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Balancing Reserve Terms and Conditions

Dear James,

In accordance with Article 18 of COMMISSION REGULATION (EU) 2017/2195 of 23 November 2017 (as applicable and as amended in Great Britain) establishing a guideline on electricity balancing (EBR), National Grid ESO is required to propose terms and conditions related to balancing. If the terms and conditions are approved by Ofgem, Article 6 of EBR envisages that National Grid ESO will consult and seek approval to amendments to such terms and conditions as further required, under CUSC Section 4, paragraph 4.2B.5.

A consultation with industry (in accordance with EBR) on the Terms and Conditions of a new Balancing Reserve (BR) service was undertaken from 16 November 2022 to the 16 December 2022. We are now making our submission to Ofgem covering the terms of this new service, for review and decision. If approved, these documents will constitute version 1 of the contractual documentation for the new BR service.

BR will enable ESO to procure regulating reserve as a firm product locking volume at day ahead, both reducing balancing costs and providing improved system security by guaranteeing headroom and footroom for the Control Room to access when needed.

The regulating reserve we currently procure in real time is mainly from synchronised generators able to respond within standard Bid Offer Acceptance (BOA) timescales (2 minutes). With our new service, our requirements will be set to reflect our needs and we anticipate these will be updated daily and shared with industry on a rolling 5-day basis.

ESO currently uses optional bids and offers for available headroom and footroom in the Balancing Mechanism (BM) to create scheduled reserve in real time. Sometimes this may require synchronising or desynchronising plant to be able to create sufficient margin. The cost of bids and offers has risen significantly. During periods of scarcity there can be insufficient margin to meet our positive or negative reserve requirements and procuring extra capacity can be extremely expensive in real time.

BR reduces operational costs by moving procurement of reserve on large, flexible, fast generators from real-time energy to day ahead capacity. This reduces our dependency on a few marginal machines and increases competition in the BM. It is forecast to reduce total costs to end consumers significantly. We have engaged LCP to model the impact of introducing BR on the wholesale market and the BM. LCP forecast a consumer benefit over the next 3 years of between ~£100m and ~£1500m, with a central case of ~£900m. The LCP analysis is included in our submission and will be published on our website.

To enable these significant consumer savings, we have designed the service to facilitate early implementation so that consumer savings are maximised. Going forward, there are developments we can make to BR that will improve the product and widen participation by lowering the unit size. However if we delayed implementation until 2024 when the multi dispatch tool will be ready, we would miss out on a substantial amount of consumer benefit. Therefore bringing it forward saves >£200m of consumer value, but means that we have needed to make compromises in unit size so we can progress BR as fast as possible to maximise consumer benefits.



We recognise the benefits of widening participation in the service by lowering unit size, and this is why we have outlined our plan to adjust it as enhanced dispatch capability becomes available.

The documents included with our submission, are for both a positive and negative BR service. Our current intention for BR, is to launch a positive BR service immediately following Ofgem approval, with the negative service to follow when the ESO has a requirement to procure this service. Notification of the launch of negative BR will be given via the normal channels.

Following feedback from stakeholders through our industry engagement, we have reviewed and changed some of our service design elements as a direct result of that feedback received. For ease, these are summarised in the table below:

| Design Element | Initial Proposal | Revised Proposal | |
|--|---|--|--|
| Provider eligibility | BM Units and Large Power Station | BM Units with control telephony and mandatory frequency response capability during all contracted windows | |
| Time to full delivery | As specified by Providers with minimum ramp of at least 15MW/min | Minimum ramp rate to be at least 10MW/min | |
| Ramp rates | Minimum ramp-up and ramp-down rate to be at least 15 MW/min, Maximum ramp rate as covered in Grid Code. | | |
| Service Windows | 1 hour | 30 minutes (Settlement Periods) | |
| Multiple Bids per unit per service window | Allowed | Not allowed | |
| Auction Timing | Auction closes at 8:30am day ahead | Auction closes at 8:15am day ahead | |

One of the areas you highlighted during discussions is around how the benefits of BR will be tracked and I wanted to confirm that this will be picked up over the coming weeks. As our work progresses, we will share our thoughts with you for further development as required.

If there are any other areas you would like to specifically pick up with us, please reach out to Vicci Page and we can discuss as part of the regular on-going engagement you will have with the BR team.

Yours sincerely,

Kyle Martin

Kyle Martin

Market Change Delivery Senior Manager



Annex 1 EBR Article 18 mapping for Balancing Reserve Terms and Conditions

This table cross references the terms and conditions related to balancing described in Article 18 of the Electricity Balancing Regulation against the corresponding parts of the GB codes and relevant contractual provisions, with particular reference to the new Demand Flexibility Service. This cross referencing includes the terms and conditions for balancing service providers and the terms and conditions for balance responsible parties.

Nothing in this table shall prejudice or otherwise affect the operation of the GB codes and relevant contractual provisions, and in the event of any conflict or inconsistency between this table and Article 18 EBR the latter shall prevail.

Table 1

| Article | Text | Code or document | Section |
|---------|---|---|--|
| | The terms and conditions pursuant to paragraph 1 shall also include the rules for suspension and restoration of | Grid Code | OC9.4 |
| 18.2 | market activities pursuant to Article 36 | BSC | G3 |
| 18.4 | The terms and conditions for balancing service providers shall: | - | - |
| | | | BR Procurement Rules |
| 18.4.a | Define reasonable and justified requirements for the provisions of balancing services; | | 4 - Registration of Registered BR Participants |
| | | | 5 - Prequalification of BR Units |
| | | | 12 - Formation of BR Contracts |
| | | BR Procurement Rules & Service Terms | 15 - Use of Designated Auction Platform |
| | | | BR Service Terms |
| | | | 5 - Service Availability |
| | | | 9 - Energy Utilisation Payments |
| | | | 10 - Payment Procedure |
| | | | 14 - Provision of Other Services |



| | | BSC | BSC Section A, H3, H4.2, H4.7, H4.8, H5.5, H6, H10, J3.3, J3.6, J3.7 and J3.8 |
|---------|--|---|--|
| | | CUSC | Section 4.1.3 |
| | | BSC | K3.3, K8, S6.2, S6.3 and S11 |
| | | Grid Code | DRSC 4.2, BC1.4 |
| | | | BR Procurement Rules |
| 18.4.b | (-/, | | 4 - Registration of Registered BR Participants |
| | | | 5 - Prequalification of BR Units |
| | | | Schedule 2 – Registration and Pre-Qualification Procedure |
| | | | [note: aggregation not applicable] |
| | | BSC | K3.2, K3.3, K8 |
| | | | BR Procurement Rules |
| | nwhers of energy storage linits to | BR Procurement Rules & Service Terms | 4 - Registration of Registered BR Participants |
| 18.4.c | | | 5 – Prequalification of BR Units |
| | | | Schedule 2 – Registration and Pre-Qualification Procedure |
| | | | |
| 18.4.d | Require that each balancing energy bid from a balancing service provider is assigned to one or more balance responsible parties to enable the calculation of an imbalance adjustment pursuant to Article 49. | BSC | T4, Q7.2, Q6.4 |
| 18.5 | The terms and conditions for balancing service providers shall contain: | - | - |
| Article | Text | Code or document | Section |
| 18.2 | The terms and conditions pursuant to paragraph 1 shall also include the rules | Grid Code | OC9.4 |



| ment Rules tion of BR fication of BR ion of BR Designated tform Terms Availability Utilisation nt Procedure on of Other |
|---|
| n A, H3, H4.2, H5.5, H6, J3.6, J3.7 and |
| .3 |
| 6.2, S6.3 and |
| |
| |



| | | BR Procurement Rules & Service Terms | BR Procurement Rules 4 - Registration of Registered BR Participants 5 - Prequalification of BR Units Schedule 2 – Registration and Pre-Qualification |
|--------|---|---|--|
| | | | Procedure [note: aggregation not applicable] |
| 18.4.c | Allow demand facility owners, third parties and owners of power generating facilities from conventional and renewable energy sources as well as owners of energy storage units to become balancing service providers; | BSC | K3.2, K3.3, K8 |
| | | BR Procurement Rules & Service Terms | BR Procurement Rules 4 - Registration of Registered BR Participants 5 - Prequalification of BR Units Schedule 2 - Registration and Pre-Qualification |
| 18.4.d | Require that each balancing energy bid from a balancing service provider is assigned to one or more balance responsible parties to enable the calculation of an imbalance adjustment pursuant to Article 49. | BSC | Procedure T4, Q7.2, Q6.4 |
| 18.5 | The terms and conditions for balancing service providers shall contain: | - | - |



Non- Mandatory Elements

| Article | Text | Comment |
|---------|---|---|
| 18.7. a | A requirement for balancing service providers to provide information on unused generation capacity and other balancing resources from balancing service providers, after the day-ahead market gate closure time and after the intraday crosszonal gate closure time; | NG ESO does not expect to require this from Balancing Service Providers. |
| 18.7. b | day ahead market gate closure time, without prejudice to the possibility of | NG ESO does not expect to require this from Balancing Service Providers, except where balancing capacity or energy has been contracted. Although the BR defaulting rules apply if data is not updated, there is no legal requirement for parties to offer unused generation capacity or any other balancing resource. |
| 18.7.c | Where justified, a requirement for balancing service providers to offer the unused generation capacity or other balancing resources through balancing energy bids or integrated scheduling process bids in the balancing markets after intraday cross-zonal gate closure time; | NG ESO does not expect to require this from Balancing Service Providers, except where balancing capacity or energy has been contracted. Although the BR defaulting rules apply if data is not updated, there is no legal requirement for parties to offer unused generation capacity or any other balancing resource. |
| 18.7. d | Specific requirements with regard to the position of balance responsible parties submitted after the day-ahead market timeframe to ensure that the sum of their internal and external commercial trade schedules equals the sum of the physical generation and consumption schedules, taking into account electrical losses compensation, where relevant; | NG ESO does not expect to require this from Balancing Service Providers. No BSC party is required to contract to match its Final Physical Notifications (FPNs). |
| 18.7. e | An exemption to publish information on offered prices of balancing energy or balancing capacity bids due to market abuse concerns pursuant to Article 12(4) | NG ESO does not expect to require this exemption. Such data is published on BRMS. |
| 18.7. f | An exemption for specific products defined in Article 26(3)(b) to predetermine the price of the balancing energy bids from a balancing capacity contract pursuant to Article 16(6) | NG ESO has not applied for this exemption and does not expect it to be necessary to do so. |



| 18.7. g | ostablished pursuant to Article 52(2)(d)(i) | NG ESO does not expect to apply for the use of dual pricing for all imbalances. A single imbalance price was adopted by the GB market in November 2015. |
|---------|---|---|
|---------|---|---|

Annex 2 EBR Article 18 Balancing Reserve Terms and Conditions Consultation Responses Summary

Summary of responses and key themes from the consultation responses and ESO comments.

For responses provided on the official template we have only included the specific questions the provider responded to, all other questions should be assumed as "no comment" from the provider.

Where providers have submitted detailed letters, or their response is very detailed on the response template ESO has summarised the response into key themes.

This information is included in the attached excel spreadsheet.