
National Grid ESO
Faraday House
Gallows Hill
Warwick
CV34 6DA

Mili Gupta

mili.gupta@nationalgrideso.com
www.nationalgrideso.com

26 September 2023

Balancing Reserve Terms and Conditions

Dear Industry and Colleagues,

In accordance with 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 introduce terms and conditions for a new Balancing Reserve (BR) service.

BR has been developed to enable the ESO to procure regulating reserve on a firm basis at day ahead stage. The new BR service will help ensure ESO can procure reserve capacity in a manner which optimises value for consumers.

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). Our requirements are set so that the risk of a loss of load event due to a reserve shortfall is uniform across all settlement periods in the year.

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.

Since 2021, the cost of bids and offers in the **Balancing Mechanism (BM)** 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.

The new BR service will help reduce balancing costs and improve system security as the unit headroom and footroom is guaranteed for the Control Room to access in real-time when needed. By procuring the service day ahead of delivery, reserve volume is secured in advance of the day ahead GB power auctions. This will mean that contracted units cannot sell its headroom into continental markets over the interconnectors and will be available to ESO in real-time.

Following the previous EBR consultation on the proposed BR service which was rejected by Ofgem, ESO have undertaken a thorough review of the proposed service design. This has led to a number of changes to the BR service design, removing barriers to entry. Changes to the service design can be found in the below table, compared to the originally proposed service design parameters.

Design Element	Initial Proposal	Revised Proposal
Minimum Contract Size	50 MW	1 MW
Provider Eligibility	BM Units with a backup means of dispatch (control or system telephony) and mandatory frequency response capability during contracted windows	BM Units with a backup means of dispatch (control or system telephony) during contracted windows
Time to Full Delivery	Minimum Ramp Rate to be at least 10MW/min	Time to full delivery (10 minutes to full delivery)
Ramp Rates		
Performance Monitoring	“Event of Default” on Availability, Ramp Rates and Utilisation of Providers in Service Windows	“Event of Default” on Availability, Time to full delivery and Utilisation of Providers in Service Windows
Dispatch Flexibility	No specific rules as 50MW requirement removed the risk of inflexible dispatch	Ensure service terms allow instruction from PN to all integers within contracted volume in 1 minute time interval
Multiple Bids per Unit per Service Window	Not allowed	Allowed 1 parent and up to 10 child bids
Bid Curtailment Rules	Units can be curtailed up to 50MW.	User-defined curtailment
Reimbursement Approach	£10,000 per MW per SP	Max BM Accepted Offer/Bid Price for Energy or ESO Trade for Energy per MW per Settlement Period
Aggregation	Not Allowed	Allowed per GSP Group

In accordance with EBR, the ESO is now consulting on the new terms and conditions for BR, and the consultation will be undertaken from 26th September 2023 to 26th October 2023. The documents can be found on our website link [here](#).

Please respond by 17:00 on 26th October 2023 using the proforma available on our website to box.futureofbalancingservices@nationalgrideso.com

If you have any queries regarding this proposal, please contact us using the above email address.

Yours sincerely,

Mili Gupta

Mili Gupta - Electricity Market Change Delivery Manager

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 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:	-	-

18.4.a	Define reasonable and justified requirements for the provisions of balancing services;	BR Procurement Rules & Service Terms	<p>BR Procurement Rules</p> <p>4 - Registration of Registered BR Participants</p> <p>5 – Pre-qualification of BR Units</p> <p>12 - Formation of BR Contracts</p> <p>15 - Use of Designated Auction Platform</p> <p>BR Service Terms</p> <p>5 - Service Availability</p> <p>15 - Provision of Other Services</p>
		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 & Service Terms	<p>BR Procurement Rules</p> <p>4 - Registration of Registered BR Participants</p> <p>5 – Pre-qualification of BR Units</p> <p>Schedule 2 – Registration and Pre-Qualification Procedure</p>
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	<p>BR Procurement Rules</p> <p>4 - Registration of Registered BR Participants</p> <p>5 – Pre-qualification of BR Units</p>

			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 Units 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, 33 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 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 Units 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 prequalification process and operation of the balancing market;	BR Procurement Rules & Service Terms	<p>BR Procurement Rules</p> <p>4 - Registration of Registered BR Participants</p> <p>5 – Pre-qualification of BR Units</p> <p>11 - Daily Auction Reports</p> <p>13 - Confidentiality</p> <p>16 - Accuracy of information</p> <p>17 - Intellectual Property</p> <p>Schedule 2 - Registration and Pre-qualification Procedure</p> <p>BR Service Terms</p> <p>21 - Records and Audits</p> <p>24 - Confidentiality</p> <p>25 - Intellectual Property Rights</p>
		BSC	BSC Section O
		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 7 - 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 & 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 Prequalification 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 standard product and each specific 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
18.5.i	The rules for the settlement of balancing service providers defined pursuant to Chapters 2 and 5 of Title V;	BR Procurement Rules & Service Terms	BR Service Terms 5 - Service Availability

			<p>9 - BR Availability Payments</p> <p>10 - Energy Utilisation Payments</p> <p>11 - Payment Procedure</p> <p>Schedule 2 - BR Availability Payments</p> <p>Schedule 3 - Payment Provisions</p>
		BSC	T1.14, T3 and U
		CUSC	Section 4.1.3.9 and 4.1.3.9A
18.5. j	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;	BR Service Terms	<p>BR Service Terms</p> <p>9 - BR Availability Payments</p> <p>10 - Energy Utilisation Payments</p> <p>11 - Payment Procedure</p> <p>Schedule 2 - BR Availability Payments</p> <p>Schedule 3 - Payment Provisions</p>
		BSC	U2.2
		CUSC	Section 4.3.2.6
18.5. k	The consequences in case of non-compliance with the terms and conditions applicable to balancing service providers.	BR Procurement Rules & Service Terms	<p>BR Procurement Rules</p> <p>4 - Registration of Registered BR Participants</p> <p>5 – Pre-qualification of BR Units</p> <p>Schedule 2 - Registration and Pre-Qualification Procedure</p> <p>BR Service Terms</p> <p>15 - Provision of Other Services</p> <p>17 - Termination of BR Contracts</p>

		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 paragraphs 3 and 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
18.6.h	A maximum period for the finalisation of the settlement of imbalances with balance	BSC	U2.2

	responsible parties for any given imbalance settlement period pursuant to Article 54;		
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	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 cross-zonal gate closure time;	NG ESO does not expect to require this from Balancing Service Providers.
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 or integrated scheduling process 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 balancing energy gate closure time or the integrated scheduling process gate closure time due to trading within intraday market;	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	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

	energy bids or integrated scheduling process bids in the balancing markets after intraday cross-zonal gate closure time;	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	An application for the use of dual pricing for all imbalances based on the conditions established pursuant to Article 52(2)(d)(i) and the methodology for applying dual pricing pursuant to Article 52(2)(d)(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.