

Gas
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Workshops

Charging Reforms

16 September 2021

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Overview

- Any comments on materials to date
- Updates following National Grid's open letter and recent updates (Webinar / NTSCMF) and development discussions and setting up for future workshops
 1. Additional Charge
 2. Approach to Gas Year Revenues
- Next Steps

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1

Additional
Charge

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Additional Charge within the Charging Methodology

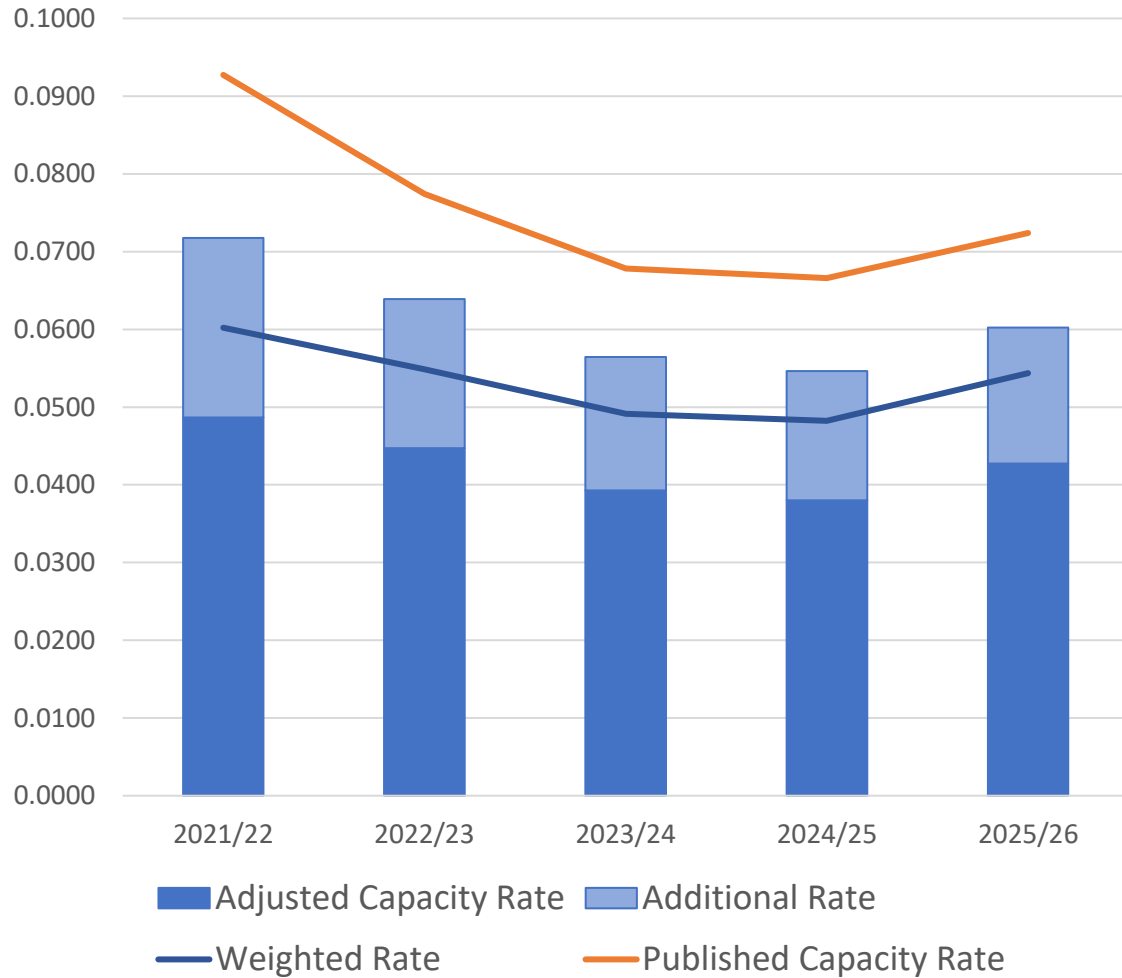
- Following NTSCMF in August, National Grid suggested some methods by which an amount could be attributable to the influence of Existing Contracts.
- In terms of what it is looking to address, primarily the price impacts associated to the high levels and use of Existing Contracts significantly impacting the prevailing payable Entry Reserve prices, a method of measuring this should be integral to its design
- Previously, National Grid shared a number of options and said we'd be focusing on our Scenario 3 (establishing the influence of utilised Existing Contracts relative to overall utilised capacity) as it provided a logical basis in terms of assessing and demonstrating a pricing influence of existing contracts.
- In this workshop we are showing the impact of this approach to continue its test as a concept and outlining the steps we intend to take ahead of the next workshop to build this into the overall methodology

Modelling the outcomes

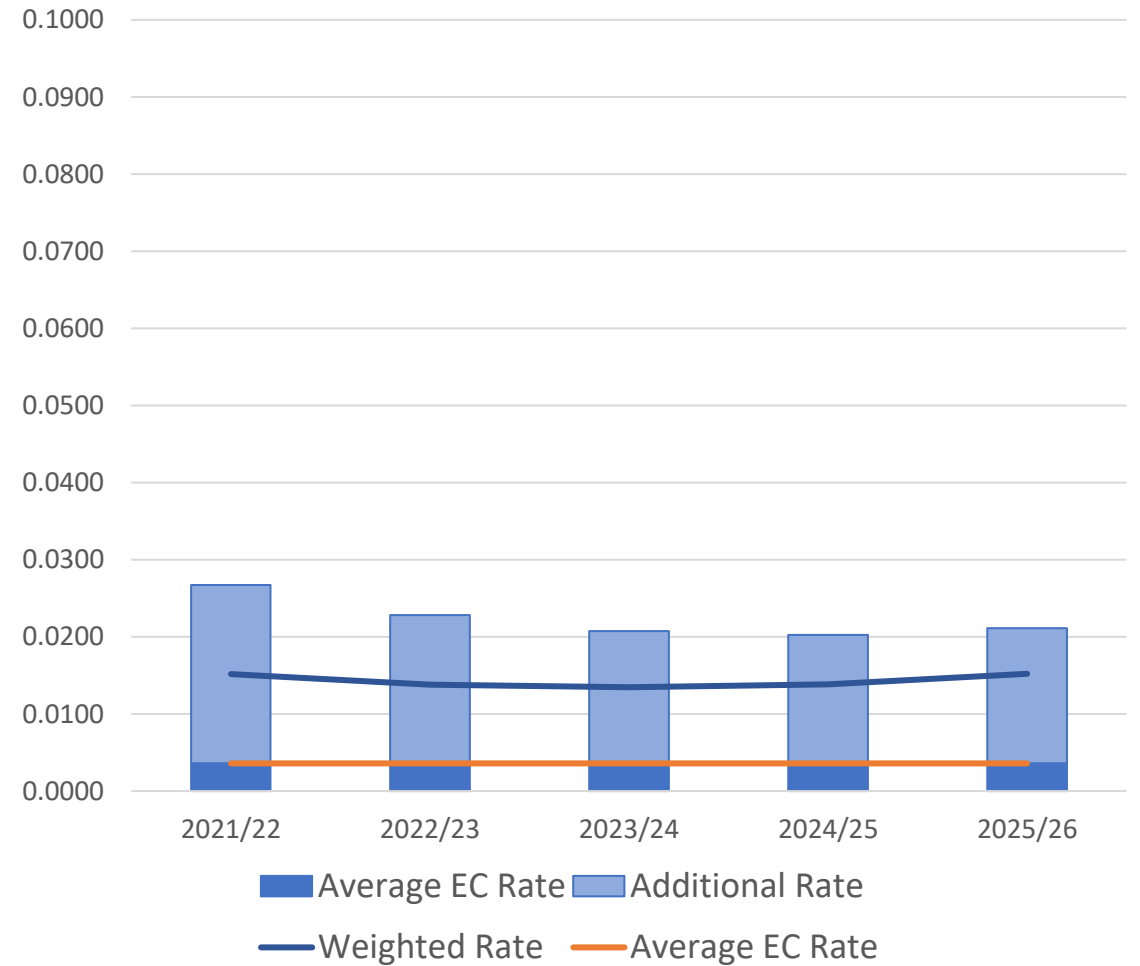
- **To Support understanding of the following charts**
 - Two charts are shown based on revenue scenario 3; one each for Non-EC and EC impacts.
 - The **orange** line tracks the current and indicative Entry Capacity Reserve prices as published in May 2021 with effect from Oct 21. For the second graph, a single weighted average of Existing Contract prices is used across all five years.
 - The **dark blue** bar represents the Adjusted capacity rate based on the recalculated reserve prices as a result of the process to determine the revenue to be collected by 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.

Flow based charge (no exemptions)

Rates p/kWh/day



Existing Contract Rates p/kWh/day

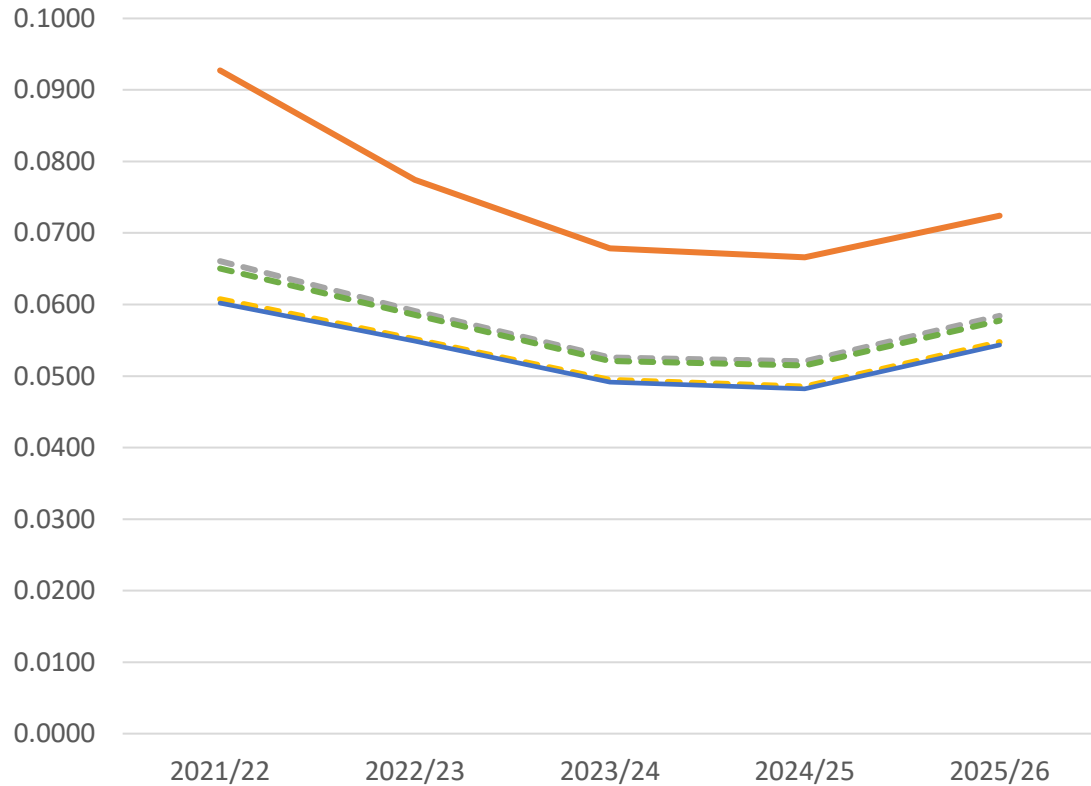


Additional Charge within the Charging Methodology

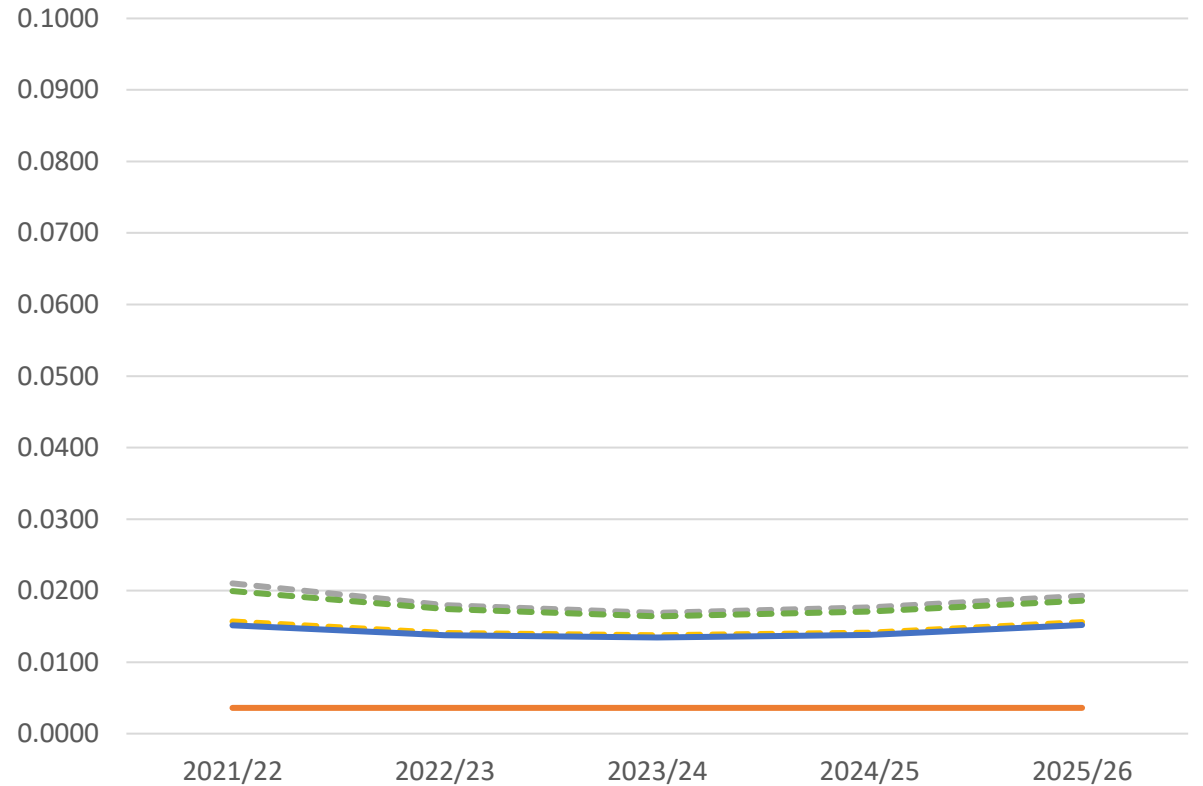
- The following graphs demonstrate the impact of potential exemptions to the flow based charge.
 - We retain the **orange** lines providing the current and indicative prices for the next five years...
 - ...and the **dark blue** line demonstrating the weighted average cost per unit under a scenario with no exemptions as seen previously.
 - Three dotted lines have been added representing the weighted average price for three combinations of exemptions
 - IP Exemption only in **yellow**
 - Storage Exemption only in **green**
 - Combined IP and Storage Exemptions in **grey**
 - An additional zoomed in version for each graph follows the versions displayed in context to better highlight the differences.
 - Please be aware of the changes to scale on the y axis on the second of the following graphs.

Flow based charge – exemption impacts

Standard Capacity



Existing Contracts

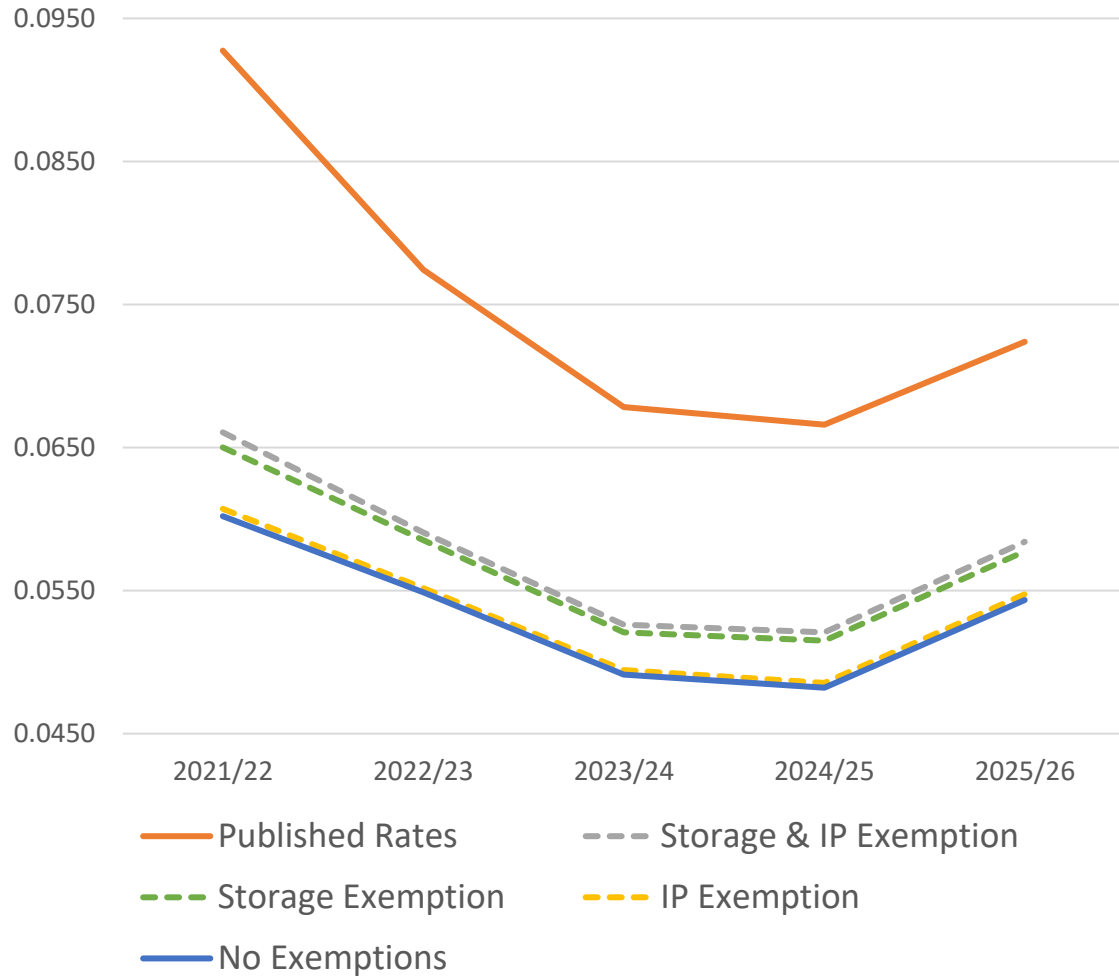


- Published Rates
- - - Storage Exemption
- No Exemptions
- - - Storage & IP Exemption
- - - IP Exemption

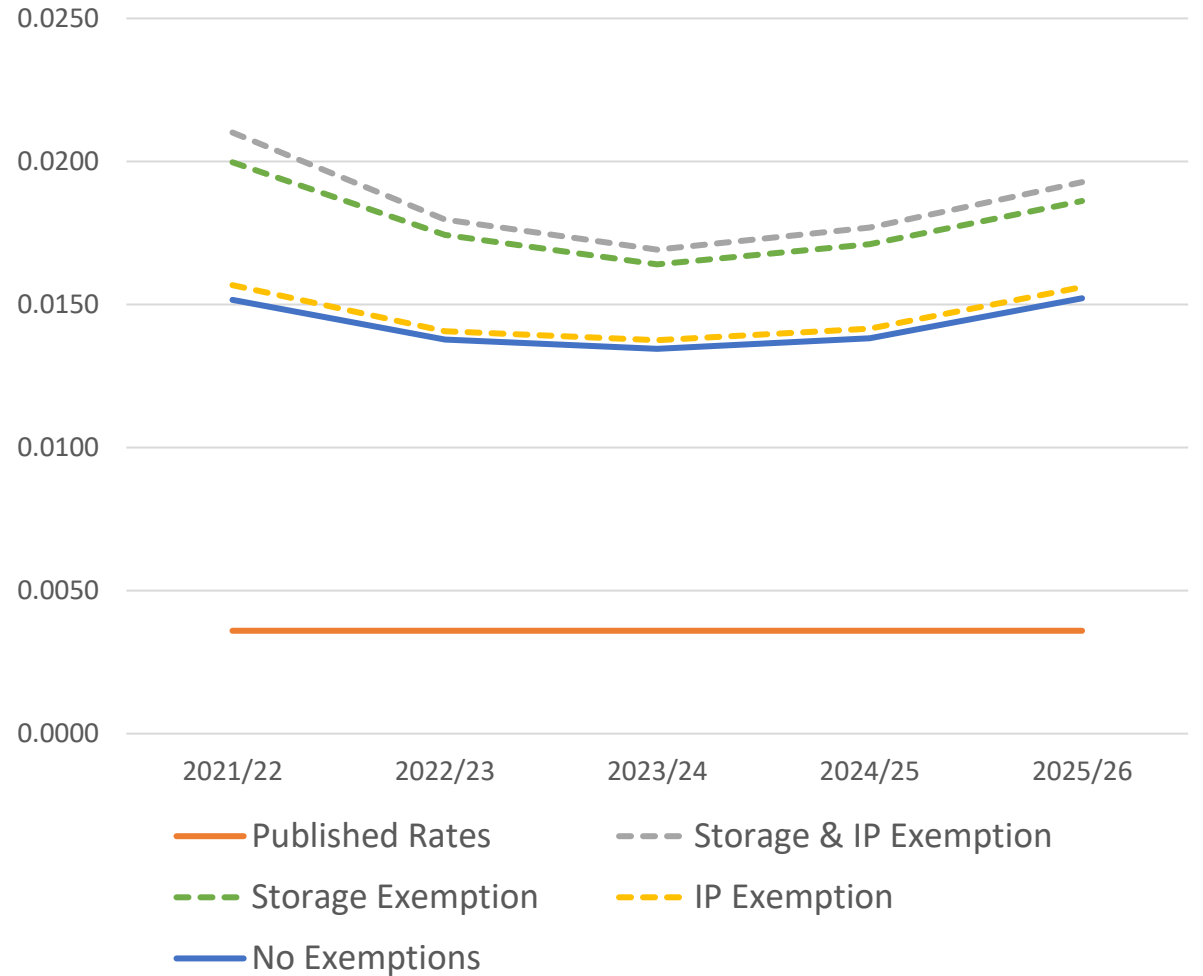
- Published Rates
- - - Storage Exemption
- No Exemptions
- - - Storage & IP Exemption
- - - IP Exemption

Flow based charge – exemption impacts

Standard Capacity

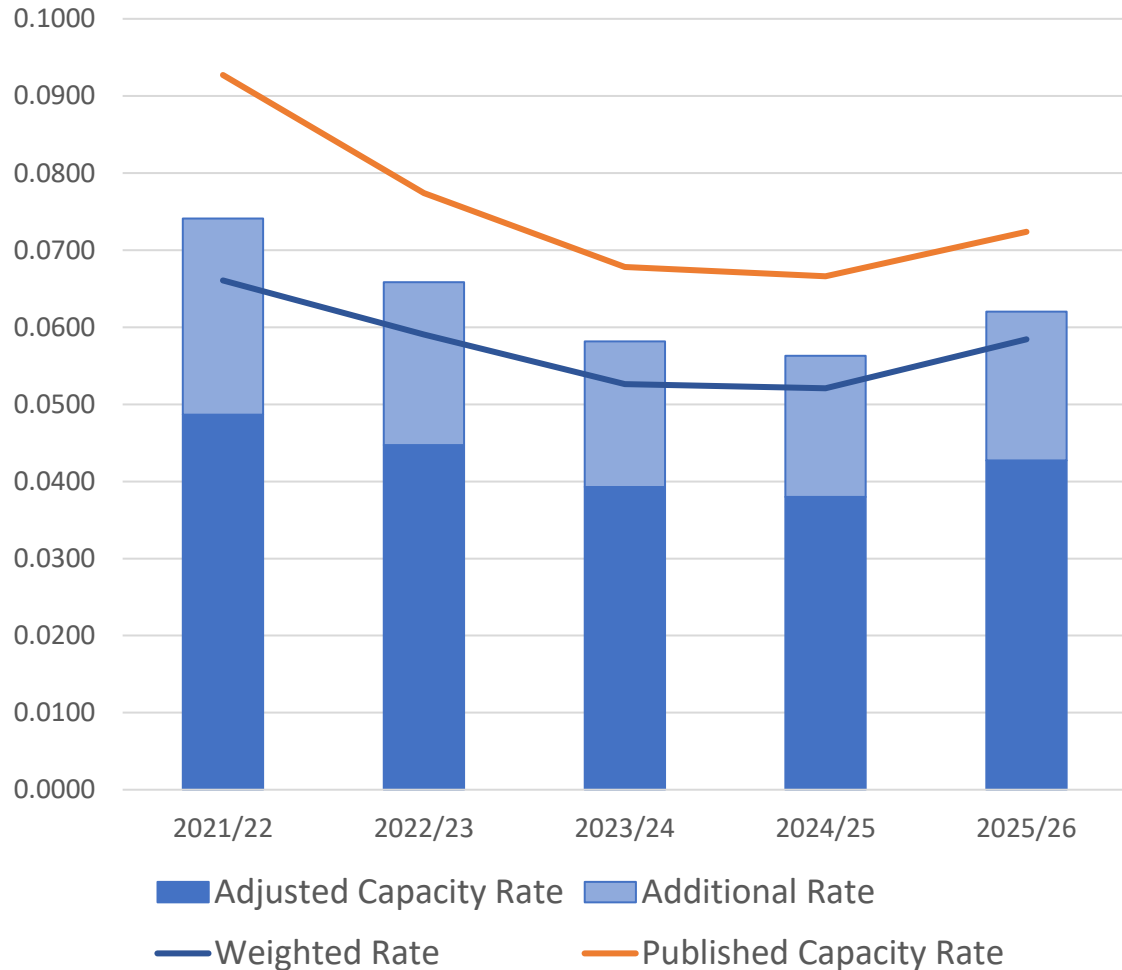


Existing Contracts

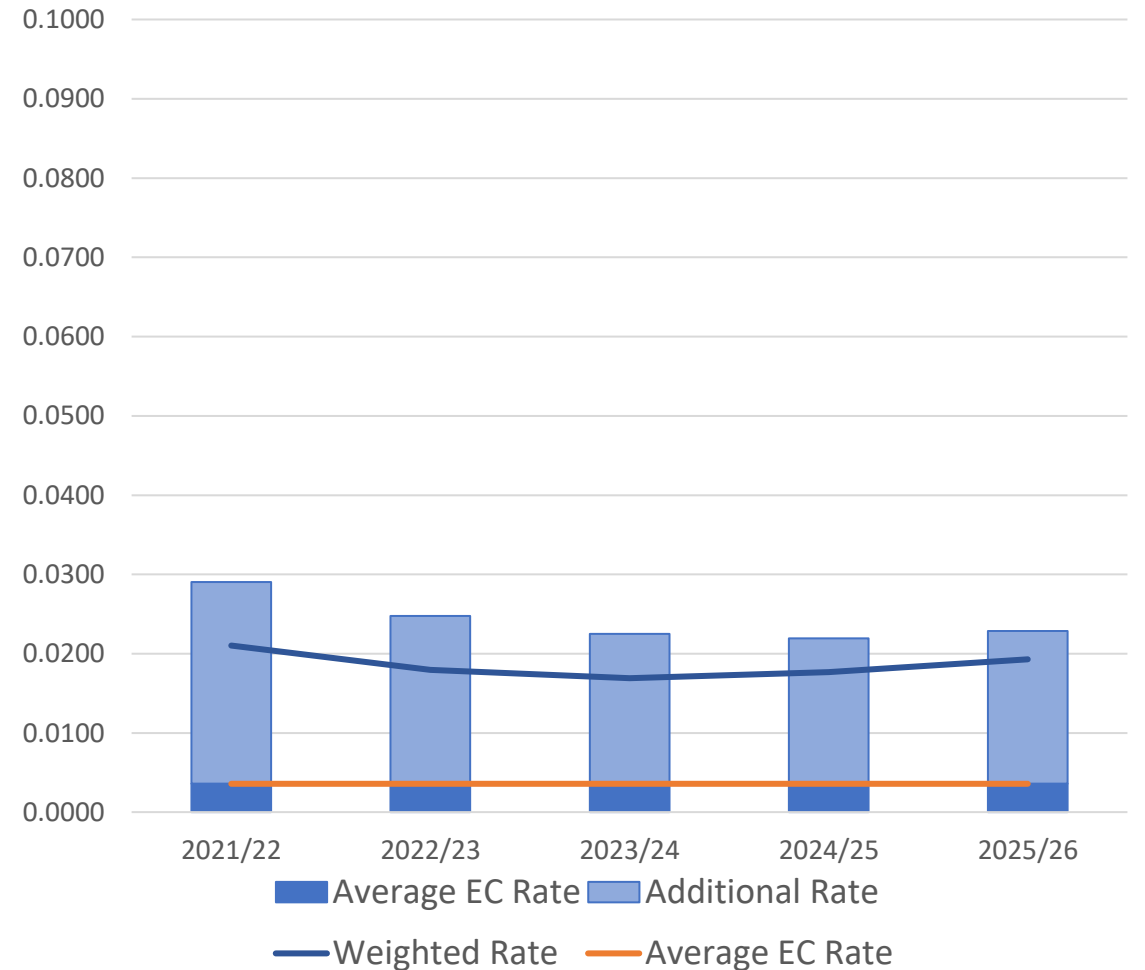


Flow based charge - IP and Storage exemption

Rates p/kWh/day



Existing Contract Rates p/kWh/day



Additional Charge within the Charging Methodology

- Our next step is to share the basis of how we propose to apply this such that it can be a product of the RPM and an output anticipated revenue shortfall can be levied more in line with TAR NC to manage revenue recovery linked to the issue it is looking to address.
- Below we share some thoughts on the steps that are needed and welcome views on this. This uses the prevailing method as a baseline to change from (i.e. where the focus is on recovery of the Formula Year Revenues).
- High level summary:
 - Determine target allowed revenue for Entry
 - Establish prices without EC influence that would be applied to Non-ECs. All discount arrangements (i.e. storage % discounts, interruptible, inefficient bypass) would apply to these reserve prices.
 - Calculate anticipated revenue collection from both non-ECs and ECs to determine a revenue shortfall
 - Revenue Shortfall becomes the target revenue from the additional Entry flow based charge

Next Steps: Additional Charge

- Share calculation steps of the detailed thinking
 - Determine Allowed Revenues as per normal process to determine overall target Entry revenue (including Existing Contracts)
 - Calculate the entry reference price without ECs and produce an Entry capacity reference price for all capacity as if no Existing Contracts.
 - Produce updated expected recovered revenues using the calculated reserve prices plus all other revenues / charges (e.g. ECs, inefficient bypass) to determine anticipated amount to be collected from the additional charge.
 - Review anticipated collection against the baseline UNC for recovery (i.e. using the regulatory year as the target). Consider any updates to meet this obligation as revenue recovery profile of capacity and a flow based charge would be different to prevailing that is only linked to capacity.
 - Review the level of the additional charge in light of the obligation under previous step regarding target recovery of regulatory year.
- Share modification drafting for comments

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2

Revenues

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Revenue Profiles: Current Methodology (UNC TPD Y 1.6.1)

Financial Year v Gas Year

- National Grid's Allowed Revenues are set for Formula / Financial / Regulatory Year (April – March)
- Transmission Services Entry / Exit & IP Capacity Reserve prices are set for Gas Year (October – September)
 - Reserve prices have to be set to ensure National Grid meets its Allowed Revenues for the Financial Year.
 - Prices driven by revenue required to be collected in the period October to March of the Gas Year.
- $AR_y = (AR_t - R_{pt}) * F_{ry} * 2$
 - where AR_t is the corresponding allowed revenue for Formula Year t ;
 - R_{pt} is the amount of revenue (of the corresponding kind) which National Grid NTS estimates will be earned in respect of the part of Formula Year t which falls prior to Gas Year y ;
 - F_{ry} is a factor which represents National Grid NTS's estimate of (A / B) where A is the amount of revenue (of the corresponding kind) which would be expected to be earned on average in any month in Gas Year y as a whole, and B is the amount of revenue (of the corresponding kind) which would be expected to be earned on average in any month in the part of Formula Year t which falls within Gas Year y .

Revenues options

- Amendment to the calculation of the Gas Year revenue.

Scope of thinking at this stage – new methodology

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).

Analysis shown in this pack

1. Modelling proposed methodology and revenues used for tariff setting (Entry) with £45m deferral
2. Modelling proposed methodology and revenues used for tariff setting (Exit)

Transmission Services Entry: Potential New Methodology revenues (£45m deferral)

	Apr-Sep 21	Oct - Mar 21/22	Apr - Sep 22	Oct - Mar 22/23	Apr - Sep 23	Oct - Mar 23/24	Apr - Sep 24	Oct - Mar 24/25	Apr - Sep 25	Oct - Mar 25/26	Apr - Sep 26	Oct - Mar 26/27
Seasonal Allocaton Factor (Fry)		0.515	0.485	0.515	0.485	0.515	0.485	0.515	0.485	0.515	0.485	0.515
Entry Target Revenue (FY) exc k	515.136		470.974		441.289		413.481		416.748		425.923	
Target including K	515.136		474.785		448.704		420.427		415.932		423.631	
Revised 6 monthly		250.410	228.422	242.552	214.025	227.264	200.538	212.943	202.123	214.625	206.572	
Revised 6 monthly GY Target		478.832		456.577		427.802		415.066		421.198		
Forecast Revenue Collection (6 months)	264.726	246.598	232.234	235.137	221.440	220.318	207.484	213.759	201.307	216.917		
Forecast Revenue Collection (FY)	511.325		467.371		441.758		421.243		418.224			

Transmission Services Exit: Potential New Methodology revenues

	Apr-Sep 21	Oct - Mar 21/22	Apr - Sep 22	Oct - Mar 22/23	Apr - Sep 23	Oct - Mar 23/24	Apr - Sep 24	Oct - Mar 24/25	Apr - Sep 25	Oct - Mar 25/26	Apr - Sep 26	Oct - Mar 26/27
Seasonal Allocaton Factor (Fry)		0.501	0.499	0.501	0.499	0.501	0.499	0.501	0.499	0.501	0.499	0.501
Exit Target Revenue (FY) exc k	434.908		431.493		446.808		419.000		422.267		431.442	
Target including K	434.908		417.141		442.980		425.952		421.450		429.148	
Revised 6 monthly		187.489	215.232	216.261	222.872	223.937	209.001	210.000	210.630	211.637	215.206	
Revised 6 monthly GY Target		402.721		439.132		432.937		420.630		426.843		
Forecast Revenue Collection (6 months)	247.420	201.840	200.880	220.090	219.043	216.985	215.953	210.816	209.813	213.930		
Forecast Revenue Collection (FY)	449.260		420.970		436.028		426.769		423.744			

Next Steps with Revenues

- To fully develop into a workable solution there is further details to share and expand on. The focus in this workshop has been to highlight the basic method underlying a potential change that could ‘flatten’ the revenue profile compared to the current approach.
- Further considerations needs to take account of and sharing in these workshops:
 - Transmission Services Entry, Exit and Non-Transmission Services assessments
 - Potential interactions with the Licence
 - Calculation walkthrough on revenues
- Share modification drafting for comments

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3

Next Steps

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Next Steps with Additional Charge / Revenues

- Both areas being prioritised require some further development and are progressing
 - In each of the sections, next steps specific to each were identified
- One aspect to keep in mind is the change from the current UNC baseline
 - The two proposals should be independent and not changing same text in UNC
 - Each will show comparisons to current UNC baseline as would be needed for UNC change proposals
- There will likely be merits in showing the potential impacts of the two sets of potential changes together
 - Views on this are welcome to shape how this could be approached

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4

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