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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 converted into retained EU law) (EBR), National Grid ESO is proposing to amend its terms and conditions relating to balancing specifically to update the terms and conditions for a new Balancing Reserve (BR) service.

A consultation with industry (in accordance with EBR) on the Terms and Conditions of a new Balancing Reserve (BR) service was undertaken from 26 September 2023 to the 26 October 2023. 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, and we intend these terms to go live on the date of Ofgem approval.

BR will enable ESO to procure firm Regulating Reserve capacity through a Day Ahead auction, both reducing balancing costs and providing improved system security by guaranteeing headroom (reduced consumption or increased generation) and footroom (reduced generation or increased consumption) for the Control Room to access when needed.

ESO currently uses optional bids and offers in the Balancing Mechanism (BM) to create Regulating Reserve in real time. Sometimes this may require synchronising or desynchronising BM Units to create margin; paying for energy to create reserve capacity. The cost of bids and offers, particularly during periods of scarcity, has risen significantly. BM price trends usually follow the wholesale power market prices which increased considerably following the gas market price volatility introduced by the war in Ukraine. During 2023, wholesale power prices have started to reduce although are still much higher than before Winter 2021/22. 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 with big differentials between wholesale prices and BM bid-offer price spreads.

BR reduces balancing costs by moving procurement of reserve capacity from real-time to day ahead, energy from the contracted units can then be dispatched within the BM to resolve real-time energy imbalances. We have engaged energy market modelling experts LCP to model the impact of introducing BR on the wholesale market. LCP Delta updated their forecast in August 2023 which shows a significant consumer benefit over the next 3 years. The LCP analysis is included in our submission and will be published on our website.

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 and a full evolution of the service design is included with our submission.

Design Element	BR v1	BR v2
Minimum Bid Size	50MW	1MW
Provider eligibility	BM Units with control telephony and mandatory frequency response capability during all contracted windows	BM Units with control and/or system telephony in all contracted windows.
Time to full delivery	Minimum ramp rate to be at least 10MW/min	10 minutes time to full delivery
Ramp rates		Minimum ramp rate required to achieve time to full delivery, maximum ramp rate as per Grid Code.
Cap on Reimbursement	The greater of (1) £250,000, and (2) the BR Availability Payments payable in respect of that BR Contract for the relevant BR Service Window	<p>Max {BM Accepted Offer/Bid Price for Energy* or ESO Trade for Energy} per MW per SP</p> <p>Applicable to each Contracted and Undelivered MW</p> <p>*Subject to excluding any erroneous Offers/Bid sent by ESO.</p>
Dispatch flexibility rules	No specific rules as 50MW requirement provided a “blanket rule”	<ul style="list-style-type: none"> • Ensure service terms allow instruction from PN to all integers within contracted volume in as little as 1 minute time interval. • We do not expect control room operational behaviour to change.

One of the areas highlighted during discussions is around how the benefits of BR will be tracked and I wanted to confirm that our Balancing Costs team have an ongoing remit for monitoring the value delivered from the Balancing Reserve service. In addition we will of course continue with medium and long term evaluation of reserve services. As our work progresses, we will share our thoughts with you on any further development of the service as required.

If there are any other areas you would like further clarification on please reach out to Ian Childs and we can discuss as part of the regular on-going engagement you will have with the BR team and provide any supporting documentation required.

Yours sincerely,

Jonathan Wisdom
Head of Market Change Delivery

Annex 1

Amendment of EBR Article 18 mapping to update for Balancing Reserve Terms and Conditions

Please note: This table cross references the terms and conditions related to balancing described in article 18 of Commission Regulation (EU) 2017/2195 of 23 November 2017 (as incorporated into EU retained law, and as amended by the Electricity Network Codes and Guidelines (Markets and Trading) (Amendment) (EU Exit) Regulations 2019/532) (“**EBR Article 18**”) against the corresponding parts of the GB codes and relevant contractual provisions, with particular reference to the new Balancing Reserve 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 EBR Article 18 the latter shall prevail.

Table 1

Below is the mapping of EBR Article 18 with references to the relevant Balancing Reserve terms and conditions.

Mandatory Elements

Article	Text	Code or document	Section
18.2	The terms and conditions pursuant to paragraph 1 shall also include the rules for suspension and restoration of market activities pursuant to Article 36 of Regulation (EU) 2017/2196 and rules for settlement in case of market suspension pursuant to Article 39 of Regulation (EU) 2017/2196 once approved in accordance with Article 4 of Regulation (EU) 2017/2196.	Grid Code	OC9.4
		BSC	G3
18.4	The terms and conditions for balancing service providers shall:	-	-

Article	Text	Code or document	Section
18.4.a	Define reasonable and justified requirements for the provisions of balancing services;	BR Procurement Rules & Service Terms	BR Procurement Rules 4 – Registration of Registered BR Participants 5 – Pre-qualification of BR Units 12 – Formation of BR Contracts 15 – Use of Designated Auction Platform BR Service Terms 5 – Service Availability 15 – 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
18.4.b	Allow the aggregation of demand facilities, energy storage facilities and power generating facilities in a scheduling area to offer balancing services subject to conditions referred to in paragraph 5 (c);	BSC	K3.3, K8, S6.2, S6.3 and S11
		Grid Code	DRSC 4.2, BC1.4
		BR Procurement Rules	BR Procurement Rules 4 – Registration of Registered BR Participants 5 – Pre-qualification of BR Units Schedule 2 – Registration and Pre-qualification Procedure
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	BR Procurement Rules 4 – Registration of Registered BR Participants

Article	Text	Code or document	Section
			5 – Pre-qualification 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:	–	–
18.5.a	The rules for the qualification process to become a balancing service provider pursuant to Article 16;	BR Procurement Rules & Service Terms	BR Procurement Rules 4 – Registration of Registered BR Participants 5 – Pre-qualification of BR Units Schedule 2 – Registration and Pre-qualification Procedure BR Service Terms 15 – Provision of Other Services
		Grid Code	BC5, BC4.4.2
		CUSC	Section 4.1
		BSC	J3.3, J3.6, J3.7, J3.8, K3.2, K3.3 and K8
18.5.b	The rules, requirements and timescales for the procurement and transfer of balancing capacity pursuant to Articles 32 and 34;	BR Procurement Rules & Service Terms	BR Procurement Rules 7 – Buy Orders 8 – Sell Orders 9 – Market Clearing Rules 12 – Formation of BR Contracts BR Service Terms 6 – Service Instruction 7 – Service Delivery

Article	Text	Code or document	Section
			15 – Provision of Other Services 23 – Transfer of BR Contracts
18.5.c	The rules and conditions for the aggregation of demand facilities, energy storage facilities and power generating facilities in a scheduling area to become a balancing service provider;	BR Procurement Rules & Service Terms	BR Procurement Rules 4 – Registration of Registered BR Participants 5 – Pre-qualification of BR Units 20 – Site Export and Import Limits Schedule 2 – Registration and Pre-qualification Procedure BR Service Terms 15 – Provision of Other Services
		BSC	K3.3 and K8
		Grid Code	BC1.4 and BC1.A.10
18.5.d	The requirements on data and information to be delivered to the connecting TSO and, where relevant, to the reserve connecting DSO during the Pre-qualification process and operation of the balancing market;	BR Procurement Rules & Service Terms	BR Procurement Rules 4 – Registration of Registered BR Participants 5 – Pre-qualification of BR Units 11 – Daily Auction Reports 13 – Confidentiality 16 – Accuracy of information 17 – Intellectual Property Schedule 2 – Registration and Pre-qualification Procedure BR Service Terms 21 – Records and Audits 24 – Confidentiality 25 – Intellectual Property Rights
		BSC	BSC Section O

Article	Text	Code or document	Section
		Grid Code	DRC, BC5 BC1.4,
		CUSC	Section 4.1.3.14 and 4.1.3.19
18.5.e	The rules and conditions for the assignment of each balancing energy bid from a balancing service provider to one or more balance responsible parties pursuant to paragraph 4 (d);	BSC	T4
		BR Procurement Rules & Service Terms	BR Procurement Rules 8 – Sell Orders 9 – Market Clearing Rules 12 – Formation of BR Contracts BR Service Terms 15 – Provision of Other Services 22 – Assignment 23 – Transfer of BR Contracts
18.5.f	The requirements on data and information to be delivered to the connecting TSO and, where relevant, to the reserve connecting DSO to evaluate the provisions of balancing services pursuant to Article 154(1), Article 154(8), Article 158(1)(e), Article 158(4)(b), Article 161(1)(f) and Article 161(4)(b) of Regulation (EU) 2017/1485;	BR Procurement Rules	BR Procurement Rules 4 – Registration of Registered BR Participants 5 – Pre-qualification of BR Units 11 – Daily Auction Reports 13 – Confidentiality 16 – Accuracy of Information 17 – Intellectual Property Schedule 2 – Registration and Pre-qualification Procedure
		Grid Code	Grid Code BC1.4, BC1.A.10,
		CUSC	4.1.3.19
18.5.g	The definition of a location for each balancing product taking into account paragraph 5 (c);	Grid Code	BC1.4
18.5.h	The rules for the determination of the volume of balancing energy to be settled with the balancing service provider pursuant to Article 45;	BSC	BSC T3

Article	Text	Code or document	Section
<p>18.5.i</p>	<p>The rules for the settlement of balancing service providers defined pursuant to Chapters 2 and 5 of Title V;</p>	<p>BR Service Terms</p>	<p>BR Service Terms 5 – Service Availability 9 – BR Availability Payments 10 – Energy Utilisation Payments 11 – Payment Procedure Schedule 2 – BR Availability Payments Schedule 3 – Payment Provisions</p>
		<p>BSC</p>	<p>T1.14, T3 and U</p>
		<p>CUSC</p>	<p>Section 4.1.3.9 and 4.1.3.9A</p>
<p>18.5.j</p>	<p>A maximum period for the finalisation of the settlement of balancing energy with a balancing service provider in accordance with Article 45, for any given imbalance settlement period;</p>	<p>BR Service Terms</p>	<p>BR Service Terms 9 – BR Availability Payments 10 – Energy Utilisation Payments 11 – Payment Procedure Schedule 2 – BR Availability Payments Schedule 3 – Payment Provisions</p>
		<p>BSC</p>	<p>U2.2</p>
		<p>CUSC</p>	<p>Section 4.3.2.6</p>
<p>18.5.k</p>	<p>The consequences in case of non-compliance with the terms and conditions applicable to balancing service providers.</p>	<p>BR Procurement Rules & Service Terms</p>	<p>BR Procurement Rules 4 – Registration of Registered BR Participants 5 – Pre-qualification of BR Units Schedule 2 – Registration and Pre-qualification Procedure</p> <p>BR Service Terms 15 – Provision of Other Services</p>

Article	Text	Code or document	Section
			17 – Termination of BR Contracts
		BSC	H3, Z7 and A5.2
		CUSC	Sections 4.1.3.9, 4.1.3.9A and 4.1.3.14
18.6	The terms and conditions for balance responsible parties shall contain:	–	–
18.6.a	The definition of balance responsibility for each connection in a way that avoids any gaps or overlaps in the balance responsibility of different market participants providing services to that connection;	BSC	K1.2, P3 and T4.5
18.6.b	The requirements for becoming a balance responsible party;	BSC	A, H3, H4.2, H4.7, H4.8, H5.5, H6, H10, J3.3, J3.6, J3.7, J3.8., K2, K3.3 and K8
18.6.c	The requirement that all balance responsible parties shall be financially responsible for their imbalances, and that the imbalances shall be settled with the connecting TSO;	BSC	N2, N6, N8, N12, and T4,
18.6.d	The requirements on data and information to be delivered to the connecting TSO to calculate the imbalances;	BSC	BSC Section O, Q3, Q5.3, Q5.6, Q6.2, Q6.3, Q6.4
		Grid Code	BC1.4.2,3,4, BC1 Appendix 1 BC2.5.1,
18.6.e	The rules for balance responsible parties to change their schedules prior to and after the intraday energy gate closure time pursuant to paragraph 4 of Article 17;	BSC	P2
		Grid Code	BC1.4.3,4,
18.6.f	The rules for the settlement of balance responsible parties defined pursuant to Chapter 4 of Title V;	BSC	T4, U2
18.6.g	The delineation of an imbalance area pursuant to Article 54(2) and an imbalance price area;		GB constitutes one imbalance area and imbalance price area and they are equal to the synchronous area

Article	Text	Code or document	Section
18.6.h	A maximum period for the finalisation of the settlement of imbalances with balance responsible parties for any given imbalance settlement period pursuant to Article 54;	BSC	U2.2
18.6.i	The consequences in case of non-compliance with the terms and conditions applicable to balance responsible parties;	BSC	H3,Z7 and A5.2
18.6.j	An obligation for balance responsible parties to submit to the connecting TSO any modifications of the position;	BSC	P2
18.6.k	The settlement rules pursuant to Articles 52, 53, 54 and 55;	BSC	T4, U2
18.6.l	Where existing, the provisions for the exclusion of imbalances from the imbalance settlement when they are associated with the introduction of ramping restrictions for the alleviation of deterministic frequency deviations pursuant to Article 137(4) of Regulation (EU) 2017/1485.	Deterministic frequency deviation is a continental European concept and is not a characteristic of the GB system. Therefore, this requirement does not apply to GB.	N/A

Non- Mandatory Elements

Article	Text	Comment
18.7.a	-	Sub-paragraph 18.7.a was repealed pursuant to paragraph 18(6)(a) of Schedule 2 of the Electricity Network Codes and Guidelines (Markets and Trading) (Amendment) (EU Exit) Regulations 2019/532.
18.7.b	where justified, a requirement for balancing service providers to offer the unused generation capacity or other balancing resources through balancing energy bids in the balancing markets after day ahead market gate closure time, without prejudice to the possibility of balancing service providers to change their balancing energy bids prior to the	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, these do not introduce a legal requirement for parties to offer unused generation capacity or any other balancing resource.

Article	Text	Comment
	balancing energy gate closure time due to trading within intraday market;	
18.7.c	-	Sub-paragraph 18.7.c was repealed pursuant to paragraph 18(6)(c) of Schedule 2 of the Electricity Network Codes and Guidelines (Markets and Trading) (Amendment) (EU Exit) Regulations 2019/532.
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 will be publishing the bid prices for balancing capacity once the BR auction has finished and all of the bid/offer prices both ahead of time and ex post are available on BMRS.
18.7.f	An exemption 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	An application for the use of dual pricing for all imbalances containing the information set out in Article 52(2)(d)(i) and (ii).	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 and the new BR service will not change this.

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