















UNC Draft Modification Report		At what stage is this document in the process?
<h1>UNC 0729:</h1> <h2>Applying a discount to the Revenue Recovery Charge at Storage Points</h2>		<div>01 Modification</div> <div>02 Workgroup Report</div> <div>03 Draft Modification Report</div> <div>04 Final Modification Report</div>
<p>Purpose of Modification:</p> <p>The revised NTS Charging Methodology (in place from 01 October 2020) includes a discount for capacity purchased at storage sites of 50%, however, no such discount is applied to the application of the Revenue Recovery Charge (RRC). This Modification seeks to reflect the Storage Discount in a discount to the RRC rate to be applied to capacity held at storage sites. It is proposed that this change is introduced on 01 October 2020 or as soon as possible thereafter.</p>		
	<p>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.</p> <p>The close-out date for responses is 11 September 2020, which should be sent to enquiries@gasgovernance.co.uk. A response template, which you may wish to use, is at: https://www.gasgovernance.co.uk/0729.</p> <p>The Panel will consider the responses and agree whether or not this Modification should be made.</p>	
	<p>High Impact:</p> <p>All parties that pay NTS Transportation Charges and/or have a connection to the NTS, and National Grid NTS.</p>	
	<p>Medium Impact:</p> <p>N/A</p>	
	<p>Low Impact:</p> <p>N/A</p>	

Contents		 Any questions?
1	Summary	3
2	Governance	3
3	Why Change?	4
4	Code Specific Matters	7
5	Solution	8
6	Impacts & Other Considerations	8
7	Relevant Objectives	12
8	Implementation	16
9	Legal Text	16
10	Recommendations	17
11	Appendix – Alternative analysis	18
Timetable		 0121 288 2107
The Proposer recommends the following timetable:		Proposer: Benoit Enault, Storengy UK Ltd
Modification considered by Panel	16 July 2020	 enquiries@gasgovernance.co.uk
Initial consideration by Workgroup	04 August 2020	 benoit.enault@storengy.co.uk
Workgroup Report presented to Panel	20 August 2020	 01606 815 372
Draft Workgroup Report issued for consultation	21 August 2020	Transporter: National Grid NTS
Consultation Close-out for representations	11 September 2020	 colin.williams@nationalgrid.com
Final Modification Report available for Panel (at short notice)	15 September 2020	 01926 655916 or 07785 451776
Modification Panel decision	17 September 2020	Systems Provider: Xoserve
		 commercial.enquiries@xoserve.com
		Other Nick Wye
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1 Summary

What

The revised NTS Charging Methodology (the 'revised Methodology') which takes effect from 01 October 2020 includes a discount to be applied to storage related NTS (Entry & Exit) Capacity. This Proposal seeks to set the same level of discount to Revenue Recovery Charges ('RRC') for capacity held at storage.

Why

The revised Methodology aligns the overall GB Transmission Charging Methodology to the new charging structures compliant with the EU Tariff Code¹ and introduces a discount of 50% to apply for capacity booked at storage site. The discount is not extended to the application of RRCs. The RRC is a capacity-based tariff employed to ensure that National Grid recovers its Allowed Transmission Revenue across the Gas Year. The Proposer believes that as it is accepted in the EU Tariff Code that Storage Users should incur lower Capacity Charges that they should also be afforded the same discount to RRCs to avoid cross-subsidisation and ensure compliance with the EU Tariff Code.

How

Changes are proposed to the Charging Methodology contained within UNC TPD Section Y to include a discount to the RRCs for Entry and Exit Capacity holdings at Storage Points equivalent to the discount applied to the Specific Capacity Discount applied to the Reserve Prices in respect of Firm and Interruptible/Off-peak Capacity.

2 Governance

Justification for Authority Direction

The Proposer of the Modification requested that it should be treated as an Urgent Modification Proposal, however, Ofgem decided not to grant it urgent status on 30 June 2020². As such, the Modification will proceed under standard governance procedures

This Modification is recommended to be sent to the Authority for direction as it is likely to have a material effect on commercial activities relating to the shipping, supply and storage of gas. Further, the Modification Proposal will enhance security of price and supply in the UK. This Modification Proposal will reduce the transportation costs, in particular RRCs, incurred by the owners of gas Storage Facilities and/or the Users of the facilities. Without this change there is a danger that Storage Facilities will close, or Operators will limit the availability of Storage Capacity as the commercial viability of maintaining current levels will be significantly undermined. Further, the Modification Proposal will ensure compliance with the EU Tariff Code.

This Modification has not undergone pre-modification assessment by industry due to the recent developments concerning NTS charging arrangements for the upcoming Gas Year and as a consequence originally requested

¹ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017R0460&from=EN>

² https://gasgov-mst-files.s3.eu-west-1.amazonaws.com/s3fs-public/ggf/book/2020-06/Ofgem%20Urgency%20Status%20Decision%200729.pdf?JfocP45o_LroYhf8x4AKSsDiiqLwARax=

urgent status. In particular, the Modification has been submitted in response to the Ofgem Decision regarding Modification 0678A³ and its subsequent decision to grant Modification 0728 (and its alternatives) urgent status⁴.

Requested Next Steps

As the Modification was not granted urgent status it should proceed as a non-urgent Modification, but on an expedited basis to allow implementation to occur on the 1 October 2020, or a date soon thereafter,

3 Why Change?

Within the EU Tariff Code, there are requirements (Article 9⁵) to apply discounts for storage capacity, where “a discount of at least 50% should be applied to capacity-based transmission tariffs at Entry Points from and Exit Points to Storage Facilities.” This minimum discount is specific to storage in order to reduce the impact of double charging and in recognition of the general contribution to system flexibility and security of supply of such infrastructure. The revised Methodology requires that the discount to apply for capacity at storage sites is set at the minimum level of 50%.

In addition to the costs of acquiring Entry and Exit Capacity, National Grid can impose an RRC on Fully Adjusted Entry or Exit Capacity holdings in order to achieve the level of Allowed Transmission Revenue in a Gas Year. The revised Methodology establishes standard, unit capacity charges to be applied at all Entry and Exit Points. All capacity holdings are subject to the RRC with the exception of Existing Contracts at Entry Points.

As the EU Tariff Code and the revised Methodology require that discounts should be applied to storage capacity, for the purposes set out above, it is consistent to apply the same level of discount to other additional transmission capacity-based charges, such as the RRC.

The Proposer contends that the revised Methodology is inconsistent with Article 9, as the RRC is a capacity-based transmission tariff. If an equivalent discount was not applied to the RRC, the concession made to storage points in the EU Tariff Code is undermined, as storage Users will bear unreasonable and disproportionate levels of costs.

The revised Methodology is based on a Postage Stamp Reference Price Methodology (RPM). As such, reserve prices at Entry and Entry Points are standardised, without any geographical variation. The RRC is calculated and applied on the same basis as the underlying RPM, in that the amount of (under/over) recovered revenue is allocated uniformly against capacity holdings, again without any geographical variation.

The RRC is a capacity-based transmission charge and should be subject to a discount in accordance with Article 9 of the EU Tariff Code. Where a discount is not applied to this charge, the uplift to storage related Entry/Exit charges is disproportionate, resulting in storage Users subsidising other Users on the network.

Table 1 shows that the application of a standard, non-discounted RRC results in storage Users total capacity charges increasing at twice the rate of non-storage Users. As a result, storage Users will make a disproportionate contribution to overall Transmission Operator services costs, contravening the stipulation in Article 9 of the EU Tariff Code that storage Users transmission capacity-based charges should be discounted by at least 50%.

³ <https://www.gasgovernance.co.uk/0678>

⁴ <https://www.gasgovernance.co.uk/0728>

⁵ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017R0460&from=EN>

Table 1: Increase in total exit capacity charges based on potential RRC

Non-storage PS exit capacity charge	Storage PS exit capacity charge (50% discount)	Potential RRC charge (no discount)	% increase non-storage total capacity charges	% increase storage total capacity charges
0.0198	0.0099	0.001	5%	10%

Source: WWA

Impact of the Revenue Recovery Charge

The level of the Revenue Recovery Charge is anticipated to be communicated to industry 1-2 months before the commencement of the Gas Year. Further changes to this charge can be prompted by National Grid at any time during the Gas Year (in accordance with its Licence), to ensure revenues are in line with permitted levels. The charge rate will be based on National Grid's forecasted revenue under/over recovery. Factors which will contribute to this forecast will include, for example: changes in capacity bookings before the start of the Gas Year; changes to forecast Allowed Revenues due to regulatory intervention (such as RIIO settlements); and the establishment of new products (such as "shorthaul" services).

In order to quantify the impact of a Revenue Recovery Charge on storage Users, assumptions need to be made as to the amount of under/over recovered revenue. Table 2 sets out a range of possible revenue under-recoveries and, based on the Forecast Contacted Capacities (FCCs) provided in the National Grid Charging Notice⁶, determines the aggregate financial impact on GB storage Users. In the Appendix of this Modification, alternative analysis is provided reflecting the Proposer's view of more realistic forecast storage Exit capacity bookings because the aggregate Exit FCC recorded for storage in the Charging Notice appears to the Proposer to be excessively high.

Table 2: Impact of Revenue Recovery Charge on storage

Under-recovery	Standard RRC (p/kwh)	Cost to storage (£ aggregate)	50% Discounted RRC (p/kwh)	Cost to storage (50% RRC) (p/kwh)	RRC uplift to non-storage Users (p/kwh)	% increase in RRC for non-storage Users
£30m entry	0.004620	£910,860	0.002310	£455,430	0.000075	1.62%
£30m exit	0.001265	£2,211,098	0.000633	£1,105,549	0.000050	3.98%
£10m entry	0.001540	£303,620	0.000025	£151,810	0.000025	1.62%
£10m exit	0.000422	£737,032	0.000211	£368,516	0.000017	3.98%

⁶ https://gasgov-mst-files.s3.eu-west-1.amazonaws.com/s3fs-public/ggf/book/2020-06/October%202020%20Charging%20Information%20Provision%20R1.pdf?ZT_uMgcWFOlnR_clZGx5BdlImey6o8pB=

£50m entry	0.007699	£1,518,101	0.003850	£759,050	0.000124	1.62%
£50m exit	0.002109	£3,685,163	0.001054	£1,842,581	0.000084	3.98%

Source: WWA

Table 2 shows that, depending on the amount of revenue needed to be recovered, the impact on storage, particularly on Exit Capacity holdings can be material. A modest revenue under-recovery of £10m (at entry and exit) results in over £1m of additional charges being levied on storage capacity holdings whereas an under-recovery of £50m (at entry and exit) would impose additional costs of £5.2m. Applying a 50% discount on the storage RRC would reduce these costs by half.

It should be noted that although the RRC has a significant impact on the storage costs, the redistribution of revenue as a result of applying a 50% discount is extremely modest with adjusted RRCs increasing by 1.62% at entry and 3.98% at exit.

Ofgem's review of UNC 0678A and comparisons with discounting the Revenue Recovery Charge

In its Modification 0678 'Minded to Decision' and its subsequent 'Final Decision'⁷ Ofgem noted the benefits that gas storage can bring to the system in relation to price stability at times of relative system stress. In this context, Ofgem stated that it "*remained open to a storage discount of above 50%.*"

In the storage analysis carried out by CEPA and presented in their report supporting Ofgem's Final Decision it was shown that the implementation of Modification 0678A would have a significant detrimental effect on the revenues of GB gas Storage Facilities and thereby their viability.

Furthermore, CEPA analysis showed that increasing the discount level for Storage Users from 50% to 80% would have a negligible effect on consumer bills. This is supported by analysis carried out by the Proposer as set out in Table 3 (and included in Modification 0727.)

Table 3: Impact of 80% discount on storage capacity reserve prices

Scenario	Entry Cap (firm) £/a	Exit Cap (Int) £/a	Total £/a
Modification 0678A (PS – 50% discount)	8,681,077	3,123,565	11,804,642
PS – 80% discount	3,529,223	1,298,105	4,827,328

Source: Storengy

Comparing Tables 2 and 3, even in the most extreme under-recovery scenario of £50m (entry and exit) the amount of revenue which would need to be recovered from non-storage Users would be far lower than those

⁷ <https://www.gasgovernance.co.uk/0678>

resulting in an increase in the storage capacity discount to 80%. For ease of reference, applying a 50% discount to the RRC for storage Users, the total amount of revenue needed to be recovered from non-storage Users equates to £2.6m (assuming a £50m under-recovery at entry and exit), whereas increasing the storage discount to 80% (as proposed in Modification 0727) results in an additional £4.8m needing to be recovered from non-storage Users.

In conclusion, where it has been shown by CEPA, and confirmed by Ofgem, that an increase in the storage discount from 50% to 80%, as part of the assessment of UNC 0678 Modifications, has a negligible effect on consumer bills, then the impact of applying a discount to RRCs at storage points will have an even smaller effect.

Although it is not possible to forecast with any certainty the level of future RRCs, the analysis provided by the Proposer shows that under a range of scenarios, the costs to storage Users would be material and disproportionate. In the median scenario, where revenues are £30m short, storage Users would incur over £3.1m per year of additional costs, in addition to the £11.8m of extra costs resulting from the implementation of Modification 0678A. Without adjustment, Modification 0678A will increase the risk that storage facilities withdraw capacity thereby creating adverse effects on wholesale gas prices and security of supply. Introducing an RRC discount for storage Users will go some way to alleviating these adverse impacts, as well as ensuring that the revised Methodology is fully compliant with Article 9 of the EU Tariff Code.

4 Code Specific Matters

Reference Documents

EU Tariff Code (Regulation 2017/460)

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32017R0460>

EU TAR NC implementation document

https://www.entsog.eu/sites/default/files/entsog-migration/publications/Tariffs/2017/TAR1000_170928_2nd%20Implementation%20Document_Low-Res.pdf

UNC Modification Proposal 0678A Ofgem Decision

<https://www.ofgem.gov.uk/publications-and-updates/amendments-gas-transmission-charging-regime-decision-and-final-impact-assessment-unc678abcdefghij>

Knowledge/Skills

An understanding of Modification 0678A, UNC TPD Section Y Part A, the EU Tariff Code, Gas Transmission Charging Review (GTCR) documentation and the customer / stakeholder objectives developed within NTSCMF would be beneficial.

5 Solution

Specific Capacity Discount for Storage

It is proposed that, in respect of storage sites, (locations where the type of Entry Point/Offtake is designated as a 'storage site' in National Grid's Licence⁸ (Special Condition 5F Table 4B for Entry Points, and Special Condition 5G Table 8 for Exit Points)) the applicable Revenue Recovery Charge is discounted to the same level as the Specific Storage Point Discount.

Consequences if Not Addressed

For the avoidance of doubt, if this issue is not addressed urgently, it will result in the establishment of tariff based cross-subsidies and significant commercial impacts for storage owners (and Users) which could ultimately have an adverse impact on physical and price security of supply for the GB market.

Further, the Proposer contends that the revised Methodology is inconsistent with Article 9 of the EU Tariff Code, as the RRC should be viewed as a capacity-based transmission tariff and therefore be subject to an equivalent discount.

Impacts and Considerations

The analysis carried out by CEPA in its Modification 0678 analytical report⁹ combined with the analysis performed by the Proposer, shows that the wider impact of the Modification on GB consumers would be negligible.

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

There is likely to be a negligible impact on different consumer groups, but the Allowed Revenue collected by National Grid NTS will not change, only the parties that pay and in what quantity. The Gas Transportation Charges recover a set amount of monies from Users of the NTS and these allowed revenues are determined in line with National Grid's Licence.

As shown in Section 3 of this Modification, the impacts of applying a discount rate to the RRC for storage will have a minimal effect on end consumers. In the Appendix in Section 11, this impact is further explored using additional assumptions for the Storage FCC values.

⁸ <https://epr.ofgem.gov.uk/Content/Documents/National%20Grid%20Gas%20Plc%20-%20Special%20Conditions%20Consolidated%20-%20Current%20Version.pdf>

⁹ https://www.ofgem.gov.uk/system/files/docs/2020/05/cepa_unc678_analytical_report.pdf

Consumer Impact Assessment

Criteria	Extent of Impact
Which Consumer groups are affected?	All
What costs or benefits will pass through to them?	<p>The revenue to be recovered by National Grid NTS remains unaltered by this Modification.</p> <p>The downstream effects on consumers will very much depend on how those costs are passed along the chain.</p> <p>Where a discount to RRCs is permitted for Users holding NTS Capacity at storage points, the resultant under-recovery which will need to be recovered from other capacity holders (this can be seen as a cross subsidy) will depend on the levels of the discount and the RRC. The analysis in the Modification shows that even where the RRC is significant (£50m at entry and exit) the level of under-recovery is modest at £2.5m. This compares with a total allowed revenue of circa. £750m.</p> <p>The benefits to customers are not quantified, but on the basis that the reduced costs to storage users result in more storage capacity being made available to the market and gas is cycled more frequently, the dampening impacts on wholesale price and price volatility will reduce the overall costs of gas for all customers. This in effect makes a justification for the cross subsidy.</p>
When will these costs/benefits impact upon consumers?	The costs and benefits will be realised immediately following implementation of the Modification and will continue in the future.
Are there any other Consumer Impacts?	None identified at this stage.
General Market Assumptions as at December 2016 (to underpin the Costs analysis)	
<i>Number of Domestic consumers</i>	<i>21 million</i>
<i>Number of non-domestic consumers <73,200 kWh/annum</i>	<i>500,000</i>
<i>Number of consumers between 73,200 and 732,000 kWh/annum</i>	<i>250,000</i>
<i>Number of very large consumers >732,000 kWh/annum</i>	<i>26,000</i>

Cross Code Impacts

None.

EU Code Impacts

EU Tariff Code compliance is considered as part of this Modification Proposal, noting that the EU Tariff Code (Article 9) allows for “*a discount of at least 50% should be applied to capacity-based transmission tariffs at Entry Points from and Exit Points to Storage Facilities*”.

The application of a Transmission Services Revenue Recovery Charge is permitted in Article 20; however, it does not exclude the setting of alternative RRCs at different System Points. Given the RRC is a capacity-based transmission tariff, the application of a discounted RRC at Storage Facilities would ensure compliance with Article 9.

National Grid as a Workgroup Participant noted the following:

Ofgem implemented a TAR NC compliant proposal with Modification 0678A as per their decision, which did not include this discount to Revenue Recovery charges. Article 9(i) of TAR NC says:

“A discount of at least 50 % shall be applied to capacity-based transmission tariffs at entry points from and exit points to storage facilities....”

Reviewing the TAR NC implementation document¹⁰ for Article 3 (Definitions) it says:

“Reserve prices are set on the basis of reference prices. Such reserve prices are the capacity-based transmission tariffs for standard capacity products established by Article 9...”

One reading of this it would seem the Capacity-based transmission tariffs are the reserve prices and not any others. As such it could be considered that this does not further compliance as this is not a requirement of TAR NC to discount charges beyond the capacity reserve prices.

Central Systems Impacts

There are expected to be Systems Impacts which are under review by National Grid and the CDSP. However, the Proposer believes that if required in the short term, a solution which includes some Systems changes combined with manual intervention would be workable until such time as the Systems can fully accommodate the changes.

The change proposed in Modification 0729 will need to be assessed formally by Xoserve and will be undertaken via the usual route (i.e. ROM request, etc.). An initial assessment has shown that system changes to both the Gemini and UK-Link systems would be necessary and new charge types to existing invoice(s) and a new invoice type may be required. The Modification would therefore follow the necessary steps following a positive decision to implement, should this be received.

Workgroup noted the clarification from the CDSP that any new charge type or invoice type requires a 3-month notification period. This will impact any implementation date. It should also be noted that UK Link release dates need to be taken into account (the CDSP delivery programme). The major UK Link release in November 2020 is now considered to be full. DSC Change Management Committee will consider this Modification at the appropriate time to determine how to make the required system changes.

Depending on the timing of any decision and implementation, if granted, then it would also likely require some manual processes to support the systems in the short term whilst transitioning to a full systems solution.

It should be noted that the number of Sites which may be affected is very low.

¹⁰ https://www.entsog.eu/sites/default/files/entsog-migration/publications/Tariffs/2017/TAR1000_170928_2nd%20Implementation%20Document_Low-Res.pdf

Rough Order of Magnitude (ROM) Assessment

A ROM request was submitted to the CDSP on 04 August 2020.

A response back is expected by 18 August 2020. When available this will be published here:

<https://www.gasgovernance.co.uk/0729>

Workgroup Impact Assessment

Workgroup noted that the Modification had previously been submitted to Ofgem seeking Urgency, though this was rejected. With this in mind, the Panel had facilitated a compressed schedule for Workgroup consideration, bearing in mind potential implementation opportunities.

Workgroup noted National Grid's clarification that the RRCs will be set taking into account the required discount arrangement. If an RRC was set late in the charging year for example, the principle remains the same.

A combination of the RRC (multiplied by its relevant volume) and the discounted RRC (multiplied by its relevant volume) will equate to the target revenue required.

If the storage discount were to be 50% then this would mean that the discounted RRC would be 50% of the applicable RRC.

The end result will be a discounted and non-discounted Entry and Exit TSRRC (i.e. four charges) published to 4 decimal places.

Overall, the cost of National Grid NTS does not change nor does the total revenue required to be collected via Transmission Services charges. Any discount will result in charges increasing for those not availing of such discount meaning the amount charged out in total to NTS Customers is unchanged. The levels of Transmission Services Revenue Recovery Charges (TSRRCs) can have the potential to fluctuate. They are introduced under the new charging regime implemented under Modification 0678A from 01 October 2020 and therefore the levels have no history to review. As of 01 October 2020, they are set to zero however can be updated to manage revenue recovery. It should be noted that the discount this Modification would introduce would apply to the TSRRCs irrespective of polarity (i.e. applies to positive and negative TSRRCs).

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) Coordinated, efficient and economic operation of (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: (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.	Positive
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.	Positive
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.	Positive

Proposer views demonstrating how the Relevant Objectives are furthered:

a) Efficient and economic operation of the pipe-line system

The flexibility provided by gas storage provides direct support to National Grid in its role as system balancer through; contributing to linepack management and reduced activity and costs associated with National Grid's participation in the balancing market (On the Day Commodity Market) or any other contractual arrangements it may choose to enter into as part of its network balancing toolbox.

By imposing the full RRC on storage Users, analysis performed by the Proposer and WWA indicates that the aggregate costs incurred by storage owners could be significant, even in a scenario where the level of revenue under-recovery is relatively modest.

These cost increases will lead to reduced storage cycling as the variable costs incurred by storage owners will diminish opportunities for capturing value in shorter term spreads. In turn, system balancing costs will increase, as storage will less frequently make a positive contribution to the overall balance of the network and limit access to an essential balancing tool for shippers and National Grid as the balancer of last resort.

b) Coordinated, efficient and economic operation of

(i) the combined pipe-line system, and/ or

(ii) the pipe-line system of one or more other relevant gas transporters

Storage provides support to the entire network. Its proximity to demand and flow response to changes in aggregate demand levels ensures that overall system pressures are supported, benefiting the NTS and connected networks. In the absence of, or reduction in storage, caused by escalating transportation tariffs, marginal gas supplies would be more distant from demand which, in turn, may result in operational issues for Distribution Networks, in the absence of additional investment in the NTS.

d) Securing of effective competition between relevant shippers;

Where the charges levied on Storage Users better reflect the costs/benefits of storage flows on the system, it improves the overall cost reflectivity of charges and as such better facilitates competition through diminished cross-subsidisation. Non-discounted RRCs would result in storage Users making disproportionate contributions to Transmission Services as shown in Table 1, creating a cross-subsidy between storage and non-storage Users.

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.

Storage facilities provide price stability benefits by dampening price spikes and reducing price volatility as they respond to market price signals, which in turn are highly correlated with supply and demand. A non-discounted RRC will likely erode storage revenues and affect closure decisions; a discounted RRC would better reflect this relevant objective by limiting the erosion of the storage revenues.

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.

Article 9 of the EU Tariff Code requires that a discount of at least 50% is applied to capacity-based transmission tariffs at entry points from and exit points to storage facilities. A Revenue Recovery Charge is permitted under Article 20 in order to fulfil obligations under Article 17. Given a Revenue Recovery Charge is a capacity-based transmission tariff established exclusively for the recovery of transmission services revenue, extending the Article 9 discount to Revenue Recovery Charges ensures compliance with the EU Tariff Code.

Workgroup considered the standard Relevant Objectives on 04 August 2020. Workgroup Participants in the main agreed with the Proposer's assertions above in relation to the Relevant Objectives and most had nothing further to add. However National Grid as a Workgroup Participant wished to add the following:

Standard Relevant Objective a): The levels of Transmission Services Revenue Recovery Charges (TSRRCs) can have the potential to fluctuate. They are introduced under the new charging regime implemented under Modification 0678A from 01 October 2020 and therefore the levels have no history to review. As of 01 October 2020, they are set to zero however can be updated to manage revenue recovery.

Therefore, the impact could vary depending on what the levels of TSRRCs may be, in addition to the other costs mentioned and their levels (e.g. balancing costs).

Standard Relevant Objective (b)(i)(ii): A new regime is implemented from October 2020 under Modification 0678A which was approved by Ofgem in May 2020. Therefore, the new regime has yet to take effect in terms seeing the levels of any TSRRCs and managing potential under or over recovery, and the levels of transportation tariffs impacted by TSRRCs is not yet known.

Standard Relevant Objective (d): A new regime is implemented from October 2020 under Modification 0678A which was approved by Ofgem in May 2020. Under Modification 0678A approved by Ofgem it provides a discount for Storage for Entry and Exit Reserve prices. It also implemented a single TSRRC methodology, so all parties pay the same price for TSRRCs (noting the exception for Existing Available

Capacity Holdings) considering it appropriate that “all users should contribute to the cost recovery of the NTS, without undue discrimination” (quote from Ofgem minded to document) . Any discount will result in charges increasing for those not availing of such discount, meaning the amount charged out in total to NTS Customers is unchanged.

Standard Relevant Objective (g): Ofgem implemented a TAR NC compliant proposal with Modification 0678A as per their decision which did not include this discount to Revenue Recovery charges. Article 9(i) of TAR NC says:

“A discount of at least 50 % shall be applied to capacity-based transmission tariffs at entry points from and exit points to storage facilities....”

Reviewing the TAR NC implementation document for Article 3 (Definitions) it says:

“Reserve prices are set on the basis of reference prices. Such reserve prices are the capacity-based transmission tariffs for standard capacity products established by Article 9...”

One reading of this it would seem the Capacity-based transmission tariffs are the reserve prices and not any others. As such it could be considered that this does not further compliance as this is not a requirement of TAR NC to discount charges beyond the capacity reserve prices.

Impact of the Modification on the Relevant Charging Methodology Objectives:	
Relevant Objective	Identified impact
a) Save in so far as paragraphs (aa) or (d) apply, that compliance with the charging methodology results in charges which reflect the costs incurred by the licensee in its transportation business;	Positive
aa) That, in so far as prices in respect of transportation arrangements are established by auction, either: (i) no reserve price is applied, or (ii) that reserve price is set at a level - (I) best calculated to promote efficiency and avoid undue preference in the supply of transportation services; and (II) best calculated to promote competition between gas suppliers and between gas shippers;	Neutral
b) That, so far as is consistent with sub-paragraph (a), the charging methodology properly takes account of developments in the transportation business;	Positive
c) That, so far as is consistent with sub-paragraphs (a) and (b), compliance with the charging methodology facilitates effective competition between gas shippers and between gas suppliers; and	Positive
d) That the charging methodology reflects any alternative arrangements put in place in accordance with a determination made by the Secretary of State under paragraph 2A(a) of Standard Special Condition A27 (Disposal of Assets).	None
e) 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.	Positive

This Modification proposal does not conflict with:

- (i) Paragraphs 8, 9, 10 and 11 of Standard Condition 4B of the Transporter's Licence; or
- (ii) Paragraphs 2, 2A and 3 of Standard Special Condition A4 of the Transporter's Licence;

as the charges will be changed at the required times and to the required notice periods.

Proposer views demonstrating how the Relevant Objectives are furthered:

- a) Save in so far as paragraphs (aa) or (d) apply, that compliance with the charging methodology results in charges which reflect the costs incurred by the licensee in its transportation business;**

The revised Methodology establishes a 50% discount for storage capacity in order to avoid double counting, as a minimum. The Revenue Recovery Charge is a vehicle used to recover transmission revenue and should reflect the costs that storage imposes on National Grid. The revised Methodology does not discount the Revenue Recovery Charge at storage points and as a result total capacity charges will not avoid double counting and will exceed the costs imposed by storage Users on the network.

- b) That, so far as is consistent with sub-paragraph (a), the charging methodology properly takes account of developments in the transportation business;**

Considering the lead time required for the development of such assets, assumptions on storage flows for the modelling of the impact of a discount on the Transmission Revenue Recovery Charges are robust for 5 years, at the very minimum, notwithstanding the general level of uncertainty surrounding the overall level of revenue under/over recovery going forward. As such, the statements regarding improvements to cost reflectivity and compliance with the EU Tariff Code are maintained into the future.

- c) That, so far as is consistent with sub-paragraphs (a) and (b), compliance with the charging methodology facilitates effective competition between gas shippers and between gas suppliers**

The application of an RRC discount for Storage Users better achieves this objective. Firstly, gas storage provides shippers with access to physical flexibility to manage any physical portfolio imbalances which occur for a variety of reasons. Gas storage is an essential tool for a large number of shippers which contract directly with storage operators, but also provides wider benefits to all shippers as a result of enhanced security of supply, market price stability and well-understood, significant positive externalities. These wider benefits dampen price volatility as described by CEPA and Ofgem in the Modification 0678 ‘final decision’ and reduce the likelihood of network constraints, gas deficit issues and cost escalation.

Non-discounted RRCs would result in storage Users making disproportionate contributions to Transmission Services as shown in Table 1, creating a cross-subsidy between storage and non-storage Users.

- e) 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.**

Article 9 of the EU Tariff Code requires that a discount of at least 50% is applied to capacity-based transmission tariffs at entry points from and exit points to storage facilities. A Revenue Recovery Charge is permitted under Article 20 in order to fulfil obligations under Article 17. Given a Revenue Recovery Charge is a capacity-based transmission tariff established exclusively for the recovery of transmission services revenue, extending the Article 9 discount to Revenue Recovery Charges ensures compliance with the EU Tariff Code.

Workgroup considered the charging Relevant Objectives on 04 August 2020 and 12 August 2020. Workgroup Participants in the main agreed with the Proposer’s assertions above in relation to the Relevant Objectives and most had nothing further to add. However National Grid as a Workgroup Participant wished to add the following:

Charging Relevant Objective a): National Grid notes that Ofgem approved a methodology under Modification 0678A that accommodates the requirements of Storage as part of the compliance with TAR NC which would include any “double counting”. If this is accounted for in the methodology implemented under Modification 0678A, the TAR NC requirement may be met with Modification 0678A however does not necessarily limit such an additional change providing other considerations are met such as the Relevant Objectives.

Charging Relevant Objective (e): A new regime is implemented from October 2020 under Modification 0678A which was approved by Ofgem in May 2020. Under Modification 0678A approved by Ofgem it provides a discount for Storage for Entry and Exit Reserve prices. It also implemented a single TSRRC methodology, so all parties pay the same price for TSRRCs (noting the exception for Existing Available Capacity Holdings) considering it appropriate that “all users should contribute to the cost recovery of the NTS, without undue discrimination” (quote from Ofgem minded to document) . Any discount will result in charges increasing for those not availing of such discount, meaning the amount charged out in total to NTS Customers is unchanged.

Charging Relevant Objective (e): Ofgem implemented a TAR NC compliant proposal with Modification 0678A as per their decision which did not include this discount to Revenue Recovery charges. Article 9(i) of TAR NC says:

“A discount of at least 50 % shall be applied to capacity-based transmission tariffs at entry points from and exit points to storage facilities....”

Reviewing the TAR NC implementation document for Article 3 (Definitions) it says:

“Reserve prices are set on the basis of reference prices. Such reserve prices are the capacity-based transmission tariffs for standard capacity products established by Article 9...”

One reading of this it would seem the Capacity-based transmission tariffs are the reserve prices and not any others. As such it could be considered that this does not further compliance as this is not a requirement of TAR NC to discount charges beyond the capacity reserve prices.

8 Implementation

Implementation is proposed to take effect, concurrent with the introduction of the revised Methodology, i.e. 01 October 2020, however implementation will be in line with any Ofgem Direction.

Workgroup Participants noted that the discount will be aligned with the storage discount in the Charging Methodology (note for example this would increase from 50% to 80% if Modification 0727 is implemented).

The effective implementation of this Proposal can be at the same time as the implementation of Modification 0678A which will update the UNC at 05:00 on 01 October or after and not before as it updates text introduced with Modification 0678A.

9 Legal Text

Legal Text has been provided by National Grid and is published alongside this Modification on the Joint Office website. The Proposer has confirmed that they are satisfied that it meets the intent of the Solution.

Text Commentary

This can be found here: <https://www.gasgovernance.co.uk/0729>

Text

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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.

Panel have also asked respondents to:

Q1. provide a view as to whether Article 9(1) TAR NC requires that a discount must be applied to the capacity reserve prices only or whether the discount must also be applied to the Transmission Services Revenue Recovery Charges (see section 'EU Code Impacts' of the Workgroup Report).

Q2. provide views on the proposed implementation date.

11 Appendix – Alternative analysis

Section 3 of this Modification provides impact analysis based on the FCCs recorded in the National Grid Charging Notice. The aggregate storage annual Exit Forecasted Contracted Capacity (FCC) applied in Table 2 (which can be found on page 5) is stated to be 174 TWh which appears grossly exaggerated. The Proposer has modified this FCC figure to provide what it believes an alternative representation of annual aggregate Exit Capacity bookings, reducing the annual Exit FCC to 67 TWh¹¹. The results are shown in Table 4.

Table 4: Impact of alternative storage Exit FCC of 42 TWh per annum

Under-recovery	Standard RRC (p/kwh)	Cost to storage (£ aggregate)	50% Discounted RRC (p/kwh)	Cost to storage (50% RRC) (p/kwh)	RRC uplift to non-storage Users (p/kwh)	% increase in RRC for non-storage Users
£30m entry	0.004620	£910,860	0.002310	£455,430	0.000075	1.62%
£30m exit	0.00134	£908,970	0.000671	£454,485	0.000021	1.56%
£10m entry	0.001540	£303,620	0.000025	£151,810	0.000025	1.62%
£10m exit	0.000448	£302,990.18	0.00024	£151,495.09	0.000007	1.56%
£50m entry	0.007699	£1,518,101	0.003850	£759,050	0.000124	1.62%
£50m exit	0.002240	£1,514,950.89	0.001120	£757,475.45	0.000035	1.56%

Source: Storengy and WWA

Table 4 shows a marked reduction, yet still significant cost to storage and a much lower percentage increase in the Exit RRC uplift when compared to the results shown in Table 2.

¹¹ Storengy has applied the same level of capacity bookings as it applied in the analysis to support UNC 0678E (see: <https://www.gasgovernance.co.uk/0678>). The figure of 42 TWh is consistent with the maximum level of storage cycling experienced in recent years.