



# DSR Framework and Methodology Document

June 2024



# Version control

Version/revision number	Date of issue	Notes
V1.0	3 <sup>rd</sup> September 2015	First version
V2.0	8 <sup>th</sup> July 2016	<p>Changes to Section 3. The OCM Locational Market – removal of the reference to the DSR flag</p> <p>Changes to Section 4. The DSR Product – removal of the 7-day profile of daily offers</p> <p>Housekeeping amendments – removal of references to gas DSR framework, revisions to footnotes.</p>
V3.0	February 2020	References to a Gas Deficit Warning (GDW) replaced with Gas Balancing Notification (GBN) to align with UNC Modification 0658, effective from 1 <sup>st</sup> October 2019, and the National Grid Licence change, effective from 1 <sup>st</sup> April 2020.
V3.1	February 2021	Issued for industry Consultation. No changes proposed.
V4.0	16 <sup>th</sup> April 2021	Approved by Ofgem.
V5.0	September 2022	Amendments to align with UNC Modification 0822 ‘Reform of Gas Demand Side Response Arrangements’ plus housekeeping changes
V6.0	December 2022	<p>Amendments to:</p> <ul style="list-style-type: none"> <li>• Enable DSR Market Offers to be made and accepted without using the OCM where a Shipper has had a DSR Option accepted and does not have OCM access, to align with UNC Modification 0833 ‘Enabling Demand Side Response (DSR) Market Offers to be made by Non-Trading System Transactions’; and</li> <li>• Include a provision for National Gas Transmission to notify the relevant Gas Distribution Network operator where a DSR Market Offer is accepted in respect of a consumer connected to its network.</li> </ul>
V7.0	July 2023	Amendments to reflect change of company name, UNC Modifications 0844 and 0845, option assessment criteria and threshold for Ofgem referral
V8.0	June 2024	Amendments to reflect Modification 0866 and remove duplication with the UNC.



# Contents

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<b>Introduction.....</b>	<b>6</b>
<b>Section 1 Definitions.....</b>	<b>7</b>
<b>Section 2 The DSR Service.....</b>	<b>9</b>
<b>Section 3 DSR Option Offers .....</b>	<b>11</b>
<b>Section 4 OCM Locational Market.....</b>	<b>14</b>
<b>Section 5 The DSR Product.....</b>	<b>15</b>
<b>Section 6 Eligibility.....</b>	<b>15</b>
<b>Section 7 DSR Participants.....</b>	<b>17</b>
<b>Section 9 The DSR Market Offer Price.....</b>	<b>17</b>

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## Introduction

This document sets out the Gas Demand Side Response (DSR) Methodology which is required to be established in accordance with National Gas Transmission's Transporters Licence Special Condition 9.22 (SC9.22).

The gas DSR Methodology arrangements described within this document seek to ensure that all relevant SC9.22 Licence condition principles are met.

### **The DSR Methodology**

The gas DSR Methodology seeks to provide an additional 'route to market' through which Consumers (either via their Shipper or directly with National Gas Transmission) can signal their willingness to make available DSR energy quantities which would be unlikely to be offered through other market mechanisms. Encouraging DSR energy quantities to be available 5 days ahead or post issue of a Margins Notice or Gas Balancing Notification (GBN), but prior to the end of Gas Deficit Emergency (GDE) Stage 1 may provide sufficient additional system balancing volumes to avoid the system entering a GDE Stage 2. This may enhance the security of supply to more critical load and help all affected parties avoid the high costs and risks associated with an escalation into the later stages of a GDE.

# 1. Definitions

- a DSR Demand Side Response. The reduction in an eligible consumer's rate of gas offtake by or to a specified quantity in the period following a forecast supply deficit at D-5 or declaration of a Margins Notice or GBN.
  
- b DSR Service The framework within which the end to end DSR processes are operated. As set out in section 2 of this document.
  
- c DSR Market Offer A Market Offer to provide DSR on the OCM which may only be accepted by National Gas Transmission and when accepted will effect a DSR Locational Market Transaction.
  
- d DSR Product The arrangements by which all DSR Market Offers will be placed and accepted, as set out in sections 4 and 5 of this document.
  
- e Voluntary DSR Period The period that commences following the issue of either a Margins Notice or GBN and ends at the earlier of (i) the end of the gas day to which a Margins Notice relates, (ii) the time at which a GBN is no longer in force or (iii) the declaration of a GDE Stage 2. This is the period within which National Gas Transmission may accept within-day and D-1 DSR Market Offers.
  
- f OCM Platform – DSR Locational Market The market that DSR Market Offers may be submitted upon. As set out in section 3 of this DSR Methodology.
  
- g GBN Gas Balancing Notification ref: UNC TPD Section V5.9.

h	GDE	Gas Deficit Emergency ref: UNC TPD Section Q3.2
i	Firm Load Shedding (FLS)	During Stage 2 of a GDE; upon direction from the Network Emergency Coordinator (NEC), National Gas Transmission and relevant Transporters may instruct the Consumers to curtail gas offtake at specified sites. Ref: UNC TPD Section Q3.5.
j	Tick Down	A DSR Market Offer may be offered with a reducing down feature that reduces the volume of DSR available as the unaccepted offer progresses through the Day.
k	The GDE Stages	GDE Stages are defined in UNC TPD section Q3.2 and in the Network Gas Supply Emergency Classifications as provided in the National Gas Transmission safety case for a Network Gas Supply Emergency
l	Eligible DMC / DMA	As set out in section 6.2 of this DSR Methodology
m	Margins Notice	A notice to inform market participants of a projected imbalance between Expected Available Supply and Forecast Total System Demand for the following Day, as more particularly defined in UNC TPD Section V5.9.
n	DSR Reduced Quantity	A reduced level of offtake in relation to a DSR Option, as more particularly defined in UNC TPD D7.

Where capitalised words and phrases are used within this document, those words and phrases shall usually have the meaning provided within the Uniform Network Code (unless they are otherwise defined within the terms detailed above).



## 2. DSR Service

**2.1** In relation to DSR arrangements between National Gas Transmission and shippers, the DSR service features three principle contractual arrangements:

- **For commitments to make DSR Market Offers in advance via DSR Options** – Shipper to National Gas Transmission contractual arrangements, backed by Shipper / Supplier / Consumer contracts. Under the rules set out in this methodology and in the UNC TPD Section D7, a Shipper may contract with National Gas Transmission to make a DSR Option Offer(s).
  
- **For reduction in gas quantity oftaken, at a relevant site** – Shipper/Supplier to Consumer contractual arrangement. In respect of a Consumer (in some cases through instruction by the Supplier), subject to the provisions of section 3.4 of this methodology, the Shipper will agree to place an offer onto the OCM Platform – DSR Locational Market, which reflects the agreed DSR energy quantity and price for the Consumer’s reduction in gas offtake. In return the Consumer commits to honouring and delivering on the agreed energy quantity reduction if called to do so by the relevant Shipper following acceptance of the offer by National Gas Transmission. (Note: Requirements for this aspect of the DSR mechanism shall be defined by the Shipper, Supplier and Consumer through their DSR Service agreements); and
  
- **For the procurement of the gas associated with the DSR Market Offer** – Shipper to National Gas Transmission contractual arrangements. Under prescribed parameters and criteria set out in this DSR Methodology and the UNC, the Shipper will offer to sell title to gas (associated to the DSR Market Offer), to National Gas Transmission, in its role as residual balancer.

**2.2** The Consumer (in some cases through the Supplier) will work together with their registered Shipper to set-out and agree details, criteria and arrangements associated with posting the DSR Market Offer(s) for an Eligible site onto the OCM Platform – DSR Locational Market. DSR

Market Offers may be placed, updated or withdrawn, at any time up to the declaration of a GDE Stage 2.

**2.3** DSR Market Offers associated to the DSR Service may only be accepted by National Gas Transmission and only for a Day within a Voluntary DSR Period, except where such offers are placed on D-1 following exercise of a D-5 DSR Option. DSR Market Offers posted on D-1 pursuant to exercise of D-5 DSR Option shall be accepted by National Gas Transmission in accordance with the provisions of UNC TPD D7.

**2.4** National Gas Transmission will promptly notify the OCM Market Operator when:

2.4.1 a Margins Notice and/or GBN has been declared and is in effect;

2.4.2 a GBN has been revoked and a Margins Notice is no longer in force;

2.4.3 it has committed to exercise D-5 DSR Options.

**2.5** Where a DSR Market Offer is accepted by National Gas Transmission either on the OCM Platform – DSR Locational Market or as provided in section 3.4:

2.5.1 The Shipper will notify the Consumer of the requirement to reduce their notified End Of Day (EOD) offtake by an energy quantity at least equal to the DSR Market Offer or as the case may be, to the DSR Reduced Quantity (including any allowances for ‘Tick down’).

2.5.2 The imbalance position for the Shipper registered on the UK Link system, will be adjusted to reflect the completed gas trade on the OCM Platform – DSR Locational Market.

2.5.3 DSR Market Offers may be accepted:

2.5.3.1 Solely by National Gas Transmission for national balancing purposes;

2.5.3.2 Post the declaration of a GBN or Margins Notice up to the end of Gas Deficit Emergency Stage 1;

2.5.3.3 On D-1 pursuant to the exercise by National Gas Transmission of D-5 DSR Options; and

2.5.3.4 Where the DSR Market Offer meets the criteria set out in the UNC and in this DSR Methodology.

**2.6** National Gas Transmission may also enter into DSR Option arrangements directly with Consumers pursuant to UNC TPD D7 and in accordance with the terms of the DSR Contract that are published on its website.

### **3. DSR Option Offers**

**3.1** National Gas Transmission shall issue to all shippers and publish on its website an invitation (DSR Option Invitation) seeking commitments from shippers and eligible Consumers to offer DSR within-day, and/or at D-1 and/or at D-5 at specified times via DSR Option Offers, as described in UNC TPD section D7.

**3.2** National Gas Transmission shall select DSR Option Offers in accordance with UNC TPD Section D7.6 and the following Option Selection Guidance.

3.2.1 A DSR Option Offer may be rejected where the relevant Consumer is already contracted by its Shipper with National Gas Transmission for the relevant Winter Period for Operating Margins Purposes and where, in National Gas Transmission' reasonable opinion, the Exit Facility Deliverability for that Consumer would be insufficient to fulfil both its Operating Margins and DSR obligations and/or if in National Grid Transmission's reasonable opinion, acceptance of the offer may have an adverse impact on whole energy system security.

3.2.2 When selecting DSR Option Offers for acceptance, subject to paragraph 3.2.3, the aggregate value of all DSR Option Offers accepted by National Gas Transmission shall not exceed £36,000,000 in respect of any Winter Period.

3.2.3 Where National Gas Transmission wishes to accept DSR Option Offers that exceed the value specified in paragraph 3.2.2, National Gas Transmission shall, within the applicable assessment period according to UNC TPD D7.6.5, submit a report to the Authority including:

3.2.3.1 The DSR Option Offers that it wishes to accept;

3.2.3.2 The aggregate value of such DSR Option Offers; and

3.2.3.3 Its rationale for wishing to accept such DSR Option Offers.

3.2.4 Within 10 business days from receiving the report referred to in paragraph 3.2.3, the Authority may veto National Gas Transmission's proposal, in which case National Gas Transmission shall not accept DSR Option Offers with an aggregate value above the value specified in paragraph 3.2.2.

3.2.5 Where the Authority does not veto National Gas Transmission's proposal, National Gas Transmission shall accept DSR Option Offers in accordance with its report referred to in paragraph 3.2.3.

**3.3** Where a Shipper has a DSR Option Offer accepted, that Shipper shall be obliged to post a DSR Market Offer either onto the OCM DSR Locational Market or, if the Shipper is not an OCM subscriber, by way of a Non-Trading System Transaction, in the circumstances described in UNC TPD Section D7.

**3.4** Where a Consumer has a DSR Option Offer accepted and National Gas Transmission has notified the Consumer that the option is being exercised (in accordance with UNC TPD D7 and the DSR Contract), that Consumer shall be obliged to not exceed its DSR Reduced Quantity or, in respect of a within-day option, its DSR Reduced Rate, on the relevant Day.

## 4. The OCM DSR Locational Market

**4.1** The OCM includes a DSR Locational Market. Only National Gas Transmission is permitted to accept Locational bids and offers on the OCM DSR Locational Market; and Shipper market participants will only be able to post Locational and DSR Locational bids and offers.

**4.2** Where a DSR Market Offer is accepted it will be regarded as a 'Locational Market Transaction' that will be undertaken in accordance with UNC TPD section D2.2.1 (d).

**4.3** All accepted within-day and D-1 DSR Market Offers will be Eligible Balancing Actions which shall be included in the system clearing processes and cash-out for the relevant Day and all Daily Option Fees resulting from accepted DSR Option Offers shall be excluded from such processes. The quantity and price of any DSR Market Offers accepted pursuant to the exercise of D-5 DSR Options shall be Eligible Balancing Actions but shall be excluded from the calculation of cashout prices for day D. Exercise of any Consumer DSR Options shall be neither Eligible Balancing Actions nor included in the calculation of cashout prices because they would not be executed as an energy trade.

## 5. The DSR Product

**5.1** Where DSR is offered by a Shipper, the DSR Product provides 2 items:

- 1) A specified energy quantity of DSR to be provided by the Consumer; and
- 2) A gas trade for the equivalent DSR energy quantity provided by the Shipper.

**5.2** Features of the DSR Product:

5.2.1 Where the DSR Product is provided by a Shipper, it must be associated with a specific DMC or DMA Daily Metered Supply Point.

5.2.2 Subject to section 3.3, the Product must be submitted onto the OCM Platform– DSR Locational market by the Registered User at the relevant DMC / DMA.

5.2.3 The Product may be offered as;

- 1) a daily product and accepted for each Day exclusively in accordance with UNC TPD Section D2.2.1 (d) a ‘Locational Market Transaction’ (and all DSR Market Offers submitted pursuant to a DSR Option shall be made on this basis); or
- 2) a Multiday product undertaken in accordance with the UNC Section D4 – Multi-Day Balancing Actions.

5.2.4 Subject to section 3.3, the DSR Product must be submitted onto the OCM Platform – DSR Locational market as a DSR Market Offer, prior to the declaration of a Gas Deficit Emergency (GDE) Stage 2.

5.2.5 Where not posted pursuant to a DSR Option:

- 1) the DSR Product may be offered in separate tranches of energy quantity, which may be priced individually;
- 2) Each tranche will be submitted as a single DSR Market Offer;
- 3) There may be more than one DSR Market Offer at a specific DMC or DMA.

5.2.6 Each DSR Market Offer must be greater than or equal to 100,000 kWh

5.2.7 Where a within-day or D-1 DSR Market Offer has been submitted onto the OCM Platform – DSR Locational market for a relevant Day or as provided in section 3.4, and remains a valid offer, National Gas Transmission may accept the offer, during the Voluntary DSR Period.

5.2.8 Where a DSR Market Offer is posted on the OCM DSR Locational Market on D-1 following exercise of a D-5 DSR Option, National Gas Transmission shall accept such offer on D-1.

## 6. Eligibility

**6.1** An Eligible Supply Point is a DMC or DMA Supply Point that is able to offer a daily demand reduction quantity of at least 100,000 kWh.

## 7. DSR Participants

**7.1** There may be up to five parties participating in the DSR arrangement.

7.1.1 Consumer at the Eligible DMC/DMA;

7.1.2 Shipper

7.1.3 Supplier;

7.1.4 OCM Market Operator; and

7.1.5 National Gas Transmission.

### **7.2 Consumers**

7.2.1 The Consumer, as an Eligible DMC or Eligible DMA, may choose to enter into a DSR arrangement with its registered Shipper/Supplier and an Eligible DMC also has the choice

to enter into a Consumer DSR Option directly with National Gas Transmission instead of via its Shipper.

- 7.2.2 A Consumer may only have one DSR contract either with its registered Shipper or directly with National Gas Transmission.

### **7.3 The Shipper**

- 7.3.1 The Shipper, who must be a Registered User at the Eligible DMC / DMA, is the party eligible to participate on the OCM Platform – DSR Locational market or as provided in section 3.3 which then requires a physical response from the relevant Consumer.

### **7.4 OCM Market Operator**

- 7.4.1 The OCM Market Operator will provide the DSR Locational market within the OCM.
- 7.4.2 The OCM Market Operator will facilitate offer and acceptance of DSR trades in accordance with the OCM Market Rules contract, and UNC Section Annex D1, which will reflect the DSR Methodology provisions.

### **7.5 National Gas Transmission**

- 7.5.1 National Gas Transmission will be the sole party that may accept DSR Market Offers within the DSR mechanism.
- 7.5.2 National Gas Transmission will only accept DSR Market Offers for national balancing purposes.
- 7.5.3 A DSR Market Offer submitted in respect of the current Day may be accepted by National Gas Transmission at any time on that Day during a DSR Period, subject to the specified lead-time.
- 7.5.4 The acceptance of a DSR Market Offer by National Gas Transmission does not affect, or set aside, the Network Emergency Coordinator's (NEC), National Gas Transmission's or other relevant Transporters' rights or obligations when undertaking their duties under the provisions set out in 'The Gas Safety (Management) Regulations 1996 - NEC Safety Case'.

## **8. The DSR Market Offer Price**

- 8.1** The DSR Market Offer price will be a p/kWh/ Day conforming to OCM Market Rules.

**8.2** The derivation of the DSR Market Offer price will be agreed between the relevant Consumer and its registered Shipper/Supplier and shall not exceed the Exercise Price under the relevant DSR Option, where applicable.

**8.3** Within-day and D-1 accepted DSR Market Offers will be treated as Market Balancing Actions (MBA) and as such all accepted DSR Market Offer prices will feed into the System Average Price (SAP) and System Marginal buy Price (SMPb) calculation for the relevant Day in accordance with existing arrangements for other MBAs.

**8.4** Payment for the accepted DSR Market Offer will be made within the same timescales prescribed for all other MBAs, and in accordance with the UNC TPD Section S;

**8.5** The Shipper will pay the Consumer the agreed DSR payment for an accepted DSR Market Offer in the contractual timescale agreed by the two parties.



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