





Modification		At what stage is this document in the process?
<h1>IGT167:</h1> <h2>Alignment of the IGT UNC with UNC NGT Demand Side Response Arrangements</h2>		<div style="display: flex; flex-direction: column; gap: 5px;"> <div style="border: 1px solid green; background-color: #28a745; color: white; padding: 5px; display: flex; justify-content: space-between; align-items: center;"> 01 Modification </div> <div style="border: 1px solid #17a2b8; padding: 5px; display: flex; justify-content: space-between; align-items: center;"> 02 Workgroup Report </div> <div style="border: 1px solid #6c757d; padding: 5px; display: flex; justify-content: space-between; align-items: center;"> 03 Draft Modification Report </div> <div style="border: 1px solid #fd7e14; padding: 5px; display: flex; justify-content: space-between; align-items: center;"> 04 Final Modification Report </div> </div>
<p>Purpose of Modification:</p> <p>The purpose of this modification is to incorporate and enable the existing National Grid Transmission Demand Side Response arrangements on IGT networks by aligning the IGT UNC to the UNC.</p>		
	<p>The Proposer recommends that this modification should be:</p> <ul style="list-style-type: none"> Proceed straight to Consultation be subject to Authority Decision <p>This modification will be presented by the Proposer to the Panel on 28th July 2023. The Panel will consider the Proposer’s recommendation and determine the appropriate route.</p>	
<p>Impacted Parties and Codes</p>		
	<p>High Impact: None</p>	
	<p>Medium Impact: Shippers, Suppliers</p>	
	<p>Low Impact: IGTs</p>	

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 **Any questions?**

Contact:
Code Administrator

 **iGTUNC@Gemserv.com**

 **02070901044**

Proposer:
Charlotte Gilbert

 **charlotte.gilbert@bu-uk.co.uk**

 **07483082216**

Timetable

The Proposer recommends the following timetable:

Pre-Modification (Draft) Workgroup Discussion	13 July 2023
Amended Modification considered by Workgroup	-
Workgroup Report presented to Panel	-
Draft Modification Report issued for consultation	28th July 2023
Consultation Close-out for representations	11th August 2023
Variation Request presented to Panel	-
Final Modification Report available for Panel	14th August 2023
Extraordinary Modification Panel decision	17th August 2023

1 Summary

What

This Modification looks to align the IGT UNC with Demand Side Response (DSR) arrangements implemented as part of UNC modifications 0822, 0833, 0844 and 0845, and so should be read as an enabler Modification. These Modifications have been subject to scrutiny and debate with the usual rigour under the UNC Workgroups.

There are no significant impacts to IGTs and arrangements for Shippers will mirror that of the UNC Modifications.

This Modification will simply enable the relationship between National Gas Transmission and Shippers, and between National Gas Transmission and the Consumer to exist on IGT networks as it does within Large Transporter networks.

It should be noted that currently 0844 and 0845 have not been implemented in the UNC, and the sections of this Modification that relates to them is dependent on them being supported by Authority Direction.¹

Below is a breakdown of what this Modification looks to replicate from the UNC into the IGT UNC;

[0822: Reform of Gas Demand Side Response Arrangements.](#)

- This Modification was implemented on 17th October 2022, following an Urgent Authority Decision.
- This Modification allowed for National Gas Transmission to issue a tender to Users seeking commitments, in advance, to offer DSR volumes that would physically be delivered by Class 1 Consumers.
- Where National Gas Transmission accepted a DSR Option offer from a User, it provided for an Option fee to be paid in respect of each month of the Winter Period, alongside an Exercise payment where the User, would be paid if DSR arrangements were triggered.
- The trigger was extended for opening the DSR market, from the issue of a Gas Balancing Notification, to also include issue of a Margins Notice at the day ahead stage.

[0833: Enabling Demand Side Response \(DSR\) Market Offers to be made by Non-Trading System Transactions.](#)

- This Modification was implemented on 9th December 2022 following an Urgent Authority Decision.
- This enabled National Grid Transmission to effect DSR trades with Users that don't have access to the On-the-day Commodity Market (OCM), and thereby enable their participation in the DSR tender.

[0844: Enabling Direct Contractual Arrangements with Consumers for Demand Side Response.](#)

- This Modification is currently at Consultation stage, ahead of being issued for Authority Decision.
- This change builds on 0822 and 0833 to expand the scope of the DSR arrangements set out above to include the ability for National Gas Transmission to establish direct contractual arrangements with individual Class 1 Consumers who wish to volunteer the reduction of their gas demand.
- Shippers have raised in Consultation that they want to be notified should NGT accept a DSR Option offer from a Consumer, which NGT have committed to providing. A new draft UNC Modification is underway to obligate NGT to also inform the Shipper when NGT exercises a Consumer DSR Option.

¹ As has previously been the case with IGT UNC modifications. [IGT138V – Performance Assurance Techniques and Controls](#) sets the precedent that was dependant on the implementation of UNC 0674.

Should that draft UNC Modification be implemented there will be no need for an IGT UNC mirror Modification as this will be picked up under the current proposed legal text.

[0845: Enhancements to Demand Side Response \(DSR\) Arrangements including a D-5 Product.](#)

- This Modification is currently at Consultation stage, ahead of being issued for Authority Decision.
- This Modification allows for DSR arrangements to also permit Users to participate in the DSR tender where the physical demand reduction would be delivered by a Class 2 Consumer for which they are the Registered User
- It amended the determination of the quantity of demand reduction under a DSR Option.
- This also allowed for Option offers to specify restrictions to the days they could be exercised. It provided greater clarification on the obligations a User may have, should a DSR Option be exercised and great optionality for Users and Consumers in the tender process.
- This also allowed for National Gas Transmission to procure DSR Options that may be exercised with a 5-day lead time.

Why

This Modification is enabling the IGT UNC to be aligned with the UNC, in terms of its governance and to allow Class 1 and 2 Consumers on IGT networks to have the ability to take part in DSR arrangements.

Demand Side Response serves as a mitigating tool against the risk of a Gas Deficit Emergency (GDE). Enhanced measures to safeguard gas security of supply have come into sharper focus since the war in Ukraine and associated reduction in gas supplies to the EU.

How

The IGT UNC will need to be modified to include references to the changed UNC TPD document to enable the contractual arrangements to be conducted on IGT networks. Currently, there are no references in Code to DSR.

2 Governance

Justification for Normal Procedures

This Modification should be subject to an Authority Decision, to align with that of the UNC modifications, that have either gone through, or are about to go through Ofgem scrutiny before being approved.

Requested Next Steps

This modification should:

- proceed to Consultation, following initial discussions at July Modification Workgroup. It is recognised that extensive discussions have taken place under the UNC and that this modification will simply replicate the arrangements for Users and Consumers on IGT networks, with no variation required to the arrangements.
- be subject to Authority Decision.

3 Why Change?

Currently the IGT UNC is silent on the subject of Demand Side Response. A Modification of the Code is proposed in order to bring the IGT UNC up to speed to allow for Consumers on our networks to be able to partake in DSR Options as they do on Large Transporter networks.

DSR arrangements provide a mechanism for large Consumers (Class 1 & 2) of gas to offer to reduce their demand via their User in return for a payment that they define during times of system stress.

DSR as a whole is required to mitigate the risk of a Gas Deficit Emergency (GDE), and specifically an IGT UNC Modification is required to allow Class 1 and 2 on IGT networks to have the ability to benefit from these arrangements but also assist in the prevention of a GDE occurring. This will then reduce the likelihood, severity or duration of a gas supply emergency and provide a 'route to market' for large consumers to potentially receive greater financial compensation than they would under a GDE.

Should this change not be made, supply may not be able to meet demand and could lead to a GDE.

4 Code Specific Matters

Technical Skillsets

None.

Reference Documents

- [0822: Reform of Gas Demand Side Response Arrangements.](#)
- [0833: Enabling Demand Side Response \(DSR\) Market Offers to be made by Non-Trading System Transactions.](#)
- [0844: Enabling Direct Contractual Arrangements with Consumers for Demand Side Response.](#)
- [0845: Enhancements to Demand Side Response \(DSR\) Arrangements including a D-5 Product.](#)
- [National Grid - DSR Framework and Methodology Document](#)

5 Solution

This Modification is simply looking to allow those on IGT sites to do the same as those on GDN sites. In order to facilitate this, the IGT UNC needs to be updated to point to the relevant sections of the UNC that refer to Demand Side Response, within UNC Modifications 0822, 0833, 0844 and 0845.

It should be considered that Modifications 0844 and 0845 have not been implemented yet and are currently at Consultation in the UNC. This Modification has been drafted so that, should either of these Modifications NOT be approved, then this Modification will merely not implement either or both of those elements of DSR arrangements within the IGT. Equally, should Ofgem deem that the 0822 and 0833 elements of this Modification not be implemented, this Modification will be withdrawn. This is reflected in the legal text, attached within the Modification documents on the IGT UNC website.

For clarity;

Modification	Legal Text
0822	TPD Section D, Clauses 5 and 7
0833	TPD Section D, Clauses 5 and 7
0844	TPD Section D, Clauses 7 and 8
0845	TPD Section D, Clause 7

Should 0844 not be approved, there will be no changes to the IGT UNC legal text in this Modification.

Should 0845 not be approved, Clause 8 will not be included in the IGT UNC legal text.

See Appendix 1 for full Solutions to the UNC Modifications.

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

What is the current consumer experience?

Currently, Consumers on IGT networks are unable to partake in DSR contracts with National Gas Transmission. This prevents them being able to financially benefit from the arrangements and also partake in preventing a Gas Deficit Emergency.

What would the new consumer experience be?

This Modification provides Class 1 Consumers with an opportunity to contract directly with National Gas Transmission and Class 1 and 2 Consumers via their Registered User to provide DSR at times when expected available supply is insufficient to meet forecast demand. This would help prevent a supply shortfall situation escalating to a GDE which would have detrimental impacts on a wider group of consumers.

Impact of the change on Consumer Benefit Areas

Area	Identified Impact
<p>Improved safety and reliability</p> <p>This will allow National Gas Transmission to have foreknowledge about whether any DSR will be available if needed, meaning better reliability. Allowing for the Option Price and lead-times also means for a greater ability for Consumers to partake in the arrangements.</p>	<p>Positive</p>

<p>Without this, preventing escalation towards a GDE could impact all consumer groups.</p>	
<p>Lower bills than would otherwise be the case</p> <p>The impacts on consumer bills from a GDE are unquantifiable in advance but are likely to be significant as wholesale gas prices would rise in response to the insufficient supply situation that would trigger such an event.</p> <p>However, if DSR Market Offers are not required during a Winter Period then the option payments would still be funded by Users through balancing neutrality which may then be passed on to consumers.</p>	<p>Positive</p>
<p>Reduced environmental damage</p> <p>A quantifiable impact on the environment is not envisaged as a result of this Modification. There is potential for 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.</p>	<p>Unknown/negligible</p>
<p>Improved quality of service</p> <p>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.</p>	<p>Positive</p>
<p>Benefits for society as a whole</p> <p>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 a comparatively modest financial incentive relative to the potential scale of these impacts as proposed by this Modification would provide additional mitigation against such risks arising.</p>	<p>Positive</p>

Cross-Code Impacts

There are Cross-Code Impacts with the UNC as this Modification looks to take on UNC mods to apply to the IGT UNC.

UNC	<input checked="" type="checkbox"/>
REC	<input type="checkbox"/>
Other	<input type="checkbox"/>
None	<input type="checkbox"/>

Environmental Impacts

No environmental impacts are seen as directly being caused by this Modification.

Central System Impacts

Central System changes have been implemented and further are proposed, both which look to include IGTs within these changes. This will be centred around invoicing DSR Participants via the RTB process. There is also a focus on data provision for NGT to support the DSR process.

The detailed design change pack for UNC modification 0844 will be issued in July 2023. Currently CDSP do not anticipate an implementation cost, though this would be reassessed should volumes increase above 30 Consumers.

7 Relevant Objectives

Impact of the modification on the Relevant Objectives:	
Relevant Objective	Identified impact
(A) Efficient and economic operation of the pipe-line system	Positive
(B) Co-ordinated, efficient and economic operation of <ul style="list-style-type: none"> (i) the combined pipe-line system; and/or (ii) the pipe-line system of one or more other relevant gas transporters 	Positive
(C) Efficient discharge of the licensee’s obligations	None
(D) Securing of effective competition: <ul style="list-style-type: none"> (i) between relevant shippers; (ii) between relevant suppliers; and/or (iii) between DN operators (who have entered into transportation agreements with other relevant gas transporters) and relevant shippers 	None
(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 Cooperation 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, Independent Gas Networks may be given instructions to implement the shedding of firm loads within their networks resulting in disruption and inefficiency.

8 Implementation

This Modification should be implemented as soon as possible following Authority Decision to allow to be in place for 2023/2024 Winter Period. The relevant UNC Modifications 0844 and 0845 that are currently at Consultation stage, following full workgroup scrutiny have a proposed implementation of 7th August 2023, to allow for procurement to be conducted in time for the 2023/2024 Winter Period.

Reliance of Modifications 0844 and 0845 Approval.

It should be noted that currently 0844 and 0845 have not been implemented in the UNC, and the sections of this Modification that relates to them is dependent on them being supported by Authority Direction.

9 Legal Text

Text Commentary

For legal text please see accompanying document.

10 Recommendations

Proposer's Recommendation to Panel

Panel is asked to:

- Agree that Normal governance procedures should apply
- Issue this Modification directly to Consultation
- Agree that this Modification should be subject to an Authority Decision in line with the UNC changes.

11 Appendix 1 – Solution Section for UNC Modifications 0822, 0833, 0844 and 0845.

0822

The UNC will be modified to enable National Grid NTS to issue an invitation to all Users to commit to post DSR Market Offers for the current / forthcoming Winter Period and the next two Winter Periods. Such quantities would be physically delivered (if called upon by National Grid NTS) as now by a reduction in gas demand by consumers with an Annual Quantity greater than 2 million therms per annum. (For information, a multi-year option is proposed because the consumer may require longer term certainty in its revenue stream from DSR to recover the costs it would incur to be available for DSR). The User would receive a payment ('option payment') for each accepted offer from this process which would be passed on to those consumer(s) within its portfolio that would deliver the demand reduction physically, subject to terms agreed between the consumer and its shipper/supplier. Such acceptance would also create a UNC obligation on that User to place a DSR Market Offer onto the OCM DSR Locational Market in respect of each consumer that is available for National Grid NTS to accept on each day when the DSR Locational Market is open.

Option payments shall be funded from balancing neutrality and shall not exceed a value specified in the DSR Methodology, initially set at £5m per Winter Period, without further oversight by the Authority. Whilst it is not possible to estimate the costs of a GDE against which option payments would provide a form of insurance against, it is considered important to provide an expectation of the cap on the maximum potential exposure for Users. This figure is expected to be sufficient for National Grid NTS to be able to accept a volume of DSR based on the indicative costs of demand turndown provided to National Grid NTS by industrial consumers and would be capable of revision in the future based on market conditions and experience when the DSR Methodology falls due for review. However, should National Grid NTS wish to accept option offers for an aggregate value which is greater than that specified in the DSR methodology, the DSR methodology shall provide that National Grid NTS may notify the Authority of the higher value that it wishes to accept which the Authority may veto. Option payments shall not contribute to the determination of imbalance cashout prices for any day because they will be applicable to the whole Winter Period and are unlikely to reflect the cost of imbalance for any particular day.

The trigger for opening the OCM DSR Locational Market shall be extended from the issue of a GBN by National Grid NTS (which may be issued within day or day ahead) to also include the issue of a Margins Notice, which may only be issued at the day ahead stage. This aspect of the Modification seeks to strike a balance between National Grid NTS retaining its role to only intervene in the market as the residual balancer within prompt market timescales and lengthening the lead-time which consumers have to provide their curtailment response, which a number of consumers have stated is crucial to enable their participation. Whilst lead-time of D-1 will still not be sufficient for many consumers to participate, (some industrial consumers require a matter of weeks to schedule gas demand turndown), we believe that National Grid NTS should not be able to accept DSR Market Offers prior to D-1 as this would fundamentally change its residual balancing role and prior to this lead-time, Users, as the primary balancers of the system, should maintain the responsibility of securing supplies to meet their demand portfolios. Where the DSR Locational Market has been opened following the issue of a Margins Notice, it shall be closed at the end of the next gas day if a GBN or GDE has not been subsequently declared and unless a further Margins Notice has been issued.

Where a User has a day ahead option accepted, that User shall be obliged to post a DSR Market Offer for at least the lesser of the accepted quantity or its prevailing Output Nomination, within 1 hour of the DSR Locational Market being opened and would not be permitted to increase the relevant Output Nomination during the period when the DSR market is open. National Grid NTS shall not accept any day ahead DSR Market Offers after 17:00 on D-1. Where the option applies within day, the quantity to be posted as the DSR Market Offer shall reduce over the course of the day on a 1/24th basis, subject to a maximum 6 hour lead-time. If the User fails to post the relevant DSR Market Offer having had an option accepted then it shall incur a penalty charge equal to 110% of the value of its option payment, provided that this shall be reduced proportionately based on the number of DSR Market Offers that were accurately posted during that Winter Period.

For information:

- National Grid NTS shall conduct a consultation on complimentary changes to its Gas Demand Side Response Methodology in parallel with this Modification's consultation, subject to a derogation from the Authority that permits a shorter consultation period than the minimum 28 days that is required by the NTS Licence; and
- A change to National Grid's NTS Licence will be required to enable National Grid NTS to accept DSR Market Offers following the issue of a Margins Notice as well as a GBN. It is proposed that a Licence change would be initiated following a positive decision by the Authority on this Modification and associated DSR Methodology, and that permission for National Grid NTS to operate in this way could be facilitated by a derogation in the interim.

0833

The UNC will be modified to enable:

- (i) National Grid NTS and Users that have had DSR Options accepted but do not have OCM access to effect DSR Locational Market Transactions as Non-Trading System Transactions (i.e., as 'over the counter' trades);
- (ii) National Grid NTS and Users to have visibility of DSR Market Offers during a Voluntary DSR Period (which post implementation of UNC0822 may be triggered either by a Margins Notice or GBN); and
- (iii) Amend the units in which DSR Option Prices are submitted from p/kWh to p/kWh/day.

0844

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

1. 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:
 - a. 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 multi-year 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,

$$ADD - ((ADD / 24 \times HB) + (MinQ / 24 \times HA))$$

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 $(Q \times P) \times N$, 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

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It is proposed that the UNC is modified to amend the DSR arrangements in 7 areas:

1. Eligibility Criteria

Extend the eligibility criteria for Users to offer DSR that would be physically delivered by Consumers (whether or not pursuant a DSR Option) from the current Class 1 group only (requiring a minimum Annual Quantity of 2 million therms) to also include Class 2 Consumers, which are also daily metered.

2. Basis of DSR Option Offer and determination of the quantity of demand reduction

At present, a User may respond to the DSR Invitation to Offer by submitting one or more energy quantities of DSR. It is proposed to amend this such that the User would submit one daily quantity 'minimum offtake quantity' that the Consumer would not exceed during the period for which DSR was effective if the DSR Option were to be exercised.

The quantity of demand reduction that would apply for the purposes of assessment and that would determine the Option Fee shall be the difference between the average daily demand of the relevant Consumer over the previous Winter Period (excluding any days on which demand in respect of that Consumer was reduced either by DSR exercise or a NGSE) and the minimum offtake quantity.

If a within-day or D-1 DSR Option is exercised, the quantity of demand reduction that shall be used to calculate the exercise fee shall be based on the difference between the User's prevailing Output Nomination in respect of that Consumer and its tendered minimum offtake quantity. For a D-5 DSR Option, such quantity shall be equal to the difference between the average daily demand of the relevant Consumer over the previous Winter Period (excluding any days on which demand was reduced either by DSR exercise or a NGSE) and the minimum offtake quantity that the User submits via the DSR Option Invitation.

Further business rules are provided below to explain how this will work in respect of within-day, D-1, and D-5 DSR Options.

3. Restrictions to Exercise

The terms of the DSR Option Invitation shall enable Users to restrict the days within a Winter Period that a DSR Option may be exercised on. A User may specify:

- 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.

4. User Obligations – DSR Options

Amend the obligations on a User holding a DSR Option to post DSR Market Offers if the DSR Locational Market is opened.

At present, on the first day of a Voluntary DSR Period, UNC requires the User to post a DSR Market Offer within 60 minutes from the start of that period and if such period extends to subsequent days, by 0600 on any subsequent day.

Where a D-1 DSR Option is held and the trigger for opening the market is a Margins Notice, for subsequent Days a new Margins Notice would need to be issued to prolong the DSR event, which would likely not be issued before 0600, therefore the User obligation in this case shall be within 60 minutes of a Margins Notice being issued, on the first day and any subsequent days.

A Margins Notice, once issued, remains in force for the Day to which it applies, whereas a GBN remains in place, potentially across several Days, unless it is withdrawn. Therefore, where a User holds a D-1 DSR Option and the trigger for opening the DSR locational market is a GBN, the obligation on the User shall be to post a DSR Market Offer on subsequent days within 60 minutes of the market opening for D-1 trading, therefore by 0900 for the following day. The obligations that shall apply for different combinations of DSR Option and notification trigger are summarised in the table below:

Option held	Notification trigger	Shipper obligation - first day	Shipper obligation - subsequent days
Within-day	Margins Notice on D-1	post offer on D by 06:00 on D	post offer on D by 06:00 on D
	GBN D-1	post offer on D by 06:00 on D	post offer on D by 06:00 on D
	GBN within day	post offer for current day within 60 mins of GBN issue	post offer for current day by 06:00 if GBN not withdrawn
D-1	Margins Notice on D-1	post offer on day MN issued for tomorrow within 60 mins of MN issue	post offer on day MN issued for tomorrow within 60 mins of MN issue
	GBN D-1	post offer on day GBN issued for tomorrow within 60 mins of GBN issue	post offer by 09:00* for tomorrow if GBN not withdrawn
	GBN within day	post offer for tomorrow within 60 mins of GBN issue	post offer by 09:00* for tomorrow if GBN not withdrawn

Further, UNC TPD D7.6.6 requires that NGT may not accept a DSR Market Offer that is posted pursuant to a D-1 DSR Option later than 17:00 on D-1. To provide clarity for Users, it is proposed to introduce an additional rule that a User shall not be obliged to post such offer if the Margins Notice is issued after 16:00 on D-1.

5. Product Optionality

Whereas at present, a User may offer either a D-1 or a within-day DSR Option in respect of a Consumer, it is proposed to introduce greater optionality by enabling Users to offer DSR Options for more than one DSR product in respect of the same Consumer, from which NGT may select one.

6. Assessment Process

At present, UNC TPD D7.5 requires NGT to accept DSR Option Offers in aggregate price order (option plus exercise), prioritising within-day DSR options over D-1 DSR options, based on the total amount of Option Fees that NGT determines should be incurred for a given Winter Period.

It is proposed to amend these assessment rules such that within-day DSR Options are prioritised over D-1 DSR Options, which in turn are prioritised over D-5 DSR Options and to enable NGT to also consider in its assessment of offers:

- Any restrictions to the number of days that DSR may be exercised on in a Winter Period that are specified by a User,
- Which DSR Option Offer to accept in the case where a User submits an offer for more than one DSR product in respect of the same Consumer for the same Winter Period.

7. Introduction of a D-5 DSR Product

It is proposed that the UNC is modified to extend the arrangements that have been implemented by UNC0822 which introduced within-day and D-1 DSR Options to also include D-5 DSR Options. NGT would have the ability to enter into such arrangements and exercise such options at D-5 in respect of day D if it forecasts a supply deficit on day D of 14 mcmd or greater. The rationale for this threshold is that 13.7 mcm is the target forecast error for NGT's D-2 to D-5 reputational demand forecasting incentive and

as such can be considered as a reasonable level of uncertainty. If this condition was met, NGT would then decide whether to exercise D-5 DSR Options.

The business rules for UNC0822 shall apply as far as possible in respect of D-5 Options, subject to amendments in the following key areas:

- The annual DSR Option Invitation shall include D-5 DSR Options;
- The timescales by which Users post their DSR Market Offers and NGT accepts them pursuant to accepted D-5 DSR Options;
- A new trigger for D-5 exercise pursuant to D-5 DSR Options shall be executed.