

# MODIFICATION 0504 - EXPLANATORY TABLE

## Demand Side Response (DSR) Methodology Implementation

### Notes

1. The table is based on the legal drafting for Modification 0525 submitted by NGG to the Joint Office on 27 October 2015.

2. Modification 0504 relates to the implementation of the Demand Side Response (DSR) Methodology.

3. Modification 0504 will modify TPD Sections D (Operational Balancing and Trading Arrangements), Q (Emergencies) and V (General). The explanatory table follows the same order as the amendments.

1. **Modification of TDP Section D to introduce Voluntary Demand Side Response and associated methodology, etc**

*TPD Section D is amended by the insertion of a new paragraph 5 and the amendment of paragraph 2.2.9.*

2. **Modification of Annex D-1 to reflect voluntary Demand Side Response in Trading System Arrangements**

*Annex D-1 is amended by the insertion of new paragraphs 3.6 and 10, and the amendment of paragraphs 3.2, 3.5, 4.1, 4.3, 4.6, 5.1, 5.4, 5.7 and 7 of that Annex.*

3. **Modification of TPD Section Q to reference Voluntary Demand Side Response**

*TPD Section Q is amended by the insertion of new paragraphs 3.2.1(f) and 3.2.2(e) and (f) and the amendment of paragraph 6.4.2.*

3. **Modification of TPD Section V to recognise issue of GDW as start of Voluntary DSR Period**

*TPD Section V is amended by amending paragraph 5.9.5.*

Paragraph	Explanation
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Paragraph	Explanation
<b>Modification 0525: Legal Text</b>	
<b>AMENDMENT TO TPD Section D: Voluntary Demand Side Response and associated methodology, etc</b>	
Amended paragraph 2.2.9	This paragraph details how Market Balancing Action Charges are calculated, invoiced and payable by National Grid NTS. In the case of Market Balancing Action Charges arising from DSR Locational Market Transactions in respect of Gas Flow Days falling after the Gas Flow Day on which Stage 2 of a Gas Deficit Emergency is declared by the NEC, they shall be invoiced and payable in accordance with the payment terms for DSR Payments for Firm Load Shedding as set out in TPD Section Q6.4.7.
New paragraph 5.1.1	<p>This paragraph introduces the key new defined terms that are relevant to the voluntary demand side response service, including:</p> <ul style="list-style-type: none"> <li>• <b>DSR Locational Market Transaction</b> – a transaction between National Grid NTS and the Market Participant when a DSR Market Offer is accepted;</li> <li>• <b>DSR Market Offer</b> – the offer to provide Voluntary Demand Side Response that is posted on the Trading System by the Market Participant;</li> <li>• <b>DSR Methodology</b> – the methodology that is published from time to time by National Grid NTS on its website in accordance with Special Condition 8I of its Gas Transporter Licence;</li> <li>• <b>Voluntary DSR Period</b> – the period during which DSR Market Offers will be visible to and may be accepted by National Grid NTS which commences when a GDW is issued and ends upon either the GDW being withdrawn or Stage 2 of a Gas Deficit Emergency being declared;</li> <li>• <b>Voluntary Demand Side Response</b> – the service as described in the DSR Methodology where a Market Participant agrees to make a Disposing Trade Nomination in respect of a DMC Supply Point for a Voluntary DSR Quantity having entered into a DSR Locational Market Transaction;</li> <li>• <b>Voluntary DSR Quantity</b> – the quantity of gas (in kWh) for which a DSR Locational Market Transaction has been effected.</li> </ul>
New paragraph 5.1.2	<p>This paragraph describes the key features of the new voluntary demand side response service, including:</p> <ul style="list-style-type: none"> <li>• When DSR Market Offers may be posted on the Trading System;</li> <li>• How Market Participants indicate whether a Market Offer is a DSR Market Offer and if it is to be automatically rolled over</li> </ul>

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	<p>by the Trading System Operator on a weekly basis;</p> <ul style="list-style-type: none"> <li>• The application of Multi-Day Balancing Transactions in the context of DSR Market Offers;</li> <li>• The requirement for all DSR Market Offers to indicate a Market Offer Specified Quantity and the ability for Trading Participants to post DSR Market Offers where the Market Offer Specified Quantity reduces during the course of the Market Offer Date prior to acceptance (“tick down”), however, where this results in the Market Offer Specified Quantity falling below 100,000 kWh the DSR Market Offer is automatically withdrawn by the Trading System Operator;</li> <li>• DSR Market Offers will not be visible to National Grid NTS or other Market Participants until a GDW is issued;</li> <li>• DSR Market Offers may only be accepted by National Grid NTS and then only after a GDW has been issued (.i.e during a Voluntary DSR Period);</li> <li>• National Grid NTS’ acceptance of a DSR Market Offer shall effect a DSR Locational Market Transaction which constitutes a Market Balancing Buy Action., However the entry into a DSR Locational Market Transaction shall not relieve the Market Participant of its obligations under TPD Section Q (Emergencies);</li> <li>• Where a DSR Locational Market Transaction is taken the relevant Market Participant will make the appropriate nomination or re-nomination in accordance with paragraph 2.3 (irrespective of whether the nomination or re-nomination relates to a Gas Flow Day that is on or after the Gas Flow Day that the NEC declares Stage 2 of a Gas Deficit Emergency);</li> <li>• The Market Balancing Action Charge that is payable in respect of a DSR Locational Market Transaction is calculated, invoiced and payable in accordance with paragraphs 2.2.8 and 2.2.9, except where the relevant Market Offer Date is after the Gas Flow Day on which the NEC declares Stage 2 of a Gas Deficit Emergency, the Market Balancing Action Charges is invoiced and payable in line with the DSR Payment for Firm Load Shedding (per TPD Section Q6.4.7).</li> </ul>
New paragraph 5.2	<p>This paragraph describes how National Grid NTS will publish an annual report on its website setting out certain data in respect of DSR Market Offers that have been posted on the Trading System during the previous 12 month period from 1 September to 31 August. The report will be published by the 15 business day in September of each Gas Year.</p> <p>The paragraph also describes how National Grid NTS will make arrangements with the Trading System Operator to facilitate the provision of DSR Market Offer data to Ofgem outside of the annual reporting process.</p>
New paragraph 5.3	This paragraph describes how National Grid NTS may be directed by the Authority to permanently or temporarily cease operation

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	of the DSR Methodology. In the event that this happens it will be notified to Market Participants and the Trading System Operator by notice on National Grid NTS' website. For so long as the methodology is suspended, DSR Market Offers cannot be posted on the Trading System and National Grid NTS will not be permitted to accept a DSR Market Offer. The notice shall remain in effect until such time as National Grid NTS issues a withdrawal notice on its website.
<b>Amendment to Annex D-1 to reflect Voluntary Demand Side Response in Trading System Arrangements</b>	
Amended paragraph 3.2	The amendments to this paragraph identify where a Market Participant posts a Market Offer that would result in a DSR Locational Market Transaction and the Market Offer should also indicate if it is a DSR Market Offer and that a DSR Market Offer should include a Market Offer Specified Quantity.
Amended paragraphs 3.5 and 3.6	Paragraph 3.6 provides that DSR Market Offers should be capable of being displayed on the Trading System however they will not be visible to National Grid NTS or other Market Participants outside of a Voluntary DSR Period, this is a caveat to the existing paragraph 3.5.
Amended paragraph 4.1	This paragraph details that Trading Participants cannot post DSR Market Offers after Stage 2 of a Gas Deficit Emergency has been declared by the NEC.
Amended paragraph 4.3	This paragraph describes that DSR Market Offers are subject to the usual restriction on indicating a Market Offer Specified Quantity of no less than 100,000 kWh and Market Participants may indicate that the Market Offer Specified Quantity will reduce during the course of the Market Offer Date up to the point of acceptance by National Grid NTS. In the event that this results in the Market Offer Specified Quantity being reduced below 100,000 kWh the Market Offer will be automatically withdrawn by the Trading System Operator.
Amended paragraph 4.6	This paragraph provides that a DSR Market Offer may be withdrawn by a Trading Participant at any time up until either (i) it is accepted by National Grid NTS or (ii) the declaration of Stage 2 of a Gas Deficit Emergency by the NEC (whichever occurs first).
Amended paragraph 5.1	This paragraph describes that the usual time restrictions for acceptance of Market Offers (whether Multi-Day Balancing Transactions or otherwise) apply, except in the case of a DSR Market Offer there is an additional restriction as they may only be accepted during a Voluntary DSR Period.
Amended paragraph	Paragraphs 5.4(b)(v) and 5.4(c) provide that alongside the other details that are confirmed to National Grid NTS within 5 minutes of a Market Transaction being accepted, the Trading System Operator will confirm to National Grid NTS whether the transaction

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5.4(b)(v) and 5.4(c)	was effected by the acceptance of a DSR Market Offer.
Amended paragraph 5.7	This paragraph describes that from the point at which Mod 0504 is implemented Market Offers to effect Locational Market Transactions will only be capable of being accepted by National Grid NTS (currently other Market Participants may also accept Market Offers to effect Locational Market Transactions).
Amended paragraph 7(b)	This paragraph provides that in addition to the other information that is reported by the Trading System Operator by 07:00 on D+1, the Trading System Operator will confirm for each Market Transaction whether it relates to a DSR Market Offer.
New paragraph 10	This paragraph describes how the Trading System Operator will provide certain data in respect of DSR Market Offers to National Grid NTS in order to enable National Grid NTS to publish its annual report. This data will be provided by the Trading System Operator by the 10 <sup>th</sup> business day in September of each Gas Year. The Trading System Operator will also support ad hoc requests for DSR Market Offer data from National Grid NTS or Ofgem.
<b>Amendment to TPD Section Q to reference Voluntary Demand Side Response</b>	
New paragraph 3.1.6(f)	This paragraph describes that during Stage 1 of a Gas Deficit Emergency National Grid NTS will operate the DSR Methodology and recognises that Users may post DSR Market Offers on the Trading System and if accepted these will constitute Market Balancing Buy Actions in respect of which TPD Section D5 applies
New paragraph 3.2.2(e)	<p>This paragraph provides that when Stage 2 of a Gas Deficit Emergency is declared by the NEC and there is a DSR Locational Market Transaction in place for the Gas Flow Day the User will ensure that the relevant DMC Supply Point continues to reduce the quantity of gas offtaken from the Total System by the relevant Voluntary DSR Quantity until such time as they are instructed otherwise under the Emergency Procedures.</p> <p>The paragraph goes on to clarify the payment arrangements for the continued reduction in offtake which is calculated by reference to the Emergency Curtailment Price multiplied by the Voluntary DSR Quantity up to the date that the DMC Supply Point is instructed to Firm Load Shed. From and including the Gas Flow Day that the Supply Point is instructed to Firm Load Shed the User will be paid a DSR Payment and the Voluntary DSR Quantity will be included within the calculation of the User's Emergency Curtailment Quantity for the purposes of calculating the DSR Payment. Both payments will be invoiced and payable in accordance with the provisions that apply under paragraph 6.4.7.</p>

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New paragraph 3.2.2(f)	This paragraph provides that DSR Market Offers may not be placed on the Trading System or accepted by National Grid NTS once Stage 2 of a Gas Deficit Emergency has been declared except where a DSR Locational Market Transaction in respect of a Gas Flow Day falling on or after the Gas Flow Day that the declaration takes place has been accepted prior to the declaration the transaction will remain in effect.
Amended paragraph 6.4.2(b)(i)	This paragraph describes the calculation of the DSR Quantity to determine a User's DSR Payment, the Voluntary DSR Quantity that was accepted under a DSR Locational Market Transaction will be taken into account in calculating the DSR Quantity if the relevant Market Offer Date for the transaction coincides with a day of Emergency Curtailment.
<b>TPD Section V to recognise issue of GDW as start of Voluntary DSR Period</b>	
Amended paragraph 5.9.5	This paragraph now recognises that when a Gas Deficit Warning is issued it signifies that start of a Voluntary DSR Period for the purposes of Section D5.