

National Gas Transmission Plc and all
other interested parties and
stakeholders,

Email: Maryam.Khan@ofgem.gov.uk

Date: 4 August 2023

Decision on the proposed modifications to the Demand Side Response (“DSR”) Methodology of National Gas Transmission plc’s (“NGT”) Gas Transporter Licence and Decision further to NGT’s request for Derogation from Special Conditions 9.22.3(a), 9.22.3(c) and 9.22.3(d) of its Gas Transporter Licence.

This letter sets out our¹ consent for NGT to revise the Gas Demand Side Response (“DSR”) Methodology in accordance with Special Condition 9.22.4 of NGT’s Gas Transporter Licence (“the Licence”).² It also sets out our decision to grant NGT’s requested derogation to Special Conditions 9.22.3(a), 9.22.3(c) and 9.22.3(d) of the Licence, in accordance with Special Condition 9.22.12. Respectively, the three derogations will allow NGT to:

- contract directly with Class 1 Daily Metered Consumers (DMC)³;
- permit exercise of D-5 DSR when a Gas Margins Notice⁴ or a Gas Balancing Notification⁵ (GBN) is not in force;
- exclude DSR offers where the counterparty is a consumer from imbalance cash-out calculations.⁶
- exclude the exercise of D-5 offers from imbalance cash-out calculations, but allow costs to be recovered via balancing neutrality.

¹ References to the “Authority”, “Ofgem”, “we” and “our” are used interchangeably in this document. The Authority refers to GEMA, the Gas and Electricity Markets Authority. The Office of Gas and Electricity Markets (Ofgem) supports GEMA in its day-to-day work. This decision is made by or on behalf of GEMA.

² National Grid Gas plc, Gas Transporter Licence, Special Conditions:
<https://www.ofgem.gov.uk/sites/default/files/2023-04/National%20Gas%20Transmission%20Plc%20-%20NTS%20-%20Consolidated%20Special%20Conditions%20-%20Current%20Version.pdf>

³ Class 1 Consumers are defined in the UNC TPD Section G, 2.1.3:
<https://www.gasgovernance.co.uk/sites/default/files/ggf/page/2023-07/Transportation%20Principal%20Document%20%28Consolidated%2C%20printable%20version%29.pdf>

⁴ A Gas Margins Notice is information provided by NGT indicating a potential supply/demand imbalance for the following gas day.

⁵ A Gas Balancing Notification is issued at NGT’s discretion in advance of or during a gas day if a significant supply/demand event is experienced which instigates a material risk to the physical end-of-day balance.

⁶ Actions taken for energy balancing purposes incur a cost. Parties who are not in balance incur charges that reflect the costs incurred addressing the imbalance. These charges are known as cash-out prices.

The direction, which appears annexed to this letter, will give effect to this derogation decision (subject to the conditions specified therein).

Background

Special Condition 9.22.1 of the Licence requires NGT to have in place and maintain the DSR Methodology for assessing and accepting DSR offers. NGT must review its DSR Methodology at least once in every period of two Regulatory Years in accordance with 9.22.4 and consult with interested parties for a period of no less than 28 days in accordance with 9.22.5. Within seven days of the consultation closing, NGT must submit to the Authority a report on the outcome of the review, a statement of any proposed revisions to the DSR Methodology, and any written representations that were received from interested parties pursuant to 9.22.6 of the Licence.

On 12th April 2023, NGT raised UNC844: 'Enabling Direct Contractual Arrangements with Consumers for Demand Side Response'⁷ and UNC845: 'Enhancements to Demand Side Response (DSR) Arrangements including a D-5 Product'.⁸ Both these modifications aim to further incentivise uptake of the DSR product by introducing reforms to the DSR process. UNC844 will enable direct contracting arrangements between Class 1 consumers and NGT. UNC845 will bring in process enhancements and introduce a D-5 product for all eligible consumers and shippers. We have published our decision on these modifications alongside this letter on our website.

On 21 July 2023, NGT published its proposed amendments to the Gas DSR Methodology, following consultation.⁹ On 13 July 2023, NGT made an application to Ofgem pursuant to Special Condition 9.22.12, requesting a derogation from Special Conditions 9.22.3(a), 9.22.3(c) and 9.22.3(d), in accordance with the reforms set out in UNC844 and UNC845.

Proposed amendments to the Gas DSR Methodology

In accordance with Special Condition 9.22.8, we must assess any proposed revisions to the DSR Methodology and have particular regard to whether they are consistent with the objectives set out in Special Condition 9.22.3.

The proposed changes seek to enable NGT to:

- Align the Gas DSR Methodology with UNC844 (establish direct contracting arrangements between NGT and Class 1 consumers for within-day DSR, D-1 DSR and D-5 DSR)

⁷ UNC844: <https://www.gasgovernance.co.uk/0844>

⁸ UNC845: <https://www.gasgovernance.co.uk/0845>

⁹ The Gas DSR Methodology: <https://www.nationalgas.com/balancing/demand-side-response-dsr>

- Align the Gas DSR methodology with UNC845 (expand the DSR eligibility criteria to include Class 2 consumers, introduce a D-5 DSR product and other process clarifications and enhancements)
- Increase the threshold for aggregate option payments per Winter Period¹⁰ above which NGT would need to refer to Ofgem from £5m to £36m
- Enable NGT not to accept a DSR option offer where whole system energy security could potentially be adversely impacted
- Amend NGT's company name and other housekeeping changes.

In its Gas DSR Consultation Report submitted to the Authority on 21 July 2023, NGT considered that the proposed revisions to the DSR Methodology, better facilitate the DSR principles set out in Special Conditions 9.22.3(e)-(h).

- Special Condition 9.22.3(e) states that the DSR Methodology must promote, and further facilitate, parties making DSR Offers to NGT through open and transparent market-based arrangements. NGT considered that extending the eligibility criteria to include Class 2 consumers will allow more consumers to participate. Creating a D-5 DSR product will also allow more consumers to participate, particularly those that require a longer-lead time to provide demand-side response. Enabling direct contracting arrangements (for Class 1 consumers) will create more options for participation and will thereby expand the range of parties that can participate. All of the above will be via open and transparent market-based arrangements.
- Special Condition 9.22.3(f) states that the DSR Methodology must not unduly preclude the emergence of commercial interruption arrangements.¹¹ NGT stated that this is not a concern and feedback from stakeholders supported this.
- Special Condition 9.22.3(g) states that the DSR Methodology must minimise distortions and unintended consequences on existing market arrangements and the principle of parties balancing their own positions in the wholesale gas market. NGT considers that it has minimised distortions between the exercise and settlement arrangements between DSR contracted via a shipper and DSR contracted directly with a consumer. NGT recognises that a D-5 DSR product may create some market distortions because of the greater uncertainty in D-5 supply and demand forecasts. The costs associated with exercising D-5 DSR may not be reflective of supply/demand fundamentals on the gas day D. To minimise market distortions with D-5 DSR, NGT has proposed that the quantities and prices associated with exercise of D-5 DSR would not contribute to the calculation of imbalance cash-out prices, but should feed into balancing neutrality.

¹⁰ 'Winter Period' is the period from 1st November in any year up to and including 30 April in the following year, as defined in the UNC General Terms Section C 2.2.1(h).

¹¹ There are no longer any interruptible sites connected to the National Transmission System (NTS). From October 2012 new industry arrangements deem all sites as firm.

- Special condition 9.22.3(h) states that the DSR Methodology must ensure that DSR is procured in a manner consistent with NGT's duties under the Gas Act 1986 and, in particular, the licensee's obligation to operate the pipeline system to which this licence relates in an efficient, economic and co-ordinated manner. NGT considers that the proposed changes will encourage further participation in DSR and thus mitigate the risk of a supply shortage escalating into a Gas Deficit Emergency (GDE).¹² Should a GDE be declared then compulsory firm load shedding would result in disruption and inefficiency in the operation and use of the network as some parties that would wish to be taking gas would be prevented from doing so. On balance, NGT considers it would be beneficial to take precautionary action ahead of time (using D-5 DSR) to mitigate the larger risk of a GDE.

Derogation request

We note that the proposed changes to the Gas DSR Methodology, as well as modifications UNC844 and UNC845 are currently inconsistent with the following Special Conditions:

- 9.22.3(a), which states that any party making a DSR offer must be a party to the UNC;
- 9.22.3(c), which states that NGT can accept DSR offers only when a GBN is in effect or within stage 1 of a GDE;¹³
- 9.22.3(d), which states that NGT must ensure that any Demand Side Response Offers accepted by NGT are to be treated as Eligible Balancing Actions¹⁴ and included in the System Clearing Contract, System Marginal Buy Price and System Marginal Sell Price.¹⁵

NGT has therefore requested a derogation from the above Special Conditions to enable changes to be implemented in time for the next Winter Period's DSR Options Invitation to Offer process. This should begin no later than the 31st August.¹⁶ Derogating from Special Condition 9.22.3(a) of NGT's Licence will allow NGT to contract directly with Class 1 Daily Metered Consumers (DMC) for the purposes of DSR offers. Derogating against Special Condition 9.22.3(c) of NGT's Licence will allow NGT to accept D-5 DSR offers when a GBN or Margins Notice is not in force.¹⁷ Derogating from Special Condition 9.22.3(d) will exclude

¹² A Gas Deficit Emergency is a Network Gas Supply Emergency which arises as a result of a supply/demand imbalance, a transportation constraint or a potential or actual breach of a Safety Monitor.

¹³ Stage 1 of a Gas Deficit Emergency is outlined in the UNC TPD Section Q 3.2.1.

¹⁴ Eligible Balancing Actions are defined in the UNC TPD Section D 1.4.1.

¹⁵ A System Clearing Contract is a contract between NGT and a User for a quantity of gas delivered or offtaken that is purchased or sold, as defined in the UNC General Terms Section C 2.3.1. The System Marginal Buy Price is the price shippers are charged for each unit of under-delivered gas. The System Marginal Sell Price is the price shippers receive for each unit of over-delivered gas.

¹⁶ As referenced in the UNC TPD Section 7.3.1.

¹⁷ We have previously issued a derogation pursuant to Special Condition 9.22.3(c) in our decision letter dated 14 October 2022. This allows NGT to accept DSR Offers where a Gas Margins Notice is in place alongside the existing requirements in 9.22.3(c) (where a Gas Balancing Notification is in place or within stage 1 of a GDE):

the volumes and costs associated with all DSR offers where the counterparty is a consumer and the volumes and costs associated with the exercise of D-5 DSR from the calculation of imbalance cash-out prices. NGT requested that the (licence) definition of DSR should be updated to reflect UNC844, UNC845 and the changes proposed in the Gas DSR Methodology. NGT also requested a direction from us, recognising that it intends to classify D-5 DSR trades as a Locational Action, and that the costs of such locational D-5 DSR trades should feed into balancing neutrality not capacity neutrality and therefore should also not contribute to the constraint management incentive.

We have decided to grant the above derogations and have set out our reasoning below.

Our view

We consider that the proposed changes to the DSR Methodology will better facilitate the DSR principles as set out in Special Conditions 9.22.3(e)-(h).

Measures to increase participation in DSR

We consider it important to have a functional DSR tool to help prevent, or lessen the impact of, a GDE. Therefore, we deem it appropriate for extra measures to strengthen the tool. We support the changes that are aimed at clarifying the definition of DSR and clarifying the treatment of DSR exercise costs, depending on the product and counterparty. We consider these are useful additions that will encourage further participation in DSR by clarifying how consumers/shippers can participate and how DSR works operationally. Introducing a 'reduce to' approach will allow consumers to specify a minimum threshold that they can offer, which will encourage more consumers to participate, as they will be able to tailor their demand response to their specific needs. Extending the eligibility criteria to include Class 2 consumers will also allow more daily-metered consumers to participate. Enabling Class 1 consumers to participate via a direct contract with NGT will create more routes to access the DSR market and will encourage more participation. All of these additions will support Special Condition 9.22.3(e), by enabling more users to participate in DSR via open and transparent market-based arrangements. We note that the introduction of direct contracting arrangements between NGT and Class 1 consumers (for the purposes of DSR) is inconsistent with Special Condition 9.22.3(a). We will grant the requested derogation from Special Condition 9.22.3(a) to allow Class 1 consumers to make DSR offers as well as shippers. In addition, we will grant the requested derogation from Special Condition 9.22.3(d) to recognise that exercise of any DSR option where the counterparty is

<https://www.ofgem.gov.uk/sites/default/files/2022-10/Decision%20on%20DSR%20Methodology%20and%209223c%20derogation1665496660376.pdf>

a Class 1 consumer shall not be treated as an Eligible Balancing Action and shall not be included within the calculation of imbalance cash-out prices.

Introduction of a D-5 product and recovery of costs

We support the introduction of a D-5 DSR product, as set out in UNC845. During NGT's stakeholder engagement, some large gas users stated that they were willing to reduce their demand voluntarily but were unable to achieve such demand reduction within the timescales required by the current DSR arrangements. They required a DSR product that had a longer lead-time to participation. The introduction of a D-5 DSR product will create a route for those consumers to participate in DSR. This will better facilitate Special Condition 9.22.3(e) as it will encourage further participation via open and transparent market-based arrangements.

The decision to exercise D-5 DSR will be taken on gas day D-5, but the demand response won't be delivered until gas day D. Therefore, the price at which exercise takes place may not be reflective of supply/demand fundamentals on gas day D and so we consider it appropriate that the volumes and prices associated with the exercise of any D-5 DSR option should be excluded from imbalance cash-out calculations. This will minimise distortions and unintended consequences on existing market arrangements and better facilitate Special Condition 9.22.3(g). We approve the use of a locational reason code¹⁸ for exercise of D-5 DSR options in order to avoid the volumes and prices of these D-5 trades feeding into imbalance cash-out calculations, but note that this has the side effect of directing costs to capacity neutrality instead of balancing neutrality.¹⁹ The costs of D-5 DSR should feed into balancing neutrality, to enable their recovery by NGT, as is the intention of UNC845 (and subsequently should not contribute toward the constraint management incentive).²⁰ We note that NGT is planning on instructing Xoserve to retain costs within balancing neutrality and not to move them into capacity neutrality. This is an interim solution and we encourage NGT to find an enduring solution. We will therefore grant NGT's request for a derogation against Special Condition 9.22.3(d).

We note that the introduction of D-5 DSR is also inconsistent with Special Condition 9.22.3(c). At present, the licence states NGT can only exercise DSR when a Gas Balancing

¹⁸ Locational Actions are defined in Special Condition 1.1 Interpretation and definitions as: "any action taken by the licensee where the action was taken in respect of a specific location and would therefore be coded with a locational reason code on the On-the-day Commodity Market, and where locational buys will be treated as a cost to the licensee and locational sells will be treated as a revenue."

¹⁹ The volumes and prices of 'national buy' trades contribute towards the imbalance cash-out price calculation and the costs associated with such trades feed into energy balancing neutrality. Such trades also contribute towards NGT's residual balancing incentive. The volumes and prices of 'locational buy' trades do not contribute towards the imbalance cash-out price calculation and the costs associated with such trades feed into capacity neutrality and NGT's constraint management incentive.

²⁰ Capacity neutrality and balancing neutrality charges are both defined terms in the UNC TPD. The balancing neutrality charge to be recovered from or credited to shippers is the difference between the amounts received and the amounts payable by National Grid in relation to all the applicable balancing charges.

Notification, (or Gas Margins Notice²¹) is in place or within Stage 1 of a Gas Deficit Emergency. A Gas Balancing Notification will take place on D-1 or within gas day D and a Gas Margins Notice will take place on D-1. The decision to exercise D-5 DSR will be taken on gas day D-5, which will be when NGT forecasts a supply/demand imbalance of at least 14mcm/d²² (as set out in UNC845). This may not be when a Gas Balancing Notification or Gas Margins Notice is in force. We will therefore grant NGT's requested derogation to Special Condition 9.22.3(c) to allow NGT to exercise D-5 DSR when the relevant conditions set out in UNC are satisfied and when a Gas Balancing Notification or Gas Margins Notice may not be in force.

Threshold for Ofgem referral

The DSR Option payments have previously been capped at an aggregate level of £5m per Winter Period. If NGT wished to accept offers that exceeded this amount, it would need to refer to Ofgem for approval. We note previous stakeholder feedback that said that this might discourage participation in DSR as consumers/shippers viewed the £5m threshold for Ofgem referral as a cap/ceiling. We support the principle that this threshold should be kept under review to ensure both the economic and efficient nature of the tool, but also for it to remain efficient to administer. We have reviewed NGT's methodology for increasing the threshold and have concluded it is appropriate to increase the threshold to £36m for the next Winter period.²³ We consider that this will help the DSR scheme to remain efficient to administer, particularly with new routes to market and new products, which will likely increase participation. We also consider that the £36m threshold is similar to the costs associated with the electricity demand flexibility service²⁴ which is a similar scheme (albeit targeting domestic consumers) and is an indicative benchmark for comparison.

We think this will further facilitate Special condition 9.22.3(h).

Other considerations

We agree that NGT should be considering whole system security when it is assessing DSR offers and we therefore support this inclusion into the DSR methodology. This will better facilitate Special condition 9.22.3(h).

²¹ We have previously issued a derogation pursuant to Special Condition 9.22.3(c) in our decision letter dated 14 October 2022. This allows NGT to accept DSR Offers where a Gas Margins Notice is in place alongside the existing requirements in 9.22.3(c).

²² mcm/d: million cubic metres per day

²³ The proposed increase has been calculated by scaling up the cost of DSR options accepted in the 2022/23 DSR options tender based on a theoretical aggregate DSR tendered quantity. 0.2 mcmd was procured through the 2022/23 tender at a cost of £1.4m for part of the winter; had this applied for the whole Winter Period, the cost would have been £2.4m. If 3 mcmd were to be offered in the forthcoming tender at the 2022/23 weighted average price, this would cost £36m.

²⁴ The ESO procured ~2.5 GWh at a cost of £3000/MWh, spending ~£7.5m. The maximum capacity delivered through the DFS in 2022/23 was approximately 350MW against the ESO's expectation of 2GW. If the ESO had delivered 2GW of demand reduction, this would have costed ~£43m.

Overall, we consider the changes to the DSR Methodology to be consistent with the Modification proposals UNC844 and UNC845. We note that the changes proposed to the DSR methodology have been discussed at length during the code modification discussions for UNC844 and UNC845 and have received majority support by consultation respondents and unanimous support by the UNC panel. Our decisions on UNC844 and UNC845 have also been published on our website today.

Our decision and next steps

Pursuant to Special Condition 9.22.7, we have reviewed the proposed amendments submitted on 21 July 2023 and hereby consent to NGT making the changes to the Gas DSR Methodology.

Furthermore, we have reviewed NGT's derogation request submitted to us on 13 July 2023 and, in accordance with Special Condition 9.22.12, we have decided to grant the requested derogations to NGT. The direction, which is issued in the Annex to this letter, will give effect to the derogation decision.

Going forward, we will publish and consult on a licence modification for Special Condition 9.22 of NGT's Licence in order to consolidate all the derogations and updates in relation to DSR.

This letter constitutes notice for the purpose of section 38A of the Gas Act 1986 of the Authority's reasons for its decision, and a copy has been made available on our website.

Maryam Khan

Head of GSO Regulation – Energy Systems Management & Security

For and on behalf of the Gas and Electricity Markets Authority

ANNEX – Direction Notice

To: The Company Secretary, National Gas Transmission plc

Derogation by Direction issued to National Gas Transmission plc by the Gas and Electricity Markets Authority pursuant to paragraph 9.22.12 of Special Condition 9.22 Part D of the Gas Transporter Licence in respect of implementing updates to the Demand Side Response Methodology following UNC844 and UNC845.

1. This derogation by Direction is issued by the Gas and Electricity Markets Authority (the "Authority") under paragraph 9.22.12 of Special Condition 9.22 Part D of the Gas Transporter Licence in respect of the NTS (the "Licence"), granted or treated as granted under section 7 of the Gas Act 1986 (the "Act") to National Gas Transmission plc (the "Licensee").
2. Paragraph 9.22.2 of Special Condition 9.22 provides that the Licensee must have in place and maintain a Demand Side Response Methodology approved by the Authority.
3. Paragraph 9.22.3(a) of Special Condition 9.22 states that the Licensee must ensure that the Demand Side Response Methodology ensures that any party making a Demand Side Response Offer is a party to the Uniform Network Code.
4. Paragraph 9.22.3(c) of Special Condition 9.22 provides that the Licensee must ensure that the Demand Side Response Methodology allows the licensee to accept Demand Side Response Offers only where a Gas Balancing Notification is in place or within Stage 1 of a Gas Deficit Emergency.²⁵
5. Paragraph 9.22.3(d) of Special Conditions 9.22 provides that the Licensee must ensure that the Demand Side Response Methodology demonstrates compatibility with existing market arrangements by setting out the manner in which any Demand Side Response Offers accepted by the licensee are to be treated as Eligible Balancing Actions and included in the System Clearing Contract, System Marginal Buy Price and System Marginal Sell Price.
6. Paragraph 9.22.12 of Special Condition 9.22 provides that the Licensee may apply to the Authority for a derogation relieving the Licensee of any of its obligations under this condition.

²⁵ On 14 October 2022, we issued a derogation pursuant to Special Condition 9.22.3(c). This allows NGT to also accept DSR Offers where a Gas Margins Notice is in place alongside the existing requirements in 9.22.3(c) (where a Gas Balancing Notification is in place or within stage 1 of a GDE).

7. The Authority hereby derogates the Licensee from the need to comply with paragraph 9.22.3(a) of Special Condition 9.22 in circumstances where it is making a Demand Side Response Offer to a Class 1 Daily Metered Consumer (DMC) whose annual quantity is greater than 2 million therms.
8. The Authority hereby directs that the Licensee is not required to comply with paragraph 9.22.3(c) of Special Condition 9.22 of the Licence.
9. The Authority hereby directs, under paragraph 9.22.3(d) of Special Conditions 9.22 of the Licence, that the Licensee must ensure that:
 - (i) The acceptance and exercise of within-day and D-1 DSR offers where the counterparty is a shipper shall be treated as Eligible Balancing Actions and shall be included within the calculation of imbalance cash-out prices;
 - (ii) The acceptance and exercise of D-5 DSR offers where the counterparty is a shipper shall be treated as a Locational Action and shall not be included as a cost or revenue in the constraint management incentive; and
 - (iii) Exercise of any DSR option where the counterparty is a Consumer shall not be treated as an Eligible Balancing Action and shall not be included within the calculation of cash-out prices.
 - (iv) The volumes and costs associated with D-5 DSR trades where the counterparty is a consumer shall feed into balancing neutrality.
10. The considerations and reasons for the Authority's decision, in accordance with the Authority's duty under section 38A of the Act to give reasons, are set out in the Authority's decision letter to the Licensee, dated 4 August 2023.
11. The Direction shall take effect on and from 4 August 2023 and remain in effect until revoked or varied in writing by the Authority.
12. The Authority may revoke or vary this direction upon reasonable notice in writing to the Licensee.

Dated: 4 August 2023

Signed for and on behalf of the Authority

Maryam Khan

Head of GSO Regulation – Energy Systems Management & Security

Authorised for that purpose by the Authority