

UNC Modification	At what stage is this document in the process?
<h1 style="color: #008080;">UNC 0729 (Urgent):</h1> <h2 style="color: #008000;">Applying a discount to the Revenue Recovery Charge at Storage Points</h2>	<div style="display: flex; flex-direction: column; gap: 5px;"> <div style="border: 1px solid #008000; background-color: #008000; color: white; padding: 5px; display: flex; align-items: center; justify-content: center;"> <span style="font-weight: bold; font-size: 1.2em;">01</span> Modification         </div> <div style="border: 1px solid #008000; padding: 5px; display: flex; align-items: center; justify-content: center;"> <span style="font-weight: bold; font-size: 1.2em;">02</span> Workgroup Report         </div> <div style="border: 1px solid #008000; padding: 5px; display: flex; align-items: center; justify-content: center;"> <span style="font-weight: bold; font-size: 1.2em;">03</span> Draft Modification Report         </div> <div style="border: 1px solid #008000; padding: 5px; display: flex; align-items: center; justify-content: center;"> <span style="font-weight: bold; font-size: 1.2em;">04</span> Final Modification Report         </div> </div>
<p><b>Purpose of Modification:</b></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>The Proposer recommends that this modification should be:</p> <ul style="list-style-type: none"> <li>Treated as an Urgent Modification and should proceed as such under a timetable agreed with the Authority.</li> </ul>
	<p><b>High Impact:</b></p> <p>All parties that pay NTS Transportation Charges and/or have a connection to the NTS, and National Grid NTS.</p>
	<p><b>Medium Impact:</b></p> <p>N/A</p>
	<p><b>Low Impact:</b></p> <p>N/A</p>

Contents		
1	Summary	3
2	Governance	3
3	Why Change?	4
4	Code Specific Matters	7
5	Solution	8
6	Impacts & Other Considerations	9
7	Relevant Objectives	9
8	Implementation	13
9	Legal Text	13
10	Recommendations	13
Timetable		
<b>The Proposer recommends the following timetable:</b>		
Modification sent to Ofgem	24 June 2020	
Ofgem decision on Urgency	30 June 2020	
Modification issued for Consultation	30 June 2020	
Consultation Close-out for Representations	10 July 2020	
Final Modification Report available for Panel	15 July 2020	
Modification Panel Recommendation (considered at short notice)	16 July 2020	
Final Modification Report issued to Ofgem	17 July 2020	
		 Any questions?
		Contact: <b>Joint Office of Gas Transporters</b>
		 <a href="mailto:enquiries@gasgovernance.co.uk">enquiries@gasgovernance.co.uk</a>
		 0121 288 2107
		Proposer: <b>Benoit Enault, Storengy UK Ltd</b>
		 <a href="mailto:benoit.enault@storengy.co.uk">benoit.enault@storengy.co.uk</a>
		 01606 815 372
		Transporter: <b>National Grid NTS</b>
		 <a href="mailto:colin.williams@nationalgrid.com">colin.williams@nationalgrid.com</a>
		 01926 655916 or 07785 451776
		Systems Provider: <b>Xoserve</b>
		 <a href="mailto:commercial.enquiries@xoserve.com">commercial.enquiries@xoserve.com</a>
		Other <b>Nick Wye</b>
		 <a href="mailto:nick@waterswye.co.uk">nick@waterswye.co.uk</a>
		 07900 055144

## 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 Code<sup>1</sup> 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 Urgency

This Modification should be treated as an Urgent Modification Proposal and should proceed under a timetable approved by the Authority. A proposed timeline is provided in the timetable section of this Modification.

Urgent status is sought on the basis that the need to introduce the mechanism advocated by this Modification is driven by an imminent date related issue, this being the introduction of the new NTS Charging Methodology from 01 October 2020.

There is now a short period of time until the 'go-live' date for the revised Methodology (01 October 2020) which is not sufficient enough to deliver a timely decision in respect of this Modification were it to follow standard governance procedures.

If this Modification is not considered on an urgent basis, the Proposer contends that:

- Compliance with EU Tariff Code (Art 9) will not be achieved; and
- It could result in significant commercial impacts for storage owners and Users, and ultimately have an adverse impact on security of price and supply for the GB market.

---

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

## Justification for Authority Direction

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. In particular, the Modification has been submitted in response to the Ofgem Decision regarding Modification 0678A<sup>2</sup> and its subsequent decision to grant Modification 0728 (and its alternatives) urgent status<sup>3</sup>. The timing of these decisions combined with the short period of time remaining before 01 October 2020 has removed the possibility of the Proposer seeking workgroup assessment.

## Requested Next Steps

This Modification should be treated as Urgent and should proceed as such under a timetable agreed with the Authority.

## 3 Why Change?

Within the EU Tariff Code, there are requirements (Article 9<sup>4</sup>) 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

---

<sup>2</sup> <https://www.gasgovernance.co.uk/0678>

<sup>3</sup> <https://www.gasgovernance.co.uk/0728>

<sup>4</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017R0460&from=EN>

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%.

**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 Notice<sup>5</sup>, 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

<sup>5</sup> [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=](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=)

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%
£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’<sup>6</sup> 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%.”

<sup>6</sup> <https://www.gasgovernance.co.uk/0678>

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 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>

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 Licence<sup>7</sup> (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 report<sup>8</sup> combined with the analysis performed by the Proposer, shows that the wider impact of the Modification on GB consumers would be negligible.

---

<sup>7</sup> <https://epr.ofgem.gov.uk/Content/Documents/National%20Grid%20Gas%20Plc%20-%20Special%20Conditions%20Consolidated%20-%20Current%20Version.pdf>

<sup>8</sup> [https://www.ofgem.gov.uk/system/files/docs/2020/05/cepa\\_unc678\\_analytical\\_report.pdf](https://www.ofgem.gov.uk/system/files/docs/2020/05/cepa_unc678_analytical_report.pdf)

## 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.

#### 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.

#### 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 modifications combined with manual intervention would be workable until such time as the Systems can fully accommodate the changes.

## 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

<p>d) Securing of effective competition:</p> <p>(i) between relevant shippers;</p> <p>(ii) between relevant suppliers; and/or</p> <p>(iii) between DN operators (who have entered into transportation arrangements with other relevant gas transporters) and relevant shippers.</p>	<p>Positive</p>
<p>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.</p>	<p>Positive</p>
<p>f) Promotion of efficiency in the implementation and administration of the Code.</p>	<p>None</p>
<p>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.</p>	<p>Positive</p>

Demonstration of 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.

## Section Y (Charging Methodology) Modifications

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: <ul style="list-style-type: none"> <li>(i) no reserve price is applied, or</li> <li>(ii) that reserve price is set at a level -               <ul style="list-style-type: none"> <li>(I) best calculated to promote efficiency and avoid undue preference in the supply of transportation services; and</li> <li>(II) best calculated to promote competition between gas suppliers and between gas shippers;</li> </ul> </li> </ul>	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.

Demonstration of 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.

**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.

## 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.

## 9 Legal Text

Legal Text is being provided by National Grid and will be published alongside this Modification on the Joint Office website before commencement of the Consultation period. The Proposer will ensure that Legal Text is considered and will ensure that they are satisfied that it meets the intent of the Solution before publication.

### Text Commentary

To be provided.

### Text

To be provided.

## 10 Recommendations

### Proposer's Recommendation to the Authority

The Authority is asked to:

- Agree this Modification should be treated as Urgent and should proceed as such under a timetable agreed by the Authority.

## 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 is stated to be 174 TWh which appears grossly exaggerated. The Proposer has modified this figure to provide what it believes an alternative representation of annual aggregate Exit Capacity bookings, reducing the annual Exit FCC to 67 TWh. 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.