

Andreas Flamm
Wholesale Markets
Ofgem
9 Millbank
London
SW1P 3GE

By email to EBSCR@ofgem.gov.uk

24th October 2013

Dear Andreas

Electricity Balancing Significant Code Review – Draft Policy Decision and Impact Assessment

Thank you for the opportunity to respond to the above consultations. This is a non-confidential response, which represents the view of the Centrica group of companies, excluding Centrica Storage Ltd.

We support Ofgem's general direction for reform under the Electricity Balancing Significant Code Review (EB SCR). We agree that current cash-out prices are dampened, in particular at times of system stress, and do not fully reflect the value of flexibility and peaking generation. However, with capacity margins tightening and an increase in intermittent generation, flexibility is becoming increasingly important to ensure security of supply. We therefore believe the current cash-out arrangements should be reformed.

Ofgem's draft policy decision includes four areas of change and we are in principle supportive of most areas. However, there are certain elements of the proposals that we do not support. In addition, we believe certain elements have practical issues and/or require additional work, including further consideration of liquidity implications.

Below we include a summary of our views in each of the four areas of change. We also set out suggestions for the EB SCR implementation. Detailed responses to the consultation questions are in the Annex attached to this letter.

More marginal main cash-out price

We support the introduction of more marginal cash-out prices, as we agree with Ofgem that the current PAR500 dampens cash-out prices and therefore the signals to flexible generation and demand side to respond are weakened.

We do not support the introduction of a PAR1 as there is not a clear enough basis to be confident that PAR1 will reliably produce a price that accurately reflects the System Operator's (SO's) marginal cost of balancing the system in that period. A PAR1 increases the risk of a polluted action setting the cash-out price. If pollution and other factors related to the mechanics of the cash-out price design unduly

influence the PAR1 price, producing volatile and unpredictable cash-out prices, then this could undermine the quality of the cash-out price signal. This in turn could mean that the desired objective of encouraging responses from market participants is not met.

We suggest a phased approach to reducing PAR would be prudent. Adopting a PAR100 would enable the efficiency benefits of a more marginal approach to be secured without the risks of volatility unrelated to market fundamentals characterising the determination of cash-out prices. The level of PAR could be kept under review and further changes could be made following assessment of the level of cash-out prices achieved, we suggest a PAR50 could be considered in 2018.

Single or dual cash-out prices

In principle, Centrica supports the introduction of a single cash-out price. A single cash-out price could result in increased cost reflectivity and more efficient balancing. However, further work is required to better understand the impacts on intraday and Balancing Market (BM) liquidity of a single cash-out price.

Participants who believe their imbalance position will be in the opposite direction to the system will have a reduced incentive to balance. This is likely to mean that those participants will have less incentive to trade intraday (as positions firm up), resulting in a higher level of trading ahead of the day and lower intraday trading. Furthermore, until a pay-as-cleared structure has been adopted for accepted bids and offers in the BM, there will be a greater incentive on market participants with additional capacity to take a long position (in the hope of benefitting from the cash-out price) rather than participating within the BM.

Attributing a cost to non-costed actions (“VoLL pricing”)

In principle, we support the introduction of a cost for voltage control and demand disconnection actions taken by National Grid and that these actions should flow into the cash-out stack. This will ensure that the cost of demand reduction will be reflected in the cash-out price in times of severe system stress. However, we do have concerns about the implementation of this proposal and would welcome industry debate and discussion in this area to enable it to be taken forward in a timely manner. Our concern is that the success of the mechanism hinges on the establishment of a robust process for the accurate calculation of the volume of the energy reduction that has arisen as a result of the demand reduction event, and, the further allocation of this volume to individual suppliers’ accounts.

We strongly disagree with Ofgem’s proposal to introduce compensation payments to customers. There are significant inconsistencies between the current levels of compensation provided by DNOs for network outages and those proposed for energy outages. This will lead to customer confusion and unnecessary reputation risk for suppliers. In addition, the design of the compensation scheme will introduce additional, unnecessary complexity into the arrangements. All this complexity will ultimately deliver is a mechanism for ensuring disconnected customers receive a payment financed by all other customers for only an extreme event. Compared to the other more compelling reasons for this review, we do not believe there is sufficient merit or justification for the provision of compensation payments to be taken forward.

Notwithstanding the above, if compensation arrangements are to be adopted, we suggest as a minimum that there should be a consistent charge and timescale for all disconnection payments, irrespective of who is liable for these payments.

Improving the way reserve is costed

Centrica does not support the adoption of a Reserve Scarcity Pricing function which reflects the arbitrary estimation of the value of STOR contracts rather than the underlying costs. We do not

believe that de-coupling the actual cost of STOR contracts from the costs included in cash-out is appropriate because the cash-out prices would no longer be cost-reflective. We also believe that there is insufficient information connected to the detailed development of this proposal to enable a clear decision to be made on whether this proposal is an improvement over the current process.

SCR implementation

Now that a decision has been made on the introduction of the Capacity Market, with the first capacity auctions scheduled to take place during winter 2014, it is important to provide as much early certainty as possible for capacity providers about the future balancing and cash-out regime. Given the complexity of this review, it would be beneficial if some aspects of the reform, notably more marginal and single cash-out prices, could be agreed and implemented as soon as possible, before winter 2014.

This highlights the importance of fixing some of the flaws in the current arrangements as soon as possible. Ofgem must therefore avoid necessary reforms being held back by an overly ambitious industry modification process and consider if it can indeed implement key elements of this package in the next year.

As always, if you wish to discuss the comments raised in this response, please contact me using the details below.

Yours sincerely,

Sarah Owen

Regulatory Affairs, Centrica Energy

sarah.owen@centrica.co.uk

Telephone 01753 431052

Mobile 07979 566011

Annex - Responses to consultation questions

**Question 1: Do you agree with our proposal to make cash-out prices more marginal?
and**

Question 2: Do you agree with our rationale for going to PAR1 rather than PAR50? Are you concerned with potential flagging errors, and would you welcome introduction of a process to address them ex-post?

We support Ofgem's proposal to make cash-out prices more marginal. We agree with Ofgem's statement that the current PAR500 averaging methodology for the main cash-out price dampens cash-out prices as a signal of scarcity in the market, particularly at times of system stress.

However, we do not support the implementation of PAR1. We do not believe that PAR1 reflects the most marginal action, it increases the risk of a system action setting the cash-out price, and creates volatility unconnected with market fundamentals. We suggest that a phased approach to reducing PAR commencing with PAR100 would be prudent.

PAR1

We do not agree with Ofgem's premise that PAR1 would fully reflect the System Operator's (SO's) cost of balancing the system at the margin. The SO continually assesses the system and the balancing actions that it requires. These assessments are based on evolving expectations of the system and the trades available both immediately and in the future. The most expensive trade in any given settlement period is therefore not necessarily the marginal action. The most marginal action is the action that would have been increased or decreased with a change in expectations. The marginal action will change every time these expectations are revised for a settlement period. Therefore, the most efficient option to reflect the cost of balancing the system at the marginal would be represented by a higher value of PAR. This point was also raised in Stephen Littlechild's response to Ofgem's initial cash-out consultation dated January 2012¹.

Under a PAR1 structure, we are concerned that on a significant number of occasions a single action will be setting the cash-out price. The frequency of this will increase in the future as the margin on the system reduces and the proportion of intermittent generation increases. This increases the risk of a single system action setting the cash-out price. We believe that this issue of system action pollution is still relevant despite the new tagging and flagging rules. The annual reviews² undertaken by National Grid over the last three years assess the current methodology against actual flagging and tagging activities undertaken under the methodology, it does not assess how often the methodology does not capture a system action. These reviews will therefore not calculate the number or proportion of actions incorrectly tagged.

Although National Grid are investigating removing and re-tagging system actions on an ex-post basis, this approach could result in significant changes from Elexon's initial published forecast cash-out price to the final price charged to market participants. It is important that all market participants are fully aware of the costs they have incurred in a timely manner. This is especially the case if the cash-out prices are considered to act as signals and participants are expected to be able to react to these signals.

Finally, if PAR1 is adopted, this will create high levels of unpredictability and volatility within the electricity balancing regime. An unpredictable cash-out price removes the ability of the cash-out price

¹ Response to Ofgem's consultation on electricity cash-out issues, Stephen Littlechild, 23 January 2012, page 11.

² National Grids' annual "Flagging Accuracy Reports"

<http://www.nationalgrid.com/uk/Electricity/Balancing/transmissionlicencstatements/SMAF/>

to act as a signal for system scarcity as flexible generation will be unable to predict and therefore react to the signal.

PAR1 could also increase the risk of negative SSPs when the system is long, this creates perverse incentives, as short parties would be paid for their imbalance, and long parties charged. It is our belief that this would undermine the trading arrangements and may lead to modification proposals being raised to lower or remove the risk of these events occurring.

Phased approach

We consider that a phased approach to reducing PAR would be prudent. It is consistent with the proposed phased approach for introducing a VoLL, allowing the market to adapt to significant change. We believe this is necessary as the EB SCR proposes to introduce a large amount of change to many aspects of the electricity balancing regime.

Initially adopting a PAR100 would enable the efficiency benefits of a more marginal approach to be secured without the risks of volatility unrelated to market fundamentals characterising the determination of cash-out prices. The analysis undertaken for Ofgem's proposed PAR levels are based on 2010-2012 market data, which may not be representative of the expected tighter market conditions. Therefore, we do not support an initial adoption of PAR50.

A further move to, for example PAR50 could be considered in 2018; once analysis and credible assessment of the impacts to the large reduction to PAR100 has been undertaken (we suggest at least 2 years of data should be used). This time period will also allow more consumers to have SMART meters in place and would result in the ability for these consumers to respond to potential peaks in prices once demand side response (DSR) and peak pricing signals become more widespread.

Question 3: Do you agree with our proposals for pricing of voltage reduction and disconnections, including the staggered approach?

In principle, we support the introduction of a cost for voltage control and demand disconnection actions taken by the SO and that these actions should flow into the cash-out stack. This will ensure that the cost of demand reduction will be reflected in the cash-out price in times of severe system stress.

However, we have concerns about the implementation details of this proposal and would welcome industry debate and discussion in this area to enable it to be taken forward in a timely manner. Our major concern is that the success of this mechanism hinges on the establishment of robust processes for the accurate calculation of the volume of the energy reduction that has arisen as a result of the disconnection event, and the allocation of this volume to correct suppliers' imbalance positions. Additionally, we believe that there should be a warning given to the industry when there is a higher risk of this type of event occurring, before these actions can be considered within cash-out.

Calculation of demand reduction volume

Ofgem are proposing that the SO uses a top down approach in order to calculate a "best estimate" of the volume of demand reduction achieved. We believe that there is insufficient information available for the SO to robustly determine the volume of demand reduction achieved. Given that the proposed levels for VoLL could substantially impact the on-going viability of a tripped generator, we believe that this needs to be an accurate process. We do not believe that a top-down approach provides an appropriate balance between simplicity and accuracy.

Calculation of suppliers' position adjustment

We are equally concerned about the accuracy of a bottom-up approach by DNOs for the calculations of determining individual suppliers' positions following a demand reduction event. To our knowledge

there has been little evidence from previous events that DNOs are aware of the overall quantity of demand reduction achieved, let alone which individual customers and therefore suppliers are impacted. Again, due to the significant impact on imbalance charges that the proposed levels of VoLL create, it is vital that the calculation and adjustment of imbalance positions is robust.

Currently the instruction for demand control is a manual process; the costs of automating this process to enable the inclusion of energy related demand reduction into cash-out in a timely manner could be significant. As stated previously, it is essential that indicative cash-out prices accurately reflect, as far as possible, the costs that parties will incur.

It should be noted that some modern appliances automatically react to a lower supply voltage by drawing more current to compensate for the shortfall. Calculating an accurate volume when voltage reduction actions are taken is compromised; the volume of actions taken would be greater than that assumed as the difference would be netted off.

Warnings

In order to be in a position to react to an impending demand reduction instruction, thereby reducing the probability of this event occurring, market participants will require a timely warning to be given by the SO that this type of event is at a higher risk of occurring.

The cost of actions included in the cash-out stack will be extremely high if this proposal is adopted. It is appropriate that all parties are fully aware of, and able to respond to, the increased level of risk that is associated with operating within this time period.

We do not understand Ofgem's statement in the Draft Policy Decision document (paragraph 4.29) that a warning would reduce the value of providing capacity that can react in very short timescales. If there is a possibility that a demand reduction action could be taken, we would expect any plant operating in the Balancing Market (BM), and able to respond to the system shortage, to increase their BM prices to cover the additional risk of being cashed-out at VoLL if they trip.

We believe Ofgem should re-assess the need for a warning signal to be given before these cash-out actions priced at VoLL can flow into the cash-out stack.

Question 4: Do you agree with our assessment of the interactions with the CM and its impact on setting prices for Demand Control actions?

We agree that without a Capacity Market (CM) in place, there needs to be some form of incentive for additional flexible capacity to connect to the system. We consider that the CM provides the longer term investment signals for flexible capacity and the electricity balancing regime provides the shorter term incentives to be operational especially at times of system stress. We do not believe that, in the absence of the CM, an investment signal would result from implementing a higher price (£17,000/MWh) for demand reduction actions.

There are limitations in London Economics' survey to determine the level of VoLL. We believe that an estimate of willingness-to-pay (WTP) would have provided a lower estimation of VoLL, with the willingness-to-accept (WTA) providing an upper level. These two estimates of VoLL should both have been used in order to determine an appropriate overall level of VoLL. We are concerned that only one set of results have been used, especially as WTA is known to result in significantly larger figures.

We agree to a staggered approach to implementing levels of VoLL as we support the need for the market to adapt to these new arrangements. However, we do not believe full justification for the levels of VoLL to be set at £3,000 and rising to £6,000 once the CM is in place has been included. We

believe Ofgem should re-consider these high values and determine whether smaller values would be more appropriate.

Question 5: Do you agree that payments of £5/hr of outage for the provision of involuntary DSR services to the SO should be made to non-half-hourly metered (NHH) consumers, and for £10/hr for NNH business consumers?

Centrica strongly disagrees, for a number of reasons, with the proposal to introduce compensation payments to customers, as set out below. Compared to the other more compelling reasons for this review, we do not believe there is sufficient merit or justification for the provision of compensation payments to be taken forward.

Firstly, Ofgem states that the provision of compensation payments are required as disconnected customers provide an involuntary DSR service to the SO. We do not agree that involuntary disconnection should be judged as a service provided by the customer. We suggest that instructing a demand reduction is an out-of-market emergency action undertaken by the SO, and therefore we do not consider interruptions under these circumstances should be subject to compensation payments.

Furthermore, we believe that paying customers compensation if they are disconnected will detract from these customers signing up to DSR and/or Time of Use contracts, as it will lessen the benefits available under these contracts. The changes to the cash-out regime should incentivise, rather than discourage, the development of these areas.

In addition, there are significant inconsistencies between the current levels of compensation provided by DNOs for network outages and those proposed for energy outages. This will lead to customer confusion and unnecessary reputation risk for suppliers.

Finally, the design of the compensation scheme will introduce additional, unnecessary complexity and costs into the arrangements. All this complexity will ultimately deliver is a mechanism for ensuring disconnected customers receive a payment financed by all other customers for only an extreme event. Compared to the other more compelling reasons for this review, we do not believe there is sufficient merit or justification for the provision of compensation payments to be taken forward.

Notwithstanding the above, if compensation arrangements are to be adopted, we suggest as a minimum that there should be a consistent charge and timescale for all disconnection payments, irrespective of who is liable for these payments.

Question 6: Do you agree with the introduction of the Reserve Scarcity Pricing function and its high-level design? Explain your answer.

We agree with Ofgem that the current process for valuing the use of STOR contracts in cash-out is not perfect. However, Centrica does not support the adoption of a Reserve Scarcity Pricing (RSP) function which reflects the arbitrary estimation of the value of STOR contracts rather than the underlying costs. We do not believe that de-coupling the actual cost of STOR contracts from the costs included in cash-out is appropriate because the cash-out prices would no longer be cost-reflective. We also believe that there is insufficient information connected to the detailed development of this proposal to enable a clear decision to be made on whether this proposal is an improvement over the current process.

We question whether the adoption of a more complex solution to this issue is proportionate. The RSP function is likely to require a significant amount of detailed development and analysis as well as systems development. In addition, we question whether the costs associated with this proposal are an appropriate response to the level of market concern in this area.

Based on the above we believe this area should be removed from the EB SCR. This will also enable time to be directly to the more urgent aspects of the cash-out reform.

Question 7: Do you agree with our rationale for a move to a single price, and in particular that it could make the system more efficient and help reduce balancing costs? Please explain your answer.

In principle, Centrica supports the introduction of a single cash-out price. A single cash-out price could result in increased cost reflectivity and more efficient balancing. However, we suggest that further work is required in this area to better understand the behavioural changes that are likely to impact BM and intraday liquidity.

BM Liquidity

As raised by Ofgem in the Draft Policy Decision document (paragraph 4.63), we are concerned that implementing a single cash-out price without introducing a pay-as-cleared methodology within the BM would reduce the incentive on parties to participate in the BM and therefore reduce BM liquidity. Only the most marginal plant would be better off within a pay-as-bid BM and a single cash-out price, all other generation would generally be better off carrying an imbalance into gate closure. We believe that in order for a single cash-out price to work efficiently, a pay-as-cleared methodology would also have to be adopted.

Intraday liquidity

If a single cash-out price is adopted we believe that behavioural changes will adversely impact intraday liquidity. The impact will be greatest close to gate closure, where most intraday volumes are currently transacted. For example, following an unexpected station trip (visible to all under REMIT) the generator would be highly incentivised, under the proposed new arrangements, to cover their imbalance position. This would usually be achieved by purchasing small chunks of additional generation capacity traded intraday. However, if a single cash-out price is adopted, any potential counterparty may conclude that they could be better off by taking a long position into gate closure, rather than trade. This is because they can predict the overall system imbalance direction (due to the station trip). They are then in imbalance in the opposite direction to the system imbalance and will receive a higher price for their output via cash-out.

Unlike Ofgem, we believe that parties and the SO can predict, to a certain extent, the overall system direction and length. We question Ofgem's statement that the Net Imbalance Volume (NIV) is highly unpredictable as the SO's forecast of imbalance was incorrect 34% of the time. We believe that the SO's "forecast" of imbalance ahead of a settlement period is actually the sum of FPNs rather than the SO's view of imbalance. It may be prudent to assess the true accuracy of NIV forecasting, ahead of a decision in this area.

Question 8: Do you have any other comments on this consultation, including on the considerations where we did not propose any changes?

SCR timing and implementation

Now that a decision has been made on the introduction of the CM, with the first capacity auctions scheduled to take place during winter 2014, it is important to provide as much early certainty as possible for capacity providers about the future balancing and cash-out regime. Given the complexity of this review, it would be beneficial if some aspects of the reform, notably more marginal and single cash-out prices, could be agreed and implemented as soon as possible, before winter 2014.

This highlights the importance of fixing some of the flaws in the current arrangements as soon as possible. Ofgem must therefore avoid necessary reforms being held back by an overly ambitious

industry modification process and consider if it can indeed implement key elements of this package in the next year.

We recommend that an industry working group could be formed ahead of Ofgem's direction being made to ensure sufficient stakeholder involvement in further developing the relevant proposals. This would also be beneficial as within the BSC process there is the facility to take only one alternative modification forward. Alternatively, if Ofgem makes a high level direction for any modification proposal, it should allow sufficient time to develop that proposal and decide which if any of the alternatives should be taken forward.

Question related to the accompanying Impact Assessment:

Question 9: Do you have any comments regarding any of the three approaches we have taken to assess the impacts of the cash-out reform packages?

We believe that the number of packages analysed and covered under the Impact Assessment is limited. It is impossible to consider the impacts of individual reforms. This is especially the case with introducing a RSP function for STOR as this is included in all 5 reform packages. We believe that incremental levels of PAR should have been included in this analysis to enable discovery of the most efficient level of PAR. It would be more transparent to include comparative packages using a wider range of PAR values. Additionally, the use of more representative data, for example 2008, should have been included to better reflect a tighter system and to give a greater range of possible consequences of implementing these proposals.

Question 10: Do you agree with the analysis of the impacts contained in this IA? Do you agree that the analysis supports our preferred package of cash-out reform? Please explain your answer.

Please see our response to Q9 above.

Question 11: Do you agree with the key risks identified and the analysis of these risks? Are there any further risks not considered which could impact on the achievement of the policy objectives? Please explain your answer.

Liquidity

We are very concerned that the introduction of a single cash-out price will impact liquidity. We believe that the introduction of a single cash-out price will reduce the participation in the BM, unless pay-as-cleared is also adopted. Additionally, we believe that intraday liquidity will also be reduced. Although there is a greater incentive on participants to reduce imbalance positions there may not be counterparties willing to trade. Both of these areas are covered in more detail in our response to Q7 above.

Credit

Ofgem needs to consider the impact of increasingly higher cash-out prices on the credit arrangements that are required for all market participants by Elexon. More marginal cash-out prices and the introduction of VoLL for demand disconnection will both increase the credit costs for market participants. Significant increases to credit arrangements could adversely impact the financial position of smaller participants and be a barrier to new market entry.

Back up fuel

We question the point raised by Ofgem at the last EB SCR stakeholder event that the CM penalty regime and marginal cash-out prices will incentivise generators to install back-up fuel capabilities.

Generators (new and existing) run the risk of putting in uncompetitive bids in the CM auctions if they include the cost of back-up installation in their bids because DECC's base line, under the CM, is at minimum cost, as reflected in the CONE (Cost Of New Entrant) calculations. These calculations do not contain a value for the installation, maintenance and testing of back-up fuel capabilities which are significant and could be prohibitive under the changing legislative and regulatory framework being adopted within GB.

Existing generators are unlikely to retrofit or re-install back-up fuel capability as it is likely to remove the generator from operational service without being able to earn revenue for a considerable length of time (up to 12 months).

BM STOR v Non-BM STOR

Any proposals that increase the costs of cash-out prices will further widen the competitive gap between BM STOR and non-BM STOR operators. The latter receive payments from their supplier (typically SBP or SSP) in addition to their utilisation and availability fees, resulting in BM STOR units being at a competitive disadvantage within the STOR auctions. This area requires further investigation and change in order to level this playing field.

Question 12: What if any further analysis should we have undertaken or presented in this document? Do you have any additional analysis or evidence you would like to contribute to support the development of the EBSCR towards its Final Policy Decision?

As stated in our response to Q9 above, we believe that incremental levels of PAR should have been covered in the analysis. It would be more transparent to include comparative packages using a wider range of PAR values. Additionally the use of more representative data, for example 2008, should have been included to better reflect a tighter system and to give a greater range of possible consequences of implementing these proposals.

There seems to have been a lack of consideration of behavioural changes within the Impact Assessment. Many of the changes proposed are highly likely to result in significant behavioural changes that will impact the market. In order to fully assess the most appropriate areas and levels of change we suggest that these impacts should have been discussed in the Impact Assessment.

Many UK parties have considerable experience of other European countries and the impacts of various policy decisions. It may be beneficial for Ofgem to utilise this experience in forming opinions of likely impacts of change.