth
- All on mute use IM if you can't break through
- Talk pause talk
- Lots of us are at home be mindful of background noise and connection speeds
- "Raise your hand" feature to let the chair know you'd like to speak

Slido Guidance

- In order to ensure that all participants' voices are heard we are using the Sli.do plug-in for MS Power Point.
- Everyone should be able to provide views live during the presentation using Sli.do
- 1 vote per organisation

Requirements:

- Internet access
- Web browser



ELEXON

P415 - WG09

Facilitating access to wholesale markets for flexibility dispatched by Virtual Lead Parties

Meeting Objectives and Agenda

1. CBA Approach

DISCUSS the hypothesised P415 balancing market benefit to feed into the CBA.

2. P415 Solution

- CONDUCT an end-to-end review of the Proposer's P415 Solution to date;
- **DETERMINE** an opinion whether an alternate solution better addresses the defect (or not); and
- **AGREE** the P415 solution requirements

Meeting Objectives and Agenda

Agenda Item	Lead
Welcome and meeting objectives	Elliott Harper (Chair)
Meeting 8 Summary	Ivar Macsween (Elexon)
Understanding Hypothesised P415 Balancing Market Benefit	Lewis Heather (CEPA), Workgroup
P415 End to End Solution Review	Matthew Roper (Elexon), Workgroup
Next Steps	Ivar Macsween
Meeting Close	Elliott Harper



SUMMARY OF 8TH MEETING

CBA Update

- Elexon updated the Workgroup with the information that Elexon had identified a Preferred Supplier and intended to award the contract for the CBA work to them shortly after the meeting. Elexon also clarified that the CBA process is projected to take around 6-7 months, with work expected to begin in January 2022, and that the BSC Panel have approved funds so that the work may commence.
- Further communications about the Preferred Supplier's industry engagement approach will be relayed to the group shortly, but will likely take the form of targeted bilateral engagements and workshops, assisting in the definition of the counterfactual, testing of assumptions and finalising the approach for incorporating variants into the analysis.

Amendment to P415 Solution Principle 4

• The Workgroup considered the previously agreed P415 solution principles. One member suggested a change to Principle 4 'The registered Supplier at a site where the customer has chosen to use VLP independent aggregation services shall receive [no benefit] nor suffer detriment from such service' to recognise differential that Suppliers could receive under P415. One member prefers the wording 'no specific benefit' while the Proposer prefers 'no direct benefit' at this stage.

P415 Solution: Supplier Compensation Volumes

- Elexon summarised the agreed P415 imbalance solution summary, noting that the Workgroup previously chose not a distinguish between BM and WM volumes included in the Deviation Volume. Therefore the impacted Supplier was to be compensated for both BM and WM volumes (i.e. all the calculated Deviation Volumes).
- Elexon legal advice confirmed that compensating BM volumes is not within scope of the P415 defect. Should Supplier BM compensation be included in the solution and is legally challenged then the challenge is likely to be successful. Therefore the P415 solution should only compensate Suppliers for WM Volumes.
- As Supplier adjustments are calculated on a MSID basis the P415 solution needs to distinguish between BM and WM volumes at this level.

Non-delivery calculation

• The non-delivery calculation identifies per Settlement Period whether a BMU has delivered against the balancing actions it has received and whether it has benefitted from that non-delivery. To do so it compares a BMU Expected Metered Volume (QME) against the actual BMU Metered Volumes (QM). Settlement then compares the price the Party will be paid (i.e. Acceptance Price) against the price the party will be charged for non-delivery (Imbalance Price). The WG previously wanted no change to the P376 non-delivery calculation.

Outcomes

- The Workgroup confirmed that they do not have a conceptual problem with proportional allocation, and that not distinguishing between BM and WM in energy imbalance calculations (counting all the supplier imbalance position correction as balancing volumes) was not seen as an issue, with members describing this as just a label, with it being more important to come out with the right number.
- It was also noted by the Proposer that the need to separate WM and BM volumes for different supplier compensation treatment is likely to be temporary (as there should be a subsequent mod to align the compensation treatment) and he favoured this simple solution.



P415 CBA Methodology

Initial Presentation to the P415 Workgroup



P415 Workgroup

l February 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.

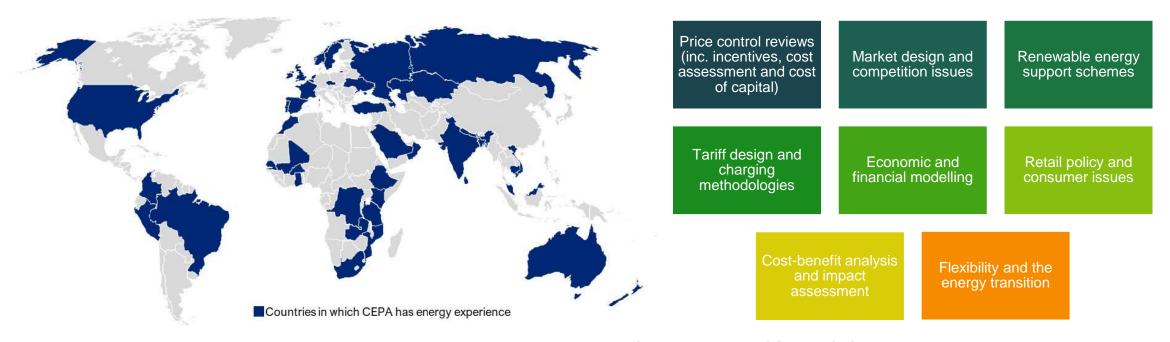
CEPA does not accept or assume any responsibility in respect of the document to any readers of it (third parties), other than the recipient(s) named herein. To the fullest extent permitted by law, CEPA will accept no liability in respect of the document to any third parties. Should any third parties 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).

Agenda

CEPA

- 1. Introduction
- 2. Key elements of methodology
- 3. Impacts of P415 on the balancing market



Introduction

Introduction



- CEPA has been appointed to carry out a CBA of BSC Modification P415.
- This follows our initial work on scoping options for a CBA. We attended a Workgroup to discuss options for the CBA last year.
- We will be discussing our methodology in more detail at the Workgroup session on 22nd February

Objectives of this session:

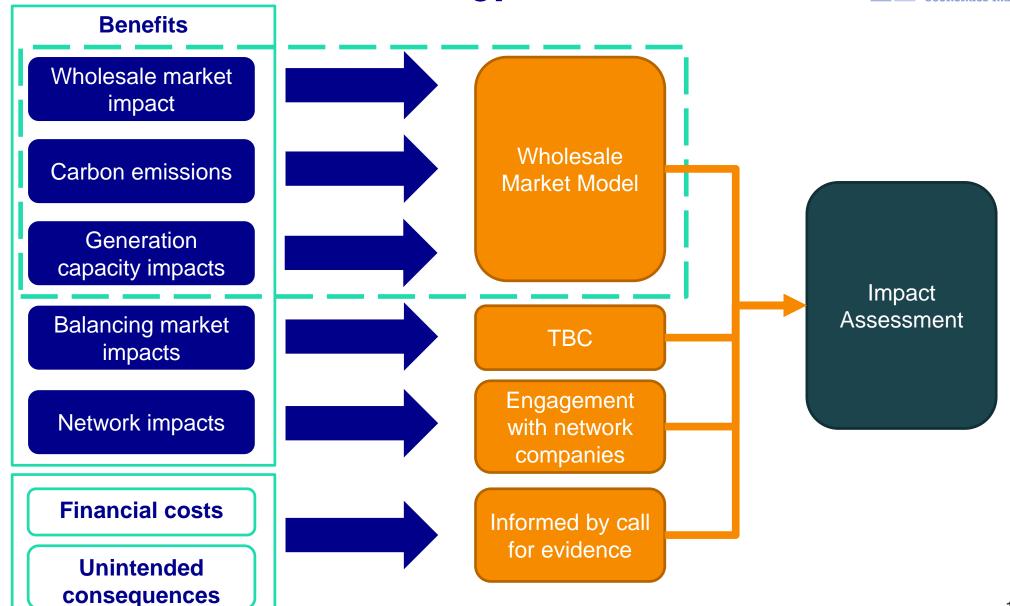
- 1. Provide a high-level summary of key elements of the methodology. This understanding may be relevant for the Workgroup's discussion of the P415 modification in the remainder of today's meeting.
- 2. Discuss the hypothesized benefit relating to the balancing market. This discussion will inform our approach for analysis of the benefit.



Key elements of the methodology

Key elements of the methodology





Modelling methodology



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

Feature	Model definition
Overarching structure	 Single wholesale market model Endogenous dispatch, price formulation and carbon intensity assessment
Model runs	 Modelling against three background scenarios, drawing on NG Future Energy Scenarios Modelling of two compensation variants and counterfactual
Temporal definition	 10-year modelling horizon Modelling of three spot years with interpolation of key variables between years Hourly granularity of dispatch and price formulation
Generation and demand	 Modelling of c. 20 generation archetypes and c. 10 demand archetypes Definition of three aggregator archetypes, drawing on data provided to us by aggregator Workgroup participants. Endogenous entry of aggregation capacity and assessment of required generation capacity to meet demand.



Balancing market impact

Balancing market impact



- We would like to better understand the hypothesised mechanism for benefits of P415 for balancing market costs.
- From previous engagement we identify two possible mechanisms:
- 1. Positive externalities: Additional revenue opportunities will increase volumes of aggregation in the market. This will have positive externalities for other markets, including the balancing market.
- 2. Net Imbalance Volume (NIV) reduction: Additional volume of flexible 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 the NIV relative to the counterfactual in which aggregation is not participating.

Which of these hypothesised mechanisms do you agree with? Which do you expect will be the most significant?



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











END TO END SOLUTION REVIEW

E2E Objectives

1. P415 Solution

- NOTE the Proposer's P415 solution
- **DETERMINE** an opinion whether an alternate solution better addresses the defect (or not)
- **AGREE** the P415 solution requirements

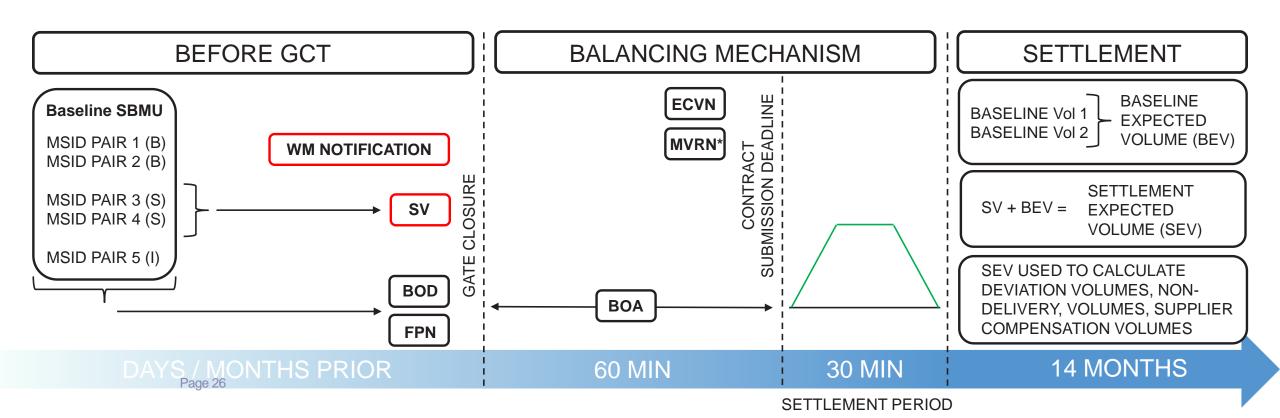
We will be discussing alternate solution elements (where WG consensus has not been reached) and will be asking WG to vote on their initial / current preferred solution (noting we are awaiting the CBA results).

P415 Solution Principles

- 1. Through independent aggregation a VLP shall be able trade Deviation Volumes on the wholesale market on behalf of their customer(s). These trades shall be captured in the same manner as existing Parties i.e. ECVN.
- 2. Deviation Volumes are a measurable commodity that represent an import/export MWh deviation to the Total System
- 3. The VLP shall be the Balancing Responsible Party (BRP) for any wholesale market Deviation Volumes traded. Neither the counterparty nor registered Supplier shall bear any liability for delivery of the trade
- 4. The registered Supplier at a site where the customer has chosen to use VLP independent aggregation services shall receive no direct benefit nor suffer detriment from such service.
- 5. VLPs shall have no advantage over existing Trading Parties and be subject to same BSC rules and requirements (where appropriate)
- 6. Through independent aggregation a VLP shall be able to trade Deviation Volumes in the wholesale market and provide other flexibility services during the same Settlement Period on behalf of their customer(s).

P415 Timeline

- Pre GCT Activity: Registration activity (Qualification / P376 Baseline SBMU / MSID Pair Allocation / Credit)
 BOA activity (FPN / BOD / Dynamic Data)
 WM activity (SBMU WM Notification)
- Pre Settlement Period Activity: Contract Notifications (ECVN and MVRN)
- Post Settlement Period Activity: Settlement (SEV / Deviation Volumes / Compensation / Imbalance Volumes)



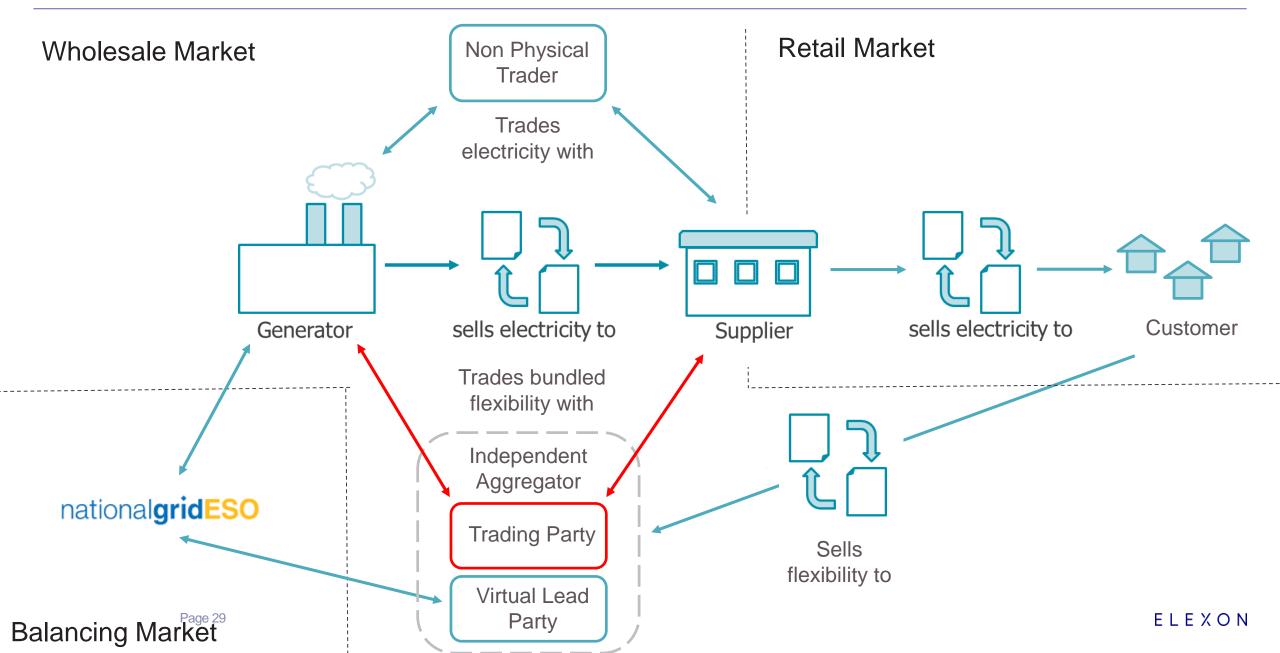


TRADING PARTY (VLP) REGISTRATION

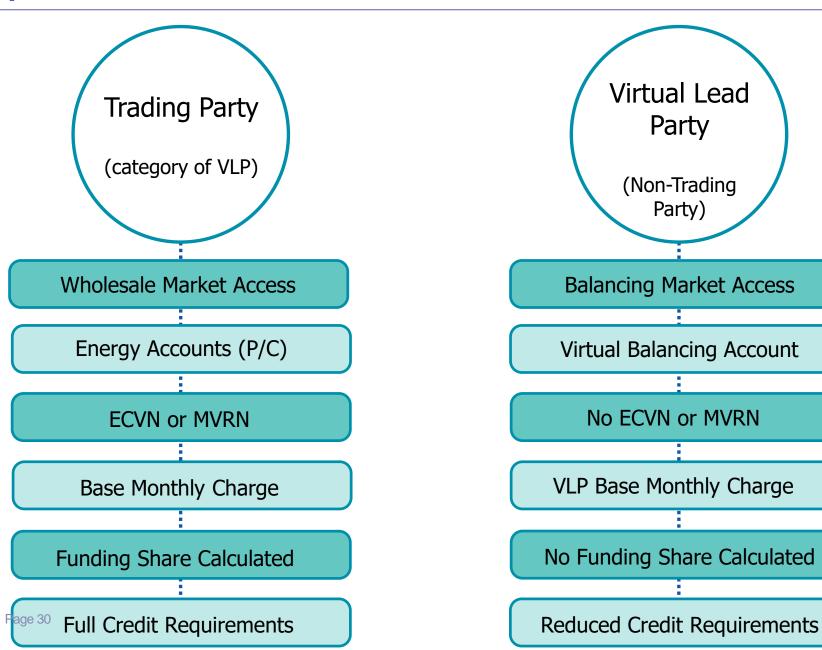
Secondary BM Units

Ref	Description
BR01	Independent Aggregators shall be able to register as a BSC Trading Party under a new Trading Party role type (Virtual Lead Party).
BR02	Independent Aggregators wishing to register as a BSC Trading Party (in the new category of Virtual Lead Party) shall undergo the SVA Qualification process.
BR03	Independent Aggregators wishing to register as a BSC Trading Party (in the new category of Virtual Lead Party) shall undergo the CVA Qualification process.
BR04	Secondary BM units shall no longer be only used for balancing services and can be registered to a Trading Party (in the new category of Virtual Lead Party)

BR01: New Trading Party role type (Virtual Lead Party)



Role Comparison



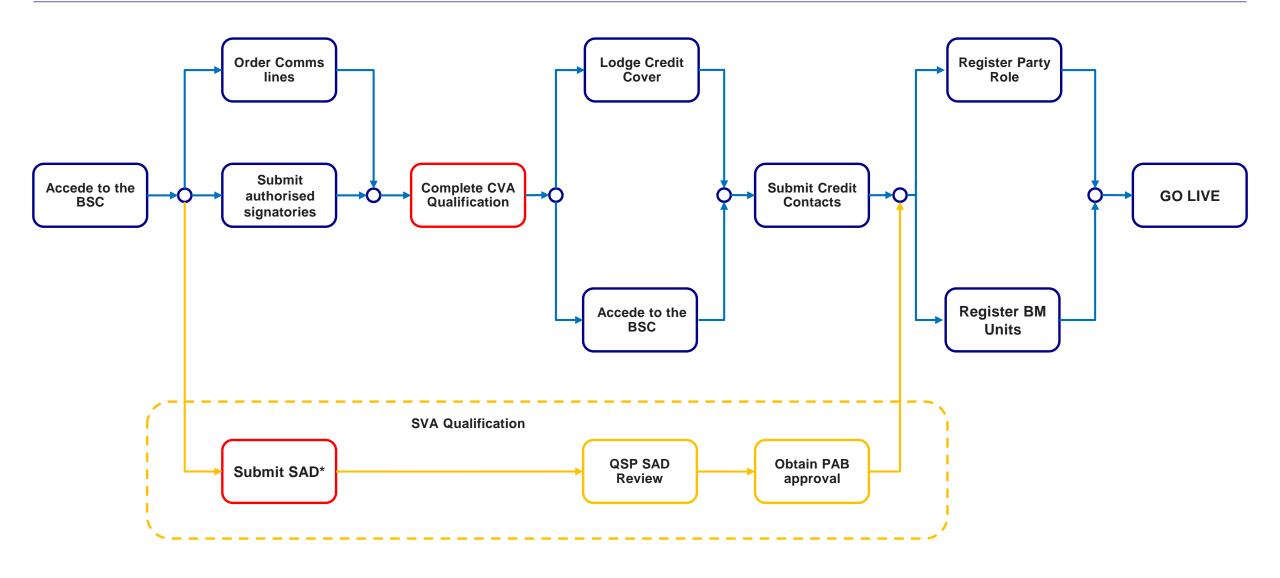
BSC Funding Shares

As a Trading Party (in the new category of VLP) Independent Aggregators will be liable for BSC Cost recovery via Funding Shares.

- the Main Funding Share (FSM_{pm}) of a Trading Party is its proportionate share of Credited Energy Volumes
- the SVA (Production) Funding Share (FSPS_{pm}) of a Trading Party is its proportionate share of Credited Energy Volumes for Production BM Units
- the **General Funding Share** of a Trading its proportionate share of the aggregate of certain BSCCo Charges (of which a Trading Party in the category of VLP shall be liable).
- The Annual Funding Share of a Trading Party is the sum of its General Funding Shares for the 12 consecutive months ending with and including that month, divided by the sum for all Trading Parties of their General Funding Shares for such 12 months.

Note as Deviation Volumes are not metered volumes they do not contribute towards Credited Energy Volumes in the "Main Funding Share" and "SVA (Production) Funding Share" calculations.

Market Entry Process



BR02 BR03: Trading Party (Virtual Lead Party) Performance Assurance Activity

CVA Qualification

Tests to be completed in order to ensure that the party is able to communicate, through electronic interfaces (i.e. CRA, CDCA, ECVAA & SAA Data Flows), with central systems.

Add test requirements for Trading Party (VLP role) (i.e. the same as other Trading Parties)

SVA Qualification

Submit Self Assessment Document (SAD) detailing an organisation's systems and processes that have been developed in line with BSC requirements and good practice. Qualification provides assurance that an organization won't pose a risk to settlement.

 Add section within the SAD specifically for Trading Party (VLP) covering additional (in relation to a VLP) BSC requirements

BR04: Secondary BM Units

A Trading Party (in the new category of Virtual Lead Party) shall be able to register baselined Secondary BM Units in the same manner as existing VLP participation capacity. Secondary BM units shall continue to have the same requirements and restrictions as per the existing arrangement.

Note: only baselined Secondary BM Units shall have Deviation Volume calculated and so impact the imbalance position of a Trading Party (in the new category of Virtual Lead Party).



CREDIT

Secondary BM Units

Ref	Description
BR05	Secondary BM Units (whose lead party is VLP Trading Party) shall be treated as a Non-Credit Qualifying BM Unit.
BR06	Independent Aggregators wishing to register as a BSC Trading Party (in the new category of Virtual Lead Party) shall undergo the SVA Qualification process.

BSC Credit Arrangements Recap

What is Credit Cover?

Credit Cover is needed because <u>Trading Charges are paid approximately 29 calendar days after a Settlement Day occurs</u>. Over this period a Party's Credit Cover ensures it has enough collateral to cover these payments in case of default.

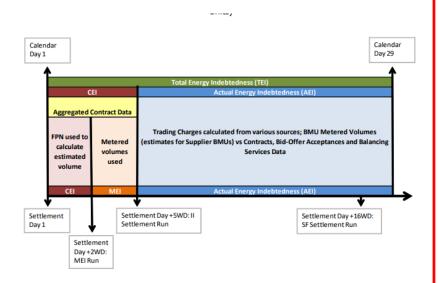
How is it calculated?

For each Settlement Period, the Total Energy Indebtedness (TEI) is the sum over the previous 29 calendar days (including the current Settlement Day) of:

- Credit Assessment Energy Indebtedness (CEI) a calculated estimate of indebtedness
- Metered Energy Indebtedness (MEI)
 calculated indebtedness using CDCA data
- Actual Energy Indebtedness (AEI)
 calculated indebtedness using trading charges

BSC Credit Arrangements Recap (2)

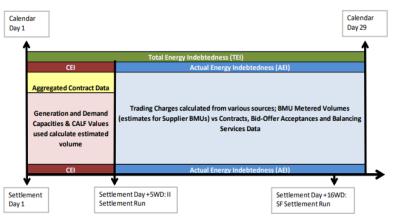
1. Credit Qualifying BM Units



If the <u>Primary BM Unit</u> is not an Interconnector BM Unit and is <u>required to submit Final Physical Notifications</u> to the System Operator, it can qualify as a Credit Qualifying BM Unit as long as it has:

- A Production Status flag (i.e. it's classed as a generating BM Unit); or
- Exempt Export status;

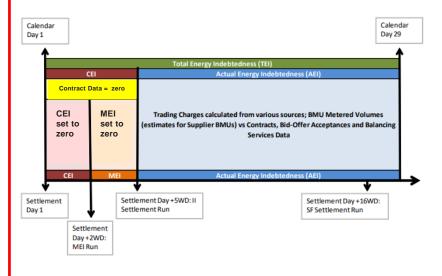
2. Non-Credit Qualifying BM Units



GC and DC submissions are required. The GC / DC are the expected maximum positive and negative metered volume for a single Settlement Period in a the BSC Season.

GC/DC and a BM Unit specific load factor (CALF) is used to calculate Credit Assessment Credited Energy Volumes (CAQCE) (i.e. an estimate your BM Unit metered volume).

3. Secondary BM Units



As by definition a Secondary BM Unit is not a Primary BM Unit it cannot be neither credit or non-credit qualifying and has its energy indebtedness calculated as below:

CEI set to zero
MEI set to zero
AEI calculated from Trading Charges



BR05: SBMU Credit Requirements

Proposal: Secondary BM Units (whose lead party is VLP Trading Party) shall be treated as a **Non-Credit Qualifying BM Unit**.

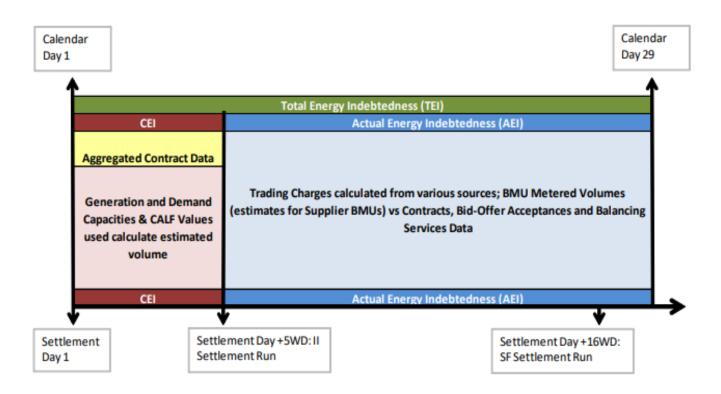


Figure 1: The Credit Calculation for non-Credit Qualifying Primary BM Units.

NOTE that VLP Trading Party shall only have CEI calculated when they are active in the wholesale market (i.e. where a Whole Market Notification has been received).

P415 Credit Proposal

Credit Assessment Energy Indebtedness (CEI) shall be calculated as follows:

 $CEI_{pj} = -((\sum Credited Energy Volumes + \sum Deviation Volumes) - \sum Contractual Volumes)$

- Credited Energy volumes represent any MVRN where the VLP holds the subsidiary Energy Account
- Deviation Volumes represent the actions they have taken as a VLP in the wholesale market
- Contractual volumes represent the bilateral contracts the VLP has entered into

P415 Credit Proposal

Adapting the existing process for SBMU

Submission of GC / DC

GC for a SBMU shall be the maximum positive 'Deviation Volume' expected in that BSC Season

DC for a SBMU shall be the maximum negative 'Deviation Volume' expected in that BSC Season

The VLP Trading Party shall estimate and notify to the CRA GC/DC values:

- (a) initially, at the time of registration of the BM Unit;
- (b) not later than the time specified in BSCP15 in the BSC Season preceding the relevant BSC Season; and
- (c) where the there become aware or believe in good faith that the submitted value will exceed the GC/DC Limits

NOTE CRA can use estimated GC/DC amounts should a primary BMU meet the 'GC and DC Breach Monitoring Criteria. I propose the same apply to SBMU.

P415 Credit Proposal – Option 1

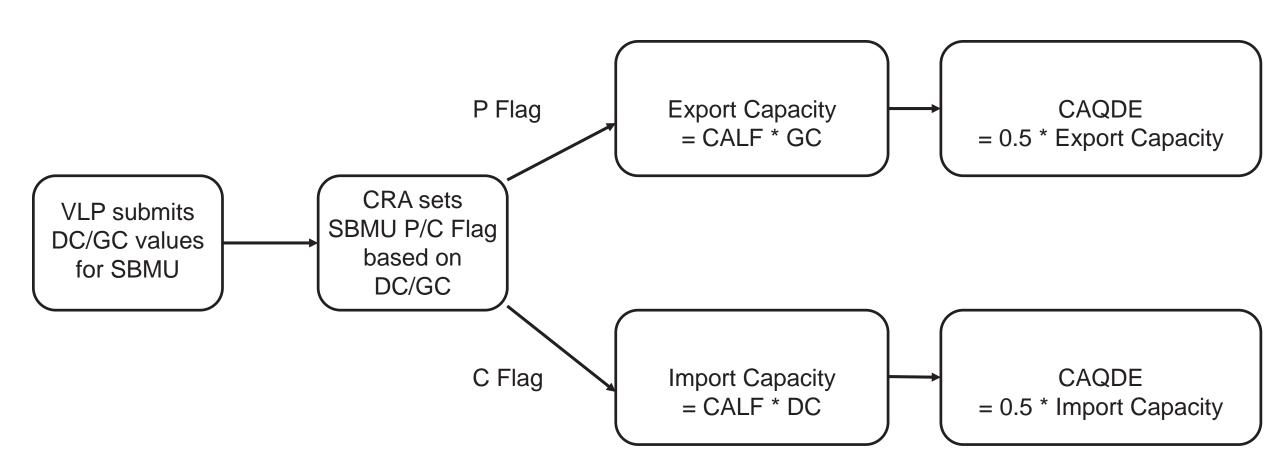
What does GC / DC do in Settlement?

- 1. Determines the P/C Status of the SBMU (i.e. which energy account the volumes are associated)
- if its GC+DC is greater than zero then its Relevant Capacity is GC and it is a Production BM Unit.
- if its GC+DC is less than zero then its Relevant Capacity is DC and it is a Consumption BM Unit.

And therefore which Energy Account the BM Unit is allocated.

P415 Credit Proposal

2. Used in the calculation of Credit Assessment Deviation Energy Volumes (CAQDE)



P415 Credit Assessment Load Factor

a) the Secondary BM Unit Credit Assessment Export Capability (SBMCAEC_i) shall be the quantity (in MW) determined as follows:

$$SBMCAEC_i = CALF_i * GC_i$$

- CALF = average net deviation Production for the BSC Season (MWh)* maximum deviation Production for the BSC Season (MWh)*
- (b) the BM Unit Credit Assessment Import Capability (SBMCAIC_i) shall be the quantity (in MW) determined as follows:

CALF = <u>average net deviation Consumption for the BSC Season (MWh)</u> maximum deviation Consumption for the BSC Season (MWh)

Note CALF shall only be calculated for settlement periods where a 'SBMU Wholesale market activity notification' has been received.

P415 Credit Proposal

- As new Non-Credit Qualifying BM Units there will be zero deviation volume data in the previous equivalent BSC Season. Therefore a generic CALF value will be assigned until data is available.
- This generic CALF value is based upon the historical average of all Secondary BM Units in the relevant GSP Group.



CONTRACT NOTIFICATIONS

Secondary BM Units

Ref	Description
BR07	Trading Party (in the new category of Virtual Lead Party) shall be able to be party to a ECVN.
BR08	SBMU shall remain unable to be party to a MVRN

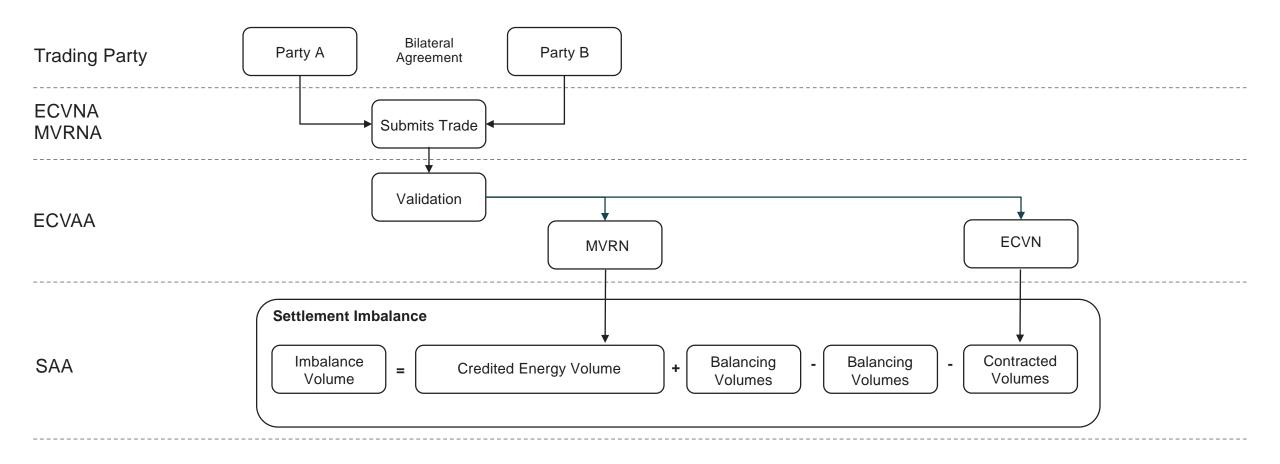
BSC Wholesale Market Arrangements

Parties active in the Wholesale Market are required to submit notifications to the Energy Contract Volume Aggregation Agent (ECVAA) for all bilateral trade agreements.

There are two types of notification:

- Energy Contract Volume Notifications (ECVNs) which notify the ECVAA of the volumes of energy bought and sold between two Energy Accounts.
- Metered Volume Reallocation Notifications (MVRNs) which notify the ECVAA that the energy flowing to or from a particular BM Unit is to be allocated to one or more different Party's Energy Accounts.
- Both ECVN and MVRN submission deadline occurs at the beginning of the Settlement Period.

Current Imbalance Settlement Arrangements





BSC MODIFICATION P376

P376: 'Utilising a Baselining Methodology to set Physical Notifications'

What is it?

P376 seeks to allow the expected flows at Supplier Volume Allocation (SVA) Metering Systems participating in the Balancing Mechanism (BM) to be calculated using an approved Baselining Methodology.

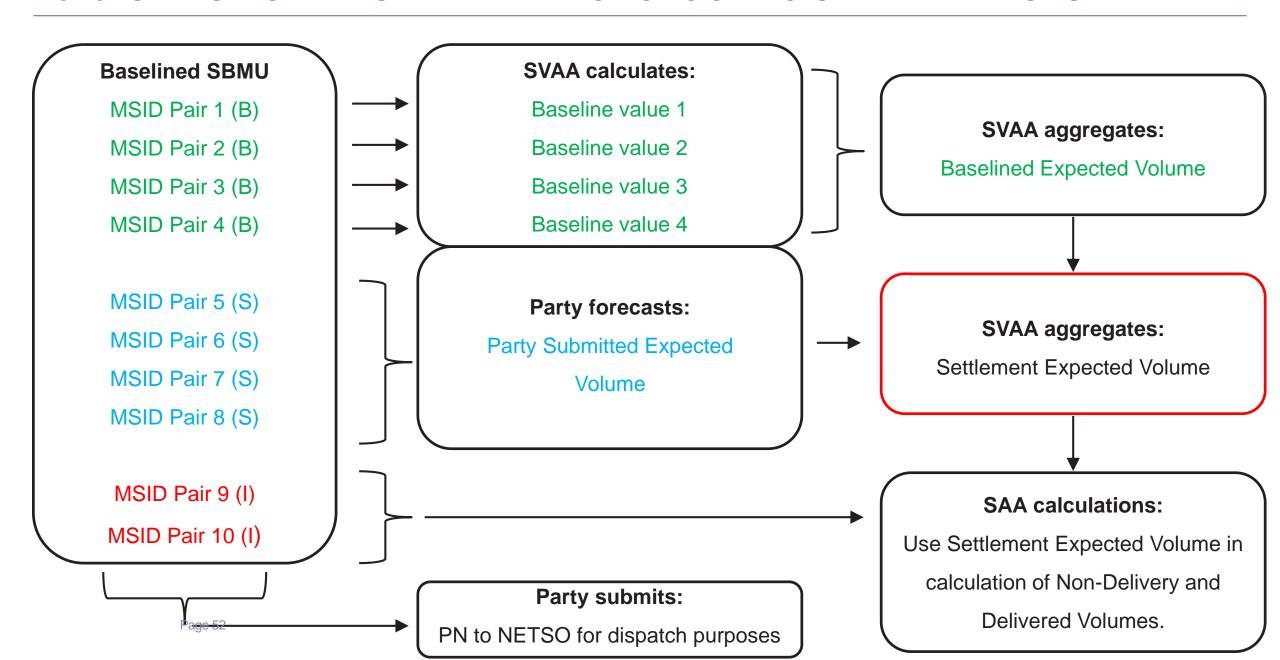
The Baselining Methodology shall use recent historic data to provide an estimate of the energy flow that would be expected at a Boundary Point under normal circumstances.

Why is it raised?

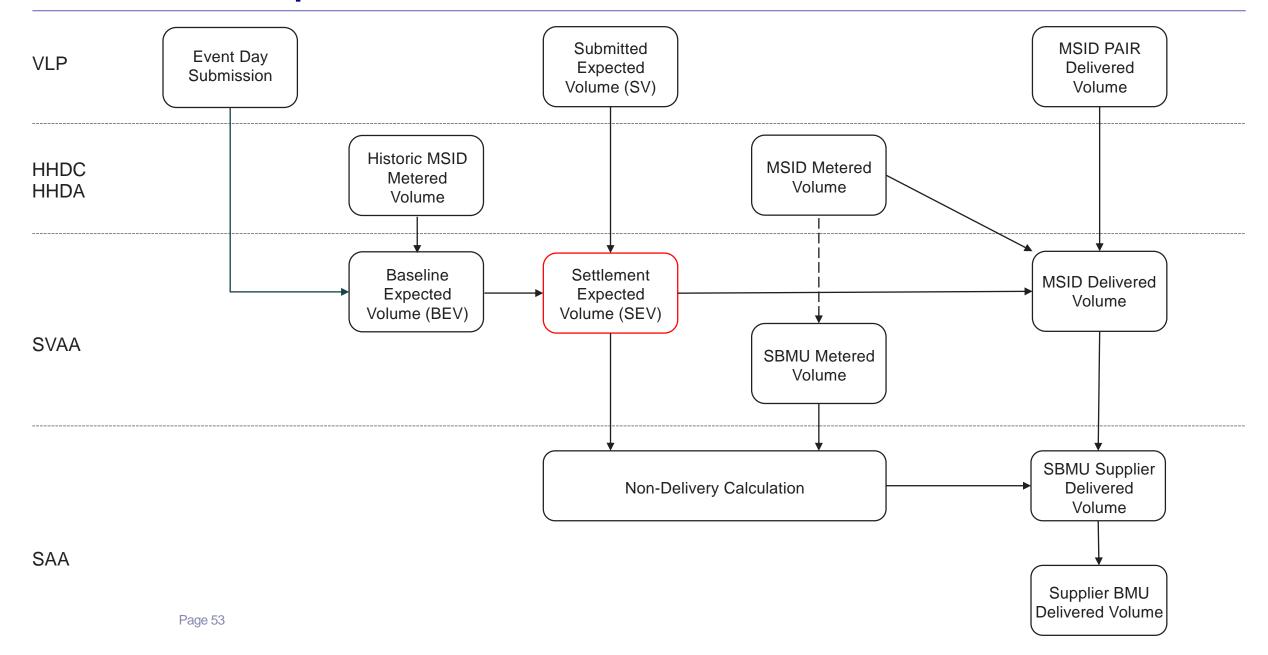
The requirement to submit an accurate Physical Notification (PN) for Secondary BMU to provide a balancing service presents an unnecessary barrier to participation in cases where VLP do not have visibility of all assets that share that network connection.

The new Settlement Expected Volume allowing balancing service providers to be more accurately recompensed for their actual change from normal usage and the impact this change has on the system, thus enabling greater participation.

P376 'UTILISING A BASELINE METHODOLOGY TO SET FPN VALUES'



P376 Process Map



Secondary BM Units

Ref	Description
BR09	The P415 solution shall amend the notification type options for event day submission to Settlement

What is an Event Day?

The Baseline Methodology creates a baseline based on normal usage and predicts what the MSID Pair should be doing. Therefore, it needs to discount days where the site is doing something not normal, such as providing a Balancing Service or to fulfil trades on the wholesale market. Current Event Day submissions provisions currently only recognise Balancing Services only and need to be amended.



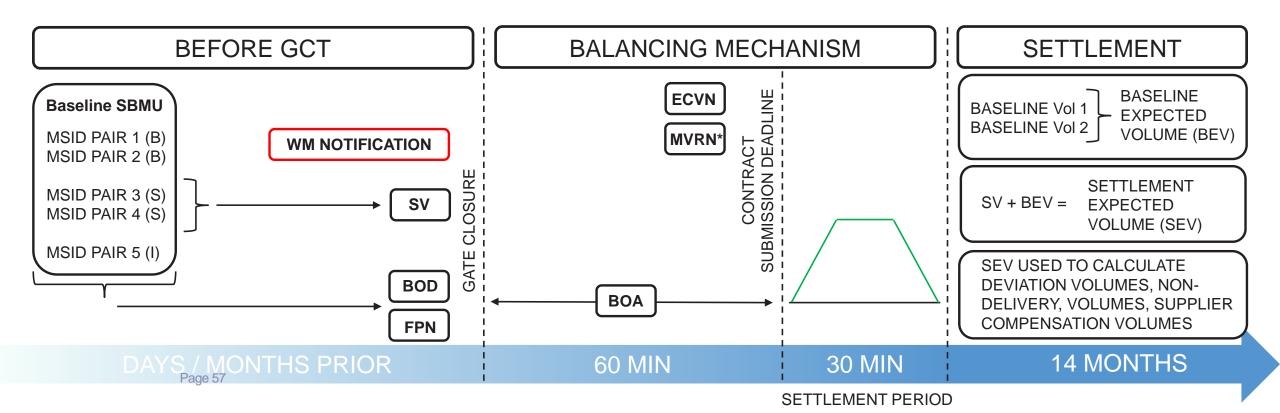
DEVIATION VOLUMES

Deviation Volumes

Ref	Description
BR10	Trading Parties (in the new category of Virtual Lead Party) shall submit a 'SBMU Wholesale market activity notification' per Settlement Period for each Baselined Secondary BM Unit active in the wholesale market
BR11	SVAA shall calculate Secondary BM Unit Deviation Volumes for all baselined Secondary BM Units registered to a Trading Party (in the new category of Virtual Lead Party) where a 'SBMU Wholesale market activity notification' and / or BOALF has been received.

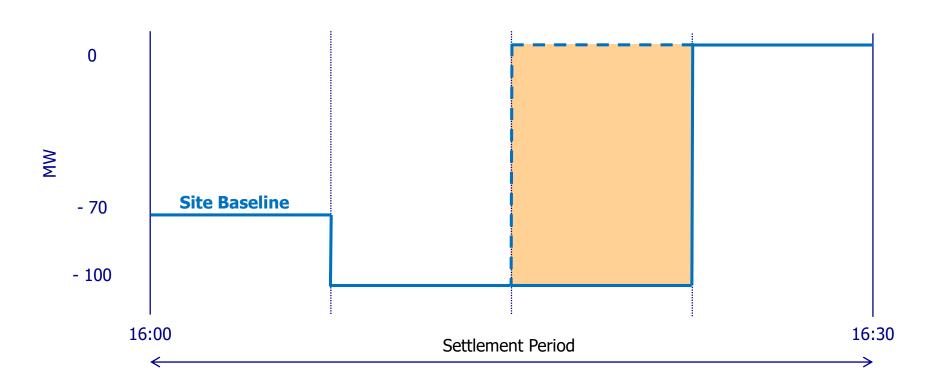
BR10: SBMU Wholesale market activity notification

- Sent per Baselined SBMU per Settlement
- Can be submitted until the Gate Closure Time for any given Settlement Period (currently 60 minutes prior)



BR11: Simple Worked Example: Early Shutdown

- VLP enacts an Early Shutdown (i.e. reduced demand / increased generation at site boundary)
- The Early shutdown (i.e. a demand response action) effectively results in an additional +11 MWh on the Total System



- Pre VLP action site would have consumed 35 MWh
- Post VLP action site consumed 24 MWh
- Deviation
 equivalent of + 11
 MWh on the Total
 System

SBMU Deviation Volume = SBMU Metered Volume – SBMU 'Settlement Expected Volume'

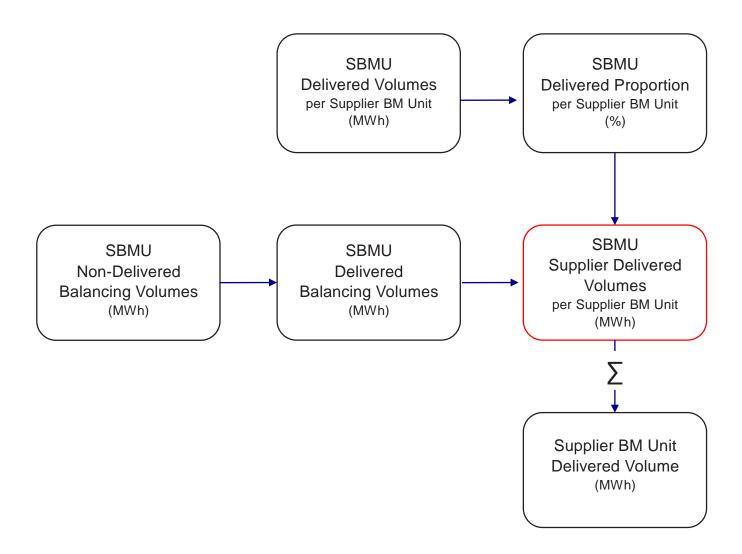


MSID PAIR DELIVERED VOLUMES

MSID Pair Delivered Volume

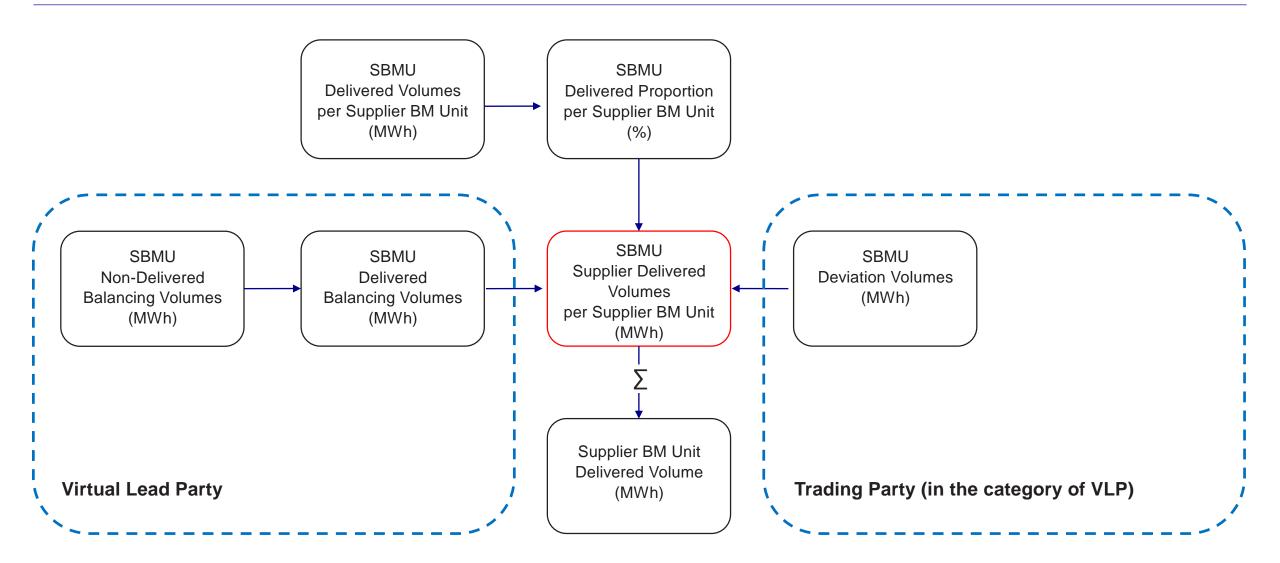
Ref	Description
BR12	Aggregators shall be required to submit Half Hourly Delivered Volumes for each non-baselined MSID Pair in a Secondary BM Unit (and should include both WM & BM volumes)
BR13	The calculation of Period Secondary BM Unit Supplier Delivered Volume (QSD _{iji2}) shall be amended to account for which type of BSC Party (i.e. VLP or Trading Party (in the new VLP role) is the lead Party of a Secondary BM Unit.

P344 Process Map



- SBMU Supplier
 Delivered Volumes
 (QSD_{iji2}) are based on physically delivered balancing volumes
- Supplier BM Unit
 Delivered Volume is the
 sum of all SBMU
 Supplier Delivered
 Volumes for that BM
 Unit.

BR13: Secondary BM Unit Supplier Delivered Volume calculation



Consequences

Current P344 Arrangements

- If a Virtual Trading Party over delivers on a BOA (i.e. balancing action) then the additional volumes are associated to the register Supplier
 - I.e. the Supplier is only adjusted for VLP balancing volumes (capped at the procured MWh)

P415 Proposal

- If a Trading Party (in new category of VLP) over delivers on a BOA (i.e. balancing action) then the
 additional volumes are associated to that Trading Party (in new category of VLP) and not the
 Supplier.
 - I.e. the Supplier is adjusted for all Deviation Volumes
- This is consistent with other Trading Parties (e.g. Suppliers & Generators)



SUPPLIER COMPENSATION

Supplier Compensation

Ref	Description
BR14	Supplier shall only be compensated for Wholesale Market volumes and so settlement will need to identify for each SBMU what volumes are to be allocated as balancing volumes and what volumes are to be allocated as wholesale market volumes.
BR15	The SAA shall calculate [or receive tbc] a Supplier Compensation Reference Price using an agreed methodology.
BR16	The Daily VLP Compensation Cashflow (SCVp) will be a new Trading Charge. It will be included on Trading Charge Advice Notes that are sent to Trading Parties (with the new category of VLP)
BR17	The Daily Supplier Compensation Cashflow (SCCp) will be a new Trading Charge. It will be included on Trading Charge Advice Notes

Supplier Compensation: Areas of Discussion

1. Supplier Compensation Volumes

2. Supplier Compensation Liability

3. Supplier Compensation Price

1. Supplier Compensation Volumes

Discussion Summary:

- WG agreed in principle that Supplier should be compensated for VLP activity at a registered site (i.e. both balancing and wholesale market activity) but asked for a legal opinion from Elexon.
- Elexon's legal opinion that the scope of P415 is not sufficient to introduce Supplier compensation in the BM, and therefore another Modification would need to be raised to cover this element.
- Therefore in the Proposer's Solution Suppliers shall only be compensated for Deviation Volumes allocated to VLP Wholesale Market trades

BR14 Example

Consider this scenario again where a SBMU is active in both wholesale and BM markets but under delivers

SEV = 0 MWhWM = ActiveBOA = 30 MWh QM = 40 MWhWhat do we know? MWh BOA = 30 MWhMWH Non-Delivery = 0 MWh5 MWh **Total Deviation Volume** = 40 MWh4 MWh Therefore WM SBMU Volumes = 40 - 30 = 102 MWh Metered Volumes

SEV / FPN

WM SBMU Proportion = 10 / 40

BM SBMU Proportion = 30 / 40

= 0.25

= 0.75

Page 68

Time

0 MWh

BR14: Proposer's Allocation Process

0

Baseline calculated or VLP Submit

MSID Delivered Volume

2 5

3 5

4 30

SVAA Identifies

MSID Pair Supplier BMU

Α

2

3 B

SVAA Calculates

MSID SBMU Compensation Vol

= 0 * 0.25 = 0

= 5 * 0.25 = 1.25

= 5 * 0.25 = 1.25

= 30 * 0.25 = 7.5

Total = 10

SVAA Allocates

Supplier BMU

Α

В

Period Supplier BM Unit Delivered Vol

$$= 0 + 5 = 5$$

$$=$$
 5 + 30 $=$ 35

Supplier BM Unit Compensation Vol

$$=$$
 5 * 0.25 $=$ 1.25

$$Total = 10$$

Supplier Compensation Volumes Principles

- 1. Deviation volumes shall only be allocated to a market where Settlement has received the relevant notifications for (i.e. WM = Wholesale Market Notifications and BM = BOALF)
- 2. Each site within a SBMU shall contribute towards all markets where a notification has been received equally.
- 3. Volume allocation at MSID level shall be proportional based on SBMU level.

1. Supplier Compensation Volumes

Question: Does the Workgroup agree with the Proposer's Solution?

To submit your views please visit www.sli.do and enter 187656 to join the session

You'll be asked to provide a 'Yes/No/Not Sure' view, there will also be an opportunity to add further comments for consideration after all votes are taken.

Joining as a participant?

187656





slido



At this stage, do you agree with the Proposer on Supplier Compensation Volumes?



Do you have any further comments on Supplier compensation volumes?

2. Supplier Compensation Liability – Proposer View

Who is liable?

VLPs should be liable to pay for impacted Supplier compensation

Why should they be liable?

 Because VLP directly benefit from activity at the Supplier's site (i.e. via wholesale market trade or exposure to cash out price).

Is this a barrier to VLP market entry?

- The compensation cost incurred by the VLP (i.e. the Supplier compensation) is forecastable and therefore can be incorporated in to the VLP business model.
- Could be viewed as a barrier to entry and therefore compensation price should be considered carefully to mitigate this.

2. Supplier Compensation Liability – Alternate View

Who is liable?

 All Suppliers (mutualised by market share) should be liable to pay for impacted Suppliers compensation.

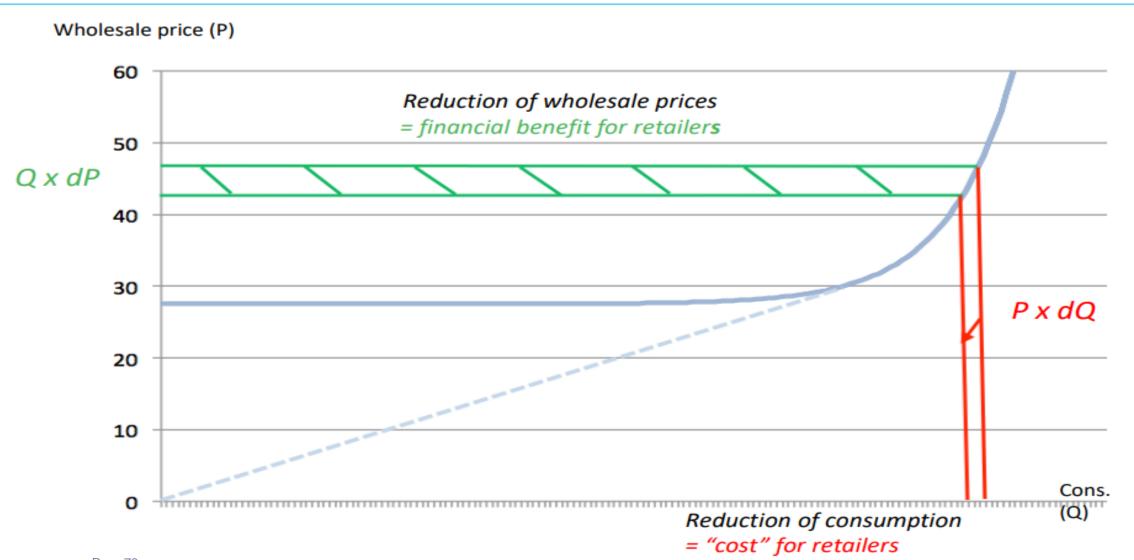
Why Should they be liable?

- Because all Suppliers benefit from lower sourcing costs due to flexibility in the wholesale market.
 - Noting that flexibility will only be chosen when at a better price point than traditional generation and so both lowers the system demand and the generation costs.

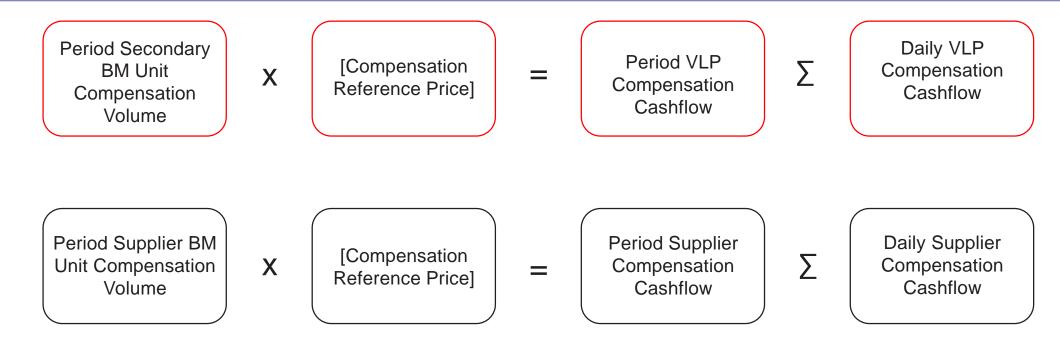
Is this a barrier to Supplier market entry?

 Could be viewed as a Supplier levy and an additional cost to pass on to the end consumers.

Selling DSR on Energy Markets to Avoid High Prices



BR16 & BR17: New Trading Charges



Note that depending on the direct of the deviation VLP / Supplier shall be receive a debit or credit.

E.g. VLP reduces load by 10 MWh then VLP would pay compensation to Elexon who in turn would credit the impacted Suppliers.

And conversely if a VLP increases load by 10 MWh then Supplier would pay compensation to Elexon who in turn would credit the impacted VLP.

2. Supplier Compensation Liability

Question: At this stage, do you agree with the Proposer on Supplier Compensation Liability? Do you agree with how the Proposer's solution implements new Trading Charges?

To submit your views please visit www.sli.do and enter 187656 to join the session

You'll be asked to provide a 'Yes/No/Not Sure' view, there will also be an opportunity to add further comments for consideration after all votes are taken.







At this stage, do you agree with the Proposer on Supplier Compensation Liability?



Do you agree with how the Proposer's solution implements new Trading Charges?



Do you have any further comments on Supplier compensation liability?

3. Supplier Compensation Price

Discussion Summary:

£ Compensation	Arguments For	Arguments Against
Retail	 Fully captures individual Supplier costs and would ensure Suppliers are not impacted by VLP activity 	 Complex and expensive solution required The cost outweighs the benefit
Imbalance	 Simplest and cheapest solution as no Supplier imbalance adjustment required 	 Designed as a market signal to self balance (or not) imbalance position. i.e. Supplier could benefit/suffer detriment
Spot Market	 Simple and inexpensive solution Represents the real time value of energy i.e. this would be the £ if the Supplier traded away the imbalance created by VLP 	 Not representative of Supplier incurred costs i.e. Supplier could benefit/suffer detriment
Supplier sourcing Costs Page 82	 Cost effective solution that would ensure Supplier should not benefit/suffer detriment from VLP activity 	 Adds complexity as sourcing cost methodology will need to developed and implemented.

3. Supplier Compensation Price

Proposer's Solution on Supplier Compensation

- VLP should be liable to pay Suppliers compensation when Suppliers suffer detrimental impact from an activity VLP benefits from (load reduction)
- Conversely Suppliers should be liable to pay VLP compensation when VLP suffer detrimental impact from an activity Supplier benefits from (load reduction)
- Compensation should be paid at price that represents the average sourcing costs for a Supplier for a given time period [to be developed]
- Compensation payments to/from Parties should be administered by BSCCo as a BSC Trading Charge

3. Supplier Compensation Price

Question: What price do you think compensation should be paid at?

To submit your views please visit www.sli.do and enter 187656 to join the session

You'll be asked to provide a 'Yes/No/Not Sure' view, there will also be an opportunity to add further comments for consideration after all votes are taken.

Joining as a participant?

187656







Do you agree with the Proposer that VLPs should be liable to pay Suppliers compensation when Suppliers suffer detrimental impact from an activity VLP benefits from (load reduction)?

i) Start presenting to display the poll results on this slide.



What price do you think compensation should be paid at?



Do you have any further comments on compensation price?

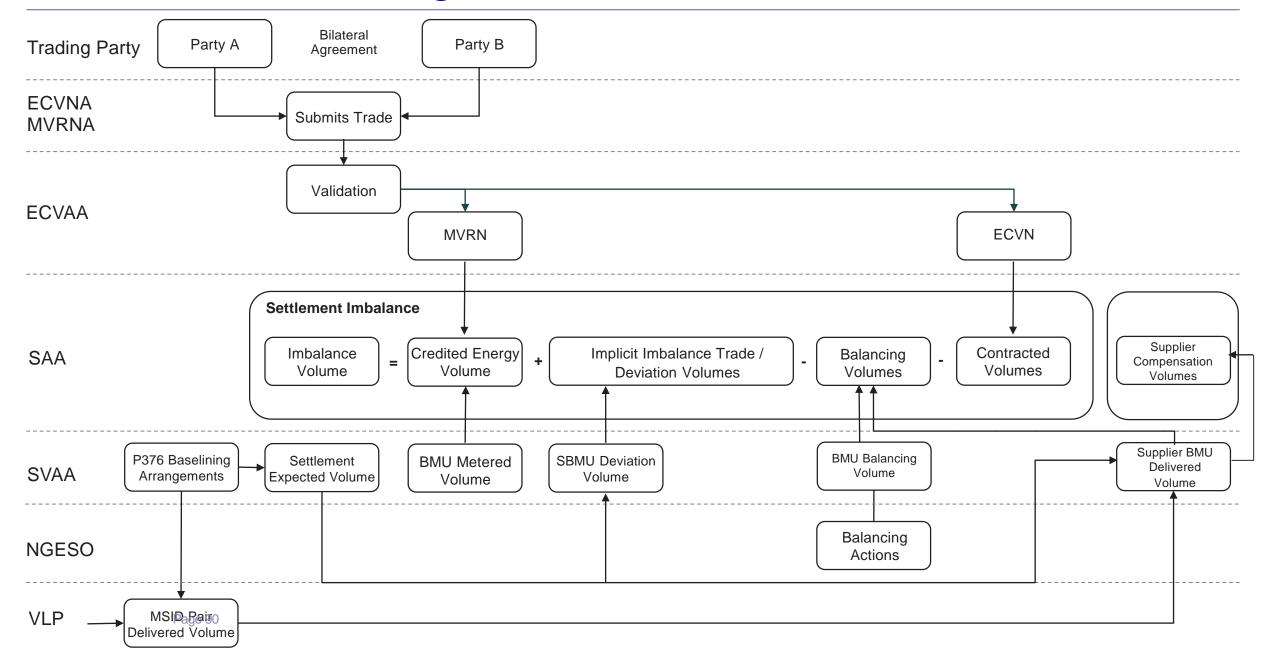


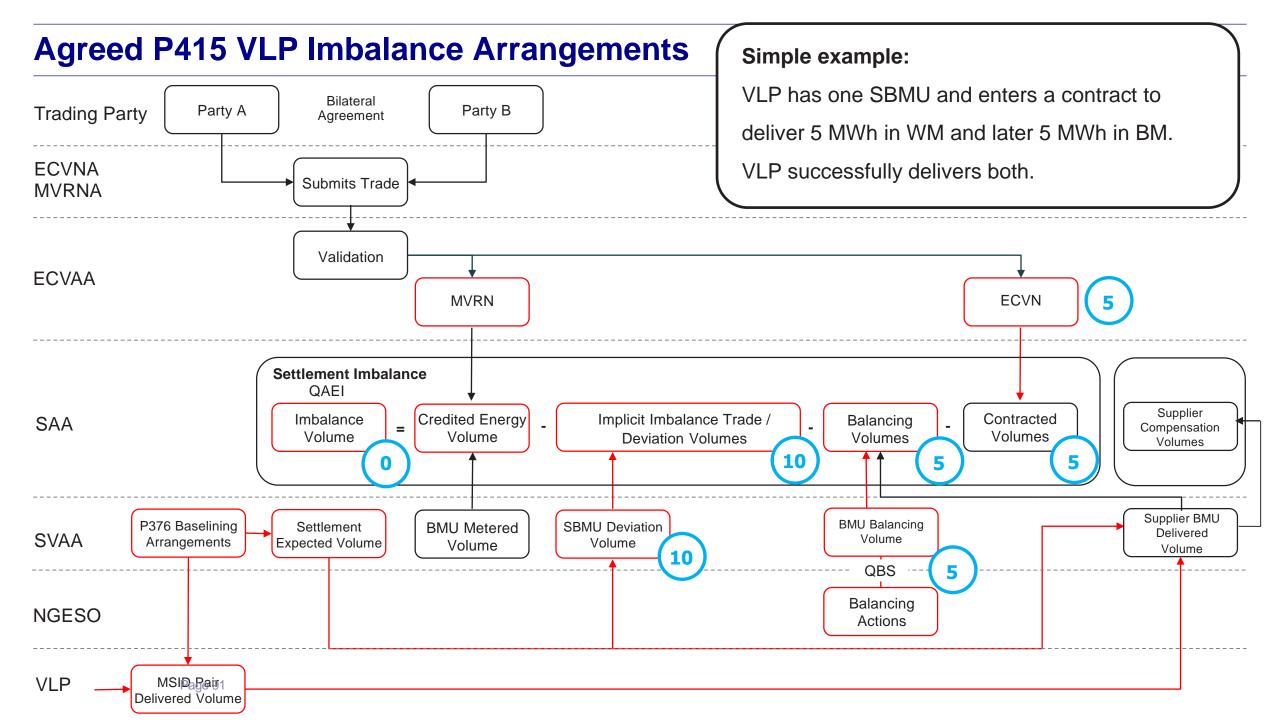
IMBALANCE SETTLEMENT

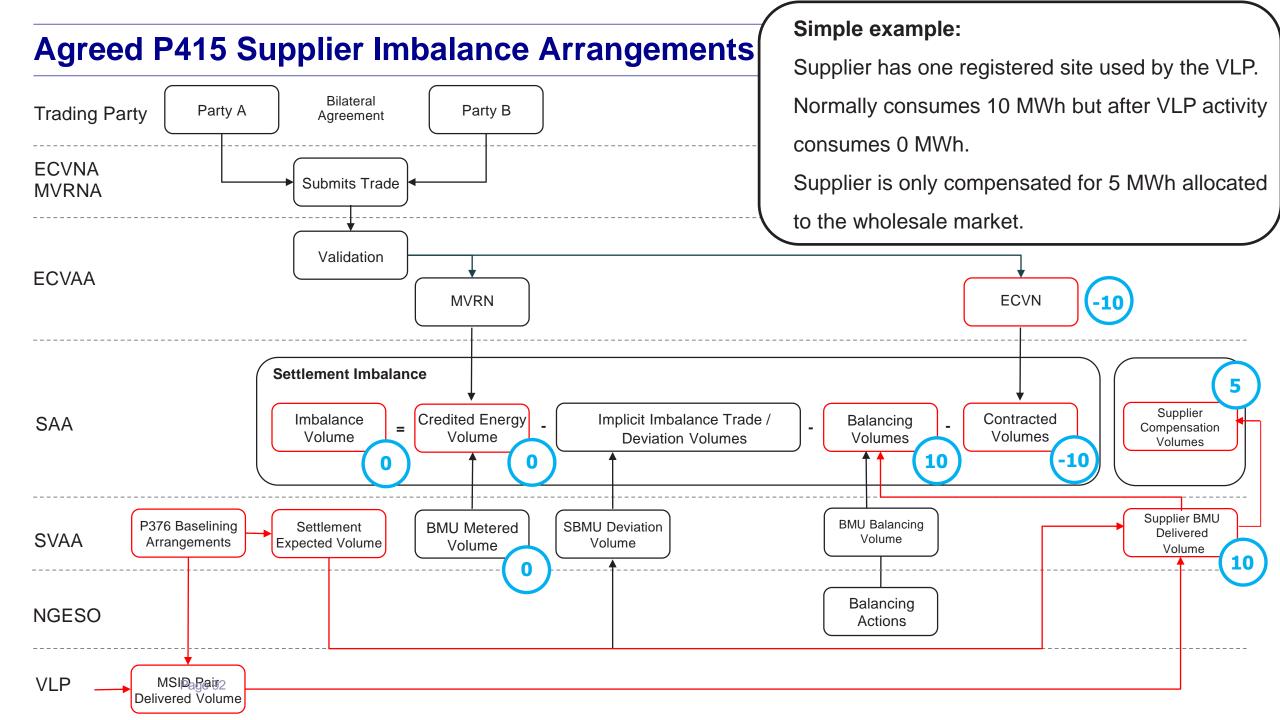
Imbalance Settlement

Ref	Description
BR18	SAA shall include Deviation Volumes in the Energy Imbalance Volume calculation when calculating imbalance volumes for Trading Parties with the new Virtual Lead Party role

P415 VLP Imbalance Arrangements









SUPPLIER REPORTING

Supplier Reporting Requirements Context

The P344 Workgroup developed two solutions i.e. a Proposer's Modification and an Alternative Modification.

- 1. **Proposer's Solution:** This is a customer consent model, whereby the customer must consent to the relevant supplier receiving the granular data (HH Delivered Volumes). Under this solution, Elexon would only issue the data to suppliers where customers have given their consent.
- 2. Alternative Solution: This is the mandating information sharing model, whereby customer consent would not be required for suppliers to receive HH delivered volumes data.

BSC Panel View

The BSC Panel by a small majority (6-4 votes) considered that the P344 Alternative Modification (mandatory data sharing) is better than the P344 Proposer's Modification.

As a result, the Panel provided a view that the P344 Alternative Modification should be approved.

Supplier Reporting Requirements Context

Authority P344 Decision

We [OFGEM] have previously published our views on this issue in an Open Letter (link) where we expressed that

"a careful balance may need to be struck between enabling information flows to support efficient contractual arrangements, and the potential impact on competition in the market for flexibility."

We [OFGEM] believe that the Proposer's modification (customer consent) better strikes this balance when compared to the Alternative (mandatory sharing). We consider that the Proposer's modification, by not mandating data sharing, enables information flows to support efficient contractual arrangements, and at the same time, allows for the commercial confidentiality matters to be agreed between the concerned parties if and where deemed appropriate.

Supplier Reporting Requirements Context

Having considered this information, the group think it would not be prudent to go against Ofgem's previous decision by including mandatory information sharing as a feature of P415.

A majority of the Workgroup agreed that correction and compensation under P415 means that Suppliers would not be impacted by VLP activity and therefore have less need for individual site-level data, although a Supplier representative disagreed that this would not be useful or desired for these organisation. Therefore no changes are proposed for Supplier reporting of VLP activity (to clarify reporting will not distinguish between VLP BM and WM volumes).

Supplier Reporting Requirements

Question: Do you agree with the Proposer's solution for Supplier Reporting (no changes are proposed for Supplier reporting of VLP activity)

You'll be asked to provide a 'Yes/No/Not Sure' view, there will also be an opportunity to add further comments for consideration after all votes are taken.

Joining as a participant?

187656







Do you agree with the Proposer's solution for Supplier Reporting (no changes are proposed for Supplier reporting of VLP activity)



Do you have any further comments on the P415 solution?



NEXT STEPS

P415 Next Steps

- Workgroup 10 on 22 February 2022: CEPA-led meeting to discuss the CBA approach.
- Elexon will continue to support the CBA and any Workgroup queries prior to the return of the CBA.
- Elexon will continue to develop Business Requirements and draft Legal Text.
- Please review the draft Solution Summary document by 11 February so we can consider feedback.
- Do the Workgroup believe further Workgroup meetings are necessary before the CBA is returned?

Next Steps

Event	Date
Present IWA to Panel	8 October 2020
Workgroup meetings 1 - 9	11 December 2020 – Feb 22
Workgroup meeting 10	22 February 2022
Service Provider Impact Assessment	By August 2022
Results of the CBA presented to the Panel	By August 2022
Final P415 Workgroups to consider information and outcomes of CBA, form final recommendations on P415	August – October 2022
Assessment Consultation	October 2022
Assessment Report presented to BSC Panel	December 2022

ELEXON

THANK YOU