Gas Transmission

NTSCMF

National Grid Charging Updates

03 August 2021

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Agenda

1. **Review of Webinar (related to charging methodology change considerations only)**

2. **Revenue option development**

3. **Tariff option development**
   - Further thinking from Webinar
   - Ways to focus on options
   - Modelling
   - Further considerations

4. **Next steps**

5. **Contacts**

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Webinar

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Review of Webinar on 21 July

- Webinar on 21 July covered the following topic areas in more detail:
  - October 2021 charges (that were published by 21 July 2021)
    - The October charges that have been published
    - How charges are determined (revenues to charges)
    - What's changed in terms of approach in setting October 2021 charges from those set for October 2020 - Why did we defer £45m in setting October 2021 Entry Reserve Prices?
    - Existing Contract 'influence'
  - Further Reform proposals next steps: following National Grid open letter
    - Why change?
    - Objectives to measure against
    - Approach and priorities
    - Suggested timelines
    - Options (at this stage)
    - Ways of working (NTSCMF, Workshops, etc)
- Material can be found at: https://www.nationalgrid.com/uk/gas-transmission/charging/gas-charging-discussion-gcd-papers

Why are changes considered necessary? Open Letter

As per Webinar on 21 July 2021

- With a new regime implemented from 01 October 2020 a number of issues have taken place resulting in quick remedial action to address such as the use of Revenue Recovery charges and implementing UNC0748.
- National Grid has also taken the decision to defer £45m from Formula Year 2021/22 to Formula Year 2022/23 as a means to help reduce the volatility in target revenues based on the values known in setting October 2021/22 charges.
- Open letter: https://www.nationalgrid.com/uk/gas-transmission/charging/gas-charging-discussion-gcd-papers (under "May 2021 - Open Letter on the Future Of Gas Transmission Charging")
- Whilst early into the new regime, the events above in addition to Stakeholder feedback and further thinking, have highlighted the need for some further changes to the charging framework.
- Structural aspects of the methodology (such as how target revenues are determined and the specifics of the tariff calculations) will need to be reviewed
- Reviewing how volatility manifests via the methodology is important to understand and why the sensitivities on prices can occur, especially on Entry Capacity Reserve Prices

Why are changes considered necessary? Open Letter

As per Webinar on 21 July 2021

- Unless addressed risks remain of:
  - Potential sizeable revenue swings tariff year to tariff year leaving volatility of prices an ever present and likely risk;
  - Consistently high Entry Reserve prices relative to the average overall and to the average Existing Contract price impacting the fairness of the regime especially for those small volumes (as a total of Entry bookings) paying the prevailing rates.
- To address this we believe changes are necessary and, to improve these areas, it should be our collective focus to address the causes and drivers of revenue/tariff volatility as a matter of priority

Charging Changes: Approach to Likely Change Areas

As per Webinar on 21 July 2021

Themes for change from assessing Tariff and Revenue Sensitivities

Area of focus	Considerations
Tariffs	How to update the tariff calculations to reduce likelihood of unsustainable high prices and the differential paid across all Users. Reduced sensitivity in the price calculations where small changes to inputs can result in significant changes to the charges. This should improve sensitivity of tariffs to change such as where small input changes to revenues can drive large swings in tariffs
Revenues	How the determination of the target revenues for the Tariff Year could be improved to better manage sensitivity to change, improve predictability and reduce the resulting revenue volatility. This would impact revenues and would unlikely, by itself remove the differential in reserve prices over the future years

- It is, in our view, necessary for changes to make charges more equitable. It is likely that a combination of changes in both categories will deliver the optimal to the framework. It is essential that the 'problem statement' is clear in terms of what any change proposals are looking to address as the options are considered.
- Changes to these topics, notably the tariffs category can cover many aspects and for these it will be necessary to put these on two likely timelines (with shorter term changes for GY Oct 22 to Sept 23 and beyond this from GY Oct 23 to Sept 24 onwards)

Objectives

As per Webinar on 21 July 2021

- **Outcomes to measure – in no particular order**
  - Transmission Services Entry charges more equitable than current
  - To reduce the substantial gap of overall for Transmission Services Entry charges paid between Existing Contracts and Non-Existing Contracts
  - Transmission Services Exit charges are either not impacted or any impact kept to a minimal value (in priority workstream).
    - Further considerations about any Exit impacts and potential change is proposed to be part of further discussions
  - To reduce the volatility of revenues used as the target revenues for the purposes of setting Transmission Services charges (Entry and Exit)
  - Licence impacts understood and if possible, kept to a minimum
  - If a decision can be made by May 2022, can be implemented and delivered for October 2022
  - Can be demonstrated to be compliant with the EU Tariff Code

Options at this stage: Revenues

As per Webinar on 21 July 2021

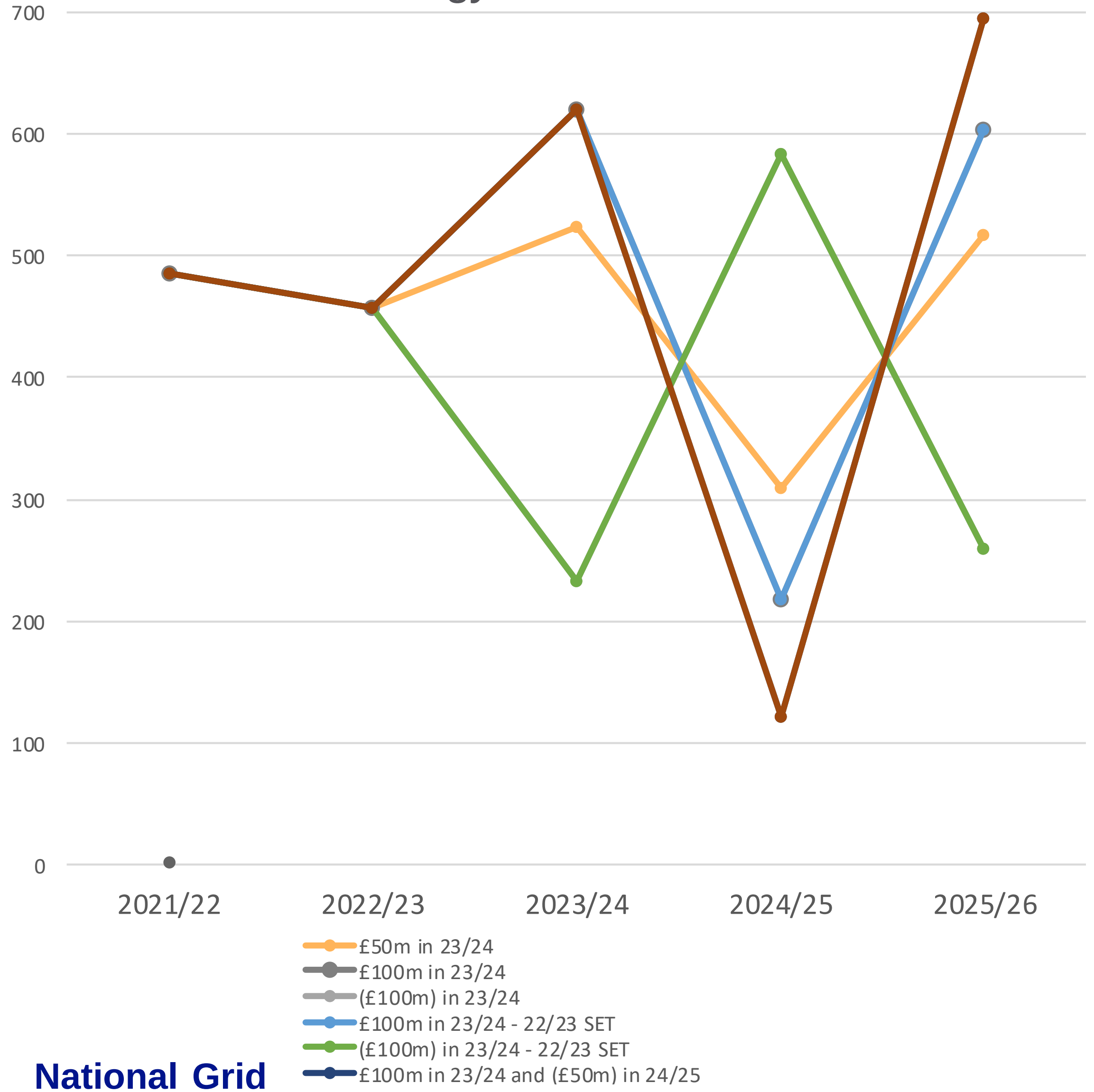
- In reviewing areas we believe can realistically deliver change for October 2022 under the two areas of Revenues and Tariffs we are sharing some thoughts on what could be done to achieve the objectives. This section looks at a way in which adjusting how the target revenues for a Gas Year are determined and the potential impacts.

Overview	Scope of thinking at this stage	Analysis shown in this pack
Revenue changes: Changes to the way the target revenue for the Gas Year are calculated	Takes the target revenue needed for the remainder of a Regulatory Year then applies the previous FRY% split to determine the % revenue needed of the next years Regulatory Year for the period April to September. These two values then added together to provide the updated target revenue for the Gas Year. This would mean, without other steps that the Regulatory Year's revenue will not be collected (Assuming forecasts are correct).	1. Modelling current methodology and revenues used for tariff setting (Entry) 2. Adjusted revenues for same years applying this updated methodology This allows a sensitivity of changes to be applied to test its impact. A range of values have been applied as adjustments to test the impact and sensitivity of changes.

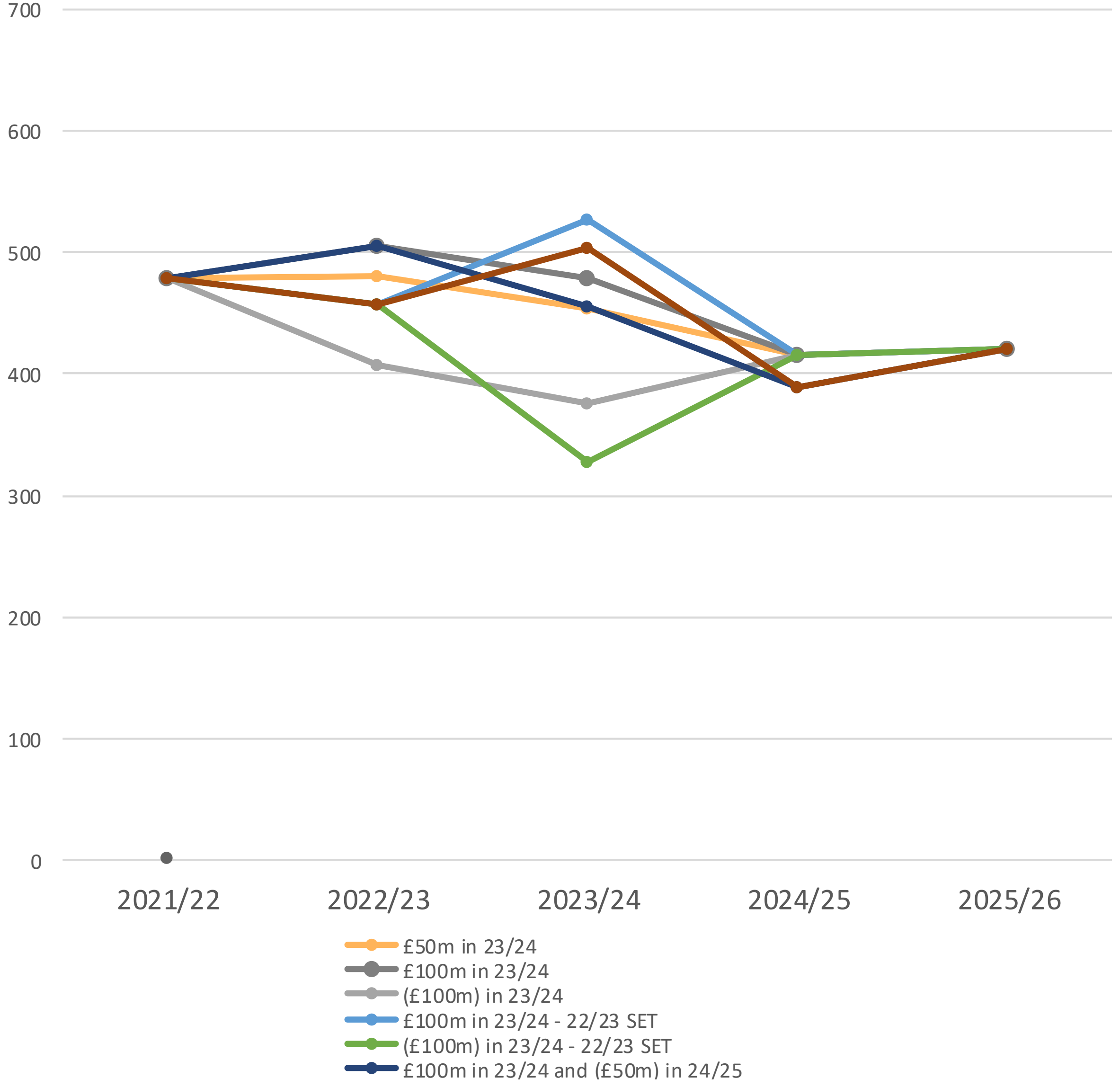
Revenue Sensitivity – Current vs Revised Methodology

As per Webinar on 21 July 2021

Current Methodology



Revised Methodology



Options at this stage: Revenues

As per Webinar on 21 July 2021

- In reviewing the revenue determination, this shows that the approach can take a substantial amount of the sensitivity out and manage better the mis-alignment of the Regulatory Year that runs April to March and the Gas Year that runs October to September.

- This, we believe, demonstrates its merit in taking forward. In order to do so, further work is to be carried out to work out more details needed and we propose to do this as part of the next steps

Options at this stage: Tariffs

As per Webinar on 21 July 2021

- In reviewing areas we believe can realistically deliver change for October 2022 under the two areas of Revenues and Tariffs we are sharing some thoughts on what could be done to achieve the objectives. This section looks at the impact of an additional charge within the charging framework.

Overview	Scope of thinking at this stage	Analysis shown in this pack
Tariff changes: Additional charges that could be applied	Could be commodity or capacity based. Both options are explored. A value is removed from the Allowed Revenue and converted in to an Additional Charge. The logic behind this value is based on the influence or impact of the Existing Contracts within the methodology. This has the benefit of reducing in line with ECs expiration. The application of these additional charges, to show some potential ranges of impacts are shown applied to: • Existing Contracts only; and • To all Capacity / Flows	Three methods of showing the influence within the framework Existing Contracts have to provide a basis to determine a revenue amount for an additional charge. These are: 1. Entry EC as a % of FCC to determine the % revenue to be subject to the additional charge; 2. Forecast collection from Non-EC capacity from running w/o ECs leaves an amount deducted from target revenue and EC revenue to be collected from the additional charge; 3. Utilisation of ECs (flows) drives the % of revenue to be subject to the additional charge The additional charge is then applied to Existing Contracts only and to all capacity / flows. The Capacity Reserve Prices are recalculated based on the adjusted Allowed Revenue. By default there will be a shortfall in the recovered revenues, under the three scenarios, the additional charge can be then applied.

Modelling the outcomes

As per Webinar on 21 July 2021

- **To Support understanding of the following charts**
  - We have modelled each of the three scenarios under the two options highlighted to give an approximate range of impact.
  - Solid orange line is the average Existing Contract rate.
  - The dotted orange line shows the impact of the additional charge. The Existing Contract price is unaffected, this line demonstrates the total rate with the additional charge applied on top.
  - The solid dark blue line is the current Published and Indicative Capacity Rates with no discounts applied.
  - The dotted blue line shows the Reserve Price as it would be calculated with the additional charge on top where appropriate.
  - Shorthaul is not assumed to change (i.e. no changes to the discounts received). Entry £discount levels for shorthaul will inevitably be lower where Non-ECs are used. For the purposes of SH this would not materially impact what has been forecast as the Entry 'utilisation' for SH is expected to be mostly ECs.

Modelling: applying to all capacity / flows

As per Webinar on 21 July 2021

Modelling: applying to only Existing Contracts (Capacity / Flows)

As per Webinar on 21 July 2021

Options at this stage: Tariffs

As per Webinar on 21 July 2021

- In reviewing the potential for an additional charge, this shows that the range of approaches can have an impact to bring the disparity closer in terms of the tariffs paid across parties.
- This, we believe, demonstrates its merit in taking forward. In order to do so, further work is to be carried out to work out more details needed and we propose to do this as part of the next steps.

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Development and review of options – Revenue change development

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Revenue developments – Next Steps

- To follow on from what we have shown so far, there is merit we believe in developing further
- To fully develop there are some additional elements we need to consider, model and determine how to incorporate such as:
  - Impacts on National Grid's Licence including but not limited to the 'K' factor and how feeds into the calculations
  - Reviewing obligations and managing the revenue positions across years
  - Transmission and Non-Transmission Services
  - Further checking compliance with relevant legislation, in particular the EU Tariff Code
- National Grid will continue this work and bring back findings and proposals for Stakeholder views however we welcome any at this stage both within these forums or directly to National Grid

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Development and review of options – Tariff development

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Tariff developments

- In the webinar we discussed a number of potential options and the influence they have on the reserve prices and the different additional charges
- We modelled as a way to show potential ranges of impacts that looked at a capacity option and a commodity option with two possible applications applying to Existing Contracts or to All Users (i.e. no exemptions or discounts
- We have worked through the options and looked at with each option what interactions there would be with other process and started to work through the modelling of some other combinations of the interactions to establish a basis to develop a limited set of options.
- The following slide presents some areas where questions against these topics help us to consider a way to focus on a smaller range of options.
- It should be stressed this is for Stakeholder feedback to help shape development and to focus on option(s) that have a more robust justification and delivers against the objectives aiming to be met.

Range of options and scope of questions / challenge to help focus options to take forward

Questions**	Capacity based (all)	Capacity based (Existing Contracts Only)*	Flow based (all)	Flow based (Existing Contracts Only)*
Compliance	TAR compliance /Licence impacts	TAR compliance /Licence impacts	TAR compliance /Licence impacts	TAR compliance /Licence impacts
Interactions with other process	Storage Discount, Overruns, Inefficient Bypass, Capacity Neutrality, RRC	Storage Discount, Overruns, Inefficient Bypass, Capacity Neutrality, RRC	Existing Storage flow exemptions	Existing Storage flow exemptions
Potential exclusion criteria	Storage discount on charge	Storage discount on charge	Storage sites, IPs	Storage sites, IPs
Application	Registered or Available capacity?	Registered or Available capacity?	Flows	Flows
Complexity	Complex with links to several other processes	Complex with links to several other processes	Not complex, unlikely links with other processes	Complex, hierarchy of use is needed for Users between EC/NonEC

***This list may not be exhaustive however represent aspects that can be commented on to help focus option(s) to take forward*

* Assume that in these examples that Existing Contract is used first

Application of the proposed charge – Views sought

- As a starter thought has been given to high level application as a means to assess where our focus is to be on developing further reflecting on the previous topics and thinking

	ECs only	All Users
Capacity	NO	NO
Commodity	NO	YES

- Considering all the potential impacts, compliance, complexity and deliverability we believe the Commodity based approach as the most merit to be taken forward, with more emphasis on an approach whereby it could potentially apply to All Users (still subject to some thinking on application – below)

- Within this option to apply against Commodity further thinking on its potential application needs to be considered. Here we present some initial thinking for views.

	Storage	IPs	All Non Storage / Non-IPs
Commodity	Propose Exempt	Propose apply to IPs, subject to compliance	Propose apply to all Non-Storage and Non-IP flows

Overview of charge options – Modelling Approach

- **Design of charge / assumptions for an additional charge**
  - In landing on a value that is subject to an additional charge, whilst this could be done in a number of ways, a value is effectively removed from the Allowed Revenue and converted in to an Additional/Alternative Charge.
  - The logic behind this value is based on the influence or impact of the Existing Contracts within the methodology. This has the benefit of reducing in ling with ECs expiration. Three options have been explored:
    1. Entry EC as a % of FCC to determine the % revenue to be subject to the additional charge;
    2. Forecast collection from Non-EC capacity from running w/o ECs leaves an amount deducted from target revenue and EC revenue to be collected from the additional charge;
    3. Utilisation of ECs (flows) drives the % of revenue to be subject to the additional charge
  - The Capacity Reserve Prices are recalculated based on the adjusted Allowed Revenue. By default there will be a shortfall in the recovered revenues, under the three scenarios, the additional charge can be then applied.

Revenue Scenarios

- **Assumptions/Considerations (further modelling of options will continue be carried out):**
  - Scenario 1: Entry - EC as a % of FCC

21/22	22/23	23/24	24/25	25/26
£344,452,713	£303,168,815	£267,116,995	£243,459,141	£246,145,527

  - Scenario 2: Forecast collection from Non EC Capacity and Non EC Cap Price

21/22	22/23	23/24	24/25	25/26
£215,673,279	£84,837,561	£110,841,974	£73,040,930	£94,769,323

  - Scenario 3: EC (flows) % of FCC

21/22	22/23	23/24	24/25	25/26
£209,028,876	£173,676,886	£155,148,349	£150,466,722	£158,397,867

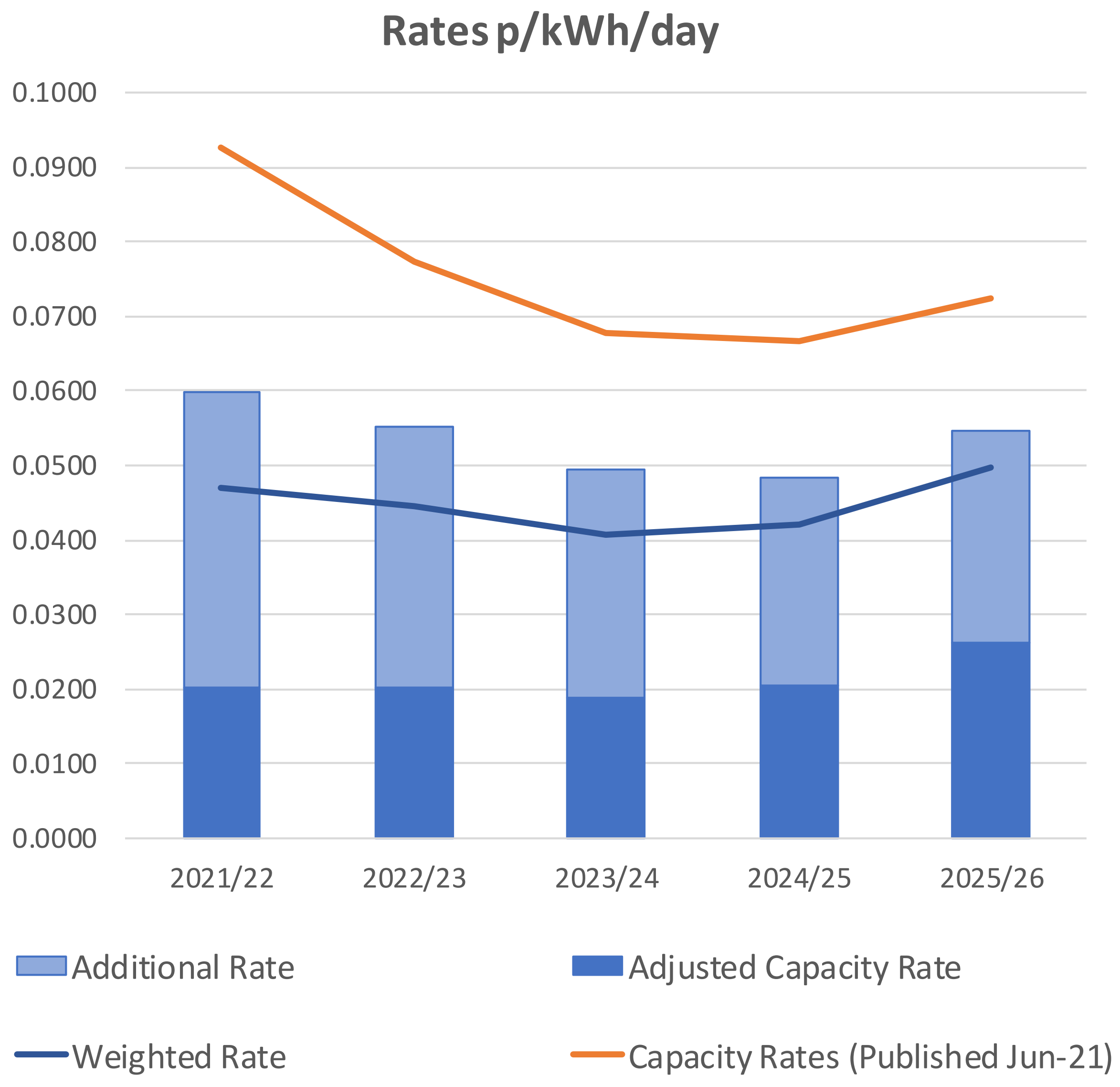
Overview of charge options modelled – Commodity option

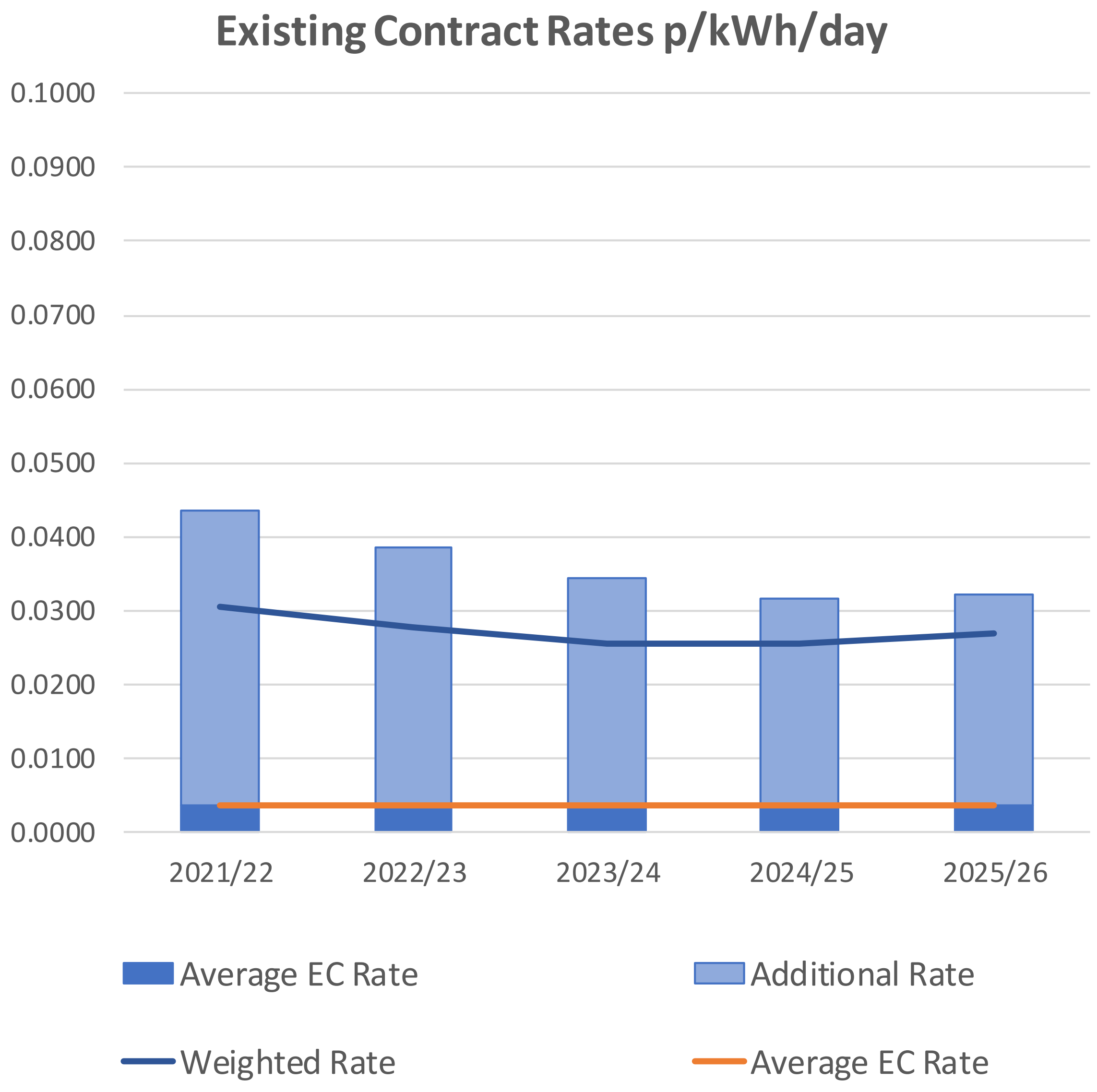
- **Assumptions/Considerations at this time for modelling the impact**
  - Storage Flows Exempt from the new charge in line with exemptions related to flow based charges so the charge is levied only on “new” gas entering the NTS
  - IP Entry flows attract the charge in this modelled option in line with application of other flow based charges on the NTS. Further review of compliance on this will be considered.
  - All other Entry flows attract the charge. Exit rates are unaffected
  - Adjustments have been calculated using the same models used to calculate the Reserve and Indicative prices published in June-2021, including the £45m deferral value.

Modelling the outcomes on

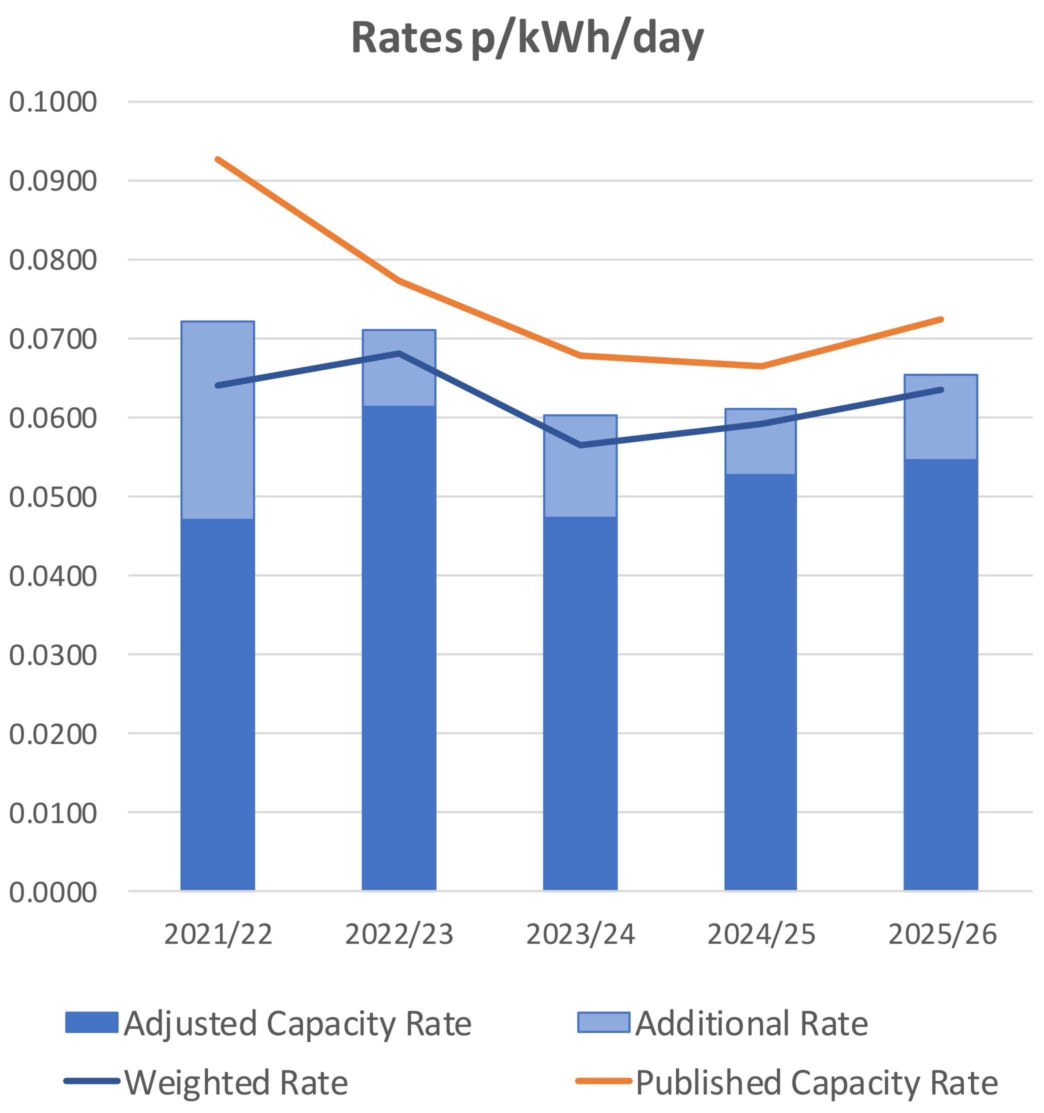
- **To Support understanding of the following charts**
  - Two charts are shown for each revenue scenario; one each for Non-EC and EC impacts.
  - The **orange** line tracks the current and indicative Entry Capacity Reserve prices as published in May 2021 with effect from Oct 21. For the second graph, a flat average of Existing Contract prices is used.
  - The **dark blue** bar represents the Adjusted capacity rate based on the recalculated reserve prices as a result of the process to determine the amount needed for the additional charge.
  - The **light blue** bar represents the additional charge. Stacked on top of the Adjusted Capacity Rate, this light blue bar represents the upper and lower limits of what a Shipper could pay in commodity charges on top of Capacity, dependant on their flow levels.
  - The **dark blue** line is the average weighted price, this comprises the cost per kWh of capacity booked and the average additional rate payable based on the historic ratio of flows against capacity.
  - The relationship between the **orange** line and the **dark blue** line demonstrates the change in payable price in each scenario and is the key message to take away from these graphs.

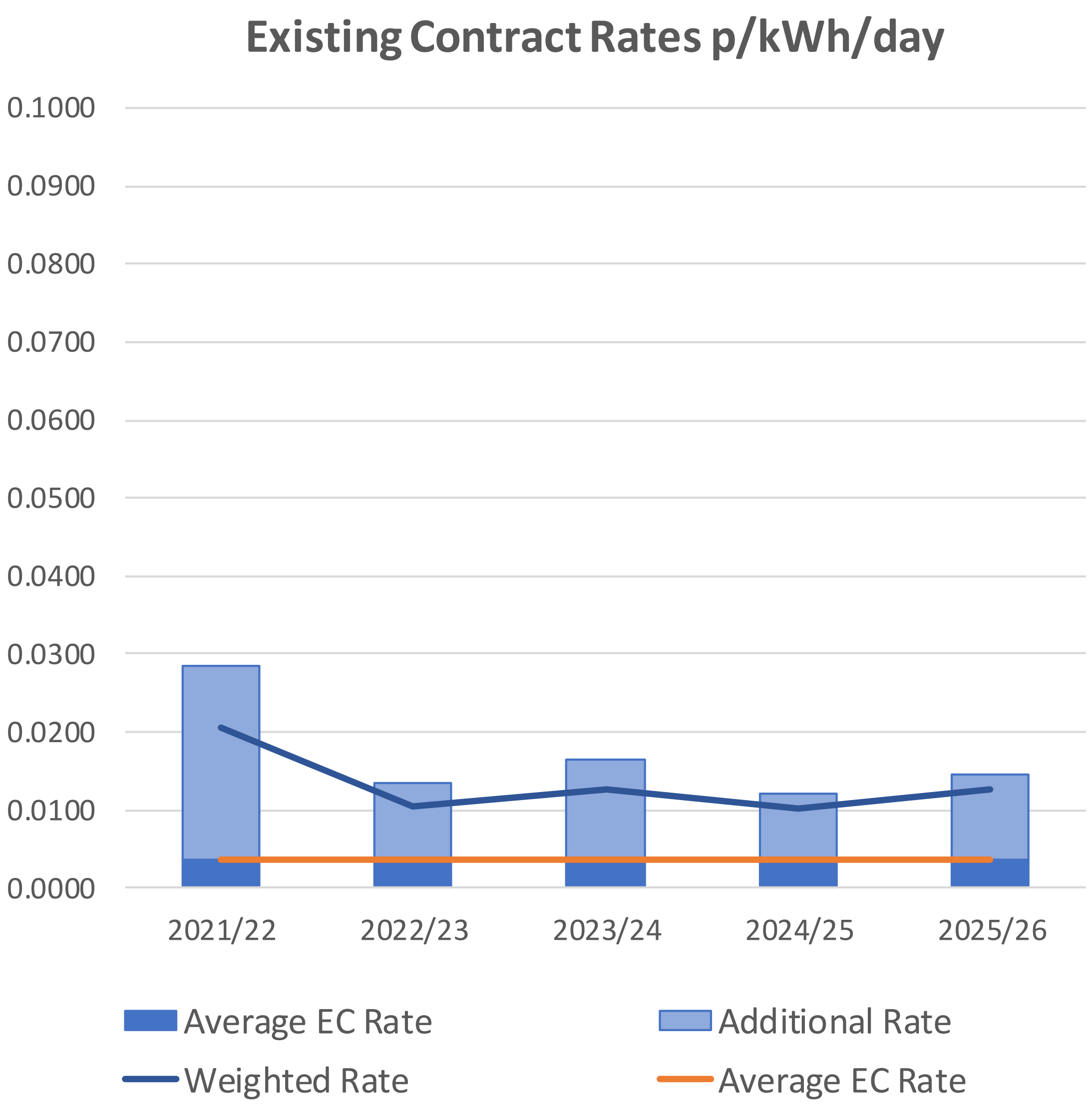
Scenario 1: Commodity (excl. Storage)



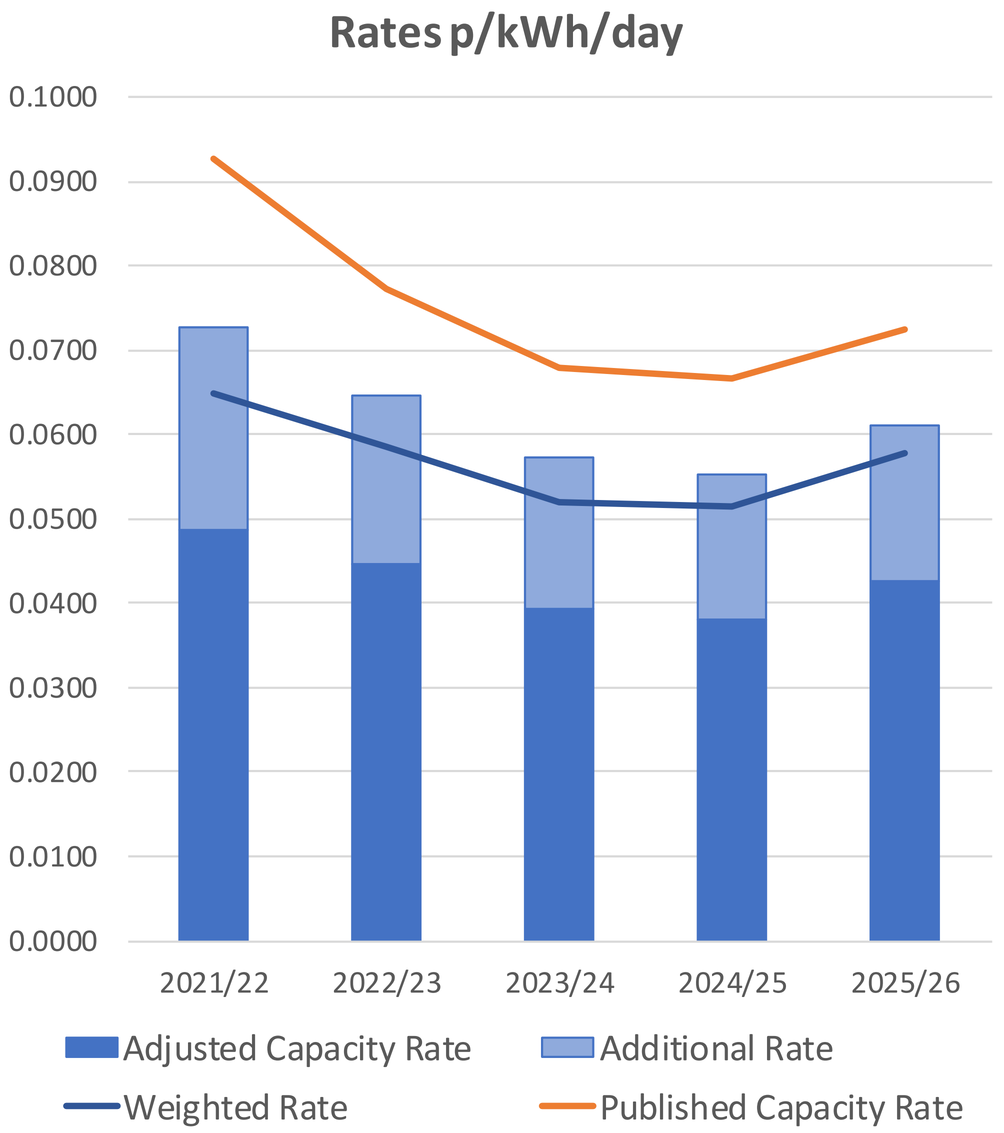


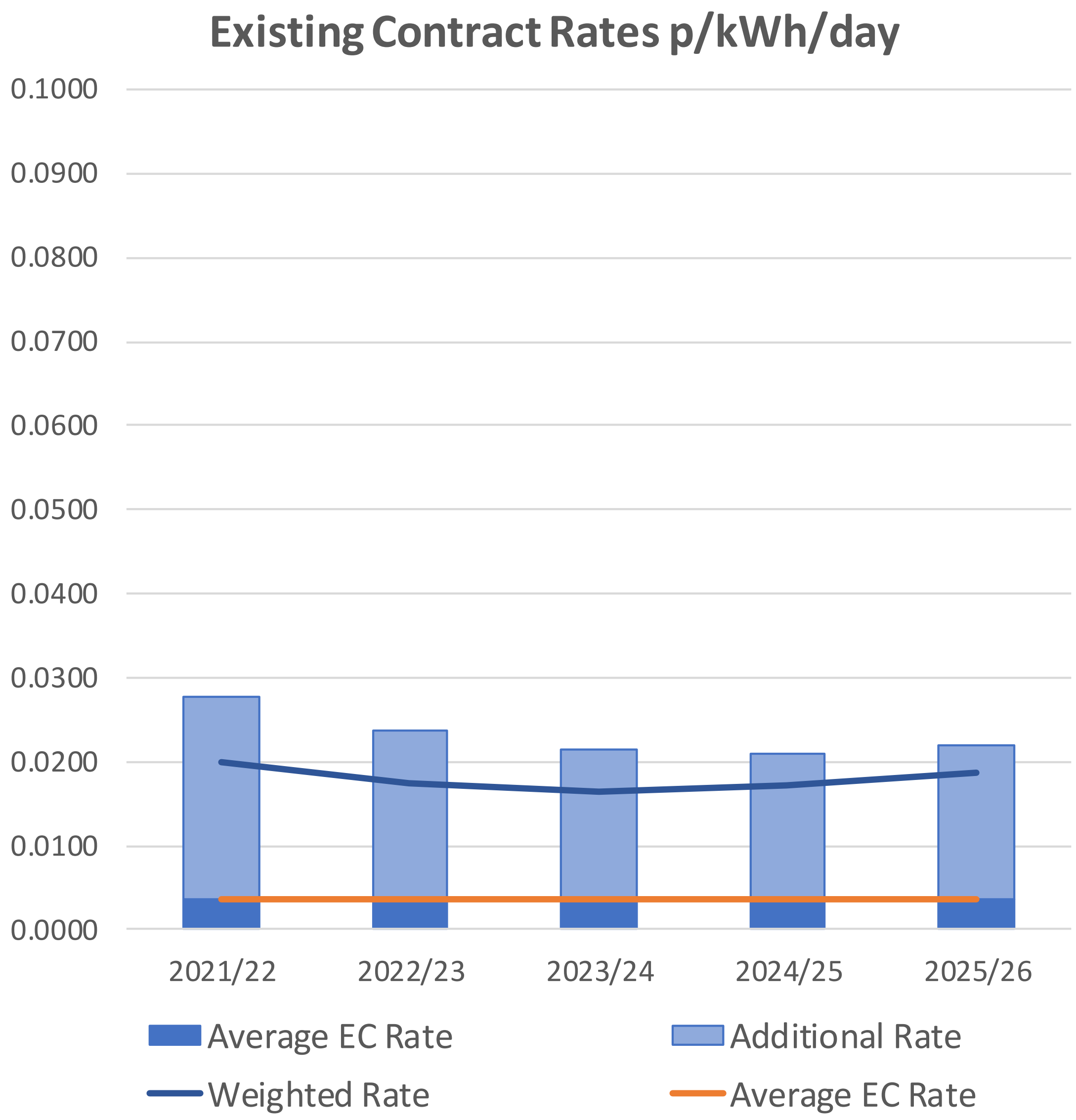
Scenario 2: Commodity (excl. Storage)





Scenario 3: Commodity (excl. Storage)





Tariff developments – Next Steps

- To follow on from what we have shown so far, there is merit we believe in further developing with focus on Commodity as the basis and focusing on Scenario 3 as the basis for supporting the determination of impacts associated with Existing Contracts
- To fully develop there are some additional elements we need to consider, model and determine how to incorporate such as, and not limited to:
  - Further checking compliance with relevant legislation, in particular the EU Tariff Code
  - Any refinements to calculation of the scenario to determine influence of ECs
  - How it might be embedded within the overarching RPM and overall framework
- National Grid will continue this work and bring back findings and proposals for Stakeholder views
- In addition to National Grid's views, we welcome input from Stakeholders on these options including compliance to enhance the development ahead of, and in developing a UNC Change proposal.

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Next Steps

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Charging Changes: Timings and Scope

As per Webinar on 21 July 2021

- In order to deliver for October 2022 and the necessary steps to achieve it, urgency request(s) for the UNC modification(s) may be needed
- The most efficient way to approach change(s) will be considered for each change – (e.g. urgency may not be necessary for all changes)
- Aim for the initial (priority) phase is to have the UNC change process concluded by December 2021. The end of this process would be to have the Final Modification Report(s) sent for Authority decision during December at the latest.
- An example timeline is below where urgency is sought:

2022 Path - Workstream 1: example for a modification that would follow urgency																
	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22
NTSCMFs																
NG Led workshops																
Pre-modification sharing																
Formal raising of Modification(s)																
UNC Consultation																
UNC Panel																
Modification to Ofgem for decision																
Effective date for charges (Oct 22)																
All dates are approximate to illustrate the necessary steps and likely timescales																

Charging Changes: Timings and Scope

- Using the same timeline approach, the next milestone would be to focus on developing the options presented, subject to views and feedback, to fully develop the options, modelling and drafting of UNC change proposal(s).
- Our aim would be to bring back drafting for comment to September NTSCMF

2022 Path - Workstream 1: example for a modification that would follow urgency																
	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22
NTSCMFs																
NG Led workshops																
Pre-modification sharing																
Formal raising of Modification(s)																
UNC Consultation																
UNC Panel																
Modification to Ofgem for decision																
Effective date for charges (Oct 22)																
All dates are approximate to illustrate the necessary steps and likely timescales																

Ways of working

As per Webinar on 21 July 2021

Workstream	Overview	Details
NTSCMF	Principle way to engage on charging changes that will result in UNC change proposals	Facilitated by the Joint Office of Gas Transporters https://www.gasgovernance.co.uk/ntscmf
NG led workshops	Likely starting in August – frequency to be determined. Purpose is to maximise engagement with the ability to work with National Grid to review analysis, pose questions to take some of the detailed questions and maximise what can be achieved in the timescales available	Hosted and run by National Grid. Trial of this approach worked well as part of the FCC Methodology update in 2021.
Webinars	To be used as might be helpful to share milestone updates	Would be signalled by National Grid and via the Joining Office of Gas Transporters mailing lists

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