

## Issue 56 'Treatment of the new SBR and DSBR services in the imbalance price'

**ELEXON**



**Any questions?**

Contact:  
**Talia Addy**



[talia.addy@elexon.co.uk](mailto:talia.addy@elexon.co.uk)



**020 7380 4043**

### Contents

<b>1</b>	Summary	2
<b>2</b>	Background	4
<b>3</b>	Issue Group's Discussions	5
<b>4</b>	Conclusions	9
	Appendix 1: Issue Group Membership	11
	Appendix 2: Glossary & References	12

### About This Document

This document is the Issue 56 Group's Report to the BSC Panel. ELEXON will table this report at the Panel's meeting on 11 December 2014.

This document provides details of the Issue Group's discussions and proposed solutions to the highlighted issue and contains details of the Issue Group's membership.

231/06

Issue 56  
Issue Report

5 December 2014

Version 1.0

Page 1 of 13

© ELEXON Limited 2014

## Background

In December 2013 Ofgem published its decision to accept an application by the Transmission Company (National Grid) to introduce two new balancing services: Supplementary Balancing Reserve (SBR) and Demand Side Balancing Reserve (DSBR).

The SBR service provides a means for generators held outside the wholesale market to contribute to balancing the system in winter periods of high demand. The DSBR service provides a new facility for the demand side to participate in the balancing services by shifting or shedding demand.

## Issue

The existing arrangements under the Balancing and Settlement Code (BSC) and the Standard Condition C16 Statements of the Transmission Licence prevent both SBR and DSBR from feeding into the calculation of imbalance prices. The Proposer believes that, if DSBR is used over winter 2014/15, there is potential for its use to dilute imbalance prices leading to inefficiencies in price signals.

## Conclusions

A majority of the Issue 56 Group recommended the following:

- DSBR and SBR actions should be reflected in the imbalance price.
- Any solution taken forward for pricing DSBR actions should also apply to SBR actions. However, the progression of any solution should be split to allow the DSBR solution to be implemented ahead of winter 2014/15.
- If a change is required to the BSC to allow DSBR actions to be reflected in the imbalance price, an Urgent Modification should be progressed.
- DSBR and SBR actions should be priced at the Value of Lost Load (VoLL), which should be set at £3,000 to be consistent with Ofgem's Electricity Balancing Significant Code Review (EBSCR) Policy.

## Development of conclusions

Following the Issue 56 Group meeting, ELEXON advised the Transmission Company and the Issue Group that if the recommended solution were to be taken forward it would not require a change to the BSC. However, in order to progress the solution a change would need to be made to the [BSAD Methodology Statement](#) owned by National Grid as the Transmission Company. ELEXON and the Transmission Company discussed how best to progress the Issue Group's recommended solution. It was identified that in order for the solution to work in practice it would require manual workarounds to be put in place as the systems owned by the Transmission Company could not be changed in time for winter 2014/15.

On 14 July 2014 the Transmission Company issued an open letter to the industry regarding the next steps to be taken regarding the treatment of pricing DSBR and SBR actions in the imbalance price. Following a review of the industry responses to the open

letter the Transmission Company decided that DSBR and SBR actions should not be reflected in the imbalance price at this point in time. They noted that it would be more appropriate to raise a Modification to the BSC at a later date, potentially in line with the progression of [P305 'Electricity Balancing Significant Code Review Developments'](#).

Both of the Transmission Company's open letters to the industry can be found on the [National Grid website](#).

---

231/06

Issue 56  
Issue Report

---

5 December 2014

---

Version 1.0

---

Page 3 of 13

---

© ELEXON Limited 2014



### What are DSBR and SBR?

In December 2013 Ofgem published its decision to accept an application by the Transmission Company (National Grid) to introduce two new balancing services:

- Supplementary Balancing Reserve (SBR); and
- Demand Side Balancing Reserve (DSBR).

Balancing services are used by the Transmission Company in its role as System Operator (SO) to balance supply and demand in real time. These are also used in the calculation of imbalance prices (also known as cash-out prices).

The **SBR** service has been developed with the intention of being able to seek generation that would otherwise be unavailable in the market. This generation would be held in reserve and only be used in the unlikely event that there is insufficient generation capacity available in the market to meet demand. SBR provides a means for generators held outside the wholesale market to contribute, should they wish to do so, to balancing the system in winter periods of high demand.

The **DSBR** service has been developed as a simple, low cost solution to stimulate rapid growth in the provision of demand-side services to the SO. The service is aimed at non-domestic consumers with the ability to reduce demand/load shift or run small embedded/on-site generation for at least an hour during the winter evening peak. At the highest level, this would enable the SO to ask large energy users to reduce their demand in exceptional circumstances, and would remunerate them for doing so.

The Transmission Company has tendered for both of the SBR and DSBR services with a view that they may need to be used during winter 2014/15.

### What is the issue?

The existing arrangements under the BSC and the [Standard Condition C16 Statements of the Transmission Licence](#) prevent both SBR and DSBR from feeding into the calculation of imbalance prices.

The [System Management Action Flagging \(SMAF\) Methodology Statement](#) classes SBR actions as being 'System Management'. This means that if the SBR service is used an SO-flag will be applied to the action so that the volume will be classified as a First Stage Flagged balancing action. The action will then become unpriced if it has a more expensive price than the most expensive energy balancing action in that Settlement Period. The [Balancing Services Adjustment Data \(BSAD\) Methodology Statement](#) excludes the volumes and prices associated with accepted DSBR services from the imbalance price calculation.

In the DSBR and SBR Reports submitted to Ofgem, the Transmission Company recognised that a mechanism for factoring SBR and DSBR into imbalance prices was required and that the approach should be aligned with any reforms determined in the wider [EBSCR](#). Nevertheless, the Issue 56 Proposer believed that the treatment of these services was not explicitly within the scope of the EBSCR and should be considered separately. Additionally, initial consultation responses from the industry (contained in the reports issued to Ofgem) reiterated the importance of incorporating the new services into the calculation of imbalance prices to ensure price signals within the market are preserved.

#### Further information

Details of the SBR and DSBR services, including consultation documents and Reports submitted to Ofgem, can be found on the [National Grid website](#).

---

231/06

Issue 56  
Issue Report

---

5 December 2014

Version 1.0

---

Page 4 of 13

© ELEXON Limited 2014

### Use of DSBR and SBR over the next few years

The Issue 56 Proposer advised the Issue Group that the Transmission Company intended to begin tendering for DSBR and SBR to help balance supply and demand in the coming winters. The Transmission Company would run the following:

- a tender in June 2014 for up to 330MW of DSBR to pilot the new service for winter 2014/15; and
- tenders by autumn 2014 and in early 2015 for a total of up to 1,800MW of both DSBR and SBR for winter 2015/16.

The Proposer believed that if DSBR was used over winter 2014/15 there was potential for its use to dilute imbalance prices leading to inefficiencies in price signals.

An Issue Group member believed that if the Transmission Company is tendering for DSBR in time for potential use this winter there must be a problem with the security of supply. Such a problem must be significant as the Transmission Company would not have made the decision to tender lightly. Therefore, it is imperative that the reflection of DSBR is included in imbalance prices. Other Issue Group members agreed with these views.

Since the final Issue 56 meeting, the Transmission Company tendered for SBR for the 2014/15 winter period. This followed a number of developments<sup>1</sup> since June 2014, when the Transmission Company set out its initial proposals for balancing services over the coming winters. As a result, there is an increased level of uncertainty over the volume of plant that may be available in the market this winter. Confirmation of the SBR contracts and volumes can be found on the [Contingency Balancing Reserve](#) page of the National Grid website.

Some Issue Group members have requested that this report note that, had members known that the Transmission Company was going to tender for SBR for the 2014/15 winter period the nature of their discussions may have been quite different.

### Demand Side Balancing Reserve Service

#### Should volume be reflected in the imbalance price?

An Issue Group member questioned whether the volume displaced during a given Settlement Period should be used when reflecting the use of DSBR in imbalance prices.

Another member voiced concern that if DSBR is called on prior to Gate Closure there is the potential for available Bids to be left unused. Therefore, it is important to work out the volume called upon through DSBR so that compensation can be given to those participants with Bids that were not accepted due to this event but which would have been otherwise. The member believed that if compensation is provided to those power stations with displaced volumes it will encourage investment in the market.

The Issue 56 Group agreed with the view that determining the appropriate volume is important when reflecting the use of DSBR in imbalance prices.

---

<sup>1</sup> These developments include fires at the Ironbridge and Ferrybridge power stations and a closure announcement regarding the power station at Barking as well as the Heysham and Hartpool nuclear power plants. As a result, there is an increased level of uncertainty over the volume of plant that may be available in the market this winter.

The Issue Group discussed what volume should be reflected if DSBR is used. The Proposer noted that the Transmission Company will instruct the volume of reduction required when DSBR is called on.

A member questioned whether the use of the volume instructed by the Transmission Company would be sufficient. The Issue 56 Proposer noted that, for other events such as Bids and Offers, the volume instructed by the Transmission Company is put into the imbalance price, regardless of what was actually delivered. They added that these volumes are not adjusted post-event and will be confirmed prior to Gate Closure.

It is anticipated that 75% of the instructed DSBR volume will be achieved during a DSBR event. For example, if the control room instructs a 100MWh reduction in consumption it would expect to achieve at least 75MWh of this volume. Members agreed that the instructed volume is the important volume and that this should be the volume used to reflect DSBR in the imbalance price.

### **What price should be reflected in the imbalance price?**

An Issue Group member noted that using DSBR is an alternative to using demand control measures. Therefore, in principle the member believes that the price of DSBR actions should be set at VoLL but recognises the potential for other prices. They noted that the current expectation is that demand control measures would need to be used this winter if it were not for other balancing services. Therefore, if DSBR is a substitute for demand control actions, the price reflected should be VoLL. However, the non-capped VoLL price (as proposed by Ofgem's EBSCR Policy Decision) may, in future, be as high as £17,000. Therefore, the Issue Group should determine what the appropriate price of VoLL should be for this winter if it agrees that DSBR actions should be priced at VoLL.

The Issue 56 Group considered that the price of VoLL, if used for DSBR during winter 2014/15, should be set at £3,000. It was noted that a value of £3,000 is consistent with Ofgem's EBSCR Policy which considers that VoLL should be introduced at this value under P305 'Electricity Balancing Significant Code Review Developments', before increasing to £6,000/MWh ahead of winter 2018/19.

A member noted that if VoLL is incorporate into imbalance prices, the Transmission Company and Ofgem may be open to legal infractions as the use of DSBR does not seem more efficient than using Short Term Operating Reserve (STOR). It was questioned why the Transmission Company could not seek additional STOR. Another member noted that Suppliers have already hedged (traded) for this winter and may not even be able to respond to the inclusion of DSBR actions in imbalance prices.

The Ofgem Representative for Issue 56 noted that the Transmission Company will use all available products before using DSBR. However, some reserve would always be held back as a last resort, for example for frequency response. It is anticipated that DSBR will be used in place of demand control measures and it would be at this point in time that the decision would be made to use the service. Therefore, it seems pragmatic to take the approach of pricing DBSR actions at VoLL.

A majority of the Issue Group agreed that it would be appropriate to price any DSBR actions at VoLL, which the Group determined should be priced at £3,000 to be consistent with Ofgem's EBSCR Policy.

## Supplementary Balancing Reserve Service

The Proposer suggested that the use of SBR should be reflected in imbalance prices in the same way that DSBR is reflected. The Issue Group agreed with this view as these are similar products and so should be treated in the same way.

An Issue Group member questioned whether the industry needed to implement a solution to deal with the potential use of both SBR and DSBR. The member suggested that any solution to reflect DSBR and SBR use should be split as the Transmission Company (as the time of the meeting) only planned to tender for the use of DSBR this winter. Other members agreed with this view and determined that a solution to price DSBR actions into imbalance prices should be progressed ahead of any solution to price SBR actions.

## Penalties

The Issue Group asked the Proposer what notice period the industry would have prior to the instruction of a DSBR event. The Proposer advised members that there would be a notice period of up to two hours to indicate that the DSBR service may be used.

A member asked whether there would be penalties for not reducing consumption if participants were asked to by the Transmission Company as part of a DSBR event. The Proposer advised that there will be no penalties if a participant chooses not to respond to the DSBR instruction. However, if they do not respond they will not be paid.

## Testing

The Proposer advised the Group that the Transmission Company will have the ability to test the DSBR and SBR services to ensure that the participants who signed up to reduce consumption would respond as intended.

An Issue Group member asked the Proposer whether or not such a test would be reflected in the imbalance prices. The member believed that such a test should not be reflected as you would be charging those participants with Bids left at Gate Closure.

The Proposer reiterated that the test would be used to ensure the reduced consumption would have been as intended and would not be reflected in the imbalance price.

## Urgent Modification

An Issue Group member asked whether it would be possible to raise an Urgent Modification should any BSC change be required to implement the solution recommended by the Issue 56 Group. Another member responded that as the recommended solution looks to address an issue aligned with a date related event, and could potential have significant commercial impact to the industry, there should be a case for urgency.

An Issue Group member believed that the issues noted by the Proposer could have a significant impact on the industry as security of supply and that an Urgent Modification would be appropriate, assuming procurement of required systems will be picked up by the Transmission Company. The Proposer responded that such costs have been accounted for in the DSBR and SBR consultation. The numbers provided to the industry as part of this consultation are reflective of a significant commercial impact.

An Issue Group member stated that, based on the points discussed by the Group, there would definitely be grounds for urgency. The member added that the implementation of the recommended solution is time critical given that the Transmission Company will be tendering for the use of DSBR this winter.

The Issue 56 Group unanimously agreed that if the recommended solution were to be taken forward, an Urgent Modification process would be the most appropriate way to progress any changes required to the BSC.





### Final Issue 56 Group conclusions

A majority of the Issue 56 Group recommended the following:

- DSBR and SBR actions should be reflected in the imbalance price.
- Any solution taken forward for pricing DSBR actions should also apply to SBR actions. However, the progression of any solution should be split to allow the DSBR solution to be implemented ahead of winter 2014/15.
- If a change is required to the BSC to allow DSBR actions to be reflected in the imbalance price, an Urgent Modification should to be progressed.
- DSBR and SBR actions should be priced at VoLL, which should be set at £3,000 to be consistent with Ofgem's EBSCR Policy.

### Development of conclusions

The Issue 56 Group unanimously agreed that if the recommended solution were to be taken forward, an Urgent Modification would be the most appropriate way to progress any changes required to the BSC.

Following the Issue 56 Group meeting, ELEXON advised the Transmission Company and the Issue Group that if the recommended solution were to be taken forward it would not require a change to the BSC. However, in order to progress the solution a change would need to be made to the [BSAD Methodology Statement](#) owned by National Grid as the Transmission Company.

ELEXON and the Transmission Company discussed how best to progress the Issue Group's recommended solution. It was identified that in order for the solution to work in practice it would require manual workarounds to be put in place as the systems owned by the Transmission Company could not be changed in time for winter 2014/15.

On 14 July 2014 the Transmission Company issued an open letter to the industry regarding the next steps to be taken regarding the treatment of pricing DSBR and SBR actions in the imbalance price. Following a review of the industry responses to the open letter the Transmission Company decided that DSBR and SBR actions should not be reflected in the imbalance price at this point in time. They noted that it would be more appropriate to raise a Modification to the BSC at a later date, potentially in line with the progression of [P305 'Electricity Balancing Significant Code Review Developments'](#).

Both of the Transmission Company's open letters to the industry can be found on the [National Grid website](#).

### Tendering for DSBR and SBR

The Transmission Company identified the need to tender for DSBR for potential use over winter 2014/15 and tendered for a small volume of DSBR in September 2014 as part of a pilot for the new service.

There have been further developments regarding this winter's security of supply outlook. As a result, the Transmission Company took the precautionary measure of tendering for the SBR service for the 2014/15 winter period to complement the DSBR procured under

### Conclusions

The Issue 56 Group concluded that DSBR and SBR actions should be reflected in the imbalance price.

the pilot. The volume of SBR procured will depend on how this situation evolves and prices offered in the tender process.

The requirement for winter 2015/16 will be tendered to both DSBR and SBR this year, and early in 2015. Further information about DSBR and SBR can be found on the [National Grid website](#).

---

231/06

Issue 56  
Issue Report

---

5 December 2014

---

Version 1.0

---

Page 10 of 13

---

© ELEXON Limited 2014

## Appendix 1: Issue Group Membership

### Issue Group membership and attendance

Issue 56 Group Attendance		
Name	Organisation	11 Jun 16
David Kemp	ELEXON ( <i>Chair</i> )	✓
Talia Addy	ELEXON ( <i>Lead Analyst</i> )	✓
Jonathan Priestley	ELEXON ( <i>Design Authority</i> )	✓
Sally Lewis	National Grid ( <i>Proposer</i> )	✓
Bill Reed	RWE	✓
Andrew Colley	SSE	✓
Mari Toda	EDF Energy	✓
James Anderson	ScottishPower	✓
Lisa Waters	Waters Wye Associates	✓
Leonida Bandura	E.ON	✓
Leslie Neubecker	Ofgem	✓
Peter Bingham	National Grid	✓
Dominic Scott	Ofgem	✓
Hannah Gradwell	GDF Suez	☎

---

231/06

Issue 56  
Issue Report

---

5 December 2014

---

Version 1.0

---

Page 11 of 13

---

© ELEXON Limited 2014

## Appendix 2: Glossary & References

### Acronyms

Acronyms used in this document are listed in the table below.

Glossary of Defined Terms	
Acronym	Definition
BSAD	Balancing Services Adjustment Data
BSC	Balancing and Settlement Code
DSBR	Demand Side Balancing Reserve
EBSCR	Electricity Balancing Significant Code Review
SBR	Supplementary Balancing Reserve
SMAF	System Management Action Flagging
SO	System Operator
STOR	Short Term Operating Reserve

### External links

A summary of all hyperlinks used in this document are listed in the table below.

All external documents and URL links listed are correct as of the date of this document.

External Links		
Page(s)	Description	URL
n/a	Issue 56 webpage	<a href="http://www.elexon.co.uk/smg-issue/issue-56/">http://www.elexon.co.uk/smg-issue/issue-56/</a>
3	Transmission License link	<a href="https://www.ofgem.gov.uk/licences-codes-and-standards/licences/licence-conditions">https://www.ofgem.gov.uk/licences-codes-and-standards/licences/licence-conditions</a>
3	SMAF Methodology Statement link	<a href="http://www2.nationalgrid.com/UK/Industry-information/Electricity-transmission-operational-data/Codes-principles-methodologies/Methodologies/">http://www2.nationalgrid.com/UK/Industry-information/Electricity-transmission-operational-data/Codes-principles-methodologies/Methodologies/</a>
3	BSAD Methodology Statement link	<a href="http://www2.nationalgrid.com/UK/Industry-information/Electricity-transmission-operational-data/Codes-principles-methodologies/Methodologies/">http://www2.nationalgrid.com/UK/Industry-information/Electricity-transmission-operational-data/Codes-principles-methodologies/Methodologies/</a>
3	EBSCR webpage link	<a href="https://www.ofgem.gov.uk/electricity/wholesale-market/market-efficiency-review-and-reform/electricity-balancing-significant-code-review">https://www.ofgem.gov.uk/electricity/wholesale-market/market-efficiency-review-and-reform/electricity-balancing-significant-code-review</a>
4	DSBR and SBR tender information page	<a href="http://www2.nationalgrid.com/mediacentral/uk-press-releases/2014/national-grid-tenders-for-balancing-reserve-services-to-meet-market-changes/">http://www2.nationalgrid.com/mediacentral/uk-press-releases/2014/national-grid-tenders-for-balancing-reserve-services-to-meet-market-changes/</a>

231/06

Issue 56  
Issue Report

5 December 2014

Version 1.0

Page 12 of 13

© ELEXON Limited 2014

## External Links

Page(s)	Description	URL
8	P305 webpage	<a href="http://www.elexon.co.uk/mod-proposal/p305/">http://www.elexon.co.uk/mod-proposal/p305/</a>

---

231/06

Issue 56  
Issue Report

---

5 December 2014

---

Version 1.0

---

Page 13 of 13

---

© ELEXON Limited 2014