ELEXON

Stage 04: Draft Modification Report

What stage is this document in the process?

- 01 Initial Written Assessment
- 02 Definition Procedure
- 03 Assessment Procedure
- 04 Report Phase

P282 'Allow MVRNs from Production to Consumption or Vice Versa'

P282 proposes to allow energy reallocated via a Metered Volume Reallocation Notification (MVRN) to be reallocated to either a Production or Consumption Energy Account regardless of the BM Unit's P/C Status.

This would remove the current restriction that energy can only be reallocated from a Production BM Unit to a Production Energy Account, or a Consumption BM Unit to a Consumption Energy Account.

This Report Phase Consultation for P282 closes:

5pm on **Friday 16 November 2012**

The Panel may not be able to consider late responses.

The BSC Panel:
- Initially recommends **Rejection** of P282

High Impact:
- Metered Volume Reallocation Notification Agents (MVRNAs)
- Energy Contract Volume Aggregation Agent (ECVAA)

Medium Impact:
- BSC Trading Parties
- Settlement Administration Agent (SAA)

Low Impact:
- ELEXON

Contents

About this Document

This is the P282 Draft Modification Report, which ELEXON is issuing for industry consultation on the BSC Panel's behalf. It contains the Panel's provisional recommendations on P282. The Panel will consider all consultation responses at its meeting on 13 December 2012, when it will agree a final recommendation to Ofgem on whether or not the change should be made.

There are five parts to this document:

- This is the main document. The majority of the document is identical to the Workgroup's Assessment Report and provides details of the solution, impacts, costs, benefits/drawbacks and proposed implementation approach. However, it also includes the initial recommendations which the Panel has made after considering the Assessment Report.
- Attachment A contains more information on the Workgroup's analysis and assessment. It includes the detailed analysis carried out by the Workgroup on the effects of P282. It also contains details of the Workgroup's membership and full Terms of Reference.
- Attachment B contains the draft redlined changes to the BSC for P282.
- Attachment C contains the full responses received to the Workgroup's Assessment Procedure Consultation.
- Attachment D contains the specific questions on which the Panel seeks your views. Please use this form to provide your responses to these questions, and to record any further views/comments you wish the Panel to consider.

Any questions?

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1 Summary

Why Change?

Under the existing rules, MVRNs can only reallocate a Production BM Unit's Credited Energy Volumes to another Production Energy Account, or a Consumption BM Unit's Credited Energy Volumes to another Consumption Energy Account. Energy cannot be reallocated from a Production BM Unit to a Consumption Energy Account, or vice versa, via MVRNs. Any Party wanting to move energy in this way must use Energy Contract Volume Notifications (ECVNs) to trade volumes at the Energy Account (rather than BM Unit) level.

Solution

P282 proposes to also allow Parties to submit MVRNs which reallocate energy from a Production BM Unit to a Consumption Energy Account or vice versa. This could be the Lead Party's own Energy Account or that of another Party.

P282 is optional in that it enables, but does not require, Parties to change the way in which they use MVRNs.

The Workgroup has considered other possible alternative solutions, but believes that these would be higher-impact and less cost-efficient ways of delivering the same outcome.

Impacts & Costs

P282 impacts the BSC, the Energy Contract Volume Aggregation Agent (ECVAA) and Settlement Administration Agent (SAA) Service Descriptions and User Requirement Specifications, and the NETA Interface Definition and Design (IDD) Part 2 document.

It will impact Metered Volume Reallocation Notification Agents (MVRNAs), BSC Trading Parties, the ECVAA and SAA, and ELEXON.

The central implementation cost of P282 is £140k, comprising £125k in ECVAA and SAA costs and £15k in ELEXON effort. Individual Party costs range from zero to £130k. As P282 is optional, these are costs which would only be incurred by Parties wishing to take advantage of the solution (Parties who don't will not incur any implementation costs).

Implementation

The proposed Implementation Dates for P282 are 7 November 2013 (November 2013 BSC Systems Release) or 27 February 2014 (February 2014 BSC Systems Release), depending on when Ofgem's decision is received. The overall implementation lead time is approximately 9 months.

The Case for Change

By majority, the Panel initially disagrees with the Workgroup's majority view that P282 would better facilitate Applicable BSC Objectives (b), (c) and (d). The Panel therefore initially recommends that P282 is rejected.

What are the existing rules?

Under the existing rules, introduced by the New Electricity Trading Arrangements (NETA) in 2001, Parties are required to keep their licensed Production (Exports to the GB Total System) separate from their licensed Consumption (Imports from the GB Total System). This requirement to treat the two sides of the market separately is one of the key principles of NETA.

Each Party is therefore allocated two Energy Accounts: a Production Energy Account and a Consumption Energy Account. In addition, each BM Unit is classed as either a Production BM Unit or a Consumption BM Unit (its P/C Status).[1] If a BM Unit is a Production BM Unit, its positive Credited Energy Volumes (QCE_{iaj}) will, by default, be allocated to the Lead Party's Production Energy Account. Similarly, a Consumption BM Unit's negative Credited Energy Volumes will be allocated to the Lead Party's Consumption Energy Account. If the Party takes no other action, both volumes will be considered as separate imbalances and will be subject to separate imbalance charges.

Parties are therefore incentivised to submit trades (either between their own Energy Accounts or with other Parties) to balance their position. In an ideal world, each Party's trades would exactly balance its position to a zero net volume. However, where this is not possible (due to any uncertainties over what volume its generators will produce or its customers consume), Parties will adopt their own trading/hedging strategies to minimise their imbalance exposure based on their best forecasts of their volumes.

There are two types of trades with Parties can use to balance their position: Metered Volume Reallocation Notifications (MVRNs) and Energy Contract Volume Notifications (ECVNs). Both types of trade must be made before Gate Closure for the relevant Settlement Period.

What are MVRNs?

These allow the Lead Party of a BM Unit to reallocate some or all of that BM Unit's Credited Energy Volumes to the Energy Account of another Party (known as the Subsidiary Party). This Subsidiary Party would be responsible for any Trading Charges associated with these volumes, and would be exposed to imbalance charges if they do not in turn balance their position.

There are two ways of specifying the amount to be reallocated through an MVRN:

- **Percentage volume**: A 'percentage volume' MVRN will transfer a percentage of the BM Unit's QCE_{iaj} in that Settlement Period to the Subsidiary Party. It is therefore not possible to know the exact amount of energy that will be reallocated until after the BM Unit's QCE_{iaj} has been calculated. However, this does allow the Lead Party to reallocate 100% of a BM Unit's QCE_{iaj} to a Subsidiary Party without needing to know what the value of QCE_{iaj} will be in each Settlement Period. These are therefore the most common form of MVRNs. It is possible to transfer a BM Unit's QCE_{iaj} across multiple Subsidiary Parties in this way, but the total amount of

[1] The P/C Status of some BM Units (Interconnector BM Units and Supplier BM Units) is fixed by the BSC and cannot be changed; Exempt Export BM Units relating to Exemptable Generating Plant choose whether to be Production or Consumption. For the remaining types of BM Unit, including all non-Exempt Export generator BM Units, P/C Status is determined dynamically at the Trading Unit level according to the Trading Unit's net Relevant Capacity.

What is the issue?

MVRNs can only reallocate a Production BM Unit's Credited Energy Volumes to another Production Energy Account, or a Consumption BM Unit's Credited Energy Volumes to another Consumption Energy Account. Energy cannot be reallocated from Production to Consumption or vice versa.

energy transferred through percentage MVRNs cannot exceed 100% of the BM Unit's QCE_{iaj}.

- **Fixed volume**: A 'fixed volume' MVRN will transfer a specified volume of energy to the Subsidiary Party. This volume will be reallocated regardless of the BM Unit's QCE_{iaj} in that Settlement Period, and so it is possible to transfer volumes that are larger or in the opposite direction to the BM Unit's QCE_{iaj}.

Multiple MVRNs, percentage and fixed, can be applied to a single BM Unit in a given Settlement Period. Once all the reallocations have been made, the remaining Credited Energy Volume is allocated to the Lead Party.

Consistent with the NETA requirement to keep Production and Consumption separate, MVRNs can only be made to an Energy Account which aligns with the BM Unit's P/C Status – i.e. Credited Energy Volumes from a Production BM Unit can only be reallocated to a Production Energy Account, and Credited Energy Volumes from a Consumption BM Unit can only be reallocated to a Consumption Energy Account. It is therefore not currently possible for the same Party to be the Lead and Subsidiary Party to an MVRN (i.e. it cannot have an MVRN between its two Energy Accounts).

Many Trading Party Groups use 100% MVRNs to 'consolidate' all their volumes in a given direction in a single Energy Account. For example, a Party who has multiple generation sites/BM Units split across multiple Party IDs can use MVRNs to allocate all of the energy into a single Production Energy Account. This makes it easier for them to balance their position, as they then only have to trade that one consolidated Production volume, rather than trading multiple Production Energy Accounts individually. If the Trading Party Group also has Consumption volumes, then it can similarly consolidate these in a single Consumption Energy Account. However, it would still need to trade this consolidated Consumption separately from its consolidated Production. In other words, MVRNs allow 'horizontal' but not 'vertical' consolidation.

MVRNs also give flexibility in who is responsible for balancing the output of a BM Unit. By using a 100% MVRN to another Subsidiary Party, the Lead Party avoids the imbalance risk (and any associated imbalance charge) which is instead borne by the Subsidiary Party. For example, a small Supplier could use an MVRN to transfer its Consumption energy to the Consumption Energy Account of another larger Supplier. The two Parties to an MVRN would usually agree a bilateral contract (outside the BSC) covering associated liabilities and payments.

Parties notify MVRNs through MVRN Agents (MVRNAs). Both Parties to the MVRN must authorise the relevant MVRNA through an MVRNA Authorisation (MVRNAA). Any change in the P/C Status of a BM Unit currently invalidates any MVRNs in place for that BM Unit, because of the rule prohibiting Production-Consumption or Consumption-Production MVRNs.

What are ECVNs?

These types of trade are made between Energy Accounts and therefore do not relate to specific BM Units. Unlike MVRNs, these are always 'fixed-volume' transfers (there can be no percentage-volume ECVNs). Unlike MVRNs they can also be from and to any Energy Account – from Production to Production, Production to Consumption, Consumption to Consumption, or Consumption to Production.

ECVNs can be between a single Party's two Energy Accounts, as well as from one Party to another. Many vertically-integrated Parties therefore use them to balance their expected Production and Consumption volumes in a single account. Trading Party groups who consolidate their Production volumes into one Production Energy Account and their Consumption volumes into one Consumption Energy Account can use an ECVN between these two accounts to balance their position.

Parties notify ECVNs through ECVN Agents (ECVNAs). Both Parties to the ECVN must authorise the relevant ECVNA through an ECVNA Authorisation (ECVNAA).

What were the original principles behind the existing rules?

The existing rules were originally intended to ensure a level playing field between Parties operating on both sides of the market (often referred to as portfolio players, vertically-integrated Parties, or 'Verticos') and those who operate on one side only (who may be smaller Parties, newer entrants and/or those with niche portfolios of generation or customers). This is because all Parties, regardless of size or portfolio, have to trade through ECVNs to balance their position and avoid imbalance risk.

If vertically-integrated Parties were able to net Production and Consumption volumes within the same Energy Account (e.g. by just having a single Energy Account per Party, or by allowing Production-Consumption and Consumption-Production MVRNs), then they could reduce their imbalance risk because they would only need to trade their residual net volume. This could be viewed as an institutional bias against Parties who only operate on one side of the market. It could also be viewed as reducing vertically-integrated Parties' incentive to balance, as any volatility/uncertainty in their Production and Consumption volumes could be offset (although, to achieve this, the volatility would have to be in opposite directions). Requiring all Parties to trade Production and Consumption separately could be viewed as promoting liquidity, although in practice under the existing rules many vertically-integrated Parties simply 'self-balance' by trading ECVNs between their two Energy Accounts rather than with other Parties.

How/why does the Proposer want to change the existing rules?

The Proposer seeks, through P282, to relax the existing MVRN rules to allow Production-Consumption and Consumption-Production MVRNs. These could be between a single Party's two Energy Accounts, or between two different Parties. You can find further details of the proposed solution in Section 3.

The Proposer believes that the existing MVRN restrictions prevent smaller Parties from having the flexibility to consolidate and/or manage their imbalance risk in the most efficient way. For example, the Proposer considers that they prevent such Parties using an MVRN to net their position with another Party on the opposite side of the market (e.g. a small generator using an MVRN to net its Production with a small Supplier's Consumption). The Proposer argues that this increases the costs of the trading arrangements and complexity of compliance with the rules. The Proposer therefore believes that P282 would promote competition and efficiency, reducing barriers to market entry.

The Proposer notes that the original restrictions were introduced to ensure that larger vertically-integrated companies would not benefit from the advantage of being able to net their volumes from their generation sites and their supply volumes in a single Energy Account, and so reduce their exposure to imbalance charges. However, the Proposer

Modification Proposal Form

A copy of the Proposer's Modification Proposal Form can be found on the P282 page of the ELEXON website.

believes that the existing rules do not provide an effective check, since vertically-integrated companies have found other solutions that minimise their exposure to imbalance. It was also initially assumed that many smaller Parties would only be active on one side of the market; something the Proposer believes has not proven to have been the case.

In addition, the Proposer highlights that Lead Parties of Exempt Export BM Units for licence-exempt generation have the ability to choose the P/C Status of these BM Units, which allows them to choose to which Energy Account their Credited Energy Volumes are allocated. This allows them more flexibility should they choose to reallocate their volumes to another Party. For example, by setting its P/C Status to Consumption, the Lead Party for an Exempt Export BM Unit can use an MVRN to transfer the BM Unit's Credited Energy Volumes to the Consumption Energy Account of a Supplier, thereby consolidating these volumes with the Supplier's existing Consumption volumes. This option is not currently available to other types of BM Unit, who cannot choose their P/C Status. The Proposer believes that P282 would level the playing field between Exempt Export BM Units and other Parties.

Finally, the Proposer considers that, when compared to other European Markets, GB is unusual in requiring separate Production and Consumption accounts. The Proposer therefore believes that P282 may go some way towards harmonising arrangements with other European countries and facilitating the creation of a single European energy market.

Are the original principles behind the existing rules still valid?

A key area of consideration for the P282 Workgroup has been whether relaxing the existing MVRN rules would promote or hinder competition.

The materiality of the potential netting benefits (and therefore any potential effect on liquidity) is lower than may have been anticipated when considered against the total volume of imbalance, and not all vertically-integrated Parties necessarily benefit. However, as would be expected, the non-portfolio players have less scope to benefit unless they contract with other such players on the opposite side of the market (and the Workgroup has different views on the feasibility of this). The Parties who have the greatest potential to benefit appear to be those who are currently the worst at self-balancing. The Workgroup has differing views on whether P282 would therefore give appropriate incentives to balance, and whether it would have a positive or negative impact on the System Operator (National Grid) in balancing the energy on the Transmission System.

You can find the Workgroup's discussions of the results, and its views of the overall pros and cons of P282, in Section 6. Overall, a majority of the Workgroup supports implementation of P282; however the arguments are finely balanced.

3 Solution

What is the proposed solution?

P282 proposes to remove the existing restriction whereby energy from a Production BM Unit can only be reallocated to the Subsidiary Party's Production Energy Account and energy from a Consumption BM Unit can only be reallocated to their Consumption Energy Account. Instead, a Lead Party could reallocate energy from a Production BM Unit to a Consumption Energy Account, or vice versa. This could be the Lead Party's own Energy Account or that of another Party.

There would therefore no longer be a link between P/C Status and MVRN validation, and therefore no longer a restriction against the same Party being the Lead and Subsidiary Party to an MVRN. See Attachment A for the specific solution requirements in this area.

Parties would be able to reallocate all their Production and Consumption Credited Energy Volumes into a single Energy Account through MVRNs rather than having to trade these volumes separately through individual ECVNs. They would then only need to trade the resulting net volume through an ECVN. The likely effect of this is that many existing ECVNs would be replaced by MVRNs (see below and further analysis in Section 6).

P282 is optional in that it enables, but does not require, Parties to change the way in which they use MVRNs (and therefore ECVNs).

P282 would not change the terminology for Production and Consumption BM Units, or Energy Accounts, under the BSC. The Workgroup has considered, but discounted, solutions which would remove these concepts from the BSC altogether, and you can find more information on these below.

What is the proposed solution?

Credited Energy Volumes could be reallocated via an MVRN to either a Production or a Consumption Energy Account, regardless of the BM Unit's P/C Status.

How does P282 impact the Funding Shares?

Funding Shares are used to recover certain (non-targeted) BSCCo Costs from Parties according to their market share. Under the current arrangements, energy from a Production BM Unit will be allocated to a Production Energy Account and energy from a Consumption BM Unit will be allocated to a Consumption Energy Account. The Main Funding Share (BSC Section D Annex D-1 Part 1) splits its associated costs 50:50 between the Production and Consumption sides of the market, while the SVA (Production) Funding Share (BSC Section D Annex D-1 Part 3) allocates its costs entirely to the Production side of the market. The calculation of these Funding Shares references the energy in a BSC Party's Production and Consumption Energy Accounts accordingly, relying on the current segregation between the two halves of the market.

P282 would allow energy from a Production BM Unit to be reallocated into a Consumption Energy Account and vice versa, which would remove the current segregation and thus impact the calculations of these Funding Shares. If Parties were able to reallocate Production volumes into their Consumption Energy Account or vice versa, then the relevant allocations would become distorted and result in incorrect charges being calculated.

Consider, for example, the scenario where every Party except one reallocates all of their Credited Energy Volumes into their Consumption Account, with that remaining Party electing to use their Production Account. This would result in that one Party becoming liable for 50% of the costs allocated under the Main Funding Share and all of the costs allocated under the SVA (Production) Funding Share.

The Workgroup has proposed changes to the calculation of these two Funding Shares with an intention to keep the allocations as current. Subsequently, the proposed changes are only to the definitions of the summations used within each equation, so that it is the relevant BM Unit's P/C Status that is used to determine whether Credited Energy Volumes are Production or Consumption, and not to which Energy Account the volumes are ultimately allocated. Therefore, it will not matter which Energy Account a BM Unit's Credited Energy Volumes are subsequently reallocated to; if the energy originated from a Production BM Unit it will still be considered Production energy by the proposed equations even if it is subsequently reallocated into a Consumption Energy Account (and vice versa). Consequently, the proposed equations will mean that P282 would have no impact on each Party's Funding Shares.[2]

In addition, it should be noted that the equations will continue to allocate the relevant share of each Funding Share to the BSC Party to which a BM Unit's Credited Energy Volumes are reallocated to (i.e. the Subsidiary Party). So if the Lead Party elects to reallocate some or all of a BM Unit's Credited Energy Volumes to a Subsidiary Party, the Subsidiary Party will continue to also be allocated the corresponding proportion of each Funding Share.

You can find the proposed changes to these equations in Attachment A.

Will P282 impact the imbalance calculations?

The P282 solution does not propose any changes to the imbalance calculations:

- The calculation of each Energy Account's imbalance and the subsequent cash-out of this imbalance at either System Buy Price (SBP) or System Sell Price (SSP) will remain as current. P282 will allow the Lead Party of a BM Unit to reallocate that BM Unit's Credited Energy Volume to their 'opposite' Energy Account. In this way, a Party could net the volumes of all of their Production and Consumption BM Units in a single energy Account, and so would only be exposed to imbalance on their net position. However, the only impact this would have with respect to the imbalance calculations is that a BSC Party would be able to avoid paying the SBP/SSP spread should they end up long in one Energy Account and short in the other.

- Each Energy Account's share of the Residual Cashflow Reallocation Cashflow (RCRC) will also remain unchanged by P282. A BSC Party's share of the RCRC is determined by the gross Credited Energy Volumes allocated to each of their Energy Accounts. P282 would allow a Party to reallocate a BM Unit's Credited Energy Volume from one Energy Account to the other, and this would transfer the corresponding proportion of the RCRC between these Energy Accounts. However, the Party's overall RCRC allocation would remain unchanged by such an action.

It should be noted that P282 is likely to reduce the overall amount of imbalance charges paid by Parties, as a consequence of them being able to avoid the SBP/SSP spread should they be long in one Energy Account and short in the other. This will result in a smaller amount of residual money in each Settlement Period that will need to be reallocated via the RCRC mechanism. You can find the Workgroup's consideration of this in Section 6.

[2] It should be noted that under the current arrangements there would be no difference in the results between the current and proposed equations, as energy from Production BM Units can only be allocated to Production Energy Accounts while energy from Consumption BM Units can only be allocated to Consumption Energy Accounts. It is only when energy from a Production BM Unit can be reallocated to a Consumption Energy Account or vice versa that the different equations would produce different results.

Legal text

The proposed redlined changes to the BSC to deliver the P282 solution can be found in Attachment B. The Workgroup agrees that these changes deliver the intent of P282.

A change has been made to the text from the version issued in the Workgroup's Assessment Consultation, following a comment made by one Assessment Consultation respondent (Section T4.5.1(b)). A change has also been made to the definition of "Subsidiary Party" in Section X Annex X-1. No other respondents had any comments on the draft redlining. You can find the full Assessment Consultation responses in Attachment C.

Does P282 impact TNUoS or BSUoS?

The Workgroup has not identified any impact of P282 on either Transmission Network Use of System (TNUoS) or Balancing Services Use of System (BSUoS) charges, which National Grid levies under the Connection and Use of System Code (CUSC).

TNUoS is paid by generators who have certain types of connection agreement with National Grid. BSUoS is paid by Lead Parties of BM Units according to their half-hourly BM Unit Metered Volume (QM_{ij}); it ignores Credited Energy Volumes (QCE_{iaj}) so is unaffected by MVRNs and P282.

Does P282 impact Trading Units or embedded benefits?

The Workgroup has not identified any impacts of P282 on Trading Unit or embedded benefits. P282 will have no impact on whether a BM Unit is deemed to be a 'delivering' or 'offtaking' BM Unit. Therefore, P282 will have no impact on the benefits that would arise from being a delivering BM Unit in an offtaking Trading Unit or vice versa, which relate to the allocation of Transmission Loss Multipliers (TLMs), BSUoS, RCRC and other BSC costs. In addition, P282 will not impact how a BM Unit's P/C Status is determined, and P282 would allow a Party to overrule the default Energy Account (Production or Consumption) to which a BM Unit's Credited Energy Volume is allocated to, which is determined by P/C Status.

Are there any alternative solutions?

The Workgroup has considered whether there are any alternative solutions to P282; however it has not identified any which it believes would better facilitate the Applicable BSC Objectives when compared with the Proposer's solution.

In their proposal, the Proposer notes that the Workgroup may wish to consider a potential Alternative whereby Parties whose annual level of production or consumption is above a certain threshold (such as 20TWh) would remain subject to the current limitations. This could prevent larger vertically-integrated Parties from gaining too large an advantage out of P282 compared to smaller Parties.

However, the Workgroup felt that this solution could be considered undue discrimination against larger Parties, which would be contrary to the Proposer's intention to level the playing field for all Parties. In addition, the Workgroup noted difficulty in enforcing these rules, as each Party's performance would need to be constantly monitored to make sure that the correct Parties were subject to the current limitations. The Workgroup concluded that this solution would not be workable.

The Workgroup noted that P282 would effectively enable each Party to trade through only one of its two Energy Accounts, an ability currently confined to licence-exempt generation. Given this, it could be questioned whether the requirement for two Energy Accounts is still meaningful/necessary or could be seen as inefficient for Parties. The Workgroup noted that moving to a single Energy Account per Party (whether on a mandatory or voluntary basis) would have a significant impact on the BSC, BSC Systems and Trading Parties, while achieving the same end result as the Proposer's suggested MVRN solution. A single Energy Account model would also remove the main purpose of P/C Status, and would therefore have knock-on impacts in that area (see below).

While the Workgroup did not rule out a single Energy Account solution being reconsidered in the future, it therefore believed that this could not be a proportional, cost-efficient solution at this time – particularly given the wider market changes on the horizon, such as Ofgem's Electricity Balancing Signficant Code Review (SCR) and DECC's Electricity Market Reform proposals (see below). It noted that, if the implementation of P282 resulted in all Parties trading through only one of their Energy Accounts, it could be easier to 'phase out' the unused accounts at a future point.

The Workgroup also noted that a different alternative solution would be to allow every BM Unit to choose its P/C Status, and thereby which Energy Account BM Unit its volumes are allocated to. It noted that the original purpose of P/C Status (to keep licensed generation and supply separate) would to some extent be 'undone' by P282, and that it could be questioned whether its retention was inefficient. However, P/C Status also has a function in determining how Generation/Demand Capacity and Credit Assessment Load Factor values are used in the Credit Cover calculation, and so any alternative solution in this area would have to address this. Given this, and since the end result of this solution would again be the same, the Workgroup believed that this would also not be a proportional, cost-efficient solution. However, the Workgroup did not rule out this idea being reconsidered in the future, either alongside or separate to a single Energy Account model.

The Workgroup has therefore concluded that the Proposer's MVRN solution is the most pragmatic, least impact/risk and most cost-effective approach. It is also a 'permissive' solution, as Parties would still have the option of trading out of both Energy Accounts as currently. P282 is therefore an 'evolutionary' rather than a 'revolutionary' approach. The Workgroup agrees that the other possible solutions would add additional impact, cost and risk for no obvious additional benefit at this time.

All Assessment Consultation respondents agree with the Workgroup's view that there are no alternative solutions that would better facilitate the Applicable BSC Objectives than the proposed solution. You can find the full consultation responses in Attachment C.

Is P282 impacted by the Electricity Balancing Significant Code Review?

On 1 August 2012, Ofgem formally launched its Significant Code Review (SCR) on Electricity Balancing. There are two areas within the scope of Ofgem's SCR that could interact with P282: a move to a single Energy Account and a single imbalance price.

The Proposer raised P282 before the SCR was launched. As such, it is up to the Proposer as to whether or not P282 is put on hold while the SCR progresses; neither the Panel nor Ofgem can do this without the Proposer's agreement (Section F5.4 of the BSC). The

Proposer has elected not to put P282 on hold, and so P282 will progress irrespective of the SCR.

Some Workgroup members believe that it would be better to consider the issues raised by P282 under the SCR to get a holistic view of the principles, impacts and benefits (e.g. those relating to vertical integration, behavioural change and liquidity), and to avoid wasted implementation work if areas progressed under the SCR negate the need for P282. Others members disagree, and believe that P282 is a step in the right direction which can be implemented separately to the SCR. These members believe that any wider changes from the SCR would build on, rather than negate P282. The Workgroup notes that Ofgem will be able to take any SCR interaction into account when making its decision on P282. You can find further details of the Workgroup's views in this area in Section 6.

Estimated central implementation costs of P282

The total central implementation cost for P282 is approximately £140k. This comprises:

- Approximately £125k in ECVAA and SAA costs; and
- Approximately £15k (60 man days) in ELEXON effort.

These are one-off implementation costs, and there would be no ongoing central operational costs.

The ECVAA and SAA costs include making the relevant ECVAA system changes to allow MVRNAAs and MVRNs to be submitted between a Production BM Unit and a Consumption Energy Account (or vice versa), and amending SAA systems to ensure these MVRNs can be processed in Settlement. In addition, changes are needed to the mechanisms used to calculate the Funding Shares, as described in Section 3.

The ELEXON costs include managing the implementation project and updating the relevant BSC Sections, Code Subsidiary Documents and other documentation.

Indicative Industry costs of P282

BSC Parties wishing to take advantage of the P282 solution have indicated (in the P282 impact assessment) that they would incur costs ranging from minimal up to £130k each. These costs are mainly one-off costs in order to make the relevant changes to systems and processes for P282. A couple of respondents also identified minimal ongoing costs following implementation of P282.

Note that some Parties provided more detailed, confidential information on their costs and impacts. This information has not been shared with the Workgroup or published on the ELEXON website, but will be provided to Ofgem with the P282 Final Modification Report for decision.

Industry Impact Assessment

The full non-confidential responses made by Parties to the Industry Impact Assessment can be found on the P282 page of the ELEXON website.

P282 impacts

Impact on BSC Systems and process	
BSC System/Process	Impact
ECVAA	Changes will be required to enable the systems to accept MVRNAAs and MVRNs between a Production BM Unit and a Consumption Energy Account (or vice versa).
SAA	Changes will be required to enable Settlement to process MVRNs between a Production BM Unit and a Consumption Energy Account (or vice versa).
Funding Share System	Changes will be required to amend the calculation of the Main and SVA (Production) Funding Shares.

Impact on BSC Parties and Party Agents
BSC Trading Parties would be able to reallocate their Credited Energy Volumes from a Production BM Unit to a Consumption Energy Account (or vice versa) if they wished. MVRNAs will need to be able to submit MVRNAAs and MVRNs between a Production BM Unit and a Consumption Energy Account, or vice versa.

Impact on Transmission Company
No direct impact identified. However, P282 may result in Parties better balancing their positions (e.g. through self-balancing or by going 'less long' overall). The Workgroup has differing views as to whether this would have a positive or negative impact on National Grid as the System Operator (see Section 6). You can find a copy of the Transmission Company's impact assessment on the P282 page of the ELEXON website.

Impact on ELEXON	
Area of ELEXON	Impact
Release Management	ELEXON will manage the implementation project.

Impact on Code	
Code Section	Impact
Section D	Changes will be required to implement the solution. See draft legal text in Attachment B.
Section P	
Section T	
Section X – Annex X-1	
Section X – Annex X-2	

Impact on Code Subsidiary Documents	
CSD	Impact
ECVAA Service Description	Changes will be required to implement the solution. If P282 is approved, ELEXON will develop and consult on the necessary redlined changes as part of the implementation project.
SAA Service Description	

Impact on other Configurable Items	
Configurable Item	Impact
ECVAA User Requirements Specification	Changes will be required to implement the solution. If P282 is approved, ELEXON will develop and consult on the necessary redlined changes as part of the implementation project.
SAA User Requirement Specification	
NETA Interface Definition and Design Part 2	

Other Impacts	
Item impacted	Impact
ELEXON Guidance Documents	Updates will be required to the 'Overview of Volume Notifications' Guidance Document. If P282 is approved, ELEXON will make these changes as part of the implementation project.

5 Implementation

Recommended Implementation Dates

The Workgroup's recommended Implementation Dates for P282 are:

- 7 November 2013 (November 2013 BSC Systems Release) if ELEXON receives Ofgem's decision on or before 7 February 2013; or
- 27 February 2014 (February 2014 BSC Systems Release) if ELEXON receives Ofgem's decision after 7 February 2013 but on or before 27 May 2013.

The implementation lead times requested by impact assessment respondents (from the point of Ofgem decision to the point of implementation) range from minimal to nine months for two respondents who identify changes to their internal systems and processes. The changes to central systems will require a lead time of seven months.

The central system changes involve:

- Amending ECVAA systems to enable it to process MVRNAAs and MVRNs between Production BM Units and Consumption Energy Accounts, and vice versa (currently prohibited by the system's validation checks);
- Amending SAA systems to enable Settlement to process MVRNs where the recipient Energy Account belongs to the Lead Party rather than a Subsidiary Party (the scenario where a Party wishes to offset volumes in one of its accounts); and
- Amending the data and calculations used to calculate each Party's Funding Shares each month (as described in Section 3).

The seven months central lead time is required to make the relevant changes to each of these areas and to test them thoroughly ahead of deployment, due to P282's impact on core Settlement systems.

The Workgroup notes that the P282 solution is optional, and has therefore questioned whether it is necessary to base the Implementation Date on the longest requested participant lead time. However, because the central lead time is itself seven months and an Ofgem decision on P282 is not expected until January 2013[3], it is not possible to implement P282 in the June 2013 Release. As the November 2013 Release is therefore the earliest viable Release, allowing a nine-month implementation lead time still gives Ofgem until February 2013 to approve P282. The Workgroup therefore notes that allowing participants their requested maximum lead time makes no practical difference to the speed in which P282 can be implemented, and agrees that this is an appropriate approach.

One member queried whether a November 2013 implementation could give any additional risk compared with a February 2014 implementation, as it would fall during Winter. No members or Assessment Consultation respondents identified any reason why it would.

Only one Assessment Consultation respondent disagrees with these Implementation Dates; this is because they believe that P282 should not be implemented. All other respondents agree with the proposed Implementation Dates. You can find the full consultation responses in Attachment C.

Industry Impact Assessment

The full non-confidential responses made by Parties to the Industry Impact Assessment can be found on the P282 page of the ELEXON website.

[3] P282 will be sent to Ofgem for decision in mid-December 2012.

Who will be the winners and losers from P282?

The Workgroup has examined the materiality of P282, and considered which Parties could gain or lose from this Modification.

Imbalance charges and RCRC

P282 gives Parties (or groups of Parties) the option of using MVRNs to consolidate/net their Production and Consumption volumes into a single Energy Account. On the Workgroup's behalf, ELEXON has undertaken analysis of the potential effect on Trading Charges to see which Parties may benefit and which may not. The analysis uses real data from 2010 and 2011. It therefore assumes that all Trading Party Groups and single Trading Parties would use P282 to consolidate their volumes in this way (as far as they are able). It ignores any future behavioural changes which P282 might incentivise, about which you can find the Workgroup's discussion later in this section. For the purposes of the analysis, ELEXON has defined 'Party groups' as being those which could plausibly use P282 to consolidate their Production and Consumption imbalances (e.g. because they are in the same Trading Party Group for Panel election purposes, or currently have MVRNs between them). This is only intended to be accurate enough to give an overall picture of the P282 impact, and not to be a legally-correct representation of company relationships.[4] It excludes all types of Party other than Trading Parties, plus any Trading Parties who were inactive and therefore had no Energy Imbalances in the period.

Attachment A contains the full analysis results showing the 'winners' and 'losers'. The results are split between:

- The direct effect on Parties' imbalance charges (under which a benefit is a reduction in imbalance charges and the 'worst-case' position is a zero reduction – no Parties actually lose money); and
- The indirect effect on Parties' Residual Cashflow Reallocation Cashflow (RCRC) charges (under which a benefit is a decrease in RCRC payments made and a disbenefit is a decrease in RCRC payments received).

The analysis shows that the Parties who benefit from reduced imbalance charges are those who are 'long' on one Energy Account and 'short' on another, and who therefore would avoid exposure to the full SBP/SSP spread on the net difference. Intuitively, this would be expected as potential consolidation benefits only arise if imbalances are in opposite directions ('offsetting imbalances'). This in turn impacts other Trading Parties by reducing the overall amount of imbalance charges, and thereby the 'pot' of RCRC which is redistributed across other Party groups by market share. Most Parties would therefore experience a reduction in the RCRC payments they receive as a consequence of P282. The exception are Parties who have a negative share of RCRC (e.g. Suppliers whose embedded generation outweighs their supply volumes), who would see a decrease in the RCRC payments they make.

Note that there is no Production/Consumption netting effect in RCRC charges themselves, as these are based on whether a Trading Unit is 'delivering' (Exporting) or 'offtaking'

[4] For instance, if companies X and Y merged in 2011 ELEXON has treated them as belonging to a 'Party group' for the whole of the analysis (including Settlement Dates that predate the merger).

What is RCRC?

The amount of money recovered from Parties who are short through imbalance charges will not usually equal the amount of money paid to Parties who are long. The residual monies are reallocated to (or recovered from) BSC Parties through the Residual Cashflow Reallocation Cashflow (RCRC) mechanism.

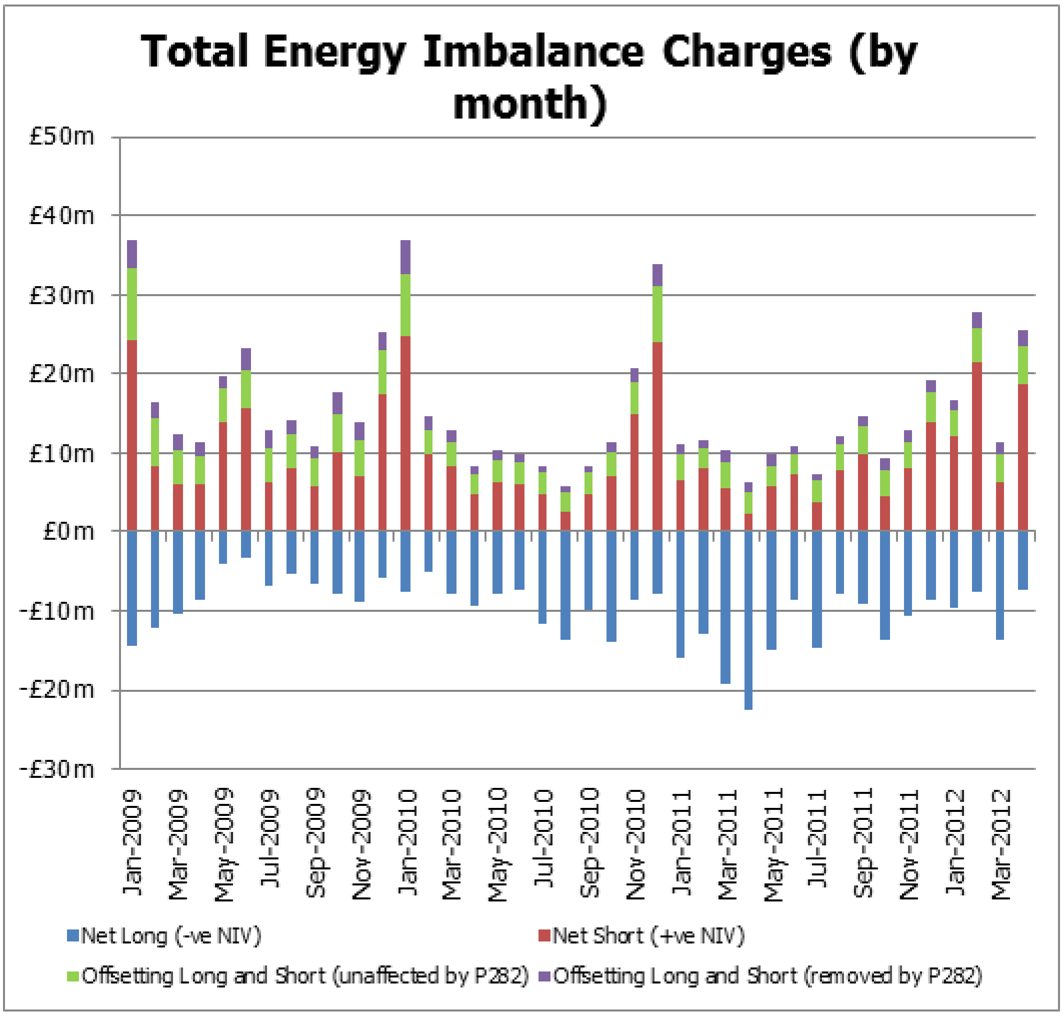
Each Energy Account is allocated a Residual Cashflow Reallocation Proportion (RCRP), which is determined by its Credited Energy Volumes as a proportion of the total Credited Energy Volume across the market in that Settlement Period. Each Party's share of the RCRC is determined by the net of the RCRP for their two Energy Accounts.

For more information, see Section T4.10 of the BSC.

(Importing) and therefore on BM Unit Metered Volumes (QM_{ij}) not Credited Energy Volumes (QCE_{iaj}).

Overall, 'winners' from P282 are therefore those whose reduction in imbalance charges from consolidating their Production and Consumption volumes outweighs their reduction in received RCRC payments, or whose negative RCRC share means that they accrue a net benefit (even if their imbalance charges do not reduce). 'Losers' are those who either have a zero reduction in imbalance charges and a reduction in their received RCRC payments, or who have a reduction in imbalance charges which is outweighed by the reduction in their received RCRC payments. Attachment A shows the results per Party group as both total £ and £/MWh figures. Attachment A also includes the list of which Parties have been included in which Party group. Note that the results are not confidential, since the data used for the analysis appears in the SAA-I014 Settlement reports which are sent to all Parties (and any Party could therefore recreate the results).

The total reduction in imbalance charges from Party groups netting their Production and Consumption is approximately £19.4m based on 2010 data and £15.1m based on 2011 data. While this is a significant amount in absolute terms, when considered against the total volume of imbalance the materiality of the potential P282 benefit is therefore less than might be anticipated. This is illustrated in the following graph (NIV = Net Imbalance Volume).



The blue parts of the graph represent payments made to Parties (at SSP) when the overall market is long, while the red parts represent payments made by Parties (at SBP) when the overall market is short. Both of these are unaffected by P282.

The green and purple parts represent payments made by Parties as a result of offsetting imbalances (i.e. where one Energy Account is long and another is short). These payments only arise because of the spread between the two cash-out prices (i.e. if there was a single imbalance prices, the opposing imbalances would cancel out). In the analysis, P282 does not reduce the green areas, as these imbalances are between separate Party groups and the analysis does not consider possible behavioural changes. However, if such Parties chose to use MVRNs under P282 to offset imbalances with Parties on the other side of the market (e.g. a scenario in which a small generator and small Supplier club together), there would be potential to reduce the green areas. The purple areas represent imbalances within Party groups and which, in this analysis, are therefore removed by P282.

The Workgroup has been surprised that some 'Big 6' players do not appear to benefit from P282. ELEXON has therefore analysed the results and underlying data further to establish whether there is a pattern in who benefits most. The findings suggest that there is no obvious connection between a Party's particular trading strategy (such as consistently 'trading long') and the amount of benefit they accrue. Instead, they suggest that for a Party group using both Energy Accounts, and with a random distribution of imbalance positions:

- The P282 imbalance benefit is approximately proportional to the 'spread' (standard deviation) of the imbalance distribution;
- The RCRC disbenefit is proportional to the market share; and
- Other things being equal, the net benefit is positive for 'bad balancers' (i.e. relatively wide spread of imbalance values) and negative for 'good balancers' (i.e. relatively narrow spread of imbalance values).

Overall, the analysis suggests that P282 will therefore tend to benefit Parties who:

- Use both Energy Accounts, and have a relatively wide spread of imbalance values (compared to their overall Metered Volumes);
- Use only one Energy Account, but have a negative share of RCRC; and/or
- Make mistakes in their cross-Account trades (and end up with offsetting positions on Production and Consumption).

Conversely, P282 will tend to disbenefit Parties who:

- Use both Energy Accounts, and have a relatively narrow spread of imbalance values (compared to their overall Metered Volumes);
- Use only one Energy Account, and have a positive share of RCRC; and/or
- Do not make mistakes in their cross-Account trades (so do not have offsetting positions to consolidate).

Based on ELEXON's analysis of the P272 'winners and losers', it appears that:

- P282 would not significantly change incentives to have a zero imbalance position (on average); but
- For Party groups who use both Production and Consumption Accounts, it would reduce the incentive to keep imbalance values closely centred around zero (i.e. to have a small standard deviation).

You can find a more detailed explanation in Attachment A.

Notified Volume Charge

Section D Annex D-3 of the BSC lists a series of Specified BSC Charges, which are levied on BSC Parties. One of these is the Notified Volume Charge, which levies a charge based on the absolute volume of energy traded by each Party through ECVNs and fixed-volume MVRNs. This charge is used to recover the costs of the ECVAA service, and is set by the BSC Panel. It is currently £0.0006/MWh. While the Panel can change the amount of the charge, it cannot change its constitution (which does not consider percentage-volume MVRNs) without a Modification Proposal.

Under the P282 arrangements, it is possible that a proportion of ECVNs could be replaced with corresponding percentage-volume MVRNs, as Parties look to use MVRNs to consolidate their Production and Consumption volumes in a single Energy Account. This will reduce the volume of energy against which the Notified Volume Charge is applied, and so reduce the amount of money recovered in this way. Currently, if a Party wishes to allocate energy from a Production BM Unit to a Consumption Energy Account or vice versa, they can only do so via an ECVN. Under P282, they would be able to submit a 100% MVRN instead to reallocate the entire BM Unit Metered Volume to the relevant Energy Account.

On the Workgroup's behalf, ELEXON has undertaken analysis of the effects of P282 on the Notified Volume Charge. The analysis uses real data from 2010 and 2011, and the same Party groups as the imbalance/RCRC analysis above. As in the previous analysis, it assumes that all Parties will seek to take advantage of the P282 arrangements by replacing ECVNs with MVRNs (as far as they are able). Again, it assumes that Parties will not otherwise change their trading strategies.

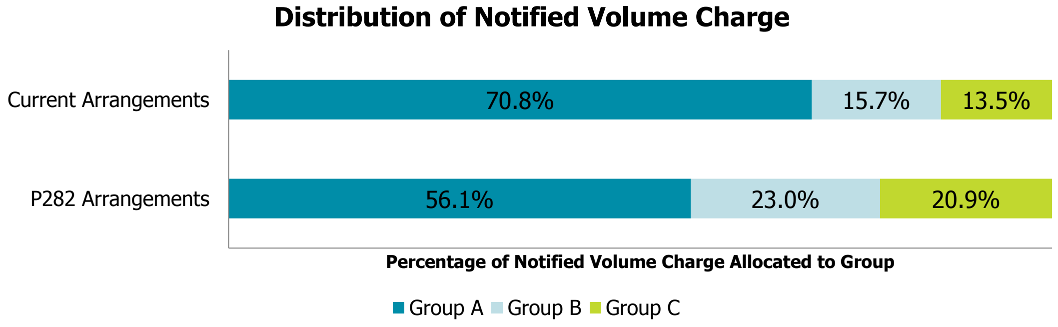
Attachment A contains the full analysis results. These show that the number of ECVNs submitted would reduce by approximately 8%. However, a decrease of around 35% in the volume of energy traded through ECVNs could be realised as Parties move to replace their intra-Party group ECVNs with MVRNs.

The existing constitution of the Notified Volume Charge does not include percentage-volume MVRNs. If the volume traded through ECVNs and fixed volume MVRNs decreases, then the amount of money recovered by the charge reduces proportionally.

If the charge remains unchanged at £0.0006/MWh, Parties in Party groups ('Group A' in the analysis) could realise savings of nearly 50% on average in their Notified Volume Charges. Parties who are not part of a group but currently use ECVNs to balance between their accounts ('Group B') could see a 5% saving on average. Parties who are not in Party groups and are active on one side of the market only ('Group C', who therefore cannot replace ECVNs with MVRNs) would not see any reduction but would not see any increase. However, the charge would no longer be recovering the total costs of the ECVAA service.

If the Panel decided to increase the Notified Volume Charge to £0.001/MWh to recover the full service costs, but the constitution of the charge continues to exclude percentage-volume MVRNs, then those Parties who are still submitting ECVNs and fixed-volume MVRNs will pick up a higher proportion of the charges. Parties in Party groups ('Group A') would still realise an overall saving, but this would be reduced to 15% on average. Parties who are not part of a group but currently use ECVNs to balance between accounts ('Group B') would see an increase in their Notified Volume Charges of approximately 58%, and Parties who only operate on one side of the market ('Group C') would see an increase of 67%.

Another way to look at the effect is that, if P282 results in 35% of the absolute volume of ECVNs being replaced with MVRNs (which equates to around £400k per year under the existing Notified Volume Charge), increasing the charge to compensate would redistribute this £400k charge across Parties in line with their remaining volumes of ECVNs.



The Workgroup has considered whether this could be perceived as unfair on the smaller Parties that only operate on one side of the market, and thus may have reduced opportunity to take advantage of P282, as they would bear the biggest percentage increase in charges should the tariff go up. Some members wondered whether the constitution of the Notified Volume Charge could be amended to include the volume from percentage-volume MVRNs. However, the volume from these MVRNs would not be known until after the end of a Settlement Period, and would then be subject to the subsequent reconciliation process, which ECVNs and fixed-volume MVRNs are not. This would increase the complexity of allocating the charge. Another Workgroup member considered scrapping the charge altogether and allocating the costs of the ECVAA service under the Main Funding Share (i.e. by market share). However, the Workgroup has concluded that the materiality is very low compared with that of the imbalance charge and RCRC impacts, and so agrees that the Notified Volume Charge will not be amended as part of P282. Some Workgroup members note that around 25% of the ECVNs and fixed-volume MVRNs submitted by 'Group C' Parties are submitted by Power Exchanges, who would be able to pass any increased costs onto their customers. Other members suggest that it is wrong to state that Parties on one side of the market could not benefit from P282, as they believe these Parties could club together to offset imbalances through MVRNs (see below).

Workgroup's discussion of analysis results and their implications

The Workgroup notes that the biggest benefits from P282 are realised by Parties who are less good at managing their imbalance positions. Parties which have less reliable generation plant or less accurate demand forecasts could regularly find themselves exposed to the SBP/SSP spread. However, if they consolidated their volumes into one Energy Account, then they would be able to avoid this portion of their imbalance charges, as the opposing imbalances would net off. As noted above, this benefit could only be realised in situations where one Energy Account is long and the other is short.

The Workgroup has discussed whether this means that P282 would penalise Parties who have invested in improving the reliability of their plant and/or the accuracy of their forecasts. Under P282, Parties would be able to carry length on one side of the market to cater for a shortfall on the other side without incurring the penalty of paying the SBP/SSP spread. This may be a disincentive to improving plant or forecasting reliability in the future, instead relying on being able to (for example) manipulate their generation levels to offset any errors in their demand forecasts.

For example, if a Party noticed that their demand was higher than forecasted during a Settlement Period, and thus they would be short in their Consumption Energy Account, they could increase their own generation to compensate, and so end up long in their Production Energy Account. Under the current arrangements, they would be exposed to the SBP/SSP spread on these equal and opposite imbalances. Under the P282 arrangements however, these equal and opposite imbalances could be netted off in a single Energy Account through an MVRN, thus avoiding the associated imbalance charges.

Some members have questioned whether this was any different from now, when Parties can adjust their generation and submit updated ECVNs to balance between their Production and Consumption Accounts. Other members note that ECVNs (and fixed-volume MVRNs) must be submitted ahead of Gate Closure whereas using 'evergreen' 100% MVRNs could give Parties greater potential to tweak generation output closer to Gate Closure. This could mean that Parties amend their Physical Notifications more frequently and nearer to Gate Closure, as their forecasts for the Settlement Period change, in order to maximise their potential to self-balance.

Some Workgroup members note that, for vertically-integrated companies, the greatest volatility is likely to be in their Consumption volumes, and suggest that it is therefore unlikely that P282 would change such Parties' hedging strategies (see below for more on possible behaviour changes). Others members suggest that smaller one-sided Parties are most exposed to volatility, because they are more likely to be intermittent generators or have fewer customers. These members believe that it is questionable whether P282 would benefit these Parties, and are concerned that this could be anti-competitive (again, see below).

Some Workgroup members have initially questioned whether it is correct to consider changes to the size of the RCRC funds as being either benefits or disbenefits of P282. However, the Workgroup notes that RCRC is heavily linked to imbalance charging, as RCRC consists of the net money remaining after all imbalance charges have been paid or received. A reduction in the volume of money redistributed via RCRC can therefore be perceived as a disbenefit to Parties. Without considering RCRC, every Party would either realise a benefit or see no impact on their imbalance charges (i.e. there would be no obvious disbenefit to anyone). The analysis therefore considers the net effect of each Party's savings in imbalance charges and their reduction in RCRC allocation.

How does P282 interact with P285/P286?

Modification Proposals P285 'Revised treatment of RCRC for Interconnector BM Units' and P286 'Revised treatment of RCRC for generation BM Units' propose to change the distribution of RCRC among BSC Parties, by excluding Interconnector BM Units (P285) and BM Units that are in delivering Trading Units (P286) from the allocation of RCRC. Part of the Workgroup's analysis of the impacts of P282 has been to consider each Party's gains and losses as a result of a smaller amount of money reallocated via RCRC. If P285 and/or P286 are approved, then this redistribution of RCRC would be impacted accordingly.

It should be noted that, although all three Modification Proposals impact RCRC, they are not dependent on each other. P282 will impact the amount of money reallocated to Parties via RCRC, while P285/P286 will impact which Parties receive RCRC.

At the Workgroup's request, ELEXON has carried out analysis to re-examine the impacts of P282 on Parties should P285 and/or P286 also be approved. You can find the results in Attachment A.

How could Parties' behaviour change?

Under the current arrangements, Parties which hold multiple Party IDs will often use MVRNs to consolidate all of their Production BM Units' Credited Energy Volumes into a single Production Energy Account, and all of their Consumption BM Units' Credited Energy Volumes into a single Consumption Energy Account. This makes it easier to trade these volumes, as the corresponding contracts only need be made against one pair of Energy Accounts, and the Party minimises their exposure to imbalance on each side of the Market.

P282 would allow Parties to go one step further, and consolidate Production and Consumption into a single Energy Account. This will be of most benefit to Parties who operate on both sides of the market, as they would be able to bring all of their Credited Energy Volumes together, and therefore will only be exposed to imbalance on their net position. Parties that only operate on one side of the market would not receive this benefit, as they would not have any volumes on the opposite side of the market to net against.

Parties operating on one side of the market

The Workgroup has considered whether P282 would enable smaller Parties to 'club together', in order to achieve similar effects to the larger vertically-integrated players. Under the P282 arrangements, it would be possible for an independent generator and a small Supplier to come together and net their volumes into a single Energy Account through an MVRN, something they would not be able to do under the current arrangements. By netting their volumes, they would be able to realise combined savings from a reduction in exposure to imbalance charges.

The Workgroup notes that such a similar arrangement could be achieved currently through the use of ECVNs (i.e. with one of the Parties using ECVNs to trade their volume into the other Party's Energy Account, where they would net). The only difference would be that, by using a 100% MVRN, they would guarantee that all of a BM Unit's Credited Energy Volume would be traded across. Embedded generators can already achieve a similar result, as Exempt Export BM Units can set their P/C Status to Consumption and transfer their volume to a Supplier's Consumption Account (through either an ECVN or MVRN). SVA-registered embedded generation forms part of a Supplier's Metered Volumes rather than a BM Unit in its own right.

Many Workgroup members believe that there are significant contractual obstacles to smaller 'one-sided' Parties clubbing together through MVRNs, due to the complexities of managing the responsibility/liability for any imbalance and credit risk. These members note that there is currently little cross-company consolidation. They believe that P282 would not remove these obstacles, and therefore would not lead to an increase in such arrangements. However, the Proposer believes P282 would give one-sided players more flexibility to pursue such arrangements and thereby to manage their imbalance risk.

The Workgroup notes that some small generators, and some small Suppliers, may also be Interconnector Users. As such, P282 would allow small generators to net Production generator BM Unit volumes with Consumption Interconnector BM Unit volumes (i.e. any generation that they export to another country). Similarly, it would allow small Suppliers to net Production Interconnector BM Unit volumes (i.e. any energy which they purchase from another country) with their Consumption Supplier BM Unit volumes – and with any volumes from Exempt Export BM Units (regardless of P/C Status). See below for further information about Interconnector Users.

Interconnector Users

The Workgroup notes that P282 would allow Interconnector Users to net their Interconnector volumes into a single Energy Account. Currently, energy that is brought into GB over an Interconnector is treated as Production, and is allocated to the Interconnector User's Production Energy Account. Conversely, energy leaving GB over an Interconnector is treated as Consumption, and is allocated to the Interconnector User's Consumption Energy Account. P282 would allow the Interconnector User to allocate both of these volumes into one Energy Account.[5]

Self-balancing, incentives to balance and the impacts on the System Operator

Workgroup members have suggested that a number of Parties aim to be long in both of their Energy Accounts, to avoid the risk of having to pay SBP if they end up short. If Parties were able to combine their volumes into a single Energy Account, then it is possible that they could then aim to be less long overall. Also, as noted above, Parties would also have more ability to self-balance, due to the more 'real-time' nature of an MVRN compared with an ECVN – for example if their demand turns out to be more or less than expected, they could get their generation sites to increase or decrease generation accordingly, in order to maintain an overall balanced position. Some Workgroup members believe that this could create issues for the System Operator, as Parties may submit more Physical Notifications closer to Gate Closure as they fine-tune their positions in order to self-balance. This would increase the volatility, making balancing the system harder.

A Workgroup member also initially expressed concern that P282 could result in Parties adjusting positions after Gate Closure. However, they noted that any Parties do so would be in breach of the Grid Code.[6]

National Grid, in its Assessment Consultation and Transmission Company Analysis responses, states its view that P282 is likely to result in an increase in the number of balancing actions which it, as System Operator, needs to take in order to balance the energy on the Transmission System. It considers that P282 may reduce the incentive for Parties to go long in a given Settlement Period, and that this could reduce the level of 'free' reserve available to the System Operator. This could require the System Operator to procure more reserve, increasing balancing costs. In addition, National Grid notes that there may be a future increase in the levels of renewable generation, which it notes usually submit negatively-priced Bids. Currently, these tend to be classed as 'constraint' actions, and so would be tagged out of the calculation of the Main Price. However, if the level of margin is reduced, National Grid considers it is more likely that these would become 'balancing' actions instead, and so would not be tagged out of the Main Price calculations. Finally, National Grid notes that if Parties go 'less long', the system may be short overall in more Settlement Periods. This could make SBP (not SSP) the Main Price, and thus calculated from Offer prices rather than the market price.

Some Workgroup members agree with National Grid's view that P282 may have a negative impact on its ability to balance the system. Other Workgroup members disagree, believing that any increase in self-balancing is a positive thing because it will allow Parties to take positions that are closer to reality and will thereby facilitate a balanced system. These

Transmission Company Analysis

The Transmission Company's analysis of P282 can be found on the P282 page of the ELEXON website.

Its Assessment Procedure Consultation response can be found in Attachment C.

[5] This issue was previously highlighted in Rejected Modification P277 'Allow Interconnector BM Units to choose their P/C Status'. For more information, please refer to the P277 Final Modification Report.

[6] Balancing Code No. 2 'Post Gate Closure Process': http://www.nationalgrid.com/NR/rdonlyres/66D4AB26-8AE6-4405-ADF6-8D34B86B6B6C/55771/21_BALANCING_CODE_2_I5R0.pdf

members note that existing reserve 'headroom' may be free to the System Operator but is not free to the Parties involved (who are going more long than they need to). These members therefore believe that it is inappropriate to view any reduction in such reserve which is caused by better self-balancing as a negative 'cost'. Some members note that P282 could also indirectly help reduce the amount of Credit Cover which Parties need to lodge (as their Trading Charges will be less due to reduced imbalance charges).

A member initially questioned whether Parties would in fact go less long, noting that there will still be an asymmetric price risk (and thereby hedging strategy) between their generation and demand portfolios. However, the Workgroup notes that, while Parties with both generation and demand may still choose to go long, P282 will allow them to be less long overall (i.e. by enabling them to be long on one net Account position rather than long in both directions on two separate Accounts).

While the Workgroup notes that some of the benefits identified by the P282 analysis may be offset by increased System Operator balancing costs, it has differing views on whether this should be viewed as a positive or negative impact.

Other than the above, the Workgroup is unconvinced that P282 would have any significant impact on incentives to balance. Members note that Parties have an incentive to balance under the existing rules, and would still do so under P282.

Assessment Consultation respondents' views on how P282 may change Parties' behaviour

A majority of Assessment Consultation respondents believe that P282 will have an impact on Parties' behaviour. Their considerations of what these impacts may be are broadly in line with those discussed by the Workgroup.

One impact that several respondents identify is that Parties may take less rigorous action to balance their positions, knowing that any opposing imbalances would be offset at no cost to them. As a result, Parties may not invest in ways to better manage their position or increase efficiency. This could also make it more difficult for the System Operator to balance the system, requiring them to take more actions with associated costs. One respondent considers that the current arrangements already provide weaker signals to those Parties with portfolios to balance their position over those without, and P282 would weaken those further without doing the same for the smaller one-sided Parties. Another respondent considers that P282 may encourage Parties to make more 'internal' trades, reducing their market-traded volume. The respondent believes that this could impact liquidity (see below) and could act as a barrier to market entry.

A minority of respondents believe that P282 would have little impact on Parties' behaviour. They believe that Parties would make operational changes as a result of P282, such as replacing ECVNs with MVRNs, but that their strategies and contracts would be unlikely to change.

Many respondents consider that P282 could result in improved self-balancing by Parties. They note that this is most likely to happen in the run-up to Gate Closure. Currently, Parties would be required to submit both a Physical Notification and an ECVN to notify a change in their position. Respondents believe that the risks associated with such actions increase in the last half-hour or so before Gate Closure because of the time needed to for ECVAA to validate ECVNs and confirm acceptance/rejection. The Party may have time to submit an updated ECVN, but there may not be time for it to know whether it has been

Assessment Procedure Consultation

The full responses made by Parties to the Assessment Procedure Consultation can be found in Attachment C.

successfully processed (or, if it has failed validation, to resend). By removing the need to submit an ECVN, Parties may be more likely to revise their position in order to better balance their position in the final run-up to Gate Closure, for example to react to an outage or an updated forecast. One respondent notes that, as Gate Closure would be unchanged by P282, they would not expect this to materially compromise the System Operator's ability to cover any changes in availability.

You can find the full Assessment Procedure Consultation responses in Attachment C.

How would P282 affect liquidity?

The Workgroup has considered what impact P282 may have on liquidity.

One of the original principles behind NETA was to separate Production and Consumption, in order to allow each side of the market to compete on an equitable basis, and to prevent vertically-integrated Parties from gaining an advantage. Any netting advantages that a vertically-integrated Party may have over a Party that only operates on one side of the market are nullified by these arrangements, and are instead spread across all Parties through RCRC.

Some Workgroup members are unconvinced that this requirement to trade licensed generation and licensed supply separately has led to the intended liquidity, as vertically-integrated Parties have found other methods to 'self-balance' without trading with other Parties (e.g. using MVRNs to consolidate 'horizontally' and ECVNs to consolidate 'vertically' as described in Section 2). One Workgroup member notes that some smaller Parties may view this as evidence that vertically-integrated companies have found 'a way around' the requirement. However, they disagree with this interpretation noting that such trades are fully permitted by the current rules.

One Workgroup member considers that other forms of consolidation already take place, such as embedded generation being registered within a Supplier BM Unit (and thus netting off against the Supplier's demand within that BM Unit) or licence exempt generation being able to elect to which Energy Account their Credited Energy Volumes are allocated. A large Supplier could also be viewed as receiving a consolidation advantage as all of their customers in a particular area are consolidated within a single BM Unit. The Workgroup notes that many Parties, both large and small, now operate on both sides of the market. A majority of members consider that the reasons for keeping an artificial separation between two sides of the market are no longer relevant, and that the present arrangements are unnecessarily complex for no real benefit.

The majority of Workgroup members are unconvinced that P282 would have any material impact on liquidity. These members generally believe that any impact would be confined to the short-term, intra-day, market as Parties would be better able to self-balance rather than relying on last-minute trading. One member has characterised this as "trimming round the edges at the last minute", and does not believe that this would impact general market liquidity. Other members suggest that any reduction in short-term trades between Party groups could undermine forward liquidity, and consider that liquidity is needed at all points on the trading horizon.

The Workgroup is unsure whether P282 could affect longer-term trading, since such liquidity is also affected by other factors outside the BSC. Some members believe that liquidity issues should be tackled through regulation (such as mandatory auctions) and not market rules. Some members consider that P282 could encourage 'gross bidding', increasing the amount of energy traded through Power Exchanges and thereby liquidity.[7] Other members were unconvinced of this argument. They consider that, under the current rules, Parties are still effectively submitting a net volume through gross bidding (just expressed as two gross volumes).

One Workgroup member notes that Ofgem (through the SCR) and DECC (through its Energy Market Reform work) are considering other initiatives to increase liquidity in the market. The member notes that part of the original reason for separating Production and Consumption was to encourage trading between the two sides of the market. They are concerned that the existence of these other initiatives demonstrates that Ofgem may still have concerns in this area, making P282 a potential step in the wrong direction. The member considers that, although the impact may be relatively small, P282 would nevertheless remove one of the fundamental principles of NETA. They would therefore have preferred it to have been considered as part of Ofgem's SCR.

Other Workgroup members consider that liquidity is about who Parties trade with rather than their number of Energy Accounts, or whether their trades are ECVNs or MVRNs. These members believe that Parties will trade in a way that gives them the maximum economic benefit and that if it makes sense to trade externally, a Party will do so irrespective of whether their volumes are consolidated. As Parties can currently trade between their Production and Consumption Energy Accounts through the use of an ECVN, there is not necessarily any more incentive to trade with other Parties under the current arrangements than there would be under P282. These members also believe that other developments, such as mandatory auctions, would likely have a larger impact on liquidity than P282. These members consider that P282 is a step in the right direction, which can be implemented separately to the SCR.

Assessment Consultation respondents' views on how P282 may affect liquidity

A majority of respondents to the Assessment Procedure Consultation consider that P282 is unlikely to impact liquidity significantly. They believe that long-term trading is often done independently of a Party's Energy Accounts. They also consider that Parties should not need to change their strategies as a result of P282, and would continue to trade externally if it is a cheaper option than trading internally. One respondent believes that if a Party elects to hold back energy to use for contingency, in order to self-balance within their portfolio, this could not be considered as power that has been removed from the open market.

Those respondents who believe that P282 would impact liquidity are split as to whether this impact would be positive or negative. Some respondents consider that P282 would encourage consolidation and internal trading and/or reduce the incentive to balance, thereby having a detrimental impact on liquidity (especially in the short-term market). One respondent notes that intermittent generators need to be able to readjust their position closer to Gate Closure in line with changes to forecasts, and therefore believes that liquidity in this short-term market is particularly important.

One respondent who believes that P282 would benefit liquidity considers that it would be wrong to confuse trading and contract notifications at Gate Closure. They believe that the number of contract notifications should reduce as a consequence of netting, but the

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The full responses made by Parties to the Assessment Procedure Consultation can be found in Attachment C.

[7] Gross bidding is where Parties who trade an offsetting amount of purchases and sales through a Power Exchange can receive a reduced fee on those trades.

amount of trading between Parties should not be affected, and that it is the latter that impacts liquidity, not the former. In addition, as Parties would have more control over their net position, this respondent believes that they may therefore trade with more confidence in the short-term market. They also feel that P282 on its own is unlikely to have a major impact on liquidity, and that wider developments are of more significance.

You can find the full Assessment Procedure Consultation responses in Attachment C.

Would P282 affect visibility in the market?

One Workgroup member has concerns around the impact P282 could have on transparency and visibility. Currently, if Parties wish to trade energy, they would do so through an ECVN, which must be submitted by Gate Closure for the relevant Settlement Period. As a result, the volume of energy traded under the ECVN is an estimate based on the Party's forecasts of how much demand will be needed or generation produced. The volume of ECVNs submitted against each energy Account can then be seen by all other Parties in the form of the Energy Account's notified volume (although this does not show with whom the Party has traded).

Under P282, Parties may be able to replace some or all of their ECVNs with percentage-volume MVRNs. Unlike ECVNs, these would transfer a volume of energy based on the BM Unit's actual performance in the Settlement Period, and would be calculated after the end of the Settlement Period. The Party would only need to submit the relevant percentage prior to Gate Closure. The Workgroup member considers that a bit of visibility would be lost as Parties' notified volumes would become distorted, making it harder to estimate how accurate other Parties' forecasting has been. They query whether this is something that Ofgem would be concerned about. The Workgroup notes that Ofgem can consider this when making its decision on whether to approve P282.

The majority of the Workgroup believe that any effect is unlikely to be material, and that it is unproven that the current visibility is useful to participants. They note that there would still be visibility on the volumes of energy from each BM Unit and where this energy is reallocated to. They also commented on possible European changes in the pipeline that may require additional reporting (e.g. REMIT[8]), which may negate this perceived reduction in visibility.

[8] Regulation (EU) No 1227/2011 on Wholesale Energy Market Integrity and Transparency. More information can be found at http://acernet.acer.europa.eu/portal/page/portal/ACER_HOME/Activities/REMIT.

What are the Workgroup's views against the Applicable BSC Objectives?

The following table contains the Proposer's and the Workgroup's views against each of the Applicable BSC Objectives:

Does P282 better facilitate the Applicable BSC Objectives?		
Obj	Proposer's Views	Other Workgroup Members' Views[9]
(a)	• **Neutral** – No impact.	• **Neutral** – No impact.
(b)	• **Yes** – Would allow Parties to self-balance, which would help in balancing the system.	• **Yes** – Would allow Parties to self-balance (potentially closer to Gate Closure), which would be more efficient and would reduce the costs incurred by System Operator in balancing the System. • **Marginal Yes** – Reduces overall imbalance but may require the System Operator to take more balancing actions if results in people going less long or updating PNs closer to Gate Closure. However, self-balancing in theory should be good for the efficiency of the Transmission System. • **Marginal No** – Parties might submit more Physical Notifications closer to Gate Closure. This could increase volatility and uncertainty, which could mean the System Operator would need to hold more reserve, increasing costs. • **Neutral** – Uncertainty over how P282 would impact balancing behaviour.
(c)	• **Yes** – Introduces an optional tool, providing more flexibility for smaller Parties to manage imbalance exposure and reduce risk. This should increase competition and attract new entrants. • **Yes** – Reduces level of complexity and cost of compliance, so removes a barrier to market entry. • **Yes** – Gives level playing field between Parties for the reasons described in Section 2.	• **Yes** – Helps smaller Parties who have both Production and Consumption. Don't believe that original reasons behind keeping volumes separate are proven valid or helped market. So could promote new entry. Don't agree that P282 would penalise 'one-sided' Parties; current arrangements could be seen as penalising the vertically-integrated. • **Marginal Yes** – Would help Parties to be able to better balance their position. • **No** – Parties that only operate on one side would lose out as a result of P282. Would enforce the position of the bigger Parties. • **Marginal No** – Can't see how P282 helps Parties enter the market on one side of the market or grow. Maybe reinforces the position of incumbents. • **Neutral** – Some Parties gain while some lose.

[9] Shows the different views expressed by the other Workgroup members – not all members necessarily agree with all of these views.

What are the Applicable BSC Objectives?

(a) The efficient discharge by the Transmission Company of the obligations imposed upon it by the Transmission Licence

(b) The efficient, economic and co-ordinated operation of the National Electricity Transmission System

(c) Promoting effective competition in the generation and supply of electricity and (so far as consistent therewith) promoting such competition in the sale and purchase of electricity

(d) Promoting efficiency in the implementation of the balancing and settlement arrangements

(e) Compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency [for the Co-operation of Energy Regulators]

Does P282 better facilitate the Applicable BSC Objectives?		
Obj	Proposer's Views	Other Workgroup Members' Views[9]
		Note a clear pattern between large and small, or vertically-integrated and one-sided, Parties. • **Neutral** – Although the materiality may be less than expected, P282 still creates significant distributional effects. But can see benefits for certain Parties. • **Neutral** – Unconvinced that Parties who operate on one side of the market only would benefit. This could be seen as discriminatory, although it is not true that all large Parties would necessarily benefit from P282 either. • **Neutral** – Existing rules are the same for everyone. While size matters, risk is the same for all. Therefore not convinced that current rules discriminate one way or the other. • **Neutral** – Concerned that the Parties who are worst at balancing benefit the most from P282.
(d)	• **Yes** – Creates greater flexibility and efficiency by removing an unnecessary restriction, helping Parties to better manage costs (including costs of compliance with BSC).	• **Yes** – Increases efficiency for Parties as they would only need to submit a single, 'evergreen' 100% MVRN instead of multiple ECVNs. • **Yes** – Using 'evergreen' 100% MVRNs removes the risk and administration for Parties in submitting multiple ECVNs. • **Yes** – Simplifies arrangements; reduces complexity. • **Marginal No** – Incurs central implementation costs to ELEXON and BSC Agents without providing any central efficiency benefit. • **Neutral** – Reduces ECVN-related administration, but increases MVRN-related administration. • **Neutral** – While risk of errors is the same for all, the impact of errors could be proportionally greater for smaller Parties. However, not obvious that P282 will enable smaller one-sided Parties to reduce the risk of such errors.
(e)	• **Yes** – GB arrangements are different to those in other countries, so this would aid in harmonising arrangements with other European countries and facilitates the creation of a single European market.	• **Neutral** – Objective (e) has a narrow scope and relates to the European Third Package legislation. There is nothing specific in European legislation that would require this change. • **Marginal Yes** – Nothing specific in legislation, but would move GB towards the European norm.

By majority, the Workgroup believes that P282 does better facilitate the Applicable BSC Objectives, and therefore recommends that P282 is approved.

Although this is the view of roughly two-thirds of the Group, many members feel that the arguments for and against are finely balanced. This is because the materiality is lower than expected, making these members' conclusions more marginal. This is in part due to the difficulties in predicting changes in Parties' behaviour which could arise from P282. The Workgroup agrees that it is difficult to see what further, meaningful analysis it could undertake in this area without devoting significant time and cost (which it believes would not be a proportionate use of industry resources).

The table below uses a slightly different format to illustrate the range of views among the Workgroup.

Does P282 better facilitate the Applicable BSC Objectives?			
Obj	Yes	No	Neutral
(a)	-	-	**Unanimous**
(b)	**Majority**	Minority	Minority
(c)	**Majority**	Minority	Minority
(d)	**Majority**	Minority	Minority
(e)	Minority	-	**Majority**

Assessment Consultation respondents' views on the Applicable BSC Objectives

Respondents to the Assessment Consultation are split in their views on whether P282 better facilitates the Applicable BSC Objectives, with an equal amount agreeing and disagreeing with the Workgroup's majority view that P282 should be approved. All respondents are neutral on Applicable BSC Objective (a), with views and arguments based on Objectives (b), (c), (d) and (e). The arguments for and against are broadly in line with those expressed by the Workgroup.

In particular, respondents in support of P282 believe that it would better facilitate competition and efficiency. They believe that P282 would remove a layer of unnecessary complexity around submitting notifications and balancing positions, with one respondent believing that separate Production/Consumption Energy Accounts do not appear to serve any useful purpose. Allowing consolidation would alleviate this administrative burden, which would reduce costs accordingly. It would also provide more options for Parties to manage their imbalance, so increasing flexibility. Respondents believe that these will remove a barrier to market entry and make it easier for smaller Parties, and so would better facilitate competition.

Some respondents also believe that P282 would aid Parties in managing their positions better much closer to Gate Closure than is currently possible. This self-balancing would then aid the System Operator in managing the system more efficiently, although one respondent wonders whether an increased volume of last-minute Physical Notifications may increase uncertainty for the System Operator.

A couple of respondents note that, while there is no specific legislation, P282 would move arrangements closer to those typically seen in other European countries, which would better facilitate the goal of creating a single European market. However, a majority of respondents believe P282 is neutral against Objective (e).

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The full responses made by Parties to the Assessment Procedure Consultation can be found in Attachment C.

The respondents who do not support P282 believe that it would be detrimental to competition. They note that P282 tends to benefit Parties that operate on both sides of the market, through the ability to consolidate their volumes and net off any opposing imbalances. However, the same benefits would not be realised by Parties that only operate on one side of the market, meaning that those Parties would tend to lose out from P282. Some respondents fear that P282 may consequently help to entrench the positions of the larger incumbent Parties.

One respondent comments that the benefits gained from P282 are a zero-sum game, and that P282 would redistribute costs rather than reduce them, with the net gains made by 'winning' Parties being offset by the net losses against 'losing' Parties. Some respondents also note that P282 would seem to benefit Parties who are worse at balancing, and consider that this would be a detrimental impact in a market where being balanced should be encouraged. This could reduce Parties' incentive to invest in more reliable generation or better demand forecasting, and the potential costs arising from this could negate any cost-savings arising from P282. This reduction in incentive to balance may also cause issues for the System Operator, who would have to manage any resultant imbalances.

You can find the full Assessment Procedure Consultation responses in Attachment C.

7 Panel's Initial Discussions

Panel's views on the Applicable BSC Objectives

The majority of Panel Members believe that P282 does not better facilitate Applicable BSC Objectives (b), (c) and (d). The views of these Members are broadly in line with those expressed by Workgroup members in Section 6 who felt P282 did not better facilitate the Applicable BSC Objectives.

In particular, they consider that P282 would reduce Parties' incentive to balance their positions in line with their Physical Notifications. They are concerned that this will lead to uncertainty for the System Operator in balancing the system, and note particularly that P282 would seem to reward most those Parties who are less good at balancing their positions. However, Panel Members consider that the introduction of an Information Imbalance charge could prevent Parties from acting in such a way.

A minority of Panel Members agree with the Workgroup's majority view that P282 better facilitates Applicable BSC Objectives (b), (c) and (d) for the reasons set out in Section 6. One Panel Member wondered whether a Party who was long in one Energy Account and short by an equivalent amount in the other could be considered to be in imbalance. They consider this to be more of an 'accounting imbalance', rather than an actual imbalance on the system, and so queried if it should be treated in the same way as a Party who is long or short in both Energy Accounts.

Some Panel Members also felt that the current arrangements could encourage Parties to take up positions longer than necessary, in order to hedge their positions, rather than balance their positions. They consider that there could be a view that the 'free' reserve such positions provide to the System Operator, as noted in its assessment of P282, is being seen as part of the energy mix, and note that, while this may be free to the System Operator, it is not free to the Parties who are going more long than necessary.

By majority, the Panel believes that P282 does not better facilitate the Applicable BSC Objectives, and therefore initially recommends that P282 is rejected.

Recommendation

By majority, the Panel initially recommends that P282 should be rejected.

Panel's views on legal text

The Panel unanimously agrees with the Workgroup's view that the proposed changes to the BSC in Attachment B deliver the intention of P282.

Panel's views on Implementation Date

The Panel unanimously agrees with the Implementation Date proposed by the Workgroup, as detailed in Section 5.

8 Recommendations

The Panel provisionally recommends to the Authority:

- That P282 **should not** be made;
- An Implementation Date for P282 (if approved) of:
  - 7 November 2013 if an Authority decision is received on or before 7 February 2013; or
  - 27 February 2014 if an Authority decision is received after 7 February 2013 but on or before 27 May 2013; and
- The draft BSC legal text for P282.

Report Phase Consultation Questions
Do you agree with the Panel's initial recommendation that P282 should not be approved?
Do you agree with the Panel's recommended Implementation Date?
Do you agree with the Panel that the redlined changes to the BSC deliver the intention of P282?
The Panel invites you to give your views using the response form in Attachment D

9 Further Information

More information is available in:

Attachment **A**: Detailed Assessment

Attachment **B**: Draft Legal Text

Attachment **C**: Assessment Consultation Responses

Attachment **D**: Report Phase Consultation Questions

For further information, including a complete version of the (non-confidential) impact assessment responses received, please see the P282 page of the ELEXON website.