

Frequently Asked Questions

Demand Side Balancing Reserve (DSBR)

This Frequently Asked Questions document has been written for all potential providers of the Demand Side Balancing Reserve (DSBR) service. It is intended to provide a reference point and supplemental guidance to parties and should be read in conjunction with the appropriate documents available on the DSBR pages of the website.

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INTRODUCTION

What is Demand Side Balancing Reserve (DSBR)?

DSBR is designed to provide additional reserves to support National Grid in balancing the transmission system if there is insufficient generating plant available in the market to meet the Government's Reliability Standard.

The service involves signing up large energy users who could reduce their demand (or run small embedded generation) during winter weekday evenings in return for a payment. This service would only be used in extreme circumstances, in the very unlikely event that there is insufficient generation available to meet demand.

DSBR providers would declare their capability to reduce demand (or increase generation output) against a baseline for at least one hour between 4pm and 8pm on working weekdays in the months November to February, having been given at least two hours notice.

Who can participate?

DSBR is targeted at non-domestic consumers able to reduce/shift demand or run 'behind-the-meter' standby generation, and owners of small embedded generation or storage accruing to a supplier's consumption account.

DSBR is not intended for those consumers who already reduce/shift demand or run embedded generation during peak times on winter weekday evenings in response to pricing signals (e.g. for Triad avoidance). A DSBR Unit must not be tendered if the assets/constituent parts are already contracted to other committed Balancing Services.

DSBR can be provided by sites which are half hourly metered and subject to the Balancing and Settlement Code (BSC) settlement arrangements (i.e. > 100kW). A DSBR Unit represents one or more such sites providing the service.

What are the different categories of Provider?

Within the tender process, you will be asked to confirm the nature of your business. We have categorised these as follows:

Single Site	A provider offering DSBR volume ($\geq 1\text{MW}$) from a single site / MPAN that they own or operate
Customer Portfolio	A provider offering DSBR volume ($\geq 1\text{MW}$) from multiple sites / MPANs that they own or operate.
3 rd Party Intermediary	A provider offering DSBR volume ($\geq 1\text{MW}$) from multiple sites / MPANs that they do not own or operate but are authorised to offer on behalf of the owner/operators.

For those providers classified as Customer Portfolio or Third Party Intermediary, they may tender an Administration Fee for each DSBR Unit (in £/MW of DSBR capability offered) where the DSBR Unit comprises of at least 50 individual Meter Point Administration Numbers (MPANs). For information on payments, please refer to the payment section below.

BACKGROUND

When will National Grid procure DSBR?

National Grid will run tenders for DSBR for the 2014/15 winter (November to February) and 2015/16 winter (November to February). The 2014/15 requirement will be subject to a tender commencing in June 2014. The 2015/16 requirement is envisaged to be subject to two separate tender events alongside the Supplemental Balancing Reserve (SBR) product. These tender events are currently scheduled for late Summer/Autumn 2015 and early Spring 2016.

An online portal will be made available to allow service providers to register and tender individual DSBR Units.

Tenderers will be invited to declare a quantity of demand reduction (in MW) that can be delivered relative to their baseline demand profile (the offered DSBR Capability), the settlement periods between 4 and 8pm that this quantity could be delivered (the contracted service window), and the length of time this could be sustained within that window. Tenderers will be required to specify the individual MPANs at each site that make up the DSBR Unit, and the capability offered through each individual MPAN.

The baseline demand profile for each settlement period would represent the typical demand (or output) of the DSBR Unit in the winter weekday evenings of system peak demand.

Does size of Unit(s) matter?

The declared capability of a DSBR Unit must be greater than or equal to 1MW, which may be made up of an aggregation of smaller sites/MPANs.

Does National Grid prefer Demand Reduction or Embedded Generation Unit(s)?

DSBR is designed to facilitate demand-side participation in balancing the system, which will become increasingly important as traditional thermal generation is replaced with increasing volumes of intermittent plant.

Please note: all references to demand reduction within this document and all communication relating to DSBR, includes the ability to increase output from on-site or embedded generation. To confirm, National Grid does not differentiate for the purposes of assessment.

Does National Grid have a geographical location preference for Unit(s)?

National Grid does not have a geographical preference for Units and location will not be considered as part of the economic assessment.

What is your overall DSBR volume requirement?

We have assessed the security of supply outlook over the next four years and, by applying the agreed Volume Requirement Methodology, have established a volume of DSBR and SBR that we wish to procure from the market over this period. This is based on the equivalent volume of additional capacity that would be required to achieve the Government's Reliability Standard of a 3 hours Loss of Load Expectation (LoLE) against a range of credible scenarios and sensitivities. This analysis was based on our updated Future Energy Scenarios which will be published in July 2014.

The volume requirements determined for the next four years are shown in the table below.

Year	Maximum De-rated Target Volume
2014/15	330MW
2015/16	1,800MW
2016/17	1,300MW
2017/18	800MW

These represent the maximum volumes required and we will look to procure up to these volumes. The actual volume required will be that which delivers best value to consumers, balancing costs against the value of lost load in accordance with the methodology, and will depend on the prices submitted in the tenders for these services.

Given the modest requirement for 2014/15, this will be met by undertaking a trial of the new DSBR service. The learning from this trial will enable us to evolve the product and better understand its value, thus supporting the economic and efficient procurement and use of this service in the following winter when the volume requirement becomes more material.

Note that these volume requirements are de-rated values, and the actual volume procured will depend on how individual DSBR and SBR resources are 'de-rated'. For example, if the 2014/15 requirement is met by DSBR which we propose to de-rate initially to 75%, the actual volume procured will be up to 440MW in order to meet the 330MW de-rated requirement.

TENDER INFORMATION

Is there anything I need to do prior to submitting my tender?

An electronic tender portal will be available for providers to tender for DSBR. This will be open for a minimum of 6 weeks for the first tender round, and four weeks for each subsequent tender round. The portal will enable potential providers to register and submit tenders for each individual DSBR Units, agree to the DSBR standard contract terms, and receive confirmation or otherwise that their tender has been accepted.

Recognising that DSBR is a new product, the first DSBR tender will be open for a minimum of 6 weeks to allow time for marketing the product, recruitment of new sites and the preparation of bids. Given that the volume requirement for 2015/16 has been announced (June 2014), the actual tender windows for 2015/16 will be shorter given the long lead times available to prepare for these tenders.

How many tender rounds are there going to be over the two year period?

The expected timetable for this product is to invite tenders in June 2014 for the 2014/15 winter (November to February) delivery season, and in both the late Summer/early Autumn of 2014 and in the early Spring of 2015 for the 2015/16 winter delivery season. Contracts will be offered for individual winter seasons for valid tenders that are successful in the economic assessment process.

An indicative timetable for the June 2014 tender is outlined below. This is subject to change, however the exact dates will be confirmed as part of the information published ahead of any tender event:

EVENT	DATE
2014/15 Requirement Published	June 2014
Tender Window Open	June 2014, for 6 weeks
Tender Window Close	July 2014
National Grid Validation of Tendered Data	July/August 2014
Assessment & Announce Results	July/August 2014
Contracts Established	August/September 2014
Market Report	October 2014
Service Commencement	November 2014

Further tenders at different times during the year may be undertaken if additional volume requirements are identified and again, the exact dates will be communicated prior to any tender event.

Can we tender more than one year at a time?

No. DSBR tenders shall be for single year service periods.

Can we tender before the installation of an asset?

No. There will be no volume data available from data collectors for National Grid to validate at the MPAN level.

Is the deadline day for tender submission absolute?

Yes. The deadline date will be detailed in the relevant Invitation to Tender letter.

What payments will National Grid make to us for providing DSBR?

Tenderers will indicate whether they wish to receive an optional set up fee to support them in establishing their demand reduction capability.

A tendered Utilisation Rate at which the DSBR provider would wish to be paid for reducing demand would be selected from a range of nominal rates.

In addition, to encourage and support intermediaries in recruiting and managing a large number of smaller sites, Third Party Intermediaries or those offering a Customer Portfolio may tender an Administration Fee for each DSBR Unit (in £/MW of DSBR Capability offered).

For more information on payments, please refer to the section below.

Can I provide DSBR and another service concurrently (ie another balancing service or Triad avoidance)?

DSBR is not intended for those consumers who already reduce/shift demand or run embedded generation during peak times on winter weekday evenings in response to pricing signals (for example Triad avoiders).

Potential DSBR providers will declare their capability to reduce demand (or increase generation output) for at least one hour relative to a baseline profile, designed as a proxy for the level of demand or output that would typically be expected on a winter weekday evening of high system demand (i.e. the capability offered should be additional to any demand reduction / increased output that is typically undertaken in response to price signals, such as Triad warnings).

As with other Balancing Services, a DSBR Unit must not be tendered if the assets / constituent parts are already contracted to other committed Balancing Services, or if they are engaged in Triad avoidance or other demand management activities.

Only those elements capable of providing a service over and above the baseline profile are eligible to tender.

If I triad avoid between 4-6pm, can I still tender between 6-8pm?

Yes, you would be able to submit a tender for demand reduction available between 6-8pm if you do not typically reduce demand during this time.

If National Grid were to accept a 6-8pm service, we would also need another provider to offer a 4-6pm service to ensure continuity across the entire 4-8pm service window.

As such, this approach would be less valued than demand reduction that can deliver between 4-8pm and will consequently be considered in the economic assessment of tenders.

Can I have mixed availability MPANs within one DSBR Unit?

Yes, National Grid expects the following 3 scenarios of service provision:

- 1 Demand suppression only (either through load reduction or use of back up generation to offset demand without exporting to the grid).
- 2 Operation of back-up / embedded generation only (exporting to the grid with no impact on demand).
- 3 Operational of back-up generation to satisfy demand (reducing import) with the residual volume being exported to the grid.

Under scenarios 1 & 2, a single MPAN (either import or export) should be tendered. However, scenario 3 will require 2 MPANs to be tendered and the potential for double counting accounted for (i.e. the import MPAN volume should correlate to offset demand volumes and the export MPAN volume should correlate only to export levels once demand has been satisfied).

A DSBR Unit can include all three forms of service provision to make up the DSBR Capability.

How do I determine the volume I can offer?

The steps involved in determining available volume are as follows:

Demand

1. Review your demand profile, within the SPs for which you would like to offer DSBR, for the 10 peak days. Please note: the 10 peak days are detailed in the 'Validation of Tenders' section below.
2. Establish the lowest demand across these SPs in the 10 peak days.
3. Establish the lowest demand that could be achieved

Your service offering would be calculated as follows: point 2. above minus point 3.

Generation

1. Establish the maximum output of the generating unit(s).
2. Review your generation profile, within the SPs for which you would like to offer DSBR, for the 10 peak days.
3. Establish the highest demand across these SPs in the 10 peak days.

Your service offering would be calculated as follows: point 1. above minus point 3

Where the generating unit(s) satisfy demand prior to exporting to the grid the potential for double counting should be accounted for by tendering 2 MPANs reflecting an import volume (correlating to offset demand volumes) and a separate export volume (correlating to export volumes once demand has been satisfied).

Please note: National Grid will validate against these methodologies.

VALIDATION OF TENDERS

How will National Grid validate Tenders?

In assessing each DSBR tender, we would undertake a number of desktop validation checks to verify that the sites tendered are capable of providing the quantity of offered DSBR Capability. In submitting their tender, the DSBR Providers effectively consent to National Grid validating related information. The process of validation could include:

- Verifying MPAN addresses;
- Contacting each individual site;
- Confirming the volume tendered for DSBR Capability is not participating in other Balancing Services;
- Reviewing volume data from the Data Collectors to ensure that the DSBR Capability offered is consistent with metered quantities across the sites that comprise the DSBR Unit; and
- Verifying that the DSBR Capability offered (demand reduction or generation) will not also be engaged in demand management activities (i.e. TRIAD avoidance) in the Settlement Periods offered for DSBR.

Subject to these validation checks, National Grid reserves the right to reject a tender for an MPAN and/or DSBR Unit, or consider a lower capability than that which was originally tendered. The volumes that National Grid has been able to verify shall continue to the assessment stage once approved by the tenderer.

How will National Grid establish a baseline for the validation exercise?

In assessing each DSBR tender, we will undertake a number of desktop validation checks to verify that that the sites tendered are capable of providing the quantity of demand reduction offered. For volumes offered for each MPAN, National Grid will validate this against metered volume data across the offered Settlement Periods (SPs) within the top 10 peak demand days across the 2013/14 winter. This data will be sourced direct from the registered Data Collector for each MPAN.

For demand MPANs the validation will compare the offered volume against the absolute lowest import across the offered Settlement Periods from the 10 peak days. For generation MPANs, tenderers will be asked to declare a day when the unit ran at the tendered load. The validation will consider the output on this declared day as well as compare the offered volume against the highest export across the offered SPs from the 10 peak days across the previous winter.

Where there is a disparity between an MPANs offered volume and 2013/14 data, National Grid will discuss this directly with the tenderer. National Grid will reserve the right to reduce / reject MPAN or DSBR offers subject to validation processes.

For information the ten peak days for the 2013/4 winter were as follows:

- Tuesday 19/11/13
- Thursday 21/11/13
- Monday 25/11/13
- Wednesday 27/11/13
- Monday 02/12/13
- Tuesday 03/12/13
- Thursday 05/12/13
- Friday 06/12/13
- Monday 20/01/14

- Thursday 30/01/14

This validation will be used to confirm that the offered capability can be delivered relative to the baseline demand profile, which is the average demand during each settlement period on the dates given above.

When calculating demand for validation will National Grid account for where an MPAN was previously engaged in providing a separate balancing service in the preceding winter?

This would be discussed as part of the validation discussions between National Grid and a tenderer with sufficient evidence/reasoning supplied where appropriate. If the same asset has previously been used for balancing services, this may need to be factored into the validation exercise and potentially divorced from the baseline calculation. Please note however: Triad avoidance volumes would not receive the same consideration, as the product has been designed to access volumes in addition to any delivered for this service.

How would the decision to reduce/reject an MPAN be made at the point of validation?

This will be part of the bilateral discussion between National Grid and the tenderer following the receipt of the MPAN volume data from the Data Collectors. Where we are not able to validate the volume offered from an MPAN based on the data received from the Data Collectors, we will consider agreeing a lower MW offering based on the evidence available to us. Where this is not possible, we reserve the right to reject the MPAN. Any changes to the constituent MPANs within a DSBR unit will be explained to the tenderer at the end of the validation process prior to assessment. The tenderer will then be given 3 days to either approve or withdraw the amended values. If no communication has been received after the 3 days, a deemed acceptance will be granted.

ASSESSMENT

How will National Grid assess DSBR Tenders?

Details of the approach to tender assessment are contained within Part II of the DSBR Procurement Methodology published on our website. Please refer to this document for more details.

In summary, DSBR and SBR tenders will be ranked in unit cost order. Hence DSBR Units opting to receive set up and admin payments and/or high utilisation rates will rank lower than those choosing not to receive set up / admin fees and/or lower utilisation rates. Contracts will be awarded in ascending unit cost order until the volume requirement is achieved.

Please note: all valid DSBR tenders opting not to receive a set up fee or admin fee will be accepted.

CONTRACT AWARD

How will National Grid notify us of acceptance/rejection of tenders?

Subject to economic assessment, all successful DSBR Units will be communicated to the relevant tenderer via the online portal. At this point, each tenderer will have the opportunity to accept or decline the contract offer within 5 days. Where no acceptance is made within 5 days, it will be assumed that the contract offer has been declined. Where the contract offer is accepted a contract shall be formed through the acceptance of the standard contract terms and the issuing of a company specific schedule. Further contracts may be offered to additional DSBR Units where initial contract offers have been declined.

DESPATCH & OPERATION OF THE SERVICE

What are the periods I have to be available for?

A minimum of 1 hour between 4-8pm (DSBR service window) on non holiday weekdays during November to February. Please note: National Grid's preference is for the full DSBR capability to be available across the full 4 hour service window. The settlement periods over which the full capability can be delivered (the contracted service window) will feed into the economic assessment.

Please see the DSBR Procurement Methodology on our website for more details.

How long do I have to sustain utilisation for?

A minimum of 1 hour service sustainability can be tendered at the DSBR Unit level. Please note: National Grid's preference is for DSBR utilisation to be sustainable for at least 3 hours. The sustainability of the service offered will feed into the economic assessment.

Please see the DSBR Procurement Methodology on our website for more details.

Can I make myself unavailable?

No. Once a tender has been accepted, tendered service availability is assumed to be available with no mechanism to declare unavailability. Service provision is incentivised by way of the stepped payment methodology described in the Payment section below.

When will I be instructed?

Except for testing, DSBR Units will only be despatched by the System Operator after all feasible offers and bids in the Balancing Mechanism have been used, or expect to be used, in balancing the system. However, we will not deplete our operating reserve and frequency response requirements before despatching DSBR.

DSBR Units will be grouped into tranches defined by the tendered Utilisation Rate, with each tranche despatched in ascending price order.

DSBR Units may be despatched outside the contracted service window, but not outside the 4pm-8pm DSBR service window, recognising that in such periods the full DSBR capability might not be delivered.

DSBR would normally be despatched with at least 2 hours notice. However, DSBR may be despatched with shorter notice periods if needed, recognising that some providers may not be able to respond at such short notice.

A DSBR despatch instruction will specify the times between which the declared demand reduction capability should be delivered.

Please note: a max DSBR instruction could also be issued in emergency situations, requesting each DSBR Unit to provide as much demand reduction as possible.

What type of metering is required for DSBR?

DSBR can be provided by sites which are half hourly metered and subject to the BSC settlement arrangements (i.e. >100kW).

How are signals received from National Grid in relation to an instruction?

A DSBR despatch instruction will specify the times between which the declared demand reduction capability should be delivered. National Grid will broadcast a despatch instruction (and warnings) to each service provider instructing the associated DSBR Unit to reduce demand between two specified times. Individual site contacts will also be able to receive notifications that an instruction has been issued for their site.

Any DSBR despatch instructions will be notified to the Industry.

A separate DSBR Operational Methodology document will be issued in advance of the DSBR service period and will be available on our website.

Can National Grid despatch a proportion of the MW tendered?

No. All instructions will be for the full DSBR volume capability of individual DSBR Units set out in the Contract schedule.

Will the wider Industry be made aware of a DSBR instruction?

Any DSBR despatch instructions, except Performance Tests, will be notified to the Industry via the Balancing Mechanism Reporting Service (BMRS).

How will National Grid measure delivery?

The quantity of demand reduction delivered will be calculated from half-hourly settlement data as the difference between the actual metered demand (or output) of the DSBR Unit and the baseline demand profile, and this will be calculated for each half hour of the despatch instruction.

The baseline demand profile for each DSBR Unit will be calculated as the average of the consumption (or output in the case of a generation MPAN) in the corresponding settlement period in the previous 10 days of highest peak system demand on which demand reduction was not called from that DSBR Unit on a rolling basis over the previous 12 months.

Metering data to enable validation & settlement will be provided by Data Collectors.

Can the service volume, capability or service duration be increased/decreased post tender assessment?

No. There is a single opportunity to declare the volume, capability or service duration associated with each DSBR Unit subject to National Grid potentially needing to amend volumes offered downwards through the validation process.

Can MPANs within a DSBR Unit be substituted within a contract period?

No. A key component of the service is volume certainty at the point of tender therefore the system does not facilitate the substitution of MPANs.

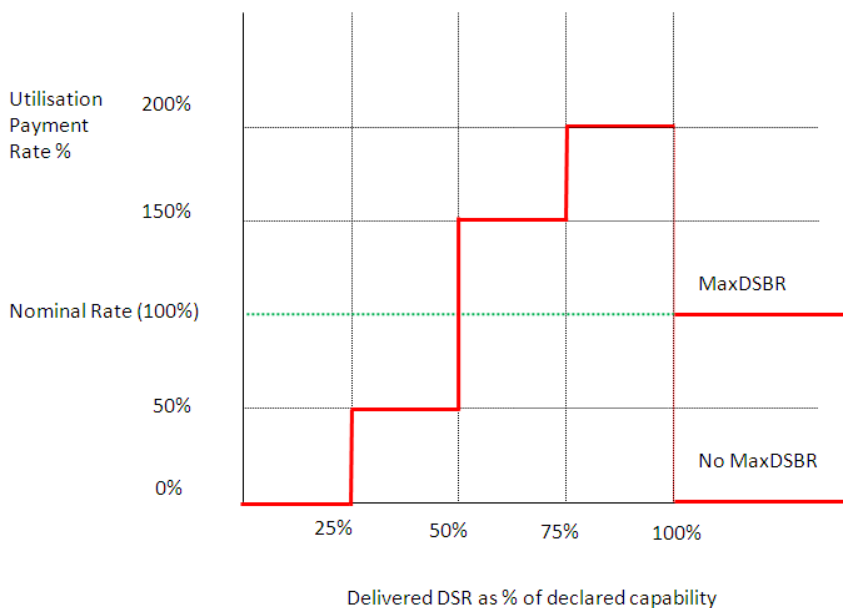
PAYMENTS

What payments are available for this service?

Tenderers will indicate whether they wish to receive an optional set up fee to support them in establishing their demand reduction capability. This will be £10,000/MW for demand reduction that can be sustained for at least two hours, and pro-rated for demand reduction that can be sustained only for a period of less than two hours (but equal or greater than one hour).

A tendered Utilisation Rate at which the DSBR provider would wish to be paid for reducing demand would be selected from a range of nominal rates: £250/MWh; £500/MWh; £750/MWh; £1,000/MWh; £1,500/MWh; £2,000/MWh; £3,000/MWh; £4,000/MWh; £5,000/MWh; £7,500/MWh; £10,000/MWh; £12,500/MWh; and £15,000/MWh. The choice of Utilisation Rate will determine the order in which DSBR Units are despatched, starting with those offering the lowest price.

Expect in certain circumstances, DSBR providers will be paid for utilisation within two months after the month in which they were despatched. Generally, utilisation payments will be calculated according to a stepped payment schedule whereby: the first 25% of demand reduction is not paid; the second 25% is paid at 50% of the tendered Utilisation Rate; the third 25% at 150% of the Utilisation Rate; and the last 25% being paid at 200% of the Utilisation Rate. If a DSBR Unit is despatched with less than 2 hours notice, within 2 hours of a previous instruction, via a Max DSBR instruction, or for periods in the DSBR 4pm to 8pm service window but outside the contracted service window, then any such demand reduction will be paid at the full tendered Utilisation Rate.



In addition, to encourage and support intermediaries in recruiting and managing a large number of smaller sites, Third Party Intermediaries or those offering a Customer Portfolio may tender an Administration Fee for each DSBR Unit (in £/MW of DSBR Capability offered). To qualify for this fee, each DSBR Unit tendered must comprise of at least 50 individual sites. The fee will be paid at the end of the winter season of the relevant year, unless the DSBR Unit fails a DSBR Performance Test.

When are payments due?

DSBR Providers will be paid for utilisation within 2 months after the month in which they were despatched.

Those Providers who elected to receive the set up fee will be paid at the start of the relevant winter availability season.

Admin Fees for intermediaries will be paid at the end of the winter availability season, unless the associated DSBR Unit fails a DSBR Proving Test.

Demand reduction will be paid up to the declared capability at the nominal utilisation rate if called with less than two hours notice, if called less than 2 hours after the last despatch instruction ended, or was despatched outside the declared periods of availability. If a MaxDSBR instruction is issued, the total demand reduction delivered will be paid at the nominal utilisation rate.

Am I paid for each MPAN or at the DSBR Unit level?

Payment is at the DSBR Unit level.

Please note: over delivery from any individual MPAN will not be paid in isolation but as the delivery from a set of MPANs will be aggregated, tenderers can compensate for any MPAN under delivering with a separate MPAN in the same DSBR Unit over delivering.

TESTING & FAILURES

Will National Grid test our Units?

A sample of DSBR Units will be tested over the winter availability season. Those selected for testing will be given at least two hours notice and despatched for at least one hour. Utilisation payment will be paid in accordance with the arrangements described above.

What penalties are there?

If a DSBR Unit in receipt of a set up or admin fee fails to deliver 75% of their declared demand reduction capability when despatched for a shortage event or in response to a sample test, National Grid will have the right to investigate whether the DSBR provider has established the capability to provide the DSBR service and have the right to schedule a DSBR Performance Test without making a Utilisation Payment.

A DSBR Performance Test would be called with at least 2 hours notice, and instructed according to the contracted service window and sustainability duration. Such test would be deemed to have failed if less than 75% of the declared capability is delivered over the duration of the instruction. Following such failure, a second DSBR Performance Test may be scheduled.

National Grid would have the right to recover the set up fee in the event that a second DSBR Performance Test is not successfully completed. Any admin fees due in respect of that DSBR Unit would also become void.

WHERE CAN I FIND MORE DETAIL...?

More details on the DSBR Service can be found on the following webpage:

<http://www.nationalgrid.com/uk/electricity/additionalmeasures>