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

P415

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

27 May 2021

Meeting Objectives and Agenda

- **AGREE** P376 alignments:
  - **DETERMINE** whether ‘Event Day’ notification should be amended;
  - **DETERMINE** whether the Non-Delivery calculation needs to amended;
  - **DETERMINE** whether Supplier BMU Delivered Volume should be split into VLP BM and WM Delivered Volumes; and
  - **AGREE** the basis of those solutions.

- **AGREE** if Supplier compensation is needed or not and:
  - what price should it be paid at?
  - who pays it?

Meeting Objectives and Agenda

Agenda Item	Lead
Welcome and meeting objectives	Elliott Harper (Chair),
Summary of WG03	Ivar Macsween (Elexon)
Aligning P376 and P415: • Event Days • Non-Delivery calculation • Delivered Volume Allocation	Matthew Roper, Workgroup
Wholesale Market Activity Notification	Matthew Roper, Workgroup
Supplier Compensation discussion	Voltalis
Impact Assessment Update	Ivar Macsween, Workgroup
Next Steps	Ivar Macsween
Meeting Close	Elliott Harper

SUMMARY OF 3RD MEETING

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Summary of 3rd Meeting

- Similarity drawn between NPTs and VLPs when trading in the WM under P415 (in that the Supplier continues to supply the site but the responsibility for trading those volumes is given to another party).

- The group agreed with interpretation that VLPs should not pay Network Costs under P415. Whatever happens the customer will have to pay the Network Charges- if VLPs ask a customer to deviate in a way that changes their network charges, VLPs would have to make it worth their while and present an attractive contractual proposition for them to deviate.

- Group were comfortable that the relationship between the customer and the VLP addressed any concerns over non-delivery of volumes under P415.

- Some members were uncomfortable with changing Credited Energy Volumes in the Settlement Imbalance calculation and Elexon will present alternate approaches.

- Questions for National Grid – what information do National Grid need from a VLP who would operates in the Wholesale Market? How does the System Operator treat secondary BMUs?

Summary of 3rd Meeting

****Action Update** Could VLPs be considered a Supplier under P415? (1 of 3)**

- The P415 Workgroup sought confirmation from BSCCo Legal that VLPs do not act as a Supplier or a Generator in their activities.

- Some members of the Workgroup were concerned that an who operates in the Wholesale Market would be acting as either a Supplier or Generator and either fall foul of the rules or create a competitive loophole.

- Elexon note that VLPs will need to form their own views on compliance and Ofgem will need to come to a view as well, but for what its worth our view is that Independent Aggregation is separate to Supplier activities although noting that final decision is ultimately up to Ofgem as the Regulator.

Summary of 3rd Meeting

****Action Update** Could VLPs be considered a Supplier under P415? (2 of 3)**

- In the Wholesale Market (as in any market) VLPs would have an agreement with a customer to ultimately change the flow of energy on to the total system by flexing their load. VLPs provide a service- paying a customer to deviate.

- The definition of “supply” suggests VLPs would not supply electricity to a premise. VLPs would never supply a site and will never contract with a customer to supply all their energy volumes and charge them for it. VLPs contract with a site to change the amount that a customer consumes, then bundle that with other changes to sell on to another party in a different market.

- This is a fundamental difference from what could be considered a Supplier role or supply activity.

“supply”, in relation to electricity, means its supply to premises in cases where [it is conveyed to the premises wholly or partly by means of a distribution system, or by means of a transmission system]

Electricity Act 1989

Summary of 3rd Meeting

****Action Update** Could VLPs be considered a Supplier under P415? (3 of 3)**

- The role of a Generator is a party who generates electricity on to the total system, selling it to other types of party, for example a Supplier.

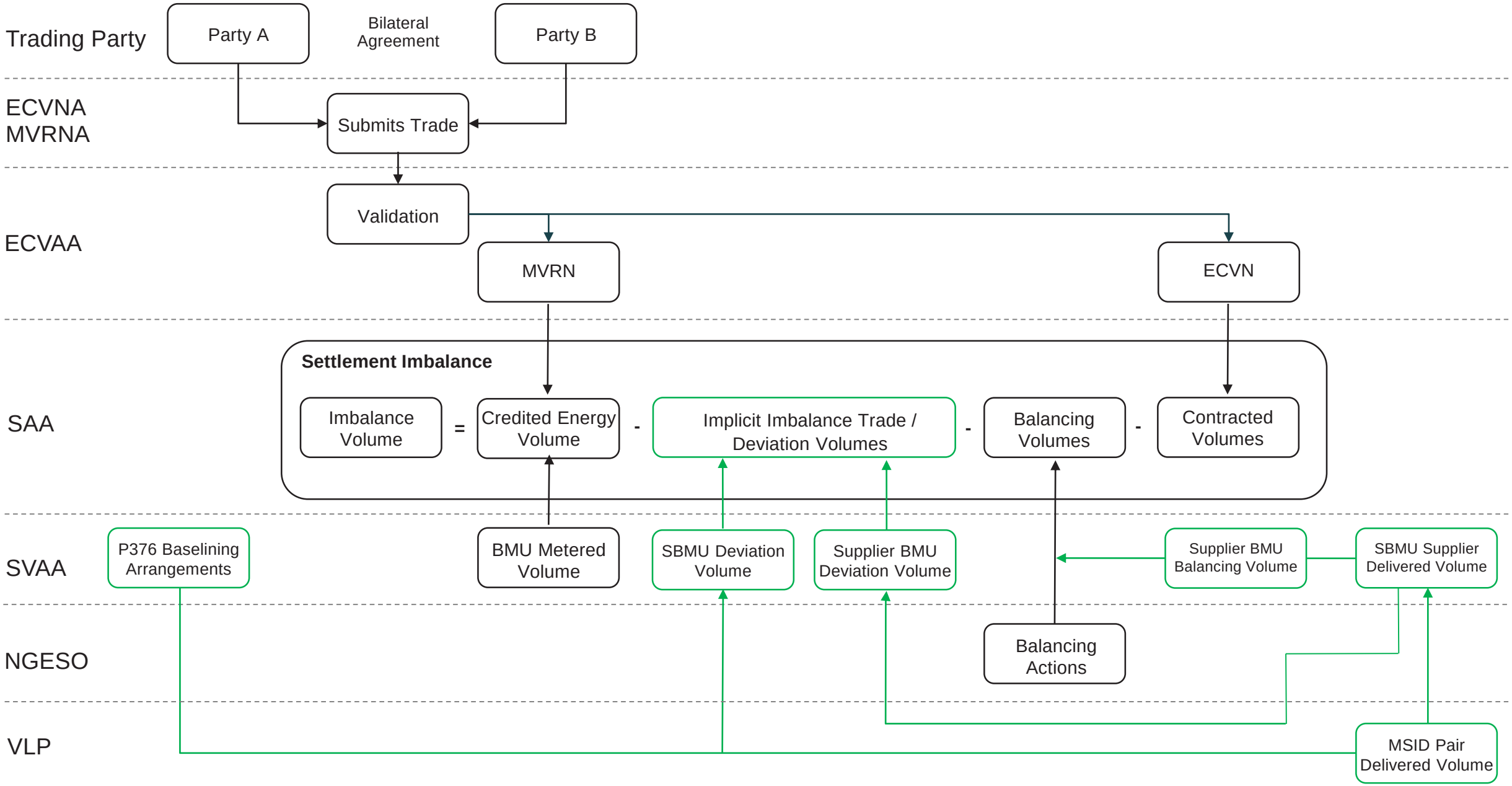
- A VLP would never physically generate any volumes themselves, rather they would change the amount of volumes that a Generator generates. The energy volumes that a VLP would deal in have already been generated somewhere along that chain of transactions and cannot be generated twice. This is a fundamental difference from what could be considered a Generator role or generation activity.

- Under P415 VLPs will aggregate deviations from the baseline and then sell these deviations on, acting as a service provider with a specific remit. They act in a similar manner to a Non Physical Trader, who trade electricity from Generators, Suppliers and other parties but do not perform a supply or generation role just because they have purchased those volumes.

“generate”, in relation to electricity, means generate at a relevant place;

Electricity Act 1989

Proposed Imbalance Settlement Arrangements



P415 SOLUTION PRINCIPLES

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P415 Solution Principles

1. Through independent aggregation a VLP shall 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 and MVRN.

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 a VLP independent aggregation service shall receive no Imbalance Settlement benefit nor 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)

ALIGNING P376 AND P415

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P376: ‘Utilising a Baselining Methodology to set Physical Notifications’

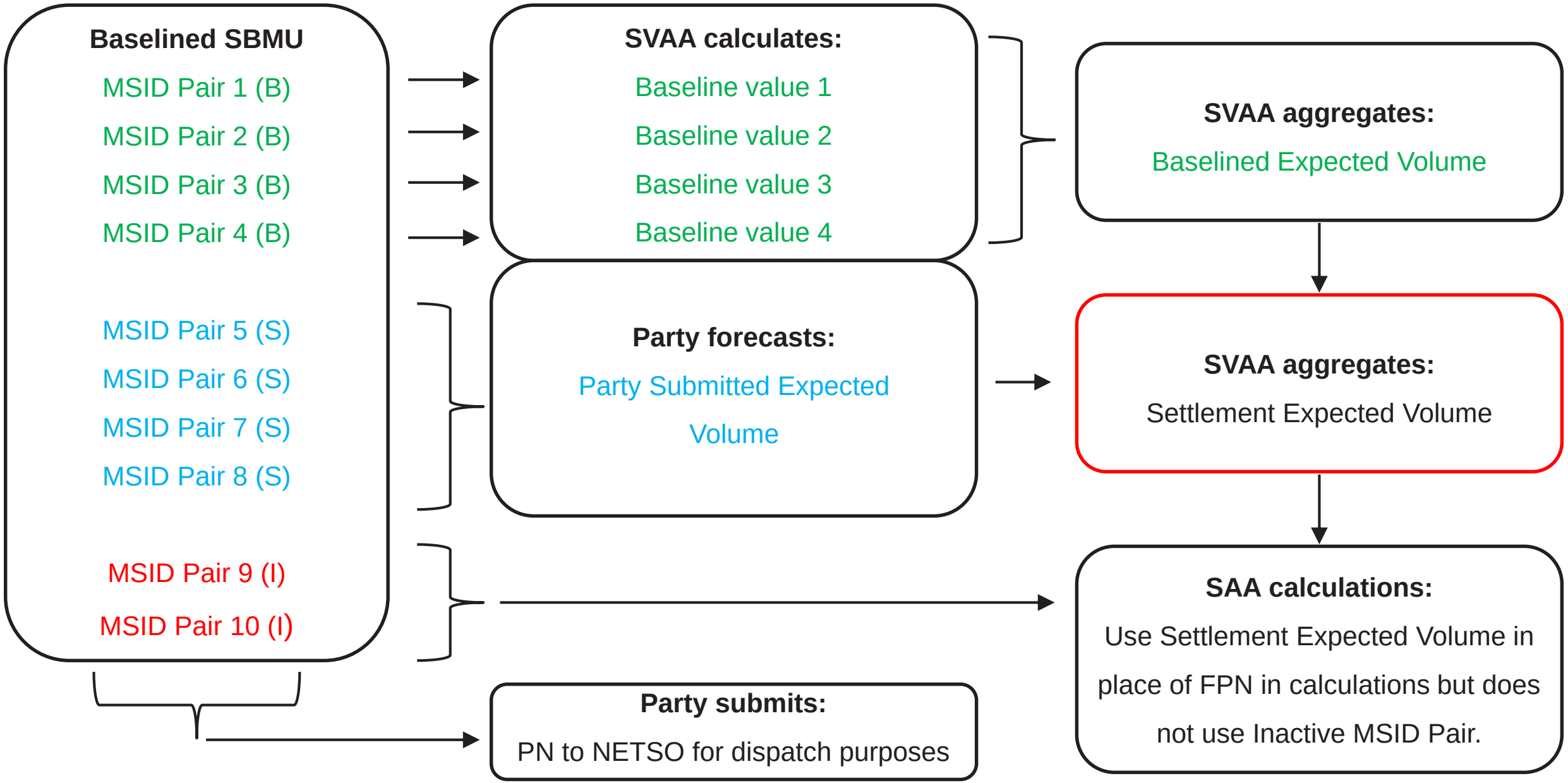
- P376 seeks to allow the expected flows at MSIDs participating in the Balancing Mechanism (BM) to be calculated using an approved Baselining Methodology.

- 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.

- Task for the workgroup is to:

  - **AGREE** whether P415 needs to amend to P376 solution
  - **DETERMINE** whether ‘Event Day’ notification should be amended
  - **DETERMINE** whether the Non-Delivery calculation needs to amended
  - **DETERMINE** whether Supplier BMU Delivered Volume should be split into VLP BM and WM Delivered Volumes
  - **AGREE** the basis of those solutions

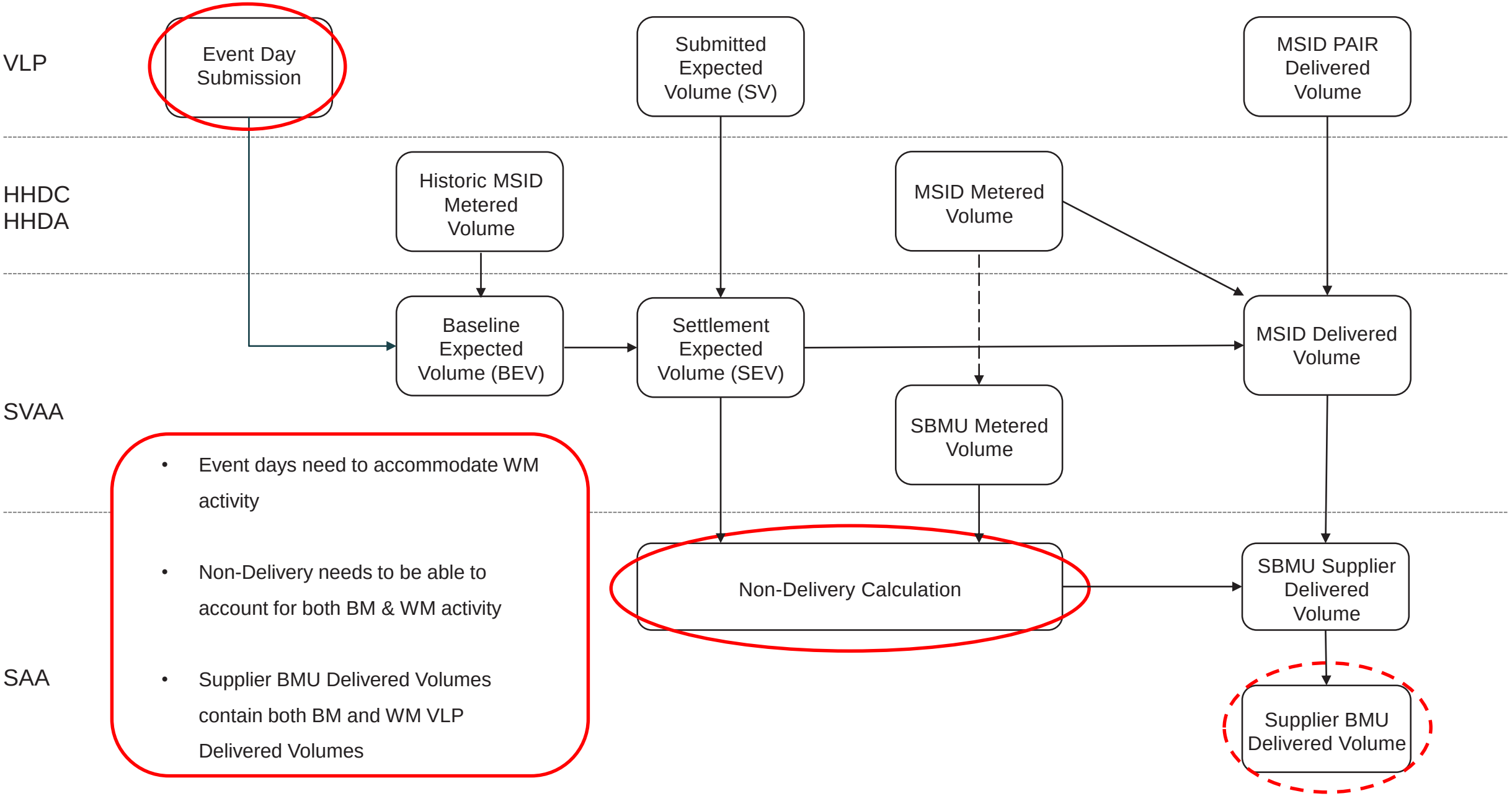
P376 'UTILISING A BASELINE METHODOLOGY TO SET FPN VALUES'



P376 Business Requirements

Business Requirements		
BR01	REGISTRATION	Registration of Baselined BMUs and MSID Pairs for baselining
BR10	REGISTRATION	Change of MSID Pair Ownership
BR02	SUBMISSION DATA	Submitted Expected Volume
BR03	BASELINE	Obtain data to calculate Baseline
BR05	BASELINE	Event days for Baselining Methodology
BR06	BASELINE	Baseline Methodologies approval and selection
BR07	BASELINE	Baseline Methodology Assurance
BR08	BASELINE	Calculate MSID Baseline Values, Delivered Volumes and Settlement Expected Volume
BR04	SETTLEMENT	Inactive MSID Pairs and Settlement
BR09	SETTLEMENT	For Baselined BMU calculate Non-Delivery using Settlement Expected Volume rather than FPN

ALIGNING P376 TO P415



EVENT DAYS

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Event Days for Baselining Methodologies

Baseline Methodologies create baselines based on normal usage and predicts what the MSID Pair should be doing.

Under P376, Baseline Methodologies discount days where the site is doing something not normal, such as providing a Balancing Service (and therefore for P415 should also include wholesale market activity).

Parties are responsible for notifying SVAA of 'Event Days' and when submitting an Event Day, the Party will be required to choose an option from a predefined list of Event Day types. Under P376 list will be restricted to two options:

- Balancing service
- Other

Question: Given baseline methodologies discard Event Days do need to distinguish between BOA and WM activity? I.e. do we need a third option for Wholesale Market activity? Does it matter?

NON-DELIVERY CALCULATION

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P376 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.

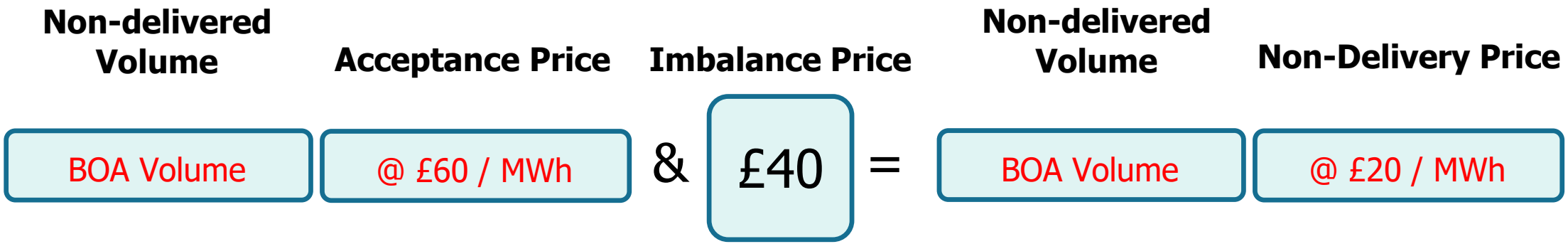
To do so it compares a BMU Expected Metered Volume (QME) against the actual BMU Metered Volumes (QM):

BMU	QME	= FPN + QBS
Baselined BMU	QME	= SEV + QBS

Where QBS = BMU Balancing Volume and SEV = Settlement Expected Volume (P376)

Non-Delivered Volume	QNDO	= min ((max (QME - QM, 0), QAO + RRAO)

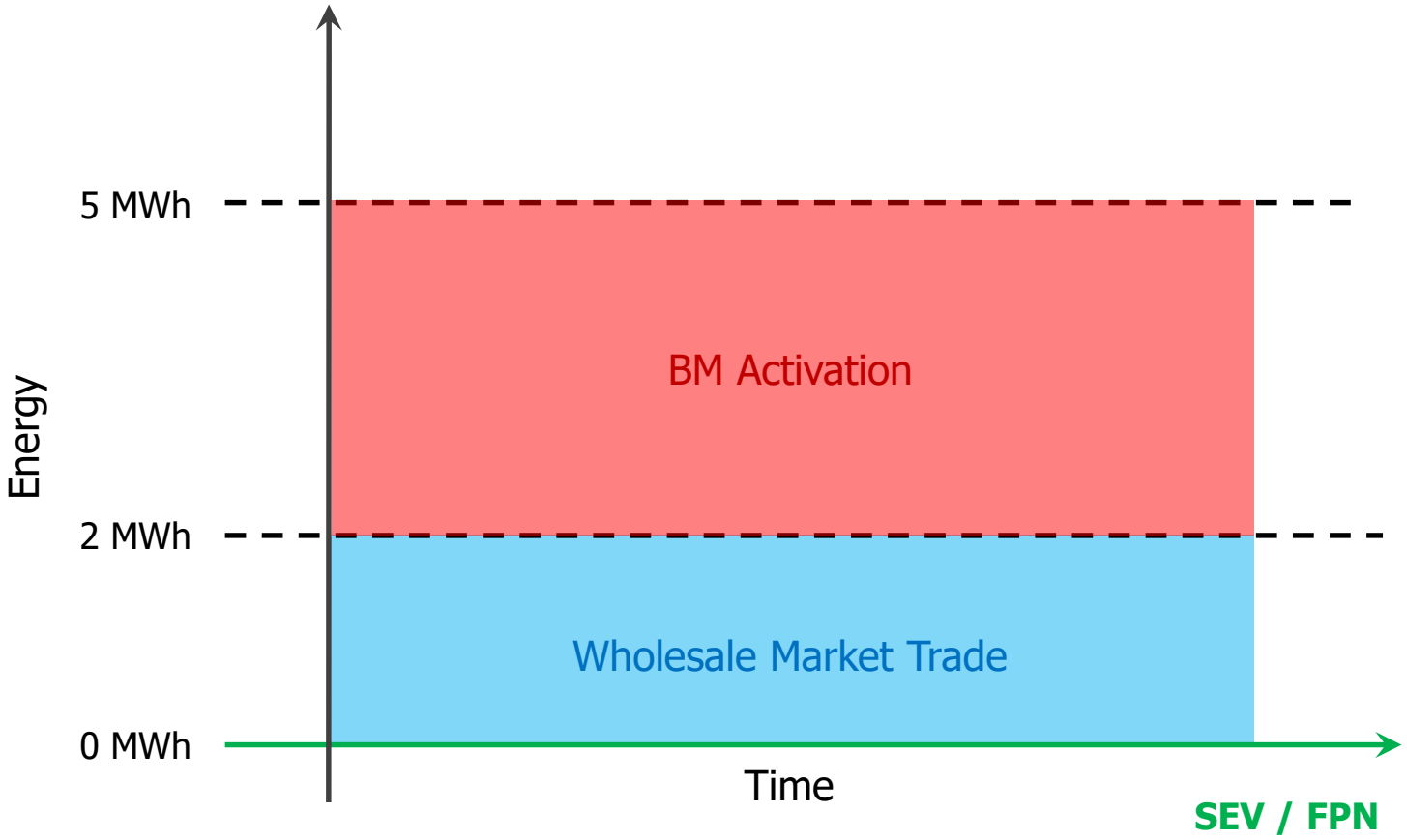
Settlement then compares the price the Party will be paid (i.e. Acceptance Price) against the price the party will be charged for non-delivery (Imbalance Price)



P376 Non-Delivery calculation

Consider the scenario below where a SBMU is active in both wholesale and BM markets:

SEV = 0 MWh WM = 2 MWh BM = 3 MWh



Under the P376 settlement calculates the Expected Metered Volume as below:

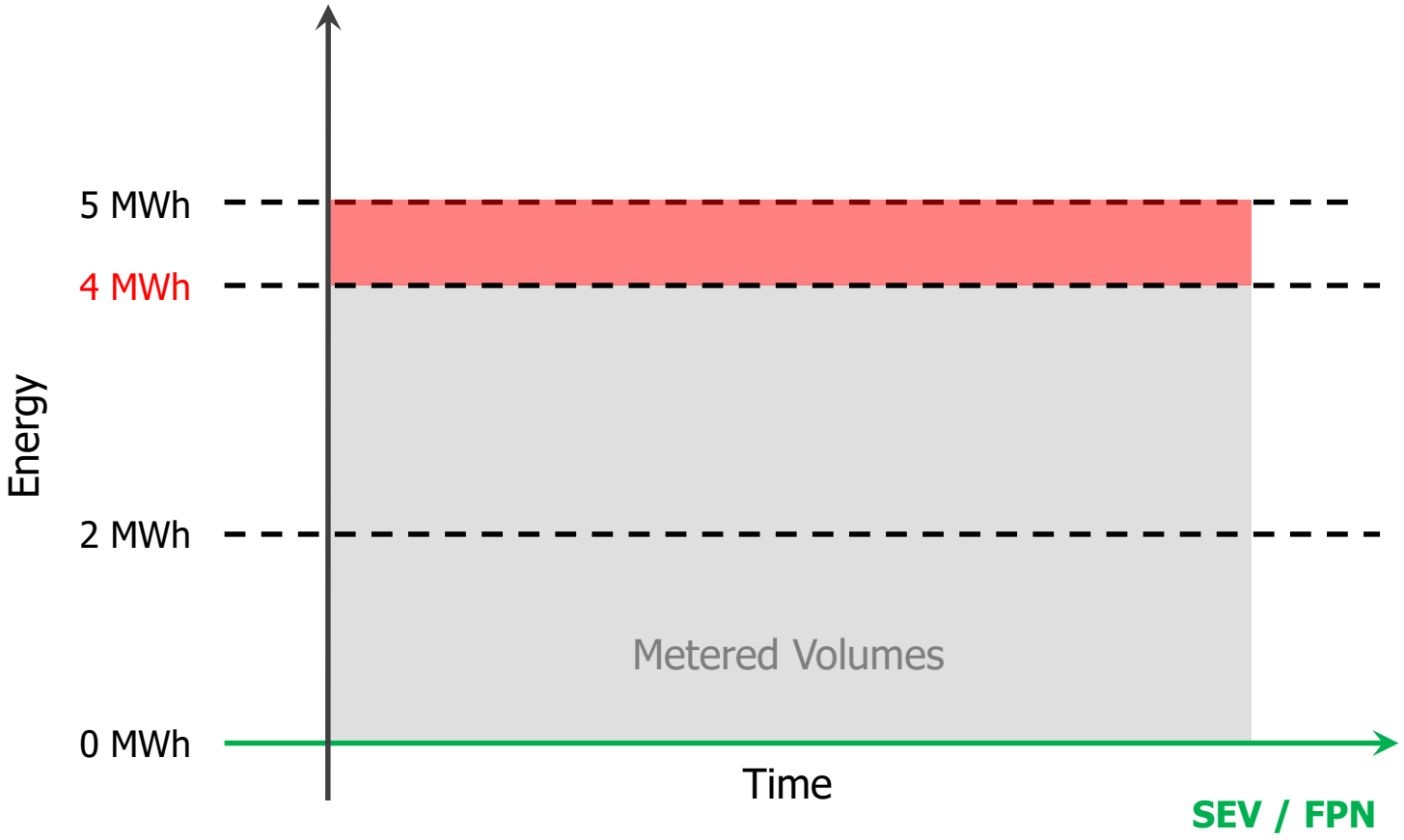
QME = SEV + QBS
= 0 + 3 = 3 MWh

Because the current arrangements only take into account Balancing Services (QBS)

P376 Non-Delivery calculation

Consider the scenario below where a SBMU is active in both wholesale and BM markets:

SEV = 0 MWh WM = 3 MWh BM = 2 MWh QM = 4 MWh



What happens if the SBMU only partially delivers on the WM and BM trades?

Under P376 Non-Delivery Volumes (QNDO) are calculated as below:

QNDO = min ((max (QME - QM, 0), QAO)
= min ((Max (3 - 4 , 0), 3)
= min (0), 3)
= 0

No Non-Delivery charges

Question: Do the P376 arrangements sufficiently incentivise delivery of BM actions?

P415 Non-Delivery calculation options:

Note: the non-delivery is calculated at the BM Unit level and so if wholesale market activity is to be accounted for it needs to be at the BM Unit level also.

To do so we need to discern a SBMU value for wholesale market activity. **How can we do that?**

Submission by the VLP per SBMU

- The VLP would be best placed to know what they intend to do
- Is this an onerous requirement for a VLP?

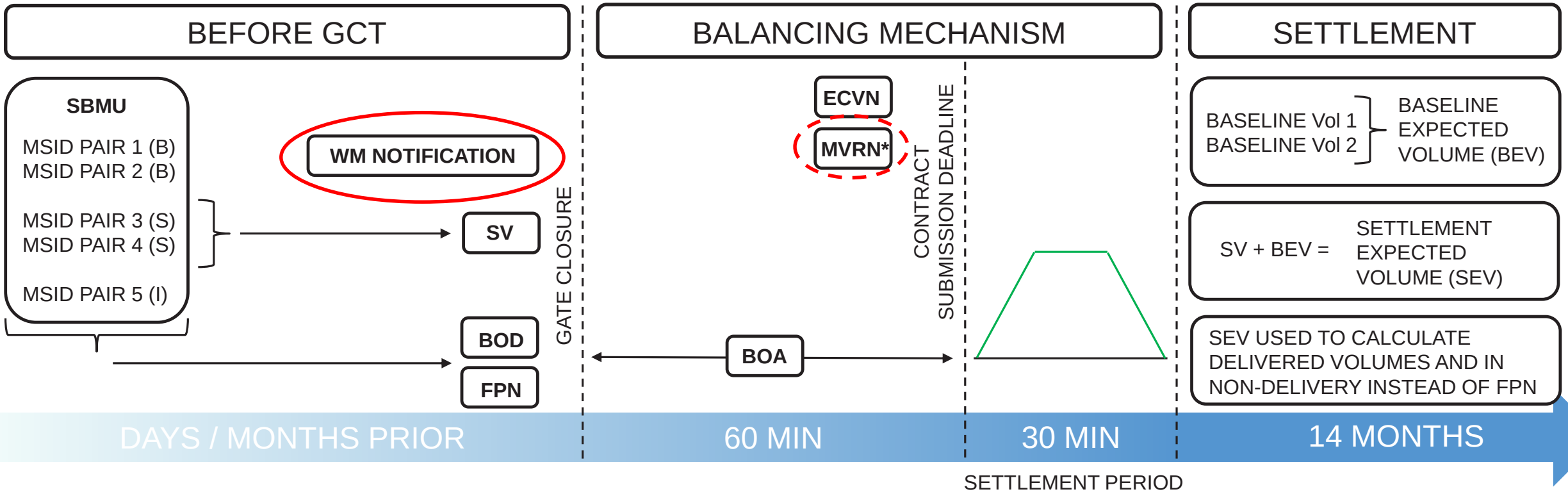
Calculated by Settlement

- Electricity Contract Volume Notification (ECVN) are at the Energy Account level. How can we allocate these across SBMUs accurately?
- Meter Volume Reallocation Notification (MVRN) are at the SBMU level and so can be easily applied.

Discussion: Does the WG have a view on how this should be done? And when?

Wholesale Market Activity Notification

- Settlement will calculate a Settlement Expected Volume (SEV) for each Settlement Period for each Baselined BM Unit. Under P376 this is triggered by Settlement receiving a BOA
- Therefore a trigger is needed to calculate Settlement Expected Volume (SEV) for Wholesale Market activity.
- **Proposal:** VLP to notify Settlement (with a submission deadline at GCT) which BMU is active in the WM and the associated expected BMU Deviation Volumes (i.e. Wholesale Market volumes)



P415 Non-Delivery calculation options:

If we can discern a wholesale market volume for a SBMU the next step is to include it in Non-Delivery.

Proposed Solution: Include wholesale market activity in the 'Expected Metered Volume' calculation

QME = SEV + QBS + SBMU WM
= 0 + 3 + 2
= 5 MWh

QNDO = min ((max (QME - QM, 0), QAO)
= min ((Max (5 - 4 , 0), 3)
= min (1), 3)
= 1

1 MWh Non-Delivery

Question: Does the workgroup agree with the proposed solution?

MVRN

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Meter Volume Reallocation Notification (MVRN)

What is a Meter Volume Reallocation Notification (MVRN)?

Metered Volume Reallocation Notifications (MVRNs) notify Settlement that the energy flowing to or from a particular BM Unit is to be allocated to one or more different Party's Energy Accounts for the purposes of Energy Imbalance calculations.

A MVRN can specify either

- a fixed MWh quantity; or
- a percentage value (between 0% and 100%)

Note the exact volume to be allocated to a different Party account is not known till the Metered Volumes are established (i.e. post event).

Meter Volume Reallocation Notification (MVRN)

The proposed VLP wholesale market activity has been described by the WG as an ‘Implicit Imbalance Trade’ from the Supplier(s) to the VLP where:

- the VLP is balancing responsible for the imbalance it has caused
- **Note** VLP is not allocated Metered Volumes or an equivalent (and so not liable for Network Charges, BSC Cost recovery etc)

Question: As the VLP is not allocated any Metered Volumes should they be able to be Lead Party to a MVRN?

DELIVERED VOLUME ALLOCATION

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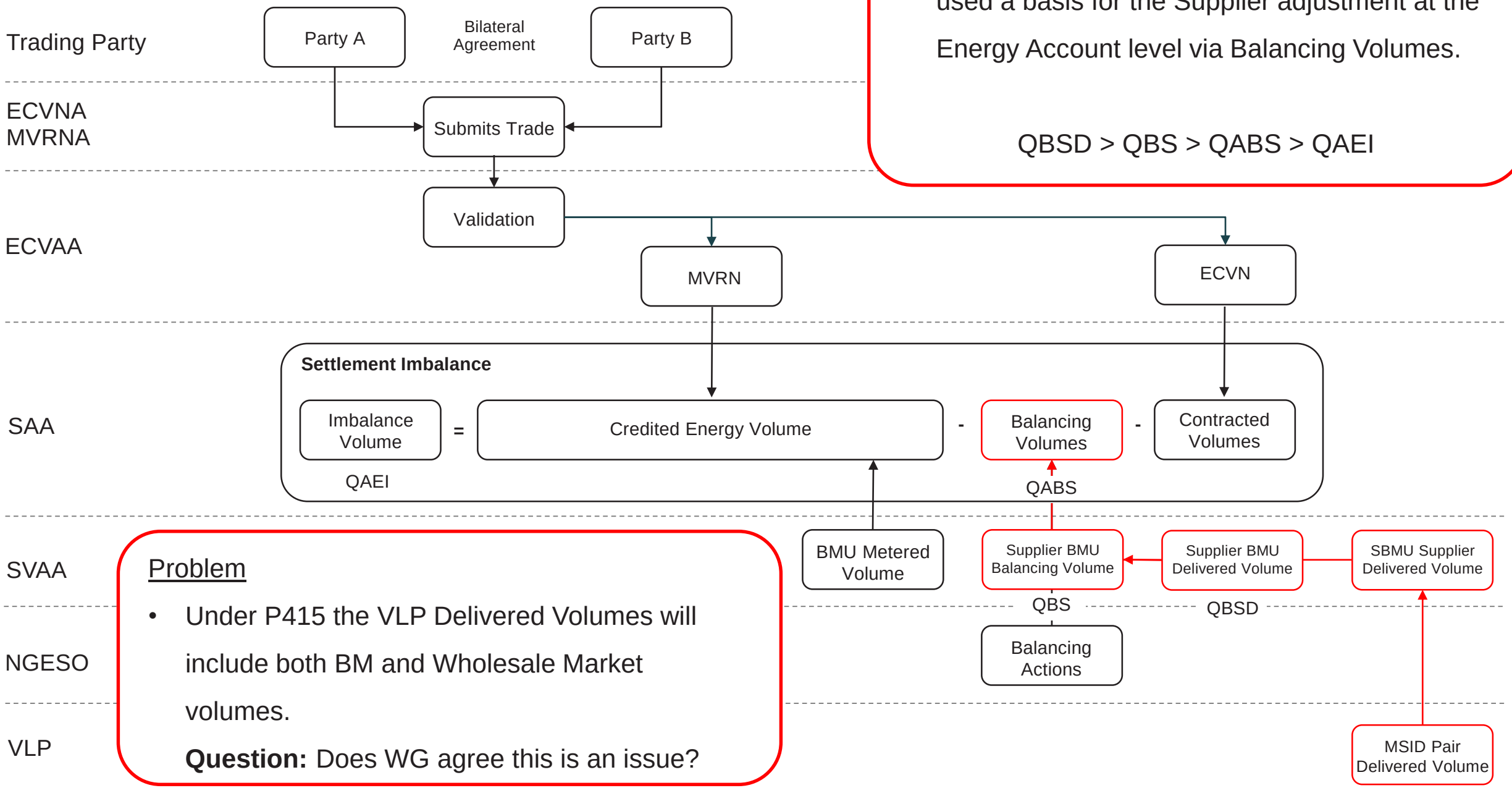
Current Imbalance Settlement Arrangements

- Pre P415 MSID Pair Delivered Volumes are used a basis for the Supplier adjustment at the Energy Account level via Balancing Volumes.

QBSD > QBS > QABS > QAEI

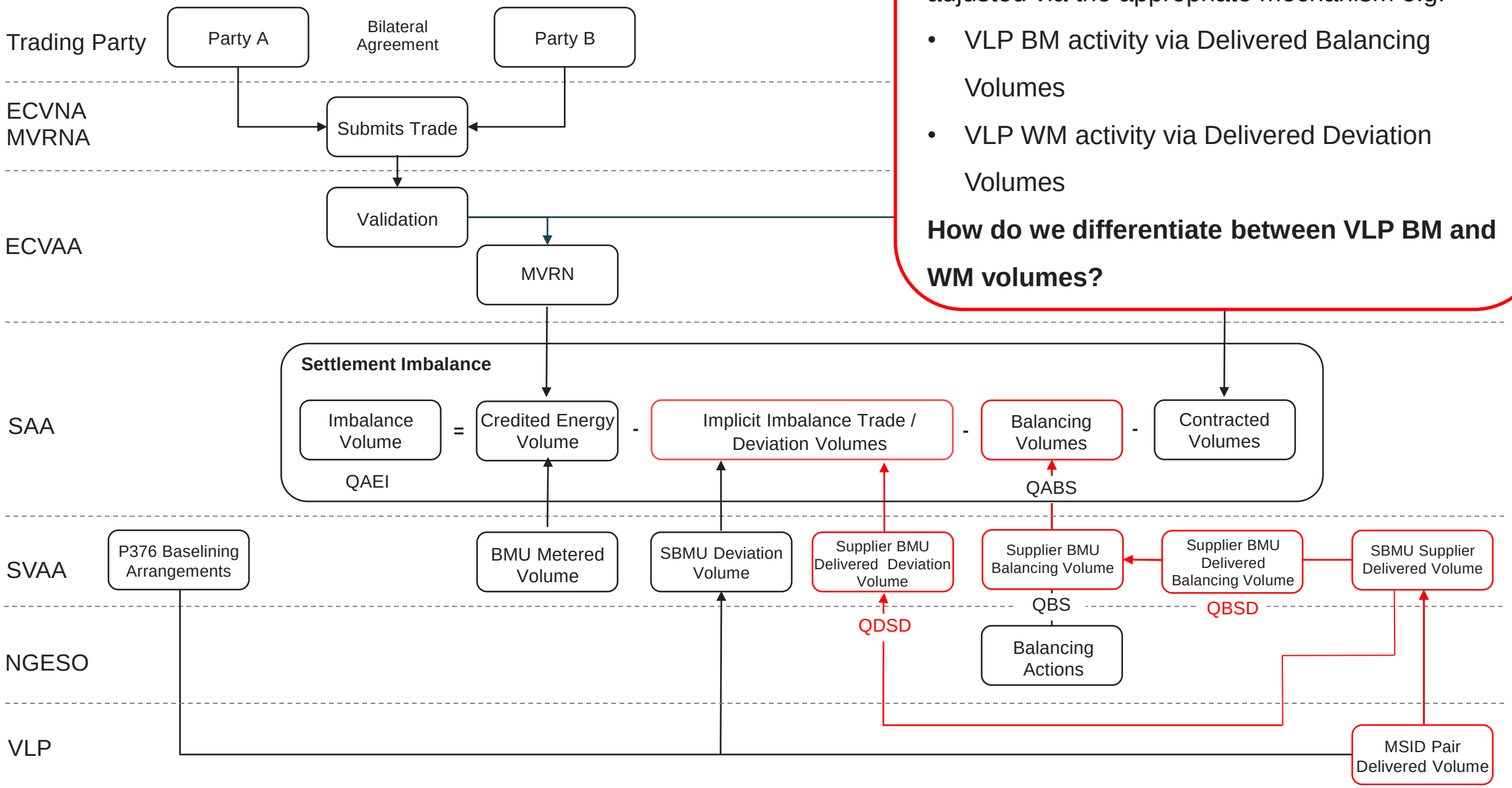


Problem

- Under P415 the VLP Delivered Volumes will include both BM and Wholesale Market volumes.

Question: Does WG agree this is an issue?

Proposed Imbalance Settlement Arrangements



The solution needs to ensure that the Supplier is adjusted via the appropriate mechanism e.g.

- VLP BM activity via Delivered Balancing Volumes
- VLP WM activity via Delivered Deviation Volumes

How do we differentiate between VLP BM and WM volumes?

Delivered Volume Solution

What information do we know?

1. SBMU WM Volume from the VLP Wholesale Market Activity Notification
2. SBMU BM Volume from the BOA
3. SBMU Non Delivered Volumes
4. We can calculate the physically delivered BM Volume (i.e. BM Volume – Non-Delivered Volume)

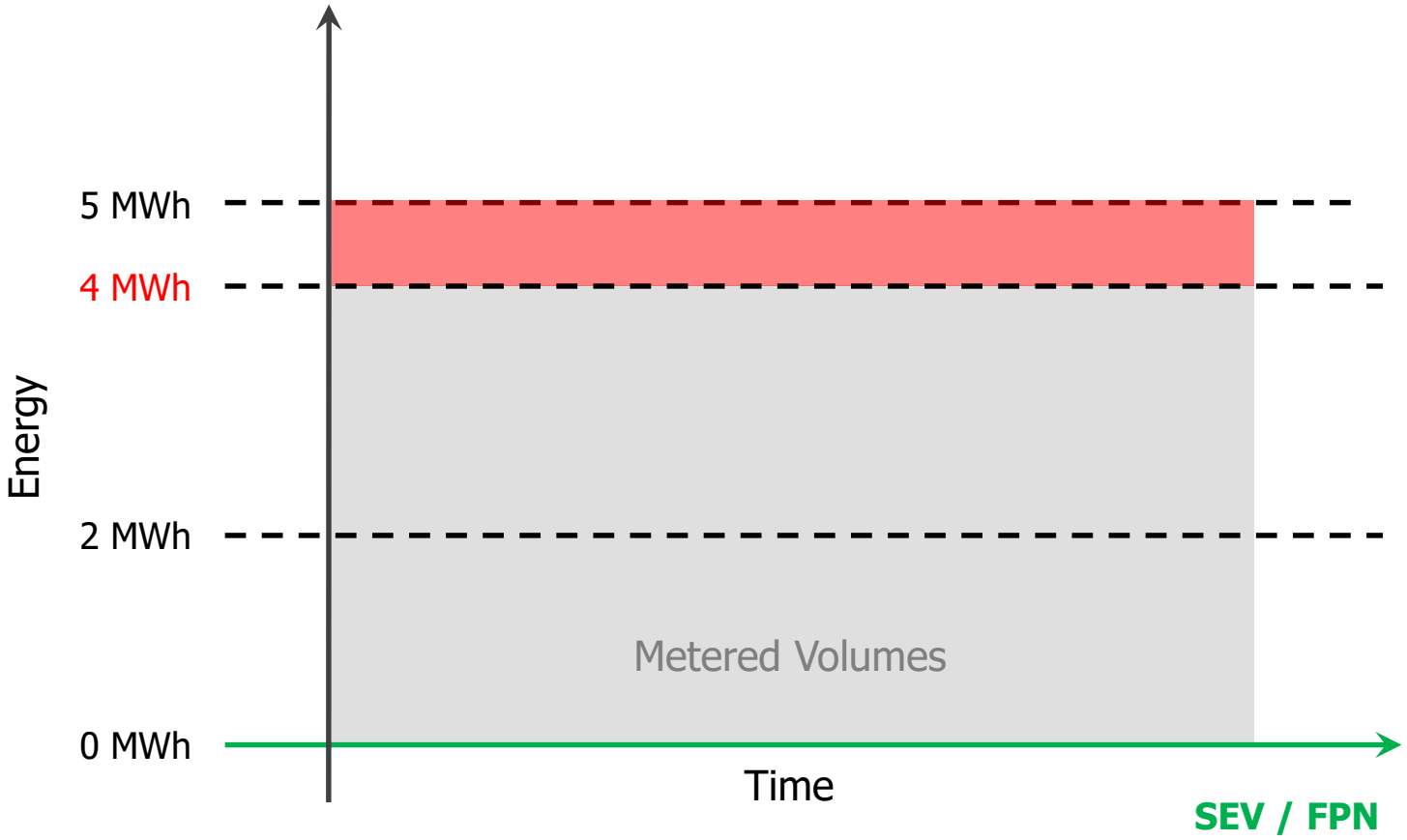
Using the above we calculate what proportion of the BMU was BM activity and what was WM activity

- SBMU WM Proportion = VLP forecast WM Vol / Total Deviation Vol
- SBMU BM Proportion = (BM Volume – Non-Delivered Volume) / Total Deviation Vol

P376 Non-Delivery calculation

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

SEV = 0 MWh WM = 3 MWh BM = 2 MWh QM = 4 MWh



What do we know?

Wholesale Market = 2 MWh
MWh BOA = 3 MWh
MWH Non-Delivery = 1 MWh

Therefore

Total Deviation Volume = 4 MWh

WM SBMU Proportion = 2 / 4 = 0.5

BM SBMU Proportion = (3 -1) / 4 = 0.5

Proposed Delivered Volume Process

Baseline calculated or VLP Submit

MSID Pair	Delivered Volume
1	0
2	0.5
3	0.5
4	3

SVAA Identifies

MSID Pair	Supplier BMU
1	A1
2	A1
3	B1
4	C1

SVAA Calculates

Supplier BMU	Proportion	
A1	= (0 + 0.5) / 4	= 0.125
B1	= (0.5) / 4	= 0.125
C1	= (3) / 4	= 0.75

SVAA Allocates

Supplier BMU	SBMU Supplier Delivered Vol	Supplier BMU Delivered BM Vol	Supplier BMU Delivered DV Vol
A1	= 0.125 * 4 = 0.5	= 0.5 * 0.5 = 0.25	= 0.5 * 0.5 = 0.25
B1	= 0.125 * 4 = 0.5	= 0.5 * 0.5 = 0.25	= 0.5 * 0.5 = 0.25
C1	= 0.75 * 4 = 3	= 3 * 0.5 = 1.5	= 3 * 0.5 = 1.5

Discussion: How does the workgroup feel about proportional allocation?

SUPPLIER COMPENSATION

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Preface

Purpose of the presentation is provide WG members:

- an overview of EU legal requirements
- Observations from existing EU markets arrangements
- Use the “Raise your hand” feature to let the chair know you’d like to ask a question.
- Please restrict questions to clarifications only.

CLEAN ENERGY PACKAGE DISCUSSION

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DSR participation in all markets balance responsibilities and models

Balance responsibility of Aggregator

Allocated volumes and Imbalances

Balance responsibility of Aggregator
Allocated volumes and Imbalances

DSR Aggregators have the same Balance Responsibility obligations as producers

"an obligation on market participants engaged in aggregation to be financially responsible for the imbalances that they cause in the electricity system; to that extent they shall be balance responsible parties or shall delegate their balancing responsibility in accordance with Article 5 of Regulation (EU) 2019/943" (Directive Art 17)

The Balance Responsibility of DSR Aggregators is clearly defined in the Clean Energy Package

Regulation art.5, recital 15

"All market participants should be financially responsible for the imbalances they cause in the system, representing the difference between the allocated volume and the final position in the market. For demand response aggregators, the allocated volume consists of the volume of energy physically activated by the participating customers' load, based on a defined measurement and baseline methodology."

- *Imbalance = allocated volume - final position in the market*
  - *Allocated volume = DSR actually performed = baseline – actual load*
  - *Allocated volume -> counted as 'injections' of DSR Aggregator's BRP*
  - *Final position = (net of) MWh sold (and bought) in the market*

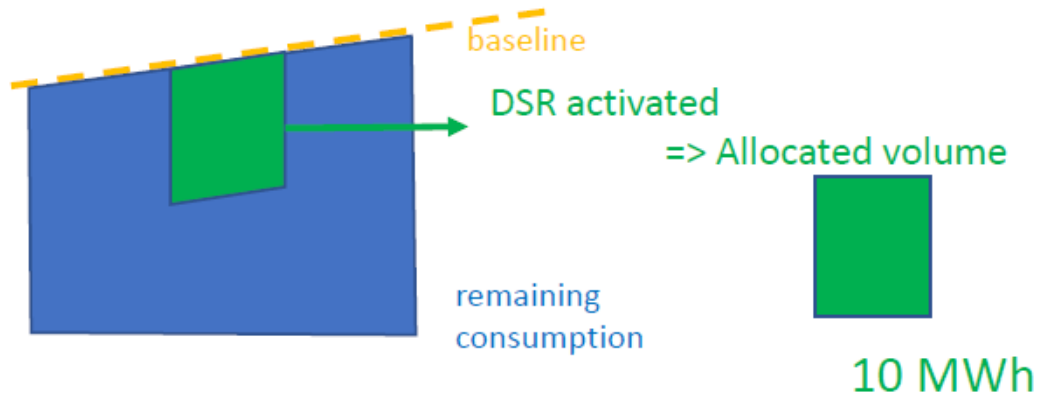
➢ DSR Aggregator is not responsible for the total consumption taking place, but for delivering flexibility as committed/sold in the market

On the other hand, it is possible to choose how the Balance Responsibility of *suppliers* is implemented, whether *models where imbalances are settled or where perimeter corrections introduced*

Allocated volume for DSR Aggregators
= DSR volumes delivered = change in consumers' load

"For demand response aggregators, the allocated volume consists of the volume of energy physically activated by the participating customers' load, based on a defined measurement and baseline methodology."

Physical delivery of DSR



Allocated volumes = volumes of DSR physically delivered
= change in consumers' load

To determine imbalances created in the system, compare allocated volume and sales

"All market participants should be financially responsible for the imbalances they cause in the system, representing the difference between the allocated volume and the final position in the market. "

Physical delivery of DSR

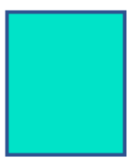
DR activated

=> Allocated volume

10 MWh

Sales in the market

MWh



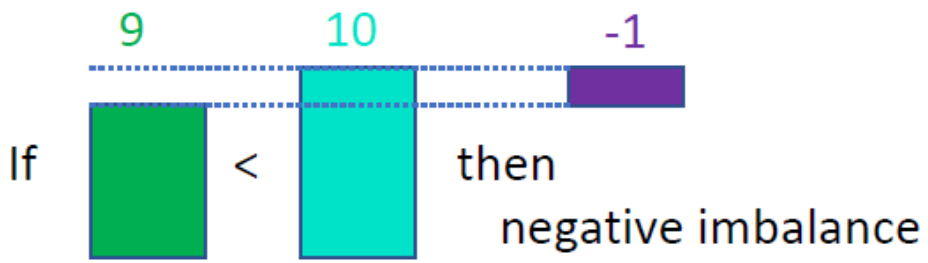
=> €

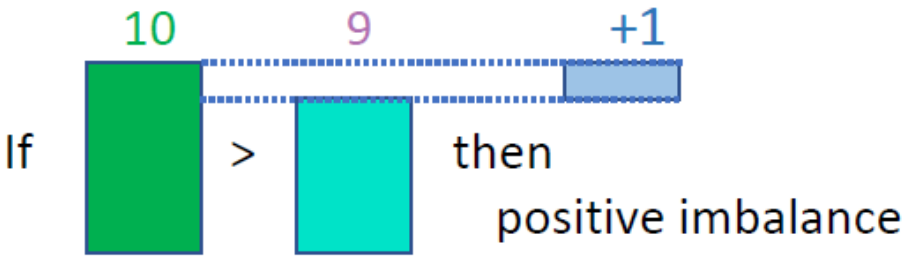
10 MWh

Imbalance = allocated volumes – sales

Imbalances occur when DSR volumes delivered differ from MWh sold in the market

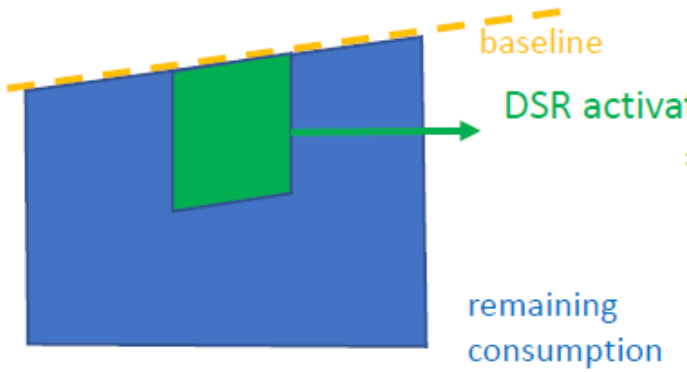
Physical delivery of DSR > ? < Sales in the market



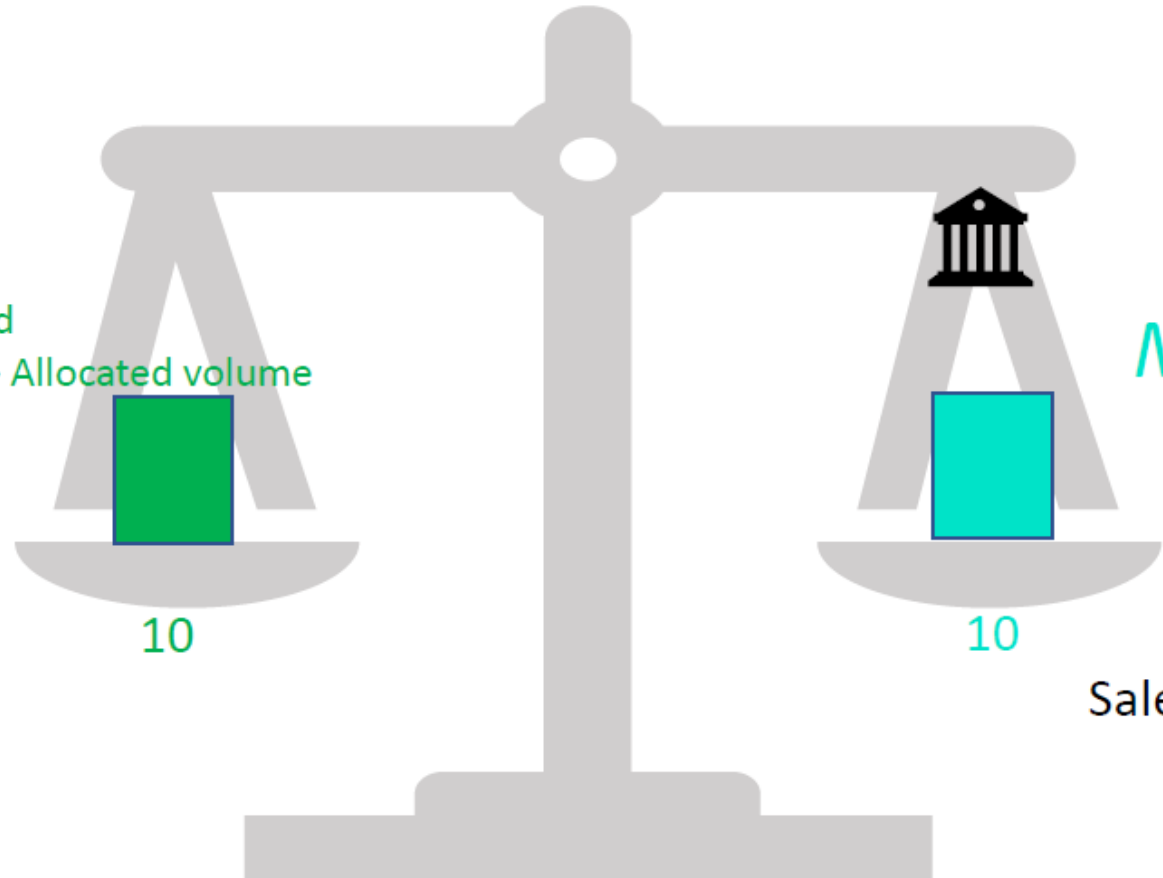


To determine one's imbalance position,
always compare sales and deliveries,
not impact on third parties

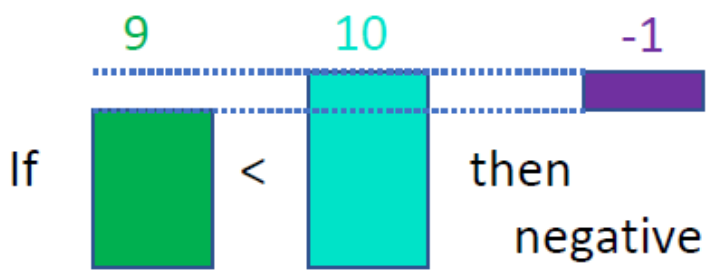
Balance responsibility of DSR aggregators:
to deliver volumes sold, no less, no more

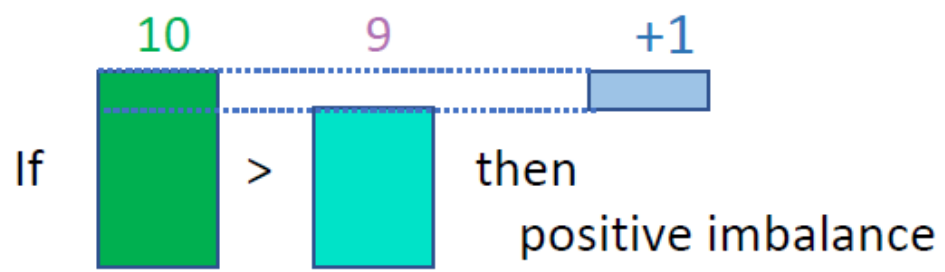


Physical delivery of DSR



Sales in the market



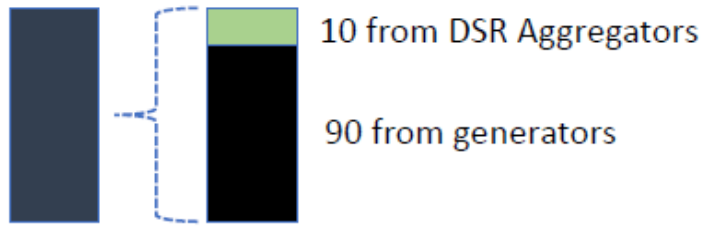


DSR in **wholesale markets:**
avoiding generation in 2 steps

DSR in **wholesale markets:** avoiding generation in 2 steps

1

Wholesale markets (in advance)

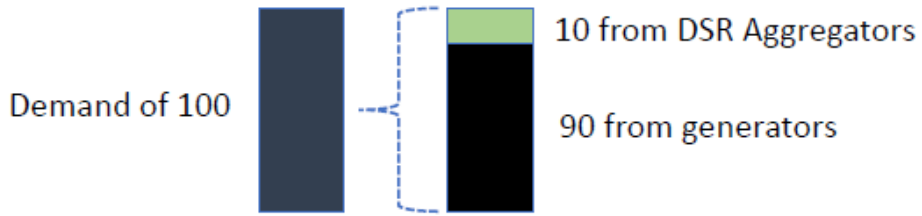


Via wholesale markets (i.e. in advance) consumption forecast is balanced by purchases

DSR in **wholesale markets:** avoiding generation in 2 steps

1

Wholesale markets (in advance)



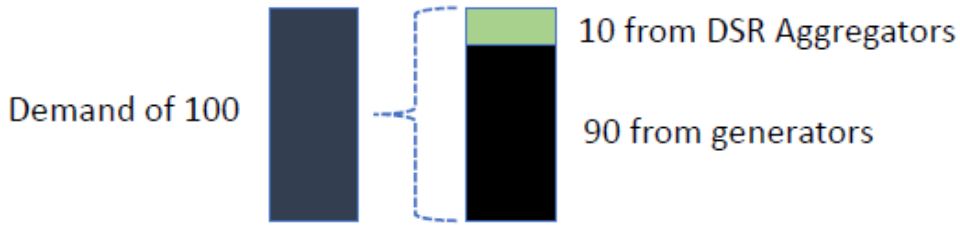
Via wholesale markets (i.e. in advance) consumption forecast is balanced by purchases

The price on the wholesale market is reduced
=> benefits for all buyers (suppliers)

DSR in **wholesale markets:** avoiding generation in 2 steps

1

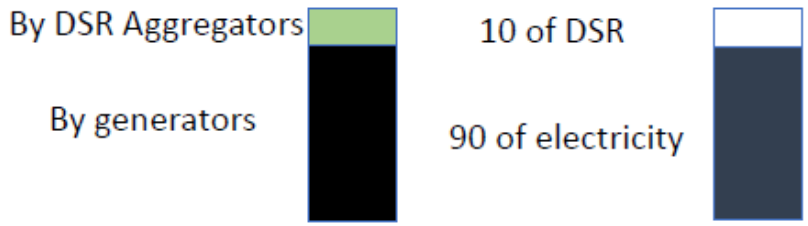
Wholesale markets (in advance)



Via wholesale markets (i.e. in advance) demand is balanced by purchases

2

Physical delivery (in real time)

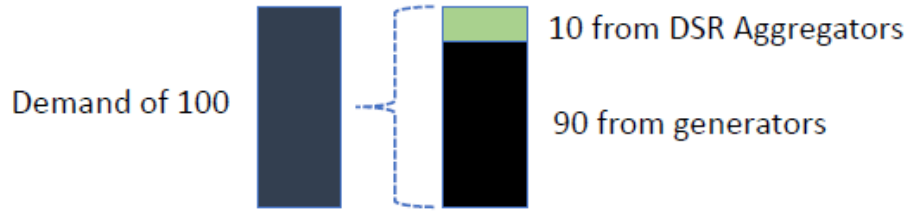


Actual consumption (90) *(as reduced by DSR)* is balanced by actual electricity generation (90)

DSR in **wholesale markets:** avoiding generation in 2 steps

1

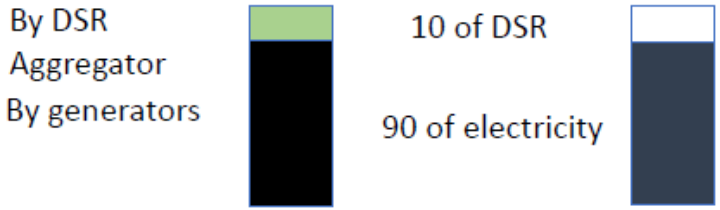
Wholesale markets (in advance)



Via wholesale markets (i.e. in advance) demand is balanced by purchases

2

Physical delivery (in real time)



Actual consumption (90) *(as reduced by DSR)* is balanced by actual electricity generation (90)

DSR ensures energy is neither generated nor consumed, in two steps

1 - DSR avoids generation via the market

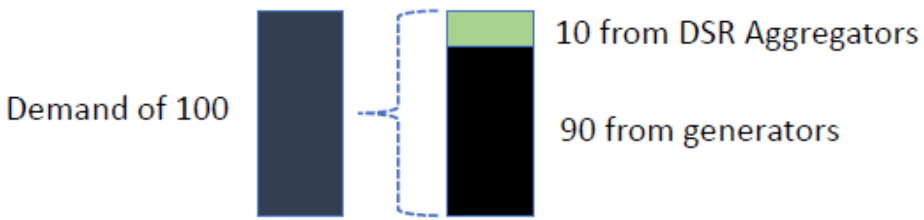
2 - DSR reduces consumption physically

➢ DSR avoids expensive generation

DSR in **wholesale markets:** contribution to overall balance

1

Wholesale markets (in advance)



Via wholesale markets (i.e. in advance) demand is balanced by purchases

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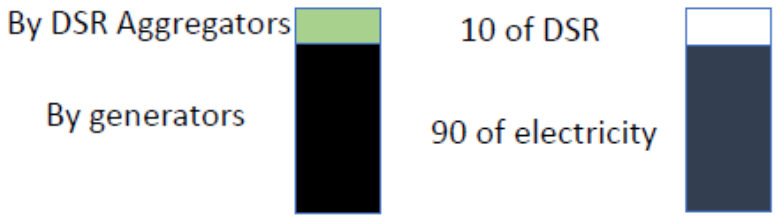
Physical delivery (in real time)



Actual consumption (90) *(as reduced by DSR)* is balanced by actual electricity generation (90)

Note:
1/ System is physically balanced
2/ BRPs of generators and aggregators are balanced: allocated volumes = sales
3/ What about electricity suppliers?
Overall positive imbalance => two possible models

Balance responsibility of suppliers: a choice of ‘models’
With or without ‘perimeter correction’?

The Clean energy package is very precise on balancing responsibility of DSR Aggregators

As per Directive (art.17-3-d) => Regulation (art.5 and recital 15)

… but leaves the choice of model fairly open regarding balance responsibility of suppliers

“Member States should be free to choose the appropriate implementation model […] such as models where imbalances are settled or where perimeter corrections are introduced” (Directive, Recital 39)

Perimeter Correction: DSR actually performed added to the suppliers’ BRP’s position

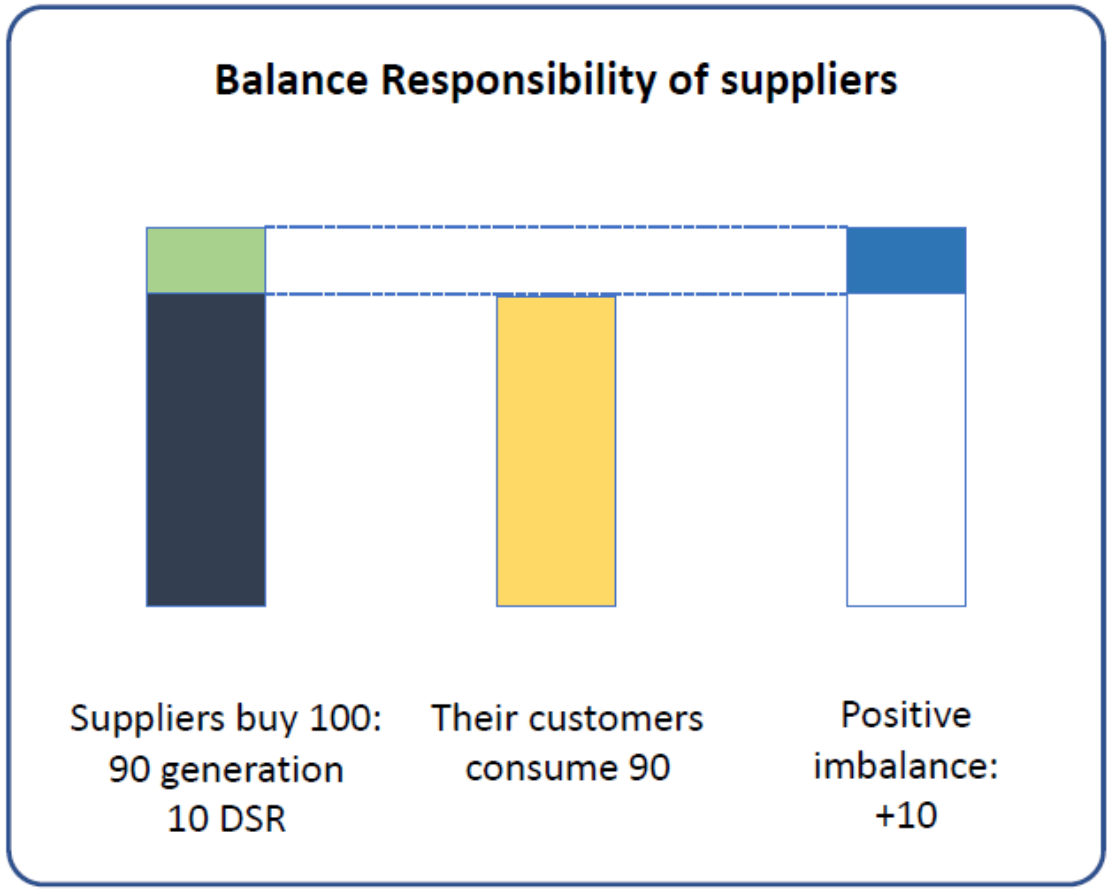
Such ‘correction’ is an accounting rule, diverging from reality of load (real load is reduced thanks to DSR)

Balance responsibility of suppliers: a choice of ‘models’

With or without ‘perimeter correction’?

Balance responsibility of suppliers: a choice of ‘models’
With or without ‘perimeter correction’?

First option: no perimeter correction… the supplier is compensated via Elexon



Accounting imbalance for suppliers:

Volume bought	+ 100
Volume sold	- 90
Total:	
positive accounting imbalance:	= + 10

No correction, suppliers are happy:

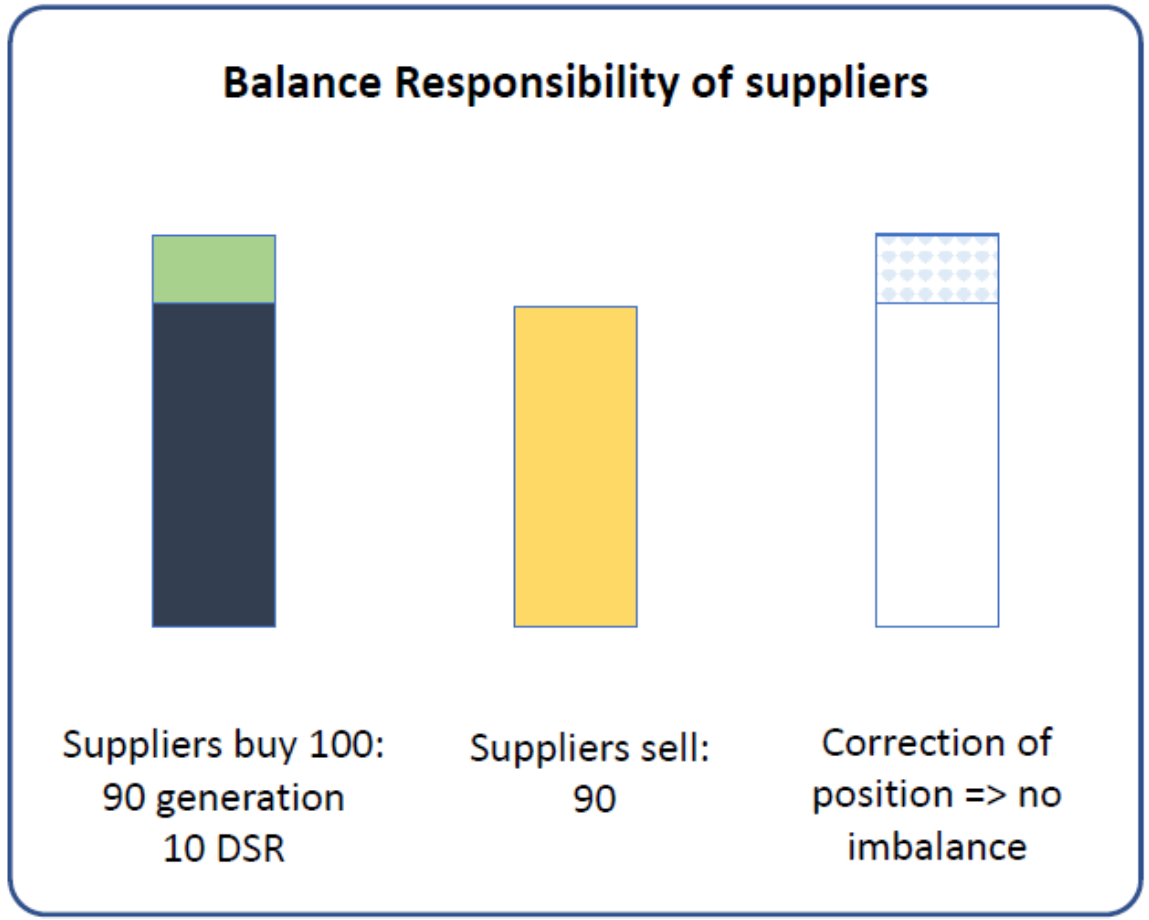
- Elexon pays suppliers for the positive imbalance as part of the Imbalance Settlement flows, “standard rule”
- Suppliers welcome such payment, same as usually paid

➢ ***But who compensates Elexon? How is this shared?***

Balance responsibility of suppliers: a choice of ‘models’

With or without ‘perimeter correction’?

Second option: with perimeter correction… and compensation to the supplier… via Elexon



Suppliers’ perimeter is corrected:

Volumes bought	+ 100
Volumes sold	- 90
Correction by Elexon	*- 10*
Total: no imbalance	= 0

Correction, but:

- Suppliers bought 100 and sold 90
- Often considered fair: Elexon pays suppliers for arbitrary corrected 10
- …e.g. at spot price

➢ ***But who compensates Elexon? At which price? How is this shared?***

Balance responsibility of suppliers: a choice of 'models'
With or without 'perimeter correction'?

Whatever the model, suppliers are kept whole

- Uncorrected model: suppliers' BRPs are paid for their *positive* imbalance
- Corrected model: suppliers are arbitrarily corrected => (may be) entitled to receive compensation from Elexon (for correction)

Same volumes, slight difference in prices

- Uncorrected model: positive imbalance price, same as any accounting imbalances
- Corrected model: day-ahead spot price, standard reference price

In both models, quite fine for suppliers and their BRPs

Remaining question: who compensates Elexon? How is this shared?

=> The Directive creates a common framework to share the costs of a compensation

Common framework to share costs
if specific compensation is established

Compensation is not mandatory and, if any, is a topic for all market participants, not just DSR Aggregators

"Member States may require electricity undertakings [...] to pay financial compensation"
(Directive Art 17-4)

Compensation must not create a barrier to entry for DSR Aggregator to participate in the wholesale market

"Such financial compensation shall not create a barrier to market entry for market participants engaged in aggregation or a barrier to flexibility."

Hence compensation costs cannot be charged to DSR, but must be shared

Customer-Centric Net Benefit Rule

Net Benefit = Benefit – Cost

Benefit: suppliers buy cheaper in the market, because market price reduced thanks to DR

Cost: compensation costs, paid via Elexon

⇒ If ever benefit is not greater than cost, DSR Aggregator may be asked to compensate the difference (only in this case and only up to offset the difference between benefit and cost if negative)

"The method for calculating compensation may take account of the benefits brought about by the independent aggregators to other market participants and, where it does so, the aggregators or participating customers may be required to contribute to such compensation but only where and to the extent that the benefits to all suppliers, customers and their balance responsible parties do not exceed the direct costs incurred."

Summary of key provisions
DSR as an alternative to generation

1. DSR is to participate in all electricity markets alongside production, no discrimination

2. Any consumer is free to engage in DR via an aggregator (his supplier or independent) without prior consent from third parties

3. Balance responsibilities
   a) DSR Aggregators have the same Balance Responsibility obligations as producers, clearly defined
   b) Flexibility regarding the Balance Responsibility of suppliers – possible correction

4. Compensation to suppliers
   ✓ Distinguish whether to have a compensation paid to suppliers and who should pay for this cost
   a) National option to have a compensation paid to suppliers or BRPs (those impacted)
   b) No overcompensation
   c) No barrier to DSR => compensation paid by various ”electricity undertakings”
   d) Net benefit: no global overcompensation => DR to contribute only to offset net benefit <0
   ✓ Suppliers share benefits via the market, should also share the costs => share net benefits fairly
   ✓ Ensure DR competes with generation, (net) benefitting all suppliers, hence all consumers

SUPPLIER COMPENSATION DISCUSSION

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Is compensation needed?

Main arguments for and against can be summarised below:

YES	NO
• Suppliers will be left with a cost £ (from WM) they cannot recover £ (in RM) due to VLP action.	• VLP participation in WM will reduce WM prices and so reduce Supplier resourcing costs • Cost to implement may be greater than benefit received

Question: Is the potential benefit for the impacted Supplier greater than the potential additional costs?

What price is an appropriate price?

Retail Market Price

- VLP could pay all or part of the Retail Market price
  - i.e. one, some or all of the WM sourcing costs, Non-commodity costs & Supplier Margin
- Is this a barrier to entry for VLP?

Imbalance Price

- Represents the costs that National Grid incurs to correct imbalance
  - The imbalance price should correctly signal the SO's cost of balancing. In response to this signal, generators and suppliers should try to balance their own positions if they are able to do so at lower cost than the SO.

Spot Market Price

- Reflective of wholesale electricity for a Settlement Period in the short term market

NEW Weighted Wholesale Market Price

- Calculated to represent true cost of Wholesale Markets across all future markets
- Most costly and complex to implement

Who Should pay the compensation

End consumer

- Is this a barrier to consumer / VLP participation?
  - **Note** as consumers do not accede to the BSC any consumer paid compensation arrangements would lay outside the BSC
- Would likely necessitate expensive changes to Supplier billing systems

VLP

- Is this a barrier to VLP wholesale market entry?
- As no relationship exists between Supplier and VLP central Settlement arrangements will need to faciliate

Mutualised (I.e. Supplier and Generators)

- In theory all participants receive the benefit from DSR participation in the Wholesale Market
  - Is the potential benefit greater than the potential additional costs?
- Allocated by market share?

Supplier compensation scenarios

In each case, just considering 1 MWh that's either consumed as expected, or curtailed due to a DR dispatch

	No DR	Uncorrected	Corrected	Corrected and compensated at		
				retail price	sourcing cost	cash-out
MWh DR	0	1	1	1	1	1
MWh imbalance	0	1	0	0	0	0
Supplier costs	S	S	S	S	S	S
Supplier revenues	R	I	0	R	S	I
Supplier profit on this 1 MWh	R-S	I-S	-S	R-S	0	I-S

NEXT STEPS

Next Steps

- Elexon to continue to document requirements, wider questions and future topics
- Elexon are running through our internal procurement process to develop a brief for a potential tender for the P415 Cost Benefit Analysis.
- Are there any Workgroup views at this stage on suggested scope, content, questions or approach for the Cost Benefit Analysis?
- Elexon intend to present a plan for the scope and timetable of the P415 Cost Benefit Analysis to the BSC Panel to seek feedback.
- At the last meeting, preference noted for more quantitative analysis than was developed for P379.

P415: Next Steps

Event	Date
Present IWA to Panel	8 October 2020
Workgroup meeting 1	11 December 2020
Workgroup meeting 2	9 February 2020
Workgroup meeting 3	25 March 2021
Workgroup meeting 4	**27 May 2021**
Workgroup meeting 5	W/C 12 July 2021
Workgroup meeting 6 -10	W/C 9 August 2021 – December 2021
Present Assessment Report to Panel	10 February 2022
Present Draft Modification Report to Panel	10 March 2022
Issue Final Modification Report to Authority	14 March 2022

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THANK YOU

Ivar Macsween

ivar.Macsween@elexon.co.uk