## NATIONAL GRID ELECTRICITY TRANSMISSION PLC

#### SUPPLEMENTAL BALANCING RESERVE - SERVICE DESCRIPTION AND TENDER PROCESS

#### **Introductory Note:**

This document contains an overview of the proposed SBR Service, including the intended tender process. The information and terms set out in this document do not, however, constitute definitive drafting for the entirety of the SBR Service.

Furthermore, this document does not indicate any willingness or agreement on the part of National Grid Electricity Transmission Plc to enter into, or procure entry into, a SBR Contract. This document does not constitute an offer and is not capable of acceptance.

#### 1. General

- 1.1. This document ("Service Description") contains a description of the new balancing service of Supplemental Balancing Reserve ("SBR Service") and the basis on which it would (if required) be procured by National Grid Electricity Transmission Plc ("NGET"). The terms and conditions on which NGET would contract for the SBR Service ("SBR Contract") are set out in the indicative contract terms published alongside this Service Description.
- 1.2. Words and expressions defined in and the rules of interpretation set out in the SBR Contract shall apply in this Service Description.

## 2. Service Description

- 2.1. The SBR Service is the service of delivering exports of electricity by generation from specified BM Units meeting the description of "other services" set out in the third limb of the definition of "balancing services" in condition C1 of the transmission licence issued to NGET under the Electricity Act 1989 (i.e. "[serving] to assist the licensee in co-ordinating and directing the flow of electricity onto and over the national electricity transmission system in accordance with the [Electricity] Act or the standard conditions and/or in doing so efficiently and economically..."
- 2.2. The SBR Service may be provided using a BM Unit comprising a Generating Unit, a CCGT Module or a Power Park Module and both this Service Description and the SBR Contract assume that tenderers will participate in the tender on the basis of a single Generating Unit, CCGT Module or Power Park Module (for multiple units or modules, the SBR Contract will need to be adapted and will provide for the units or modules to be despatched individually and not on a portfolio basis). The SBR Service may also be

- provided using part of a BM Unit only (in which case the SBR Contract may also require adapting) provided that it comprises part of a physically identifiable Generating Unit and not 'virtual' capability across a number of physical units.
- 2.3. All providers of the SBR Service must be capable of providing the SBR contracted output within BM timescales (i.e. an NDZ of less than 90 minutes) or must be capable of providing BM Start-Up and Hot Standby such that the full contracted SBR capability can (subject to NGET issuing an Acceptance) be delivered within 24 hours of a BM Start-Up Instruction.
- 2.4. A BM Unit contracted to provide the SBR Service must not (save in the case of BM Units described in paragraph 2.6 or unless otherwise agreed) be operated at any time during the term of the SBR Contract except where so instructed by NGET in respect of a Service Window (06.00 20.00 on working days during the months of November to February).
- 2.5. The SBR Service will, if required, be initially procured through a competitive tender process to be commenced in the third quarter of 2014 to cover the winter months in 2014/15. A separate tender will be undertaken for 2015/16. In all cases, the terms of the SBR Contract will include an option for NGET to extend the term on an annual basis for a maximum of two additional years.
- 2.6. In the case of a BM Unit that is otherwise unable to operate in Balancing Mechanism timescales the tenderer will be required to provide the services of BM Start-Up and Hot Standby. The relevant provisions are set out in Schedule 4 to the SBR Contract.

## 3. Tender Conditions

- 3.1. A tenderer must, in relation to a BM Unit that it proposes to use for the purposes of the SBR Service, be able to confirm the following:
  - 3.1.1. it is a party to the BSC and is either registered as the Lead Party (as defined in the BSC) in relation to the BM Unit or has obtained the authority of the Lead Party in respect of the submission of Physical Notifications in respect of the BM Unit for the purposes of providing the SBR Service;
  - 3.1.2. the Control Point, being the point from which the BM Unit is physically controlled, is at the power station in which the BM Unit is located in accordance with the Grid Code requirements for Large and Medium Power Stations and the electronic data communication facilities and automatic logging devices required by CC.6.5.8 of the Grid Code are installed at the Control Point;
  - 3.1.3. operational metering equipment is installed in respect of the BM Unit in accordance with the requirements of the Grid Code CC.6.4.4 (in the case of an Embedded BM Unit) or CC.6.5.6 (in the case of a non-Embedded BM Unit) and

- energy metering equipment is installed in accordance with the requirements of the BSC;
- 3.1.4. it holds a generation licence (or benefits from an exemption) and has acceded to the CUSC;
- 3.1.5. it complies with the requirements of the Grid Code or is in receipt of the necessary derogations (this will be an on-going requirement under the SBR Contract);
- 3.1.6. the BM Unit is either physically connected: (i) to the National Electricity Transmission System and the tenderer is a party to a Bilateral Connection Agreement; or (ii) to a distribution network connected to the National Electricity Transmission System and the tenderer is a party to a connection agreement with the operator of the relevant distribution network. In the latter case, the tenderer must also confirm that it has, in relation to the BM Unit, the right to use the National Electricity Transmission System pursuant to the terms of a Bilateral Embedded Generation Agreement with NGET;
- 3.1.7. it has (or will have prior to commencement of the SBR Contract) adequate fuel supply/fuel stocking arrangements in place for the operation of the BM Unit in accordance with the requirements of the SBR Contract for five consecutive Contracted Service Windows at a level of output equal to the offered SBR Capability of the BM Unit. In the case of a gas fired unit, the tenderer will need to confirm the existence of a physical connection of sufficient capacity to a gas transmission or distribution network and the SBR Contract will require that it at all relevant times possesses firm rights to offtake sufficient volumes of gas to deliver the offered SBR Capability.
- 3.2. A tenderer must agree that any existing contract for the provision by the tenderer of Commercial Ancillary Services (other than Black Start Capability) will be suspended for the duration of the SBR Contract.

# 4. Tender Parameters

- 4.1. A tenderer will be required to submit in respect of a BM Unit that it proposes to utilise for the SBR Service:
  - 4.1.1. BM Unit identity;
  - 4.1.2. Status of plant: description of the current operational status of the plant comprised in the BM Unit and, to the extent relevant, the lead time required to become operational and the works required to return the plant to service, including the commissioning plan;

- 4.1.3. Dynamic Parameters: the 'worst case' values for all relevant Dynamic Parameters of the BM Unit required under BC1 of the Grid Code and which are to form the basis for providing the SBR Service under the SBR Contract such values to be provided for the BM Unit on the basis that it has not been synchronised for twenty-eight days;
- 4.1.4. Minimum Non-Zero Time: the tenderer must submit a Minimum Non-Zero Time that does not exceed 6 hours;
- 4.1.5. Capability Price: the total prices (expressed in £) payable by NGET for the capability of the BM Unit to provide the SBR Service for: (i) the winter months in 2014/15; or (ii) the winter months in 2015/16, (depending on which year is being tendered for) and the associated level of capability (expressed in MW). If more than one level of capability is tendered in relation to a BM Unit, different Capability Prices and associated capabilities may be submitted. In the event that NGET exercises its option to extend the Contract Term, the tendered Capability Price for the winter period tendered will apply in each Extension Year, subject to indexation by reference to the change in the Retail Prices Index over the period from 1 October in the winter period tendered to 1 October in that Extension Year;
- 4.1.6. Utilisation Price: the prices (expressed in £/MWh) payable by NGET for any BM Unit Metered Volumes to be delivered in accordance with an SBR Instruction, including an instruction for a Proving Test (but not including an instruction for any Non-Proving Test, the costs of which are to be borne by the tenderer) for: (i) the winter months in 2014/15; or (ii) the winter months in 2015/16 (depending on which year is being tendered for). In the event that NGET exercises its option to extend the Contract Term, the tendered price for the winter period tendered will apply in each Extension Year, subject to indexation by reference to the change in the Retail Prices Index over the period from 1 October in the winter period tendered to 1 October in that Extension Year;
- 4.1.7. Reliability Factor: a factor (between 0 and 1) representing the tenderer's best estimate of the value of the term RF<sup>A</sup> (as defined in Schedule 2 to the SBR Contract) that will be achieved by the BM Unit over the Contract Term;
- 4.1.8. BM Start-Up Price and Hot Standby Price: in the case of a unit that cannot operate in BM timescales (see paragraph 2.6), the prices (expressed in £/h) to bring the BM Unit to Hot Standby and thereafter to maintain that condition for: (i) the winter months in 2014/15; or (ii) the winter months in 2015/16 (depending on which year is being tendered for). In the event that NGET exercises its option to extend the Contract Term, the tendered BM Start-Up Price and Hot Standby Price for the winter period tendered will

apply in each Extension Year, subject to indexation by reference to the change in the Retail Prices Index over the period from 1 October in the winter period tendered to 1 October in that Extension Year; and

4.1.9. Maximum Hot Standby Time: in the case of a unit that cannot operate in BM timescales (see paragraph 2.6), the maximum time (expressed in minutes) that the unit or part unit can be held in Hot Standby mode.

# 5. Despatch: MEL, Bid-Offer Pairs, Physical Notifications and Dynamic Parameters

- 5.1. Despatch priority: SBR will in general be despatched only as a last resort after all valid and feasible Bids and Offers have been accepted in the Balancing Mechanism and any valid and feasible Demand Side Balancing Reserve ("DSBR") has been called-off but, where possible, prior to any instruction of Emergency Actions and other Involuntary Reductions. However, under certain circumstances, it may be necessary to invoke the SBR Service before all valid and feasible Bids and Offers have been accepted or before all valid and feasible DSBR actions have been called off. These circumstances are set out in NGET's SBR Operational Methodology as approved from time to time by the Authority pursuant to Special Condition 4K of the Transmission Licence ("Demand Side Balancing Reserve and Supplemental Balancing Reserve Revenue Restriction on External Costs"). This despatch priority is without prejudice to NGET's contractual rights to despatch the Contracted SBR Unit as it sees fit subject to and in accordance with the terms and conditions of the SBR Contract.
- 5.2. BM Start-Up/Hot Standby: in the case of a unit that cannot operate in BM timescales (see paragraph 2.6), the tenderer must submit the relevant data for the services of BM Start-Up and Hot Standby, allowing for delivery of the full SBR capability (subject to NGET issuing an Acceptance) within 24 hours of a BM Start-Up Instruction.
- 5.3. Despatch method: SBR may be despatched either pre-Gate Closure or post-Gate Closure. Despatch pre-Gate Closure will be achieved by NGET issuing an SBR Instruction to the Service Provider to submit a non-zero Physical Notification under BC1 of the Grid Code. Despatch post-Gate Closure will be achieved through Bid/Offer Acceptances in the Balancing Mechanism which, in the case of a unit that cannot operate in BM timescales (see paragraph 2.6), may require a prior BM Start-Up Instruction. Where the BM Unit is despatched by means of submitting Physical Notifications, NGET will procure the submission of an Energy Contract Volume Notification in accordance with Schedule 3 of the SBR Contract reflecting the agreed sale of electricity to NGET under the SBR Contract.
- 5.4. The Service Provider must ensure that at all times during the Contract Term:
  - i) other than in the circumstances described in paragraph 5.5 below, the Maximum Export Limit (as defined in BC1 of the Grid Code) at all times within a Contracted

Service Window has a value equal to the Contracted SBR Capability of the Contracted SBR Unit;

- ii) other than in the circumstances described in paragraph 5.5 below, each of the Dynamic Parameters submitted under BC1 is no worse than the tendered value for that Dynamic Parameter;
- iii) only a single Bid-Offer Pair with a positive Pair ID is submitted under BC1 and for that Bid-Offer Pair, the "From Level" is zero MW, the "To Level" has a value in MW equal to the Contracted SBR Capability of the Contracted SBR Unit; and (unless otherwise instructed by NGET for the purposes of a Non-Proving Test) both the Offer Price and the Bid Price are equal to the tendered Utilisation Price (UP<sub>i</sub>);
- iv) all Physical Notifications submitted in relation to the Contracted SBR Unit under BC1 have a MW value of zero except where otherwise instructed by NGET in accordance with an SBR Instruction;
- v) subject to paragraph 5.6 below, where instructed by NGET, the Physical Notifications submitted under BC1 of the Grid Code are consistent with those which NGET instructs the Service Provider to submit; and
- vi) it will, where applicable, operate the Contracted SBR Unit in accordance with a BM Start-Up Instruction which may be issued at any time (including outside a Service Window) such that the Contracted SBR Unit is capable of synchronising within a Service Window.
- 5.5. The circumstances referred to in paragraphs 5.4(i) and 5.4(ii) above are that the Contracted SBR Unit is not physically capable of safely operating in accordance with the tendered Dynamic Parameters or at a level equal to the Contracted SBR Capability. Where this paragraph applies the Service Provider must, without delay:
  - i) notify NGET that these circumstances apply;
  - ii) submit in accordance with BC1 of the Grid Code values for Dynamic Parameters and values of MEL that reflect the safe operating characteristics of the Contracted SBR Unit; and
  - iii) take steps to rectify the issue.
- 5.6. NGET may only instruct the Service Provider to submit Physical Notifications that are consistent with the Dynamic Parameters and MEL submitted by the Service Provider under the Grid Code.
- 5.7. Where the SBR Service is to be provided by multiple Contracted SBR Units, NGET shall instruct each unit separately and the Service Provider will not have the option of

- operating on a portfolio basis. The SBR Contract would require amendment to reflect provision of the SBR Service by multiple Contracted SBR Units.
- 5.8. Each Contracted SBR Unit will be subject to monthly Proving Tests by NGET and any Non-Proving Tests required by the Service Provider to ensure ongoing availability of the plant. In all cases testing will be agreed in advance, occur during periods when the system is not under stress, and be despatched by NGET. Any Proving Tests will feed into the calculation of the SBR Capability Payment.

#### 6. Tender Evaluation

- 6.1. The target volume of SBR Capability to be procured by NGET for each winter will be determined by reference to the Volume Requirement Methodology approved by the Authority in accordance with the Transmission Licence.
- 6.2. Compliant tenders will be assessed and accepted or rejected, in accordance with the assessment principles set out in NGET's SBR Procurement Methodology as from time to time approved by the Authority pursuant to Special Condition 4K ("Demand Side Balancing Reserve and Supplemental Balancing Reserve Revenue Restriction on External Costs") of the Transmission Licence for the purposes of determining that any procurement of the SBR Service is economic and efficient, including that it provides value for money for consumers in Great Britain.
- 6.3. In determining whether or not to enter into an SBR Contract in relation to any BM Unit and the quantity of SBR Capability to be procured in relation to any BM Unit, NGET's evaluation will be affected by other tender submissions to provide the SBR or the DSBR Service. Accordingly, the question of whether or not a contract is to be awarded and, if so, the quantity of SBR Capability for which NGET will contract, will be based on NGET's assessment of the best overall economic approach to adopt. NGET will have the right to reject any tender, including any tender considered uneconomic.
- 6.4. Tenderers will be contractually bound by the terms of the invitation to tender and will be required to acknowledge that NGET will not be obliged to accept any tender and that NGET may enter into an SBR Contract for the provision of the SBR Service in respect of part only of the SBR Capability offered.
- 6.5. Any award of an SBR Contract will not place any obligation on NGET to utilise the SBR Service from the Service Provider at all or for any volume and, in particular, the extent to which NGET is able to instruct the SBR Service depends on the likely ability of the transmission system or (where relevant) distribution system to accommodate the additional exports from the Contracted SBR Unit.