UNC Draft Modification Report

UNC 0844:

At what stage is this document in the process?

Modification

02 Workgroup Report

03 Draft Modification Report

04	Final Modification Report
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Enabling Direct Contractual Arrangements with Consumers for Demand Side Response

Purpose of Modification:

The purpose of this Modification is to expand the scope of the Demand Side Response (DSR) arrangements (as set out in the UNC) to enable the establishment of direct contractual arrangements between National Gas Transmission (NGT) and individual Consumers for the voluntary reduction of their gas demand.

Next Steps:

This Draft Modification Report is issued for consultation responses at the request of the Panel. All parties are invited to consider whether they wish to submit views regarding this Modification.

The close-out date for responses is 13 July 2023, which should be sent to enquiries@gasgovernance.co.uk.

A response template is available at http://www.gasgovernance.co.uk/0844.

The Panel will consider the responses and agree whether or not this Modification should be made.

Impacted Parties:

High: Large Industrial and Commercial Consumers, National Gas Transmission (NGT), Shippers, On the-Day Commodity Market (OCM) Market Operator, Gas Distribution Networks, CDSP

Low: IGTs

Impacted Codes:

UNC and potentially iGT Code

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1 Summary

What

The Gas Demand Side Response (DSR) arrangements provide a mechanism for large consumers of gas to offer to reduce their demand via their User in return for a payment that they define during times of system stress.

The DSR arrangements as reformed by Modification 0822 take the form of distinct "option" and "exercise" stages with separate payments made for each. Ahead of each forthcoming Winter Period, NGT issues an invitation to all Users seeking commitments, in advance, to offer DSR quantities for the next three Winter Periods that would physically be delivered by Consumers. When a Margins Notice (MN) or Gas Balancing Notification (GBN) has been issued, NGT may exercise any accepted DSR Options (and any DSR Market Offers that are not linked to a DSR Option) via an OCM trade which triggers a requirement for the User to reduce the relevant Output Nomination and the consumer to reduce its offtake of gas.

Why

In its decision letter for Modification 0822, Ofgem encouraged consideration of how consumer access to gas DSR could be broadened. NGT considers that it is desirable to seek to maximise the quantity of gas DSR that would be made available because it serves as a pre-emergency tool to mitigate against the risk or severity of a Gas Deficit Emergency (GDE). Feedback provided by industrial consumers to NGT during the development of Modification 0822 and via other fora suggests that the ability for NGT to contract with Consumers directly for the reduction or cessation of offtake of gas as voluntary DSR could increase the level of participation.

Given this, NGT is of the view that being able to additionally make voluntary curtailment arrangements directly with Consumers (for the avoidance of doubt, in addition to existing arrangements entered into with Registered Users) may increase the demand volumes that are able to be curtailed should there be a need to address a forecast supply shortfall.

How

It is proposed to modify the UNC (and separately the Gas DSR methodology statement) to enable NGT to enter into contractual arrangements to procure DSR from any class 1 gas Consumer (a Consumer that is daily metered with an Annual Quantity of greater than 2 million therms).

Further, it is proposed that the UNC will be modified (as far as is necessary) to reflect:

- The ability of NGT to issue an invitation to procure DSR from eligible Consumers on an 'option and exercise' basis;
- the ability of an eligible Consumer to offer DSR to NGT with a lead-time of within-day, D-1 and D-5 in response to NGT's invitation;
- the ability of NGT to accept the Consumer's offer;
- NGT being obliged to notify the relevant Registered User and GDN of any DSR option that has been
 agreed between NGT and a Consumer, (note that on exercise, existing NGT procedure provides for the
 relevant GDN to be notified of any DSR within its network and that the responsibility for communication
 of exercise to the shipper (potentially via the supplier) would be with the Consumer).
- the existence of standard conditions of contract between NGT and each eligible Consumer whose option offer is accepted by NGT;
- the ability of NGT to exercise a DSR option provided by an eligible Consumer and therefore issue an instruction to the Consumer to reduce or curtail the offtake of gas;

- the requirement that a Consumer may hold a DSR Option either directly with NGT or via its shipper as provided for under the arrangements introduced by Modification 0822;
- arrangements whereby DSR Option and exercise payments will be made directly to Consumers (pursuant to bi-lateral contractual arrangements between NGT and Consumers) and for such costs to be included in Aggregate System Payments that are funded by Users via Balancing Neutrality arrangements.

2 Governance

Justification for Authority Direction

This Modification seeks to establish a new contractual framework that is referenced in UNC but whose specific provisions are defined outside UNC. This will facilitate an alternative means for NGT to secure voluntary DSR and represents a material change to the existing mechanism which has been in place since 2016. This is because NGT's contractual relationship under the existing DSR arrangements and under UNC is with Users. This Proposal sets a framework for NGT to enact such arrangements directly with Consumers which represents a step change from the prevailing framework and is likely to therefore have a material effect on new or existing gas consumers. On this basis, this Modification is sufficiently material to require Authority Direction.

Requested Next Steps

This Modification should be considered a material change and not subject to Self-Governance.

The principles and legality of the establishment of bi-lateral arrangements between NGT and eligible consumers for DSR was tabled and discussed in Request Group 0835R on 2 March 2023.

Workgroup's Assessment

The Workgroup agreed that this Modification should be considered a material change and not subject to Self-Governance.

3 Why Change?

The Gas DSR arrangements were introduced into the UNC in 2016 by Modification 0504 'Demand Side Response Methodology Implementation'. This provided a mechanism for large Consumers of gas to offer to reduce their demand in return for a payment which they defined during times of system stress when a Gas Balancing Notification (GBN) is in operation. The User discharges that function with NGT by posting a DSR Market Offer onto the OCM DSR Locational Market which NGT may accept. Such voluntary demand reductions are intended to reduce the likelihood, severity and duration of a gas supply emergency and provide a 'route to market' for large consumers to receive greater financial compensation by voluntarily curtailing their demand than if they were involuntarily curtailed in a stage 2 of a GDE.

In order for a User to be able to post a DSR Market Offer, the terms on which the User does so needs to be agreed within its contractual arrangements with the Consumer (and potentially the supplier). This process causes these parties to incur contracting costs and the Consumer needs to be prepared to reduce their gas requirements and as such incur either a loss of production and/or be able to switch a back-up fuel.

Enhancements to these arrangements were introduced by Modification 0822. These changes provide for greater certainty of offers being available for exercise by including an additional 'option' payment in addition to the existing 'exercise' payment. The inclusion of an option payment recognises that costs are incurred for parties to

be available to make such offers, regardless of whether demand reduction is actually required. A further change introduced by this Modification was that the trigger for submission and consideration of DSR Market Offers (formerly limited to when a GBN was in place) was extended to where a MN is issued. From this point NGT may accept any valid DSR Market Offers, following which the User should reduce its prevailing Output Nomination and instruct the consumer to reduce its offtake of gas. A MN is a D-1 notification and a GBN could be issued either within day or at D-1, therefore it is only those Consumers that are able to commit to curtail their gas flow within these timescales which are currently able to participate in Gas DSR. The combination of measures introduced by Modification 0822 are expected to increase the incentives for Users, consumers and suppliers to enter into DSR arrangements.

In its decision letter for Modification 0822, Ofgem encouraged consideration of how consumers' access to DSR may be broadened to further contribute towards the effectiveness of the DSR tool, which this Proposal seeks to enable.

Driver for further DSR Reform

Engagement with large industrial consumers and their trade associations during the development of Modification 0822 indicated that increased participation in DSR arrangements may transpire if NGT is able to contract directly with eligible consumers for DSR. Feedback from some Users on the 0822 proposal indicated a lack of a commercial incentive and increased risks for Users to enter into such arrangements on behalf of consumers.

The Russian invasion of Ukraine and subsequent reduction in gas supplies to the EU has created material risks to global gas markets which impacts both the EU and GB gas markets which are linked both via physical assets and market arrangements. NGT therefore considers that it is prudent to consider additional means of securing a higher level of participation in DSR arrangements as a mitigation against these risks; increased participation would also provide mitigation against the unlikely event of a GDE being declared which would have a significant commercial impact on GB gas market participants and more widely in GB.

Consequences of Non-implementation

If this change is not made, engagement with relevant stakeholders indicates that consumers that *could* potentially offer voluntary curtailment may be unable to do so due to the design of the current commercial framework for DSR, recognising that at present the Registered User's participation in DSR on behalf of a consumer is voluntary.

This would mean that one of the tools available to NGT to mitigate a material imbalance between national demand and supply (where a GBN / MN have been issued) that could progress to a GDE may not provide as much demand reduction as it potentially could. This Modification would serve to increase the likelihood of such additional demand curtailment being available if needed to reduce the likelihood and/or severity of a GDE.

Legal Considerations

The Proposer has undertaken an assessment of the relevant legislation and does not believe that there are any legal impediments to the ability of NGT to enter into the bi-lateral arrangements described in this Proposal, although a change to the NTS Licence would be required. NGT's conclusions in respect of each authority are set out below:

Gas Act

Section 5 of the Gas Act contains certain prohibitions on unlicensed activities, which include that, "a person who...arranges with a gas transporter for gas to be introduced into, conveyed by means of or taken out of a pipe-line system operated by that transporter...shall be guilty of an offence unless he is authorised to do so by a licence."

Historically, this has been interpreted to preclude NGT contracting directly with Consumers for gas DSR. Further to feedback received about the potential benefits of contracting directly in this way, NGT has re-examined this interpretation.

The arrangements that are referred to in this section of the Gas Act are between a Transporter and licenced Shippers; i.e. transportation arrangements that are discharged through the terms of the UNC under which, for example, shippers procure exit capacity, make nominations and receive allocations of gas which enable gas to be taken out of a pipe-line system. The DSR contract that this Modification seeks to enable would be an agreement by a Consumer to voluntarily alter the quantity of gas that will be offtaken in certain circumstances; the transportation arrangements that afford the Consumer the right to offtake gas would remain between the Transporter and the Shipper through the UNC. The same logic may be used to explain the existence of agreements that NGT has with operators at system entry and exit points (e.g. Network Entry Agreements and Network Exit Agreements) who may also be unlicenced entities and which provide for circumstances under which flow rates on and off the system may be altered.

EU Balancing Code

The EU Balancing Code¹ permits TSOs to undertake balancing actions through either 'short term standardised products' or use of 'balancing services'. Counterparties to 'short term standardised products' are only envisaged to be shippers (Arts 7(3) and 3(5)) however there are no restrictions on parties with whom a TSO may contract for 'balancing services'. A DSR arrangement with a Consumer would be consistent with the definition of 'balancing service' (Art 3(7)).

Article 8(1) of the Balancing Code entitles a TSO to procure balancing services for those situations in which short-term standardised products "will not or are not likely to provide the response necessary to keep the transmission network within its operational limits." A balancing service to provide gas DSR fits with this definition because a within-day or D-1 product would only be used at times of system stress and a D-5 product would only be used where forecast demand exceeds forecast supply by a material amount at D-5. In addition, the phrase "will not...provide the response necessary", contemplates the use of balancing services before short term standardised products.

Article 8(5) contemplates the duration of a balancing service being for one year but permits the National Regulatory Authority to allow a longer period. Therefore, an Ofgem decision to permit the procurement of directly contracted DSR options up to 3 years out as proposed by this Modification would be compliant. Article 8(6) requires the TSO to review its use of balancing services annually and consider whether the use of balancing services could be reduced for the next year. NGT is obliged to produce an annual DSR report and procurement of DSR options each year shall be considered in the light of any longer term options already contracted for.

Whilst exercise would constitute a 'balancing action' as defined by the EU Balancing Code, the exercise volumes and prices for DSR executed directly with a Consumer should not be included within the calculation of system prices for the relevant day. Article 22 of the Balancing Code prescribes that system prices are to be determined by energy trades which may include locational products subject to NRA approval. There is no provision for the volume and price of actions associated with exercise of balancing actions that are not energy trades to be included.

¹ As amended by the Gas (Security of Supply and Network Codes) (Amendment) (EU Exit) Regulations 2019

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NTS Licence

A Licence change would be required to Special Condition 9.22 which currently mandates that a party making a DSR Offer must be a party to the UNC.

Further, this condition also requires that a DSR Offer which is exercised is to be treated as an Eligible Balancing Action under the UNC however this can only be applied to DSR Market Offers transacted between NGT and a User.

Specific Rationale

The DSR contractual arrangements between NGT and consumers will sit outside UNC, therefore the UNC needs to be amended to the extent necessary to give effect to these provisions which NGT considers consist of the following areas:

Role of the User (Shipper)

The Registered User would need to be informed by the Consumer (potentially via the supplier) of any DSR exercise in sufficient time to make the appropriate Output Nomination / Renomination and potentially adjust its gas procurement and Input Nominations.

Conditions of NGT/Consumer Contract

NGT envisages consulting on draft terms (standard conditions of contract) that would govern DSR arrangements between NGT and Consumers to ensure no undue preference with both Consumers and Users concurrently with this Modification.

Products and execution mechanism

The DSR products available to Consumers are proposed to be the same as are available to Users. Modification 0845 proposes to introduce a D-5 product for Users therefore the products available directly to Consumers are proposed to be within-day, D-1 and D-5.

The existing exercise of DSR via a locational trade on the OCM is not suitable for exercise directly with Consumers, hence exercise of DSR directly with the Consumer will therefore constitute an instruction to reduce flow but would not be delivered as an 'energy trade'.

Funding & Payment

The costs of DSR options via the proposed NGT/Consumer arrangements will be included in the aggregate DSR costs which are subject to the materiality threshold beyond which Ofgem consent would be required as explained in the DSR Methodology statement.

As DSR is a tool used to maintain an operational balance, NGT considers that it should remain cash-neutral to DSR option and exercise costs, hence such costs should be funded via Balancing Neutrality (i.e. socialised across all Users).

The new arrangements need to be structured such that NGT, via the CDSP, may make DSR option and exercise payments directly to consumers.

4 Code Specific Matters

Reference Documents

UNC TPD Section D and D7

NGT DSR Methodology Statement

EU Balancing Code

E1 Network Gas Supply Emergency Procedure

Knowledge/Skills

An awareness of the current DSR rules in UNC and where they feature in the emergency arrangements would be helpful. In the UNC, these are contained in TPD section D5.

5 Solution

The UNC (and separately the Gas DSR methodology statement) will be modified to enable NGT to enter into contractual arrangements with Consumers based on the following business rules. The arrangement shall constitute a 'balancing service' for the purposes of the EU Balancing Code.

Eligibility

- NGT shall publish a DSR tender document not later than 31 August each year, to which any Class 1
 Consumer (a Consumer that is daily metered with an Annual Quantity of greater than 2 million therms) may
 respond with an offer to reduce its demand.
- 2. NGT may accept such offer, thereby entering into an option arrangement with the Consumer for demand reduction. The option arrangement shall be supported and governed by standard conditions of contract which NGT shall publish on its website. Such standard conditions of contract shall not restrict the Consumer from disclosing information concerning the DSR option to its supplier or Registered User.

Products

- 3. NGT shall invite offers for DSR options whereby the Consumer, (if required to do so by NGT in the circumstances defined in the UNC) agrees to limit its gas demand under three products:
 - a. Within-day
 - b. D-1
 - c. D-5
- 4. The DSR quantity against which the option fee shall be paid shall be greater than or equal to 100,000 kWh/d and determined as the difference between the average daily demand of that Consumer over the previous Winter Period (with any days on which DSR was invoked or a Network Gas Supply Emergency in operation removed from such determination) minus a tendered minimum quantity that the Consumer specifies will not be exceeded if NGT exercises the option.

Procurement Process

- 5. Not later than 31 August in each year, NGT shall publish an Invitation to Tender document for DSR options for the next Winter Period and the next two Winter Periods that eligible Consumers may respond to.
- 6. Each DSR Option offer that a Consumer may make shall be required to contain:
 - An end-of-day energy quantity that the consumer will not exceed in the event of the product being exercised;
 - b. In the case of a within-day option, the lead-time in hours that it requires to schedule demand reduction following notification of exercise by NGT;
 - c. The identity of the consumer and its supply meter point reference that will deliver the demand curtailment, if exercised by NGT;

- d. A price ('option price'), specified in p/kWh/day, that the User requires to be paid in return for its commitment to making a quantity available for gas DSR purposes;
- e. A price ('exercise price') which the Consumer requires to be paid if its DSR option is exercised by NGT which may be specified either:
 - i. in p/kWh or
 - ii. in respect of a within-day or D-1 option, indexed to the System Average Price (SAP) applicable on the preceding day on which a Margins Notice or GBN is issued, or
 - iii. in respect of a D-5 option, indexed to the System Average Price applicable on the preceding Day on which notification of exercise of the D-5 DSR Option is given by NGT to the relevant User (and may otherwise be understood as D-6 where D is the Day on which the demand reduction is to be effective).
- 7. A Consumer may specify in respect of its Supply Point:
 - a. A maximum number of days on which NGT may exercise a DSR Option during a Winter Period;
 - b. A minimum number of days that must elapse between Voluntary DSR Periods before exercise could again be triggered.
- 8. A Consumer may submit a DSR option offer for more than one product from which NGT may accept one such offer.
- 9. A Consumer may offer one tranche of demand reduction only.

Assessment of Offers

- 10. Assessment shall be carried out by NGT using the combined price (option plus exercise) as the primary criterion and in accordance with the Option Selection Guidance in NGT's DSR Methodology.
- 11. NGT shall prioritise acceptance of within day offers over D-1 offers and D-1 offers over D-5 offers.
- 12. In its assessment, NGT shall also consider:
 - a. Any restrictions to the number of days that DSR may be exercised on in a Winter Period that are specified by a Consumer,
 - b. Which DSR Option Offer to accept in the case where a Consumer submits an offer for more than one DSR product in respect of the same Winter Period.
- 13. NGT shall assess DSR option offers from Consumers concurrently with any DSR Option offers from Users.
- 14. NGT shall validate that the demand reduction quantity is greater than or equal to 100,000 kWh/d. Any multiyear offers that are accepted by NGT shall be conditional on this assessment in respect of future years as described BR18.
- 15. NGT shall validate that a Consumer has not submitted a DSR option offer via its User and directly to NGT. Where this is the case, NGT may select either or none of those offers.
- 16. Where a Consumer does not meet the credit conditions that are published by NGT in relation to its option payment, it shall provide credit support according to the terms in the standard conditions of contract should its offer be accepted.
- 17. NGT shall notify those Consumers that have submitted DSR option offers of their acceptance or rejection within 10 business days from the closure of the invitation to offer window, provided that this time may be extended if NGT wishes to exceed the aggregate value of DSR options specified in the DSR methodology.
- 18. Where NGT accepts an offer:

- a. in respect of the next Winter Period, NGT shall notify the Consumer of its average daily demand from the previous Winter Period and hence the DSR reduced quantity that it has offered at the time at which such offer is accepted;
- b. in respect of a Winter Period in Y+1 and/or Y+2, NGT shall notify the Consumer of its average daily demand for the preceding Winter Period and hence the DSR reduced quantity it has offered not later than 30 June in the preceding Gas Year to which the DSR Option applies. (For example, if in response to the 2023 invitation, NGT accepts an offer from a consumer for Winter Periods 2023/24 and 2024/25, NGT would inform the consumer of its average demand for Winter Period 2023/24 and hence what its DSR reduced quantity is for Winter Period 2024/25 not later than 30 June 2024). Where the demand reduction quantity is less than 100,000 kWh/d, the DSR option shall lapse.
- 19. If a Consumer commenced its offtake of gas:
 - a. during the previous Winter Period, its average demand and DSR reduced quantity shall be determined from the date of first gas offtake;
 - b. after the previous Winter Period had ended, that Consumer shall not be eligible to submit an offer and any offer that is submitted shall be rejected.
- **20.** Upon acceptance of a DSR offer by NGT, the DSR option is entered into and comes into force in accordance with the terms provided in the DSR invitation and standard conditions of contract.

Notifications

- 21. NGT shall notify the relevant Registered User and GDN of any DSR option that has been accepted between NGT and a Consumer.
- 22. NGT shall notify the relevant GDN of any exercise of a DSR option held with a Consumer according to NGT's existing procedure.
- 23. NGT shall assume that the Consumer shall notify its Registered User (potentially via its Supplier) of any DSR exercise.

Exercise of offers

- 24. The triggers for NGT to exercise a DSR option held by a Consumer shall be equivalent to those which apply to Users as set out in the UNC.
- 25. Where such triggers are met, NGT shall assess DSR options for exercise from Consumers alongside any such options held with Users.
- 26. Where NGT wishes to exercise a DSR option held by a Consumer it shall do so by notifying the relevant Consumer
 - a. In respect of a within-day option, not later than the time which is the tendered lead-time before the end of the gas day
 - b. In respect of a D-1 option, not later than 17:00 on the preceding day
 - c. In respect of a D-5 option, not later than 17:00 on D-5
- 27. Where NGT exercises a within-day option, the Consumer shall be obliged to offtake gas at a rate not exceeding 1/24th of its tendered minimum quantity from the time at which the exercise of that option becomes effective.
- 28. Where NGT exercises a D-1 or D-5 option, the Consumer shall be obliged not to exceed its tendered minimum quantity for the relevant day.

- 29. For the purposes of determining the exercise fee, the demand reduction quantity shall be determined from the average historical daily demand as follows:
 - a. In respect of a within-day DSR Option,

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ADD - ((ADD / 24 x HB) + (MinQ / 24 x HA))
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where:

ADD = average daily demand of the Consumer over the previous Winter Period (with any days on which DSR was invoked or a Network Gas Supply Emergency in operation removed from such determination);

HB = number of hours in the Day before DSR is effective (including the lead-time);

MinQ = the tendered minimum offtake quantity;

HA = number of hours remaining in the Day after DSR is effective.

- b. In respect of a D-1 and D-5 DSR Option, the difference between the Consumer's daily average demand in the previous Winter Period (with any days on which DSR was invoked or a Network Gas Supply Emergency in operation removed from such determination) and its tendered minimum offtake quantity.
- 30. NGT shall validate the Consumer's compliance with any exercise instruction at D+6 (post exit close out). Where the required demand reduction has not been implemented, no exercise payment will be made.

Funding Arrangements, Invoicing and Cashout

31. A Consumer's option fee for a Winter Period shall be determined as (Q x P) x N, where

Q = the difference between the average daily demand for the relevant Consumer from the previous Winter Period (excluding any days on which DSR was invoked or a Network Gas Supply Emergency in operation removed from such determination) and the tendered minimum offtake quantity

P = the option price in p/kWh/day submitted by the Consumer

N = Number of days within the Winter Period

- 32. Option fees payable to Consumers shall be funded from Balancing Neutrality.
- 33. NGT shall instruct the CDSP to make payment of DSR option fees to the relevant Consumers in monthly instalments for the duration of the relevant Winter Period, calculated as follows:

Total option fee divided by the number of days within the Winter Period, multiplied by the number of days in the month for which payment is being made.

- 34. DSR option fees shall be paid to relevant Consumers in respect of each relevant month on the Invoice Due Date for Energy Balancing Invoices for that month (being 12 calendar days following the 23rd day following the end of that month).
- 35. The aggregate amount of DSR option fees payable to Consumers in respect of a month shall be processed as a debit on Users' Energy Balancing Invoices in respect of that month. Each User's share of this amount shall be determined by the percentage of its system throughput (determined by its allocated inputs and outputs (UDQIs and UDQOs)) versus total system throughput for that month.
- 36. Within 8 calendar days from the end of a month M, NGT will notify the CDSP of the price, quantity and cost of any DSR option exercised directly with a Consumer during month M.
- 37. The CDSP shall then issue credit invoices to the relevant Consumers, funded from the balancing neutrality account not later than M+20 calendar days.

- 38. The aggregate amount of DSR exercise fees payable to Consumers in respect of a month shall be processed as a debit on Users' Energy Balancing Invoices in respect of that month. Each User's share of this amount shall be determined by the percentage of its system throughput (determined by its allocated inputs and outputs (UDQIs and UDQOs)) versus total system throughput for that month.
- 39. The quantity and price of any DSR option exercised directly with Consumers shall not contribute to imbalance cashout price determination for any Day.
- 40. Where a Consumer has failed to implement demand reduction when called, it shall become liable to return a proportion of its option fee to Balancing Neutrality on the same basis as applies to Users that hold DSR Options under the terms of UNC. Where such a liability is incurred and an associated charge remains unpaid by the Consumer, the relevant sum shall be mutualised among all Users in accordance with the existing CDSP process for managing balancing neutrality bad debt. Should such payment later be recovered, Users would receive the appropriate balancing neutrality credits.

Reporting

- 41. Within 5 business days from the date on which NGT notifies participating Consumers of the acceptance or rejection of their DSR option offers, NGT shall notify all participating Consumers and all Users of the following outcomes from the DSR Option Invitation:
 - a. Total volumes offered
 - b. Total volumes accepted
 - c. Number of participating Consumers
 - d. Weighted average option price for all accepted DSR option offers
 - e. Total cost of accepted DSR option offers
 - f. Lowest option price accepted
 - g. Highest option price accepted
 - h. Lowest exercise price accepted, where offered as a p/kWh rate
 - i. Highest exercise price accepted, where offered as a p/kWh rate
 - j. Lowest exercise price accepted, where offered as an index
 - k. Highest exercise price accepted, where offered as an index

6 Impacts & Other Considerations

Does this Modification impact a Significant Code Review (SCR) or other significant industry change projects, if so, how?

No.

Consumer Impacts

This Modification will provide eligible Consumers with an opportunity to contract directly with NGT for voluntary DSR at times when expected available supply is insufficient to meet forecast demand. If this results in increased participation, then the industry will have greater confidence that voluntary curtailment will be available to NGT. This will help to avoid a supply shortfall situation escalating to a GDE which would have detrimental impacts on a wider group of consumers.

What is the current consumer experience and what would the new consumer experience be?

Feedback received during the development and implementation of Modification 0822 suggests that the existing voluntary DSR contractual structure (whereby arrangements can only be made between NGT and the Registered User) may be a barrier to greater Consumer participation. This arises because adopting this (voluntary) intermediary role exposes the User to commercial and operational risks which may deter DSR being offered to Consumers. This may mean that Consumers that wish to offer DSR to NGT are not able to do so. This Proposal will remove this barrier and enable an increase in the quantity of system-wide DSR within the population of eligible sites.

Impact of the change on Consumer Benefit Areas:		
Area	Identified impact	
Improved safety and reliability	Positive	
Existing DSR arrangements have secured a relatively low volume of demand which NGT can call upon in the event of a forecast supply shortfall.		
This low volume of demand that can be reduced voluntarily could mean that the situation escalates towards a GDE, and the associated increased risks to network safety and reliability which result from falling pressures.		
This Modification is designed to further encourage voluntary DSR take-up such that this pre-emergency tool would be available to NGT in preventing such an escalation and mitigate such risks materialising, which could potentially impact all consumer groups.		
Lower bills than would otherwise be the case	Positive	
The impacts on consumer bills from a GDE are unquantifiable in advance but likely to be significant as wholesale gas prices rise in response to the insufficient supply situation that would trigger such an event. The insurance premium to enable voluntary DSR that this Modification would enable would provide a mitigation against such an impact.		
Reduced environmental damage	Unknown / negligible	
We do not envisage any quantifiable impact on the environment as a result of this Modification. There is potential for additional consumers to offer DSR that may deliver it via fuel-switching to a more polluting source than natural gas but this is unknown at this stage.		
Improved quality of service	Positive	
Declaration of a GDE resulting in compulsory firm load shedding would result in a significant impact on quality of service that for those parties that may be unable to continue their gas offtake. This Modification helps to mitigate such a scenario arising.		

Benefits for society as a whole

The potential impact on heating capability, gas fired electricity generation, interruption to industrial production and knock-on impacts into wider supply chains that a GDE is capable of causing could result in a major economic and societal impact for the country. Putting in place additional means of striking DSR arrangements is expected to secure additional volumes of DSR which is available at times of system stress would provide additional mitigation against such risks arising.

Positive

Cross-Code Impacts

An equivalent Modification may be required to the iGT Code.

EU Code Impacts

The EU Balancing Code² permits TSOs to undertake balancing actions through either 'short term standardised products' or use of 'balancing services'. Counterparties to 'short term standardised products' are only envisaged to be shippers (Arts 7(3) and 3(5)) however there are no restrictions on parties with whom a TSO may contract for 'balancing services'. A DSR arrangement with a Consumer would be consistent with the definition of 'balancing service' (Art 3(7)).

Article 8(1) of the Balancing Code entitles a TSO to procure balancing services for those situations in which short-term standardised products "will not or are not likely to provide the response necessary to keep the transmission network within its operational limits." A balancing service to provide gas DSR fits with this definition because a within-day or D-1 product would only be used at times of system stress and a D-5 product would only be used where forecast demand exceeds forecast supply by a material amount at D-5. In addition, the phrase "will not...provide the response necessary", contemplates the use of balancing services before short term standardised products.

Article 8(5) contemplates the duration of a balancing service being for one year but permits the National Regulatory Authority to allow a longer period. Therefore, an Ofgem decision to permit the procurement of directly contracted DSR options up to 3 years out as proposed by this Modification would be compliant. Article 8(6) requires the TSO to review its use of balancing services annually and consider whether the use of balancing services could be reduced for the next year. NGT is obliged to produce an annual DSR report and procurement of DSR options each year shall be considered in the light of any longer term options already contracted for.

Whilst exercise would constitute a 'balancing action' as defined by the EU Balancing Code, the exercise volumes and prices for DSR executed directly with a Consumer should not be included within the calculation of system prices for the relevant day. Article 22 of the Balancing Code prescribes that system prices are to be determined by energy trades which may include locational products subject to NRA approval. There is no provision for the volume and price of actions associated with exercise of balancing actions that are not energy trades to be included.

Workgroup Discussion

A Workgroup Participant highlighted that it would be helpful for the Regulatory Authority approval under Article 8(5) of the Balancing Code to be more specifically articulated, for example, in its decision letter to make a

reference to the parts of the Code under which approval is being granted rather than such approval being implicit through a general approval to implement this Modification. Workgroup Participants noted that this point is also relevant to Modification Proposal 0845.

A Workgroup Participant asked about the requirement for an annual review by NGT in relation to compliance with Article 8(6) of the Balancing Code and asked for further transparency of the process. The timing and validity of the decision to run the tender was questioned as the Winter Outlook would not be available until too late for the auction process. This could mean that participants undertake work to participate in the tender that in the event would not be required because the Balancing Requirement has fallen away. A Workgroup Participant added that the annual review should include a positive affirmation from the National Regulatory Authority that the proposed DSR arrangements remain compliant.

The Proposer responded that the commitment would be to run an annual process and this would give some certainty of timing to customers and Shippers, and the decision whether to take up those options would form part of the assessment. The assessment of need would be the mechanism for demonstrating compliance with the Balancing Code.

The Workgroup recommends that the Panel ask further question on these compliance issues as a part of the consultation process.

Central Systems Impacts

A means of invoicing Consumers for both credits and debits will be required and for funds to be paid out from and paid into Balancing Neutrality.

The CDSP will also be required to recover any option and exercise payments from all Users in proportion to their throughput via Energy Balancing Invoices.

NGT will also require historical demand data for tendering Consumers to be provided by the CDSP to enable determination of the demand reduction quantity for assessment and exercise purposes.

Rough Order of Magnitude (ROM) Assessment (Workgroup assessment of costs & lead times)

Cost estimate from CDSP

Implementation costs

As the proposed solution is expected to utilise existing processes, including a Paper Invoice process, we are not anticipating an implementation cost. Although we are not anticipating an implementation cost, please note, the process required to deliver the requirements of the Modification will require additional effort from existing teams and resource within the CDSP. This is to undertake the activities detailed within the change overview above. With this in mind, the proposed solution approach to utilise existing manual processes would need to be reassessed if the volumes were to increase above a certain amount (above 30 consumers).

Ongoing costs

Assuming volumes that do not exceed 30 consumers, we are not currently anticipating any additional ongoing costs for operating the solution. As described above in the implementation cost section, this would need to be reassessed if the volumes exceed the expected amount due to the additional time and effort this would place on existing resource.

Implementation timescale	As the solution seeks to utilise existing processes, delivery is	
	expected to be ad hoc in line with the Modification. We would	
	require suitable notice to ensure the required set up is managed	
	for the consumer, plus the volumes can be understood.	

The ROM is published here: https://www.gasgovernance.co.uk/0844/010623

Workgroup Participants noted the content of the ROM and that no cost or implementation impact is anticipated subject to the assumptions on the number of participants contained in the ROM.

Performance Assurance Considerations

Workgroup Participants did not raise any concern.

Initial Representations

None received

Panel Questions

Consideration of whether direct contracting is possible.

Legal advice had been sought by National Gas Transmission (NGT) and in conclusion the Gas Act does not prevent NGT contracting directly with consumers for Gas DSR.

Workgroup Participants noted the points made by NGT in support of this conclusion in relation to the Gas Act.

Consideration of communication arrangements required with DNOs

A Workgroup Participant remained concerned that arrangements for notification of GDNs may not be in place. Following initial Workgroup consideration, the Modification was amended. The Proposer pointed out during the 1 June meeting that the draft legal text has a specific obligation on NGT to notify DNOs and this concern has thus been addressed in the amended Proposal.

Workgroup Impact Assessment

This Proposal was reviewed alongside that for Modification 0845.

Issues with funding through Balancing Neutrality

The Workgroup recommended that the Proposer seek guidance from the Energy Balancing Credit Committee. An overview of Modification 0844 was presented to EBCC Members on 24 May 2023. The slides presented can be found here: https://www.gasgovernance.co.uk/EBCC/240523

Discussions revealed there is concern among some EBCC Members that the Modification 0844 proposal does not currently include securitisation for direct consumers. The concern arises because balancing neutrality is the mechanism for funding DSR and the use of bilateral contracts between National Gas Transmission and direct consumers will mean that the risk of non-payment, in the unlikely event that a penalty is due because a direct consumer does not reduce their demand, is being borne by neither National Gas Transmission nor the direct consumers.

Some EBCC Members noted that whilst the level of risk may be low initially, the scheme value is currently c. £5m, the potential for the use of DSR to increase may argue for robust securitisation within the bilateral arrangements.

National Gas Transmission submitted the following statement in response to EBCC which was reviewed by Workgroup 0844 on 1 June. The statement can be found here: The NGT statement is published here: https://www.gasgovernance.co.uk/0844/010623

NGT has considered the concerns expressed by EBCC members in relation to the current absence of any securitisation requirement in respect of DSR option arrangements that it may enter into with consumers if Modification 0844 is implemented.

NGT remains of the view that the likelihood of bad debt accruing to energy balancing neutrality in this way is very small due to the chain of events that would need to happen, i.e.

- NGT exercises the consumer held DSR option;
- The consumer fails to reduce its demand to the required level following such exercise; and
- The consumer fails to settle its liability linked to its option payment, thereby breaching the terms of its DSR contract with NGT.

NGT does however recognise the concern held by some shippers that the risk of such a non-payment, however small, would be borne by shippers who are not party to the DSR contract that gives rise to it. NGT is also keen to balance this risk against its ambition to grow the DSR market and therefore to minimise the administrative and commercial burden on consumers to participate.

Proposed Solution

NGT proposes that Modification 0844 is amended to include the following provisions:

- During NGT's assessment process, NGT will performing a credit check on each consumer whose DSR option offer it proposes to accept;
- If the results of such a credit check indicate that the consumer has insufficient capital to cover 110% of
 its option payment, NGT will accept the offer on the condition that the consumer provides NGT with
 security to cover any shortfall (in the form of a Letter of Credit, Parent Company Guarantee or Deed of
 Deposit) not later than 31 December. (The consumer would be scheduled to receive its first monthly
 DSR option payment in mid-January)
- If the consumer fails to provide the security by this date then NGT shall terminate the DSR contract in early January and instruct the CDSP not to make any option payments to the consumer.

The Workgroup discussed this proposed amendment on 1 June and no further concerns were raised on this issue.

Requirement for Licence changes

Workgroup Participants had noted that a Licence change would be required to Special Condition 9.22 to recognise exercise of a within-day and D-1 options directly with consumers will be considered as 'Eligible Balancing Actions'. However, the Modification was amended as it progressed through Workgroup process so that the question in relation to Eligible Balancing Actions fell away because the Modification Proposal v4.0 no longer proposes that the volumes and prices associated with any exercised Consumer DSR options would contribute to the formation of cash-out prices.

Workgroup further noted that for the avoidance of doubt any Licence changes required to support this modification would be specific to the DSR Licence Condition. It was noted that in order to meet the timing for implementation in August 2023 it would be likely that NGT would need to seek Derogation whist pursuing the Licence change.

Communication with Shippers

Some Workgroup Participants, including the Non-Domestic Consumer Representative, articulated a concern that NGT does not propose to inform the relevant Shipper in the event that DSR is called. The concern arises because the Consumer's operational staff, possibly plant engineers working out of hours, would not necessarily have arrangements in place to contact the Shipper. A Consumer Representative reiterated this concern that operational staff may not have the commercial contacts to do this. A consequence of this is that the Shipper may be exposed to Scheduling Charges.

Some Workgroup Participants pointed out that in a deteriorating situation the GNCC may call on additional support and in any event the expectation, at least initially, is that there may be relatively few sites. It was that suggested that NGT could accept a reasonable endeavours obligation to provide such information to Shippers. It was noted that NGT has committed to notify the DNOs.

The Proposer reiterated the NGT position that such an obligation would need to be discharged by the Gas National Control Centre (GNCC) and this may not be achievable in the circumstances where DSR is called. Shippers would receive notification that there is a DSR option in place for consumers in their portfolio and would also be aware of the risk of exercise once a Margins Notice is issued and/or would be aware if an ANS notice is issued at D-5. A further point is that the Shipper may change (after the option is entered into) and the GNCC may not be aware of this in 'real-time' and may thus inform the wrong Shipper.

7 Relevant Objectives

Impact of the Modification on the Transporters' Relevant Objective	es:
Relevant Objective	Identified impact
a) Efficient and economic operation of the pipe-line system.	Positive
b) Coordinated, efficient and economic operation of	Positive
(i) the combined pipe-line system, and/ or	
(ii) the pipe-line system of one or more other relevant gas transporters.	
c) Efficient discharge of the licensee's obligations.	None
d) Securing of effective competition:	None
(i) between relevant shippers;	
(ii) between relevant suppliers; and/or	
(iii) between DN operators (who have entered into transportation arrangements with other relevant gas transporters) and relevant shippers.	
e) Provision of reasonable economic incentives for relevant suppliers to secure that the domestic customer supply security standards are satisfied as respects the availability of gas to their domestic customers.	None
f) Promotion of efficiency in the implementation and administration of the Code.	None
g) Compliance with the Regulation and any relevant legally binding decisions of the European Commission and/or the Agency for the Co-operation of Energy Regulators.	None

Relevant Objective (a) "efficient and economic operation of the pipe-line system" is furthered by this Modification, which is designed to encourage voluntary DSR and thus mitigate the risk of a supply shortage escalating to declaration of a GDE. 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.

Relevant Objective (b) "co-ordinated, efficient and economic operation of (i) the combined pipeline system and/or (ii) the pipeline system of one more other relevant gas transporters" is also furthered by this Modification, also due to its mitigation of a GDE being declared. If such an event occurred, in addition to firm load shedding on the NTS, Gas Distribution Networks may be given instructions to implement the shedding of firm loads within their networks resulting in disruption and inefficiency at LDZ level too.

Workgroup Assessment of Relevant Objectives

Workgroup Participants did not contradict the arguments made by the Proposer in furtherance of the Relevant Objectives.

8 Implementation

Implementation is sought by early August 2023 to allow time for a procurement event to be conducted and DSR options allocated to consumers prior to the Winter Period 2023/24. The following implementation dates are therefore suggested:

If a decision is received by 04 August 2023, the implementation date should be 07 August 2023.

If a decision is received after 04 August 2023 but by 07 August 2023, the implementation date should be 08 August 2023.

If a decision is received later than 07 August 2023, implementation should be on the next business day thereafter.

Consequential changes to NGT's Gas DSR Methodology statement will also be required and consultation on these changes is proposed to be being conducted immediately following approval of this Modification. It will also be necessary to amend Special Condition 9.22 of the NTS Licence to remove the current requirement for a party making a DSR Offer to be a party to the UNC.

It is proposed that this process would be initiated following a positive decision on this Modification with NGT operating under derogation in the interim.

9 Legal Text

Legal Text has been provided by National Gas Transmission and is published alongside this report.

Workgroup Assessment

The Workgroup has considered the Legal Text on 01 June in a consolidated version that also includes the changes required for Modification Proposal 0845.

Workgroup Participants identified some in the initial draft clauses appeared to hold obligations that relate to Consumers who are not parties to the UNC and thus the clauses are unenforceable. It was suggested that these may be better addressed in the terms of the terms and conditions of the bilateral contract. In the amended draft reviewed on 05 June Workgroup Participants were content that this issue had been resolved.

Workgroup Participants observed that the bilateral contract has not yet been seen and thus Workgroup Participants suggested that the terms of the bilateral contract should be consulted upon in parallel with the Modification and that a specific Panel question should be asked as a part of the Consultation on whether responders have any points with the proposed drafting.

A Workgroup Participant noted during the review of drafting provided on 1 June that there should be a clause in the UNC that binds NGT in its contract with Consumers to enable the disclosure of relevant information to Supplier/Shippers to enable those Parties to meet their obligations under the UNC. The latest drafting provided by NGT for review on 5 June has addressed this point (as above).

Workgroup Participants considered the text in consolidated and stand-alone form on 5 June following amendments by NGT and Workgroup Participants concluded that the points raised had been addressed and no further points were raised.

Text Commentary

Published alongside this report at https://www.gasgovernance.co.uk/0844

Text

Published alongside this report at https://www.gasgovernance.co.uk/0844

10 Recommendations

Panel's Recommendation to Interested Parties

The Panel have recommended that this report is issued to consultation and all parties should consider whether they wish to submit views regarding this Modification.

11 Appendix 1: DSR Condition in the NTS Licence

Note: Ofgem has granted a derogation in relation to paragraph 9.22.3(c) to enable NGT to accept DSR offers where a Margins Notice is in force as well as a Gas Balancing Notification.

Special Condition 9.22 Implementing and maintaining the Demand Side Response Methodology for use after a Gas Balancing Notification

Introduction

- 9.22.1 This condition sets out the licensee's obligations to:
 - a) have in place and maintain the Demand Side Response Methodology for assessing and accepting Demand Side Response Offers;
 - b) where directed by the Authority, run a trial of the Demand Side Response Methodology with any revisions proposed under paragraph 9.22.6(b); and
 - c) following such a trial, send to the Authority a report on the outcome of the trial and a version of the Demand Side Response Methodology amended to address issues identified by the licensee during the trial and, if appropriate, containing any further proposed revisions to the Demand Side Response Methodology following conclusion of the trial.

Part A: The Demand Side Response Methodology

- 9.22.2 The licensee must have in place and maintain a Demand Side Response Methodology approved by the Authority.
- 9.22.3 The licensee must ensure that the Demand Side Response Methodology:
 - a) ensures that any party making a Demand Side Response Offer is a party to the Uniform Network Code;
 - b) sets out the criteria for determining that particular DMC Supply Point Components are DMC Supply Point Components in respect of which a party may not make Demand Side Response Offers;
 - c) 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;
 - d) 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;
 - e) promotes, and further facilitates, parties making Demand Side Response Offers to the licensee through open and transparent market-based arrangements;
 - f) does not unduly preclude the emergence of commercial interruption arrangements;
 - g) minimises distortions and unintended consequences on existing market arrangements and the principle of parties balancing their own positions in the wholesale gas market; and
 - h) ensures that Demand Side Response is procured in a manner consistent with the licensee's duties under the Act 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.

Part B: Revising the Demand Side Response Methodology

- 9.22.4 The licensee must, at least once in every period of two Regulatory Years, review, and if appropriate revise, the Demand Side Response Methodology in consultation with interested parties.
- 9.22.5 The consultation must allow a period of not less than 28 days in which interested parties can make representations to the licensee.
- 9.22.6 During the period of 7 days beginning with the date of completion of the consultation, the licensee must send to the Authority:
 - a) a report on the outcome of the review;
 - b) a statement of any proposed revisions to the Demand Side Response Methodology that the licensee (having regard to the outcome of the review) reasonably considers would better achieve the Demand Side Response Methodology principles; and
 - c) any written representations (including proposals for revising the statement that have not been accepted by the licensee) that were received from interested parties during the consultation process and have not been withdrawn.
- 9.22.7 The Authority, within 28 days of receiving a report under paragraph 9.22.6(a) and a statement under paragraph 9.22.6(b), will:
 - a) approve any proposed revisions;
 - b) direct the licensee to conduct a trial of the revised Demand Side Response Methodology to assess the effectiveness of the methodology and any revisions proposed by the licensee under paragraph 9.22.6(b); or
 - c) reject any proposed revisions.
- 9.22.8 In considering whether to approve the licensee's proposed revisions to the Demand Side Response Methodology, the Authority will have regard to whether they are consistent with the objectives in paragraph 9.22.3.

Part C: Trial and implementation

- 9.22.9 Where the Authority directs the licensee to conduct a trial of the Demand Side Response Methodology comprising the proposed revisions as outlined in paragraph 9.22.7(b), the licensee must during the period of 28 days beginning with the last day of the trial submit to the Authority a report on the outcome of the trial, including any further proposed revisions (having regard to the outcome of the trial) to the Demand Side Response Methodology.
- 9.22.10 Following completion of the trial and during the period of 28 days beginning with the date of receipt of the submissions under paragraph 9.22.9, the Authority will:
 - a) approve any proposed revisions and direct the licensee to:
 - i. develop appropriate modifications to the Uniform Network Code and other processes and systems to enable it to implement the revisions to the Demand Side Response Methodology;
 - ii. implement the revisions to the Demand Side Response Methodology as soon as is reasonably practicable and once the modifications, processes and systems under paragraph 9.22.10(a)(i) are complete; and
 - iii. publish the final revised Demand Side Response Methodology on its website and in such other manner as the Authority may direct; or

- b) reject any proposed revisions to the Demand Side Response Methodology.
- 9.22.11 Where the Authority does not provide a direction under 9.22.7 or 9.22.10, the licensee must not implement the proposed revisions.

Part D: Exception to compliance with condition

- 9.22.12 The licensee may apply to the Authority for a derogation relieving the licensee of any of its obligations under this condition.
- 9.22.13 The Authority may, having consulted with the licensee and interested parties, direct that the licensee must temporarily or permanently cease operation of the Demand Side Response Methodology.