









UNC Modification	At what stage is this document in the process?
<h1 data-bbox="132 320 657 412">UNC 0806:</h1> <h2 data-bbox="132 450 1123 589">Change to Curtailment Trade Price Compensation in Section Q</h2>	<div data-bbox="1209 309 1468 629"> <div data-bbox="1209 309 1468 376">01 Modification</div> <div data-bbox="1209 387 1468 454">02 Workgroup Report</div> <div data-bbox="1209 465 1468 533">03 Draft Modification Report</div> <div data-bbox="1209 544 1468 611">04 Final Modification Report</div> </div>
<p>Purpose of Modification:</p> <p>Given changes to the GB energy system, this Modification is to provide adequate incentive and compensation to help ensure gas is purchased in advance.</p>	
<p>Next Steps:</p> <p>The Proposer recommends that this Modification should be considered a material change and not subject to Self-Governance</p> <p>This Modification will be presented by the Proposer to the Panel on 21 April 2022. The Panel will consider the Proposer's recommendation and determine the appropriate route.</p>	
<p>Impacted Parties:</p> <p><i>Suppliers, Shippers, Consumers.</i></p> <p>Medium impact as probability of impact is low but price impact could be material.</p>	
<p>Impacted Codes:</p> <p>UNC TPD Section Q Section 6 Emergency Curtailment and Demand Side Response (DSR) Payments.</p>	

Contents		 Any questions?
1	Summary	3
2	Governance	3
3	Why Change?	4
4	Code Specific Matters	4
5	Solution	5
6	Impacts & Other Considerations	5
7	Relevant Objectives	6
8	Implementation	8
9	Legal Text	8
10	Recommendations	8
Timetable		 Any questions? Contact: Joint Office of Gas Transporters  enquiries@gasgovernance.co.uk  0121 288 2107 Proposer: Jeff Chandler SSE  mailto:Jeff.Chandler@sse.com Transporter: Darren Lond , National Grid  Darren.lond@nationalgrid.com  07769 724 892 Systems Provider: Xoserve  UKLink@xoserve.com
Modification timetable:		
Pre-Modification Discussed	07 April 2022	
Date Modification Raised	28 March 2022	
New Modification to be considered by Panel	21 April 2022	
First Workgroup Meeting	05 May 2022	
Workgroup Report to be presented to Panel	21 July 2022	
Draft Modification Report issued for consultation	22 July 2022	
Consultation Close-out for representations	12 August 2022	
Final Modification Report available for Panel (<i>short notice</i>)	15 August 2022	
Modification Panel decision	18 August 2022	

1 Summary

What

The current curtailment compensation payment in paragraph 6.1.1 (c) of TPD section Q of the UNC pays the average of the 30 days System Average Prices (SAP) preceding the Day, this is unlikely to be reflective of the price of gas on a day if Firm Load Shedding is instructed. Under the current rules the load shedding hierarchy has a largest off first approach, with few exceptions, therefore Gas fired generating plant (CCGTs) are likely to be the first called off. In addition, the resulting loss on the electricity wholesale market is not compensated for during Firm Load Shedding in Stage 2+. These act as a disincentive and barrier to hedge electricity generation and purchase gas in advance.

Why

Gas fired generating plant (Gas plant) plays an increasing role in meeting electricity demand as coal plant is closed. Gas plant are running less often as renewable generation capacity increases but also have a key role in managing intermittency of these generation sources. Overall, gas fired generating plant will increasingly only be used when wind availability is limited. This wind availability is not known with certainty until between a week to 1 day in advance of delivery. Without a change to the gas curtailment entitlement rules and curtailed price gas compensation, the commercial risk of purchasing gas in advance for electricity generation and trading the electricity forward may be viewed as too great. This is because a curtailed generator is exposed to electricity cashout, up to £ 6000 /MWh in a tight market and repayment of Capacity Market funding, whilst the revenue from forward baseload spark spread might only be valued at £10 /MWh. This means that less gas might be purchased in advance which may increase strain on the short-term market with the potential for system gas demand to be greater than supply.

How

This Modification proposes to change the Emergency Curtailment Trade Price defined in UNC TPD Section 6.1.1 (c) from the arithmetic mean of the SAP of the 30 Days preceding the Day to the SAP of the Day preceding the Day.

2 Governance

Justification for Authority Direction

The impact of this Modification is considered to have a low probability, but the price impact could be material and hence should not be subject to Self-Governance. The guidelines relating to consideration of Authority Direction which are directly impacted are:

- *(dd) matters relating to sustainable development, safety or security of supply, or the management of market or network emergencies.*

Requested Next Steps

This Modification should:

- be considered a material change and not subject to Self-Governance; and
- be assessed by a Workgroup.

3 Why Change?

Driver and benefits and which parties are impacted

The driver is to reduce a dis-incentive and barrier to hedge electricity generation and purchase gas in advance. The current risk reward arising from UNC TPD Section Q paragraph 6 curtailment compensation acts as a dis-incentive to hedge electricity generation and purchase gas in advance.

A lack of certainty of success exists in the Post Emergency Claims Process for voluntary load shedding prior to stage 2 Firm Load Shedding. (Higher bids are withheld and a lengthy claims process through arbitration might occur.) This background of lack of certainty over the claims process and given that stress events may occur out of normal working times with shift workers working remotely, makes the probability of voluntary load shedding when power prices have already been in excess of £4000 MWh, without a gas supply event, low. The week to day ahead intermittency of gas generation in the electricity market and the commercial structure of the gas market do not incentivise behaviour of purchasing gas in advance but rather encourage waiting until day ahead. This risks short term market stress on the gas system.

Changing the compensation to the SAP of the Day preceding curtailment will lower the market price risk and potentially remove a barrier to purchasing gas in advance and allow hedging of electricity positions. This will increase the potential for system gas supply to match demand.

If this Modification is not implemented, the current arrangements mean that parties being load shed risk bankruptcy if they have hedged forward and are Firm Load Shed for the good of society. The current arrangements are not reasonable and indeed could be asserted as discriminatory as they impose unacceptable commercial risk on Shippers.

Without changes to the curtailment rules, the physical need and commercial risk of purchasing gas in advance for electricity generation and hedging may be viewed as too great. This means that less gas is purchased in advance which may increase the potential for system gas demand to be greater than supply, which increases stress on the gas system.

Implementing this Modification will benefit wider society because gas supply will be better matched to demand. Shippers may have improved compensation that better reflects the market price under stressed conditions in the time immediately preceding an emergency, for losses incurred. With this knowledge they may be encouraged to purchase gas in advance as part of a hedging strategy and therefore remove short term market stress. The increased compensation may arise from an increase in differential between the 30 day average of SAP and SAP of the preceding Day. Affected Shippers may then pass these costs to customers, this is fair because customers will have had their supply protected and it seems reasonable to pay for this insurance service.

The proposed solution is to change the current curtailment compensation in TPD section Q paragraph 6.1.1 (c).

4 Code Specific Matters

Reference Documents

UNC TPD Section Q paragraph 6 <https://www.gasgovernance.co.uk/TPD>

UNC TPD Section V paragraph 12 <https://www.gasgovernance.co.uk/TPD>

DR ECQ Methodology [Microsoft Word - Emergency Curtailment Quantity v2.0.doc \(gasgovernance.co.uk\)](#)

User guidance on PEC [Microsoft Word - Post Emergency Claims Economic Assessment Guidelines _Version 2_ Final .docx \(nationalgrid.com\)](#)

Relevant Information on NGG website impacted by proposed changes:

<https://www.nationalgrid.com/gas-transmission/safety-and-emergencies/network-gas-supply-emergencies-ngse>

5 Solution

In paragraph 6.1.1 (c), change the calculation of the Emergency Curtailment Trade Price from the arithmetic mean of the System Average Prices for each of the 30 Days preceding the Day to the System Average Price of the Day preceding the Day.

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

The Emergency Curtailment Trade Price may increase, this may lead to a cost increase for Shippers and may be passed onto Customers.

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

This Modification seeks to remove the risk of gas supply being less than demand and any resulting load shedding. If this were to occur, it is possible that electricity produced by gas generation, the largest Customer, is interrupted and other end customers experience loss of electricity and other associated services. The large customer no longer generating electricity will experience electricity cashout costs of £60 Million for a 10 hour interruption for 1 GW of capacity based on Value Of Lost Load (VOLL) of £6000 /MWh and if in a tight electricity capacity market, repayment of Capacity Market Payments, anywhere between £0.70 and £70 kW (£0.7 Million to £70 Million depending on the number of interruptions). The current level of commercial risk faced by parties that may be load shed does not seem reasonable and indeed could be asserted as discriminatory as it imposes unacceptable commercial risk on Shippers.

If this Modification is implemented, the probability of load shedding should be made more unlikely so end customers avoid loss of electricity and associated services. In the unlikely event of Firm Load Shedding any increase in cost between the 30 day average SAP and the SAP price will be incurred by Shippers on the basis of throughput and this may feed into end Customer bills or it may be absorbed by Shippers.

Impact of the change on Consumer Benefit Areas:

Area	Identified impact
<p>Improved safety and reliability</p> <p>This change will mean that the energy system can operate more safely and reliably now and in the future in a way that benefits end consumers.</p>	Positive
<p>Lower bills than would otherwise be the case</p> <p>In the unlikely event of firm load shedding of the large gas fired electricity generating customers; they will be slightly better off than before this Modification was implemented. The saving for one party will be transferred to other Shippers and may be absorbed or passed onto end customers. This can be thought of as a cost of insurance for keeping a secure energy supply.</p>	Positive
<p>Reduced environmental damage</p> <p>Not applicable</p>	None
<p>Improved quality of service</p> <p>Improved gas purchasing and hedging and hence continuation of a secure of energy supply</p>	Positive
<p>Benefits for society as a whole</p> <p>Improved gas purchasing and hedging and hence security of energy supply</p>	Positive

Cross-Code Impacts.

No other Codes are directly impacted.

EU Code Impacts

None.

Central Systems Impacts

None.

7 Relevant Objectives

Impact of the Modification on the Transporters' Relevant Objectives:

Relevant Objective	Identified impact
a) Efficient and economic operation of the pipe-line system.	Positive
b) Coordinated, efficient and economic operation of (i) the combined pipe-line system, and/ or	None

(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: (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.	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.	Positive

Positive impact on Relevant Objective a) Efficient and economic operation of the pipe-line system:

If firm load shedding can be avoided and security of energy supply maintained by creating an incentive to hedge electricity generation and purchase gas in advance this will increase efficient and economic operation of the pipeline system.

Only limited Coal fired generation is available in GB and electricity produced by gas will increasingly only be used when wind availability is limited. This wind availability is not known with certainty until between a week to 1 day in advance of delivery. Without a change to the gas curtailment entitlement rules and curtailed price gas compensation, the commercial risk of purchasing gas in advance for electricity generation and trading the electricity forward may be viewed as too great. This is because a curtailed generator is exposed to electricity cashout, up to £ 6000 /MWh in a tight market and repayment of Capacity Market funding, whilst the revenue from forward baseload spark spread (difference between electricity – gas- carbon) might only be valued at £10 /MWh. This means that less gas might be purchased in advance which may increase the potential for system stress.

Changing the compensation to the SAP of the day preceding curtailment, rather than 30 day average before, will lower the gas market price risk and potentially remove a barrier to purchasing gas in advance. This will increase the potential for system gas supply to match demand.

Positive impact on Relevant Objective f) Promotion of efficiency in the implementation and administration of the Code:

If firm load shedding can be avoided and security of energy supply maintained by creating an incentive to hedge electricity generation and purchase gas in advance this will increase efficient implementation of the Code.

Only limited Coal fired generation is available in GB and electricity produced by gas will increasingly only be used when wind availability is limited. This wind availability is not known with certainty until between a week to 1 day in advance of delivery. Without a change to the gas curtailment entitlement rules and curtailed price gas compensation, the commercial risk of purchasing gas in advance for electricity generation and trading the electricity forward may be viewed as too great. This is because a curtailed generator is exposed to electricity cashout, up to £ 6000 /MWh in a tight market and repayment of Capacity Market funding, whilst the revenue

from forward baseload spark spread difference between electricity – gas- carbon) might only be valued at £10 /MWh. This means that less gas might be purchased in advance which may increase the potential for system stress.

Changing the compensation to the SAP of the day preceding curtailment, rather than 30 day average before, will lower the gas market price risk and potentially remove a barrier to purchasing gas in advance. This will increase the potential for system gas supply to match demand.

8 Implementation

The Proposer is seeking to have the Modification implemented as soon as possible.

9 Legal Text

Text Commentary

Insert text here.

Text

Insert text here.

10 Recommendations

Proposer's Recommendation to Panel

Panel is asked to:

- Agree that Authority Direction should apply.
- Refer this proposal to a Workgroup for assessment.