

System operator, transmission system owners, generators, suppliers, traders, consumers, aggregators and other interested parties

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# Dear Colleagues

# Minded to decision to extend the Supplemental Balancing Reserve (SBR) and Demand Side Balancing Reserve (DSBR) cost recovery arrangements for 2016/17 and 2017/18

National Grid Electricity Transmission plc (NGET) has submitted a notice<sup>1</sup> to the Gas and Electricity Markets Authority (Authority) requesting that the Authority directs an extension to the SBR and DSBR cost recovery arrangements until 2017/18 to allow it to recover the economic and efficient costs incurred with procuring, testing and utilising SBR and DSBR.

This letter sets out our minded to decision to extend these cost recovery arrangements until 2017/18. This would mean that NGET would also have access to these services for 2016/17 and 2017/18 if needed. It also provides stakeholders with an opportunity to comment on our minded to position before we reach a final decision on whether to direct this extension.

## Introduction

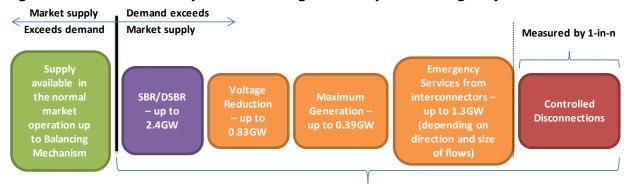
In December 2013, the Authority approved NGET's application to introduce two new balancing services, SBR<sup>2</sup> and DSBR.<sup>3</sup> These services provide NGET with additional tools to help balance the system in the rare event that the market is unable to provide sufficient reserves to do so as shown in Figure 1. Both SBR and DSBR can only be used by NGET when it has taken or expects to take all available balancing actions (including all Balancing Mechanism, BM, offers) and for this to be insufficient to balance the system. As such, these services sit outside of normal market operation. NGET must take into account the market response to price signals and market notification in the face of tight margins, and the volume of all other pre contracted balancing actions before it can use SBR and DSBR.

<sup>&</sup>lt;sup>1</sup> The notice to the Authority can be found at <a href="http://www2.nationalgrid.com/UK/Services/Balancing-services/System-security/Contingency-balancing-reserve/Contingency-Balancing-Reserve-Consultation/">http://www2.nationalgrid.com/UK/Services/Balancing-services/System-security/Contingency-balancing-reserve/Contingency-Balancing-Reserve-Consultation/</a>
<sup>2</sup> Supplementary Balancing Reserve (SBR) is a generation service where a generator is kept on standby should

<sup>&</sup>lt;sup>2</sup> Supplementary Balancing Reserve (SBR) is a generation service where a generator is kept on standby should NGET require additional resources to balance the system.

<sup>&</sup>lt;sup>3</sup> Demand Side Balancing Reserve (DSBR) is a demand side response service aimed predominantly at large scale customers and aggregators prepared to shift or shed demand when instructed by NGET.

Figure 1: SBR and DSBR (New Balancing Services) and emergency services<sup>4</sup>



Actions that would take place during loss of load events

Subsequently, we modified NGET's transmission licence to include arrangements for NGET to be able to recover the economic and efficient costs relating to the procurement and use of SBR and DSBR.<sup>5</sup> The relevant licence condition (Special Condition (SpC) 4K) came into effect on 6 June 2014.

These cost recovery arrangements were set for 2014/15 and 2015/16 aligned with NGET's intention to review the need for access to these services beyond winter 2015/16, if needed.<sup>6</sup> At the time, we introduced the flexibility to extend these arrangements if NGET concluded that it needed to retain the ability to procure these services for 2016/17 and 2017/18. We supported NGET's intention to consult stakeholders on the appropriateness of maintaining the ability to procure these services for these two winters before requesting an extension of the cost recovery arrangements for these services.

Under SpC 4K, NGET is required to have in place certain approved methodologies<sup>7</sup> which provide detail on how it will procure, including how much to procure, and use SBR and DSBR in an economic and efficient way. To recover the costs incurred, NGET has to demonstrate compliance with these methodologies.

We then assess NGET's compliance with the methodologies and depending on the outcome of that review direct NGET to recover these costs or to adjust the costs it has already recovered, as appropriate.

In 2014/15, NGET procured 1.6GW of SBR and DSBR reserves at a total cost of approximately £31.3m (approximately 40p per customer per year). We reviewed the costs incurred by NGET and decided to not disallow any of them. For winter 2015/16, NGET has procured 2.4GW of reserves at a total expected cost of £34.7m (approximately 45p per customer per year). This represents a fall in costs from 2014/15 of £4.7/kW-year.  $^{10}$ 

## **NGET request**

In its notice, NGET described its view that there is an inherent uncertainty on supply due to the unknown reaction of generators to EU Emissions Directives and to not getting a

<sup>&</sup>lt;sup>4</sup> In addition to balancing tools, NGET can also inform the market and request more reserve capacity to be made available through notices, such as Notices of Insufficient Margins (NISM). These are issued at different times based on operational parameters. These notices are not pictured in the diagram.

<sup>&</sup>lt;sup>5</sup> Our decision can be found at <a href="https://www.ofgem.gov.uk/publications-and-updates/decision-funding-arrangements-new-balancing-services">https://www.ofgem.gov.uk/publications-and-updates/decision-funding-arrangements-new-balancing-services</a>

<sup>&</sup>lt;sup>6</sup> NGET indicated its intention to review the services in its reports to the Authority available at <a href="http://www2.nationalgrid.com/UK/Services/Balancing-services/System-security/Contingency-balancing-reserve/Archive/">http://www2.nationalgrid.com/UK/Services/Balancing-services/System-security/Contingency-balancing-reserve/Archive/</a>
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<sup>&</sup>lt;sup>7</sup> These methodologies can be found at <a href="http://www2.nationalgrid.com/UK/Services/Balancing-services/System-security/Contingency-balancing-reserve/Methodologies/">http://www2.nationalgrid.com/UK/Services/Balancing-services/System-security/Contingency-balancing-reserve/Methodologies/</a>

<sup>&</sup>lt;sup>8</sup> Further information on 2014/15 SBR and DSBR costs available at <a href="https://www.ofgem.gov.uk/publications-and-updates/decision-supplemental-balancing-reserve-and-demand-side-balancing-reserve-costs-winter-2014-15">https://www.ofgem.gov.uk/publications-and-updates/decision-supplemental-balancing-reserve-and-demand-side-balancing-reserve-costs-winter-2014-15</a>
<sup>9</sup> Information received from NGET.

<sup>&</sup>lt;sup>10</sup> The cost of these services is driven by a number of factors, including the volume required and competition for these services. As such they can vary year-on-year.

Capacity Market (CM)<sup>11</sup> contract for 2018/19. In addition, it states that while governmental (CM) and regulatory policy (Ofgem cash-out reform)<sup>12</sup> will translate to better signals in the future, in the short term the development time of these proposals has also contributed to an increase in uncertainty. As a result, NGET believes that it is prudent to have access to these additional balancing services until 2017/18 (inclusive), in case they are needed.

Before submitting its notice to the Authority, NGET ran a consultation seeking stakeholder views on its proposal to extend the services. Stakeholders were mostly not supportive of the SBR and DSBR extension mainly due to concerns on the market impact of these services.

These stakeholders believe that SBR and DSBR remove the scarcity price signal from the market hence reduce the profitability of marginal plants. In their view, the testing of SBR and DSBR (and potential ramp-up of power stations when utilising the services) led (and would lead) to the displacement of marginal plants at the time they are more likely to be utilised. Some stakeholders also had concerns that plants that would otherwise have closed are now able to tender in the CM, lowering the CM clearing price.

NGET agrees that these services are likely to have some impact on the market, but in its submission it sets out why it considers that the impact is significantly smaller than industry responses have argued. As such, on balance, it believes it is prudent to continue to use these services.

#### Our minded to decision

We agree with NGET that the outlook for 2016/17 and 2017/18 is uncertain and that it is prudent to allow NGET the ability to recover any economic and efficient cost incurred with the procurement and use of these additional balancing services if they are needed. We are confident that NGET's service design, our cost recovery arrangements and our cash-out reforms mitigate the vast majority of the risks raised by industry:

# Price impact

As noted above, SBR and DSBR are "last resort" services. NGET cannot call on these services unless it has a clear expectation that they will be needed after taking into account all bids and offers, however high the price, in the BM. As such, SBR and DSBR service providers cannot directly affect market prices. 13 In addition, our cash-out reforms 14 and our recent approval of NGET C16 applications to incorporate these services into cash-out at the administrative Value of Lost Load (VoLL) (£3,000/MWh for 2015/16)15 will ensure that cash-out prices will go to VoLL when these services are used. This should have the opposite effect on market prices than highlighted by industry, ie short-term market prices should reflect scarcity.

# Displacement of marginal plants

As Figure 1 above shows, SBR and DSBR are kept outside of the market, ie service providers cannot be used for everyday balancing. As part of the contract, SBR service providers cannot participate in the wholesale market for the duration of their SBR contract and DSBR service providers cannot offer to other services the energy committed to DSBR during the DSBR window.

<sup>&</sup>lt;sup>11</sup> The CM forms part of the government's Electricity Market Reform (EMR).

<sup>&</sup>lt;sup>12</sup> Our cash-out reforms were a result of our Electricity Balancing Significant Code Review launched in 2012 to address long-standing concerns on electricity balancing arrangements, further information available on https://www.ofgem.gov.uk/electricity/wholesale-market/market-efficiency-review-and-reform/electricitybalancing-significant-code-review

13 We discuss dispatch impact below.

 $<sup>^{14}</sup>$  The first phase of our cash out reforms will be implemented on 5 November 2015 and will make cash-out price sharper and introduce an administrative VoLL for Demand Control (such as voltage reduction) of £3,000/MWh. The second phase begins in late 2018, following monitoring and review and will increase the sharpness of cash-out prices and raise the administrative VoLL price to £6,000/MWh. Further information can be found at https://www.ofgem.gov.uk/publications-and-updates/balancing-and-settlement-code-bsc-p305-electricitybalancing-significant-code-review-developments

15 Our approval of the C16 changes can be found at <a href="https://www.ofgem.gov.uk/publications-and-">https://www.ofgem.gov.uk/publications-and-</a>

<sup>&</sup>lt;u>updates/decision-approve-c16-statement-changes-0</u>

Before using SBR and DSBR, NGET must have used or expect to use all other relevant balancing services (such as excess STOR) and BM offers to balance the system (except for reserves required to operate the system on a second-by-second basis).<sup>16</sup>

In addition, there are a number of other features of these services which are designed to minimise market distortion when they are tested or used. Under the operational methodologies, in the event that NGET has to use these services, it would dispatch DSBR first. It would then have to use the most economic and efficient SBR option to meet any remaining requirement. In doing so, it has to take into consideration the dynamic parameters of each service provider. It also has to dispatch the service providers at the latest possible moment – ie, when any delay would not allow the service provider to meet the energy shortfall.

During the ramp-up of an SBR provider, it is possible that BM offers from some generators would not be accepted to accommodate this ramp-up. However, this does not mean that these generators would not be called upon during those events. NGET would accept these offers to balance the system with SBR and DSBR only meeting the difference between the market provided energy and demand. This should further limit the impact of these services on marginal generators.

In some instances, NGET may instruct a service provider to become available for dispatch ("warming"). This warming, however, does not necessarily translate to market distortion as (a) these generators are not spilling energy onto the system when warming; (b) the warming instruction may be withdrawn if the market responds. This again, would not impact marginal market participants negatively.

The operational methodologies also establish the process by which NGET schedules testing of service providers to minimise the impact on the market. NGET must take into consideration the amount of upward and downward margin, the stability of demand and the absence of system stress events. We note that NGET has updated the testing arrangements by applying lessons learned, such as making testing more flexible and less frequent if not necessary.

#### CM impact

Some stakeholders have expressed concerns that the winners of SBR contracts receive an extra injection of money, which will place them in a better financial position to be able to bid into the CM, thereby distorting the CM merit order and lowering the clearing price. While we accept that this risk exists, we consider that in practice, its impact is likely to be limited. Any impact of SBR service providers on the CM would depend on a number of factors, including the plants' SBR bids, theirs and others' costs, and the CM merit order. Since SBR is targeted at service providers that would otherwise be unavailable to the market, it is more likely that they are more marginal, hence more costly than those in the market. This would limit the impact of the service on the CM, although it is possible that these providers participate in these tenders.

As such, while we recognise that there is the potential for market distortions to exist, we are confident that appropriate mitigation measures have been put in place by NGET. We also believe that it is in the interest of consumers for NGET to retain the ability to procure these services due to uncertainty in the market for the two winters preceding the first CM delivery year. This does not mean that services will necessarily be procured, but rather that NGET will have the option to:

- Procure the services if needed
- Recover the costs if incurred economically and efficiently.

As such, we are minded to direct an extension of the cost recovery arrangements until 2017/18. This would mean that NGET would also have access to these services for 2016/17 and 2017/18 if needed.

<sup>17</sup> This is because DSBR is considered to be less distortionary to the market (eg shorter ramp-down/up times).

<sup>&</sup>lt;sup>16</sup> Further information on the dispatch of these services can be found in the operational methodologies.

NGET's application for an extension relates to the two winters 2016/17 and 2017/18 only. We note that once the CM is in place, we expect the balancing need for these additional tools to disappear. We do not intend to extend the funding arrangements beyond 2017/18. We also intend to work with NGET at that time to ensure the appropriate changes are made to its licence by the end of winter 2017/18 to remove the provision for SBR and DSBR.

# Methodologies

If we direct an extension to the cost recovery arrangements, NGET will have to submit new methodologies to us for approval, as per its licence. We would continue to assess any NGET submission to ensure it is in the interest of consumers and complies with the three principles we consulted on with stakeholders in 2013:<sup>18</sup>

- a) NGET's procurement and volume to procure must be economic and efficient and the products must represent value for money to electricity consumers.
- b) NGET's product design and proposed use of the new products must minimise unintended consequences to market participants and the operation of the market.
- c) NGET's procurement process must be objective and transparent.

We would also continue to encourage NGET to take on board lessons learned from the previous procurement and testing of these services to continue to minimise the impact in the market of these services.

# Question

Do you have any comment on our minded to decision?

# **Next steps**

If you have any questions regarding the content of this letter or comments on our intention to extend the funding arrangements, please send them to Leonardo Costa, soincentive@ofgem.gov.uk by 12/11/2015.

Following and subject to our review of any comments, we intend to direct the extension of the funding arrangements and set the date for NGET's submission of the new methodologies to the Authority for approval.

Yours faithfully

Emma Kelso

**Partner, Wholesale Markets** 

<sup>&</sup>lt;sup>18</sup> Our consultation on those principles can be found at <a href="https://www.ofgem.gov.uk/publications-and-updates/consultation-potential-requirement-new-balancing-services-national-grid-electricity-transmission-plc-nget-support-uncertain-mid-decade-electricity-security-supply-outlook">https://www.ofgem.gov.uk/publications-and-updates/consultation-potential-requirement-new-balancing-services-national-grid-electricity-transmission-plc-nget-support-uncertain-mid-decade-electricity-security-supply-outlook</a>