Gas Transmission

Gas Transportation Charging Update:

1. October 2021 charges

2. Further Reform proposals: next steps (following National Grid open letter)

21 July 2021 @ 1pm

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Logistics

- Should last for approximately 60 – 90 mins (approx. 35-40mins material and time for questions)
- Questions via MS Form: https://forms.office.com/r/HsmrKSGAbN or can be accessed using the QR code shown later in this pack
- Please mute microphones and turn off video
- Material will be published 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")

Agenda

- This Webinar will cover

1. October 2021 charges

2. Further Reforms & proposals

3. Next Steps

4. Q&A

Who you'll be hearing from today in the Markets Team

Colin Williams
Charging & Revenue Manager

Laura Johnson
Senior Code Change Officer

Dan Hisgett
Code Change Officer

Dave Bayliss
Revenue Lead

Kieran McGoldrick
Senior Charging Officer

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1

October 2021 charges

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Aim of this section

- To share details on
  - 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’

NTS Transportation Charges: October 2021

Capacity Reserve Prices published on 28 May 2021

Transmission Services Prices (p/kWh/d) (rounded to 4 decimal places)	Final	Indicative			
	21/22	22/23	23/24	24/25	25/26
Entry Capacity Reserve Price	0.0927	0.0774	0.0678	0.0666	0.0724
Entry Capacity Reserve Price for Storage (80% discount)	0.0185	0.0155	0.0136	0.0133	0.0145
Transmission Services Entry RRC	0.0000	0.0000	0.0000	0.0000	0.0000
Exit Capacity Reserve Price	0.0211	0.0274	0.0226	0.0246	0.0238
Exit Capacity Reserve Price for Storage (80% discount)	0.0042	0.0055	0.0045	0.0049	0.0048
Transmission Services Exit RRC	0.0000	0.0000	0.0000	0.0000	0.0000

General Non-Transmission Services Prices to be published by end July 2021

NTS Transportation Charges: Drivers

- Charges are calculated using two key drivers:
  - Revenue - the target revenue for the required period(s)
  - Forecasted Contracted Capacity

Revenues

- The target revenue takes into account:
  - Target MAR for regulatory years (i.e. April to March)
  - Revenue, actual and forecast, up to 30 September 2021 (the first 6 months of the regulatory year, based on the previous Gas Years prices)
  - Revenue profiled across the Gas Years (i.e. October to September)

FCC

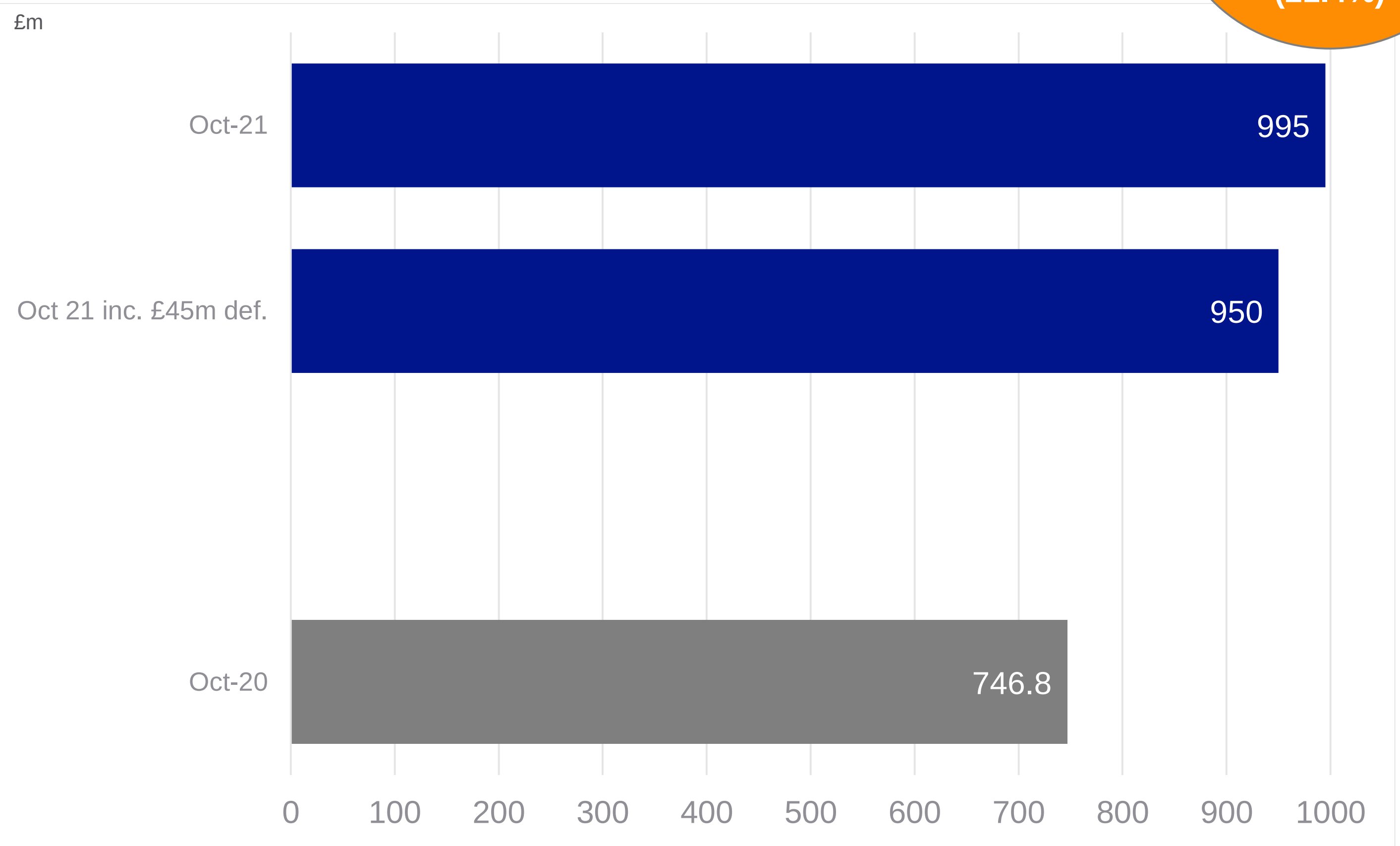
- The amount of capacity forecast to be purchased across the Gas Year.
- The Forecasted Contracted Capacity follows the FCC Methodology in the derivation of the numbers. Revised methodology applied for October 2021

MAR - TS Allowed Revenues

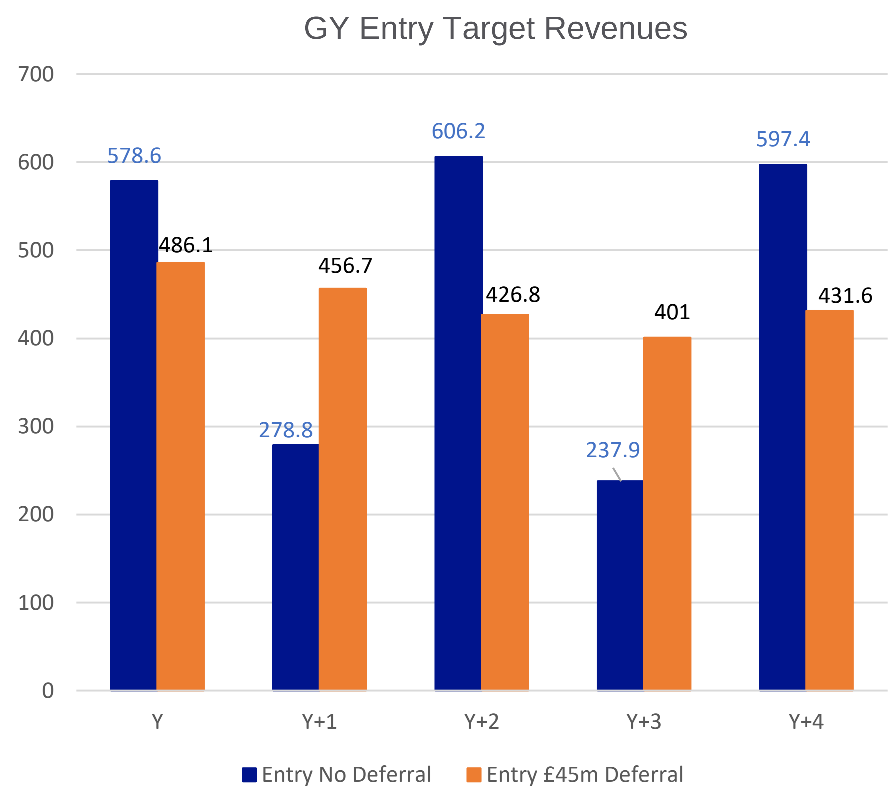
Target Revenue Increase

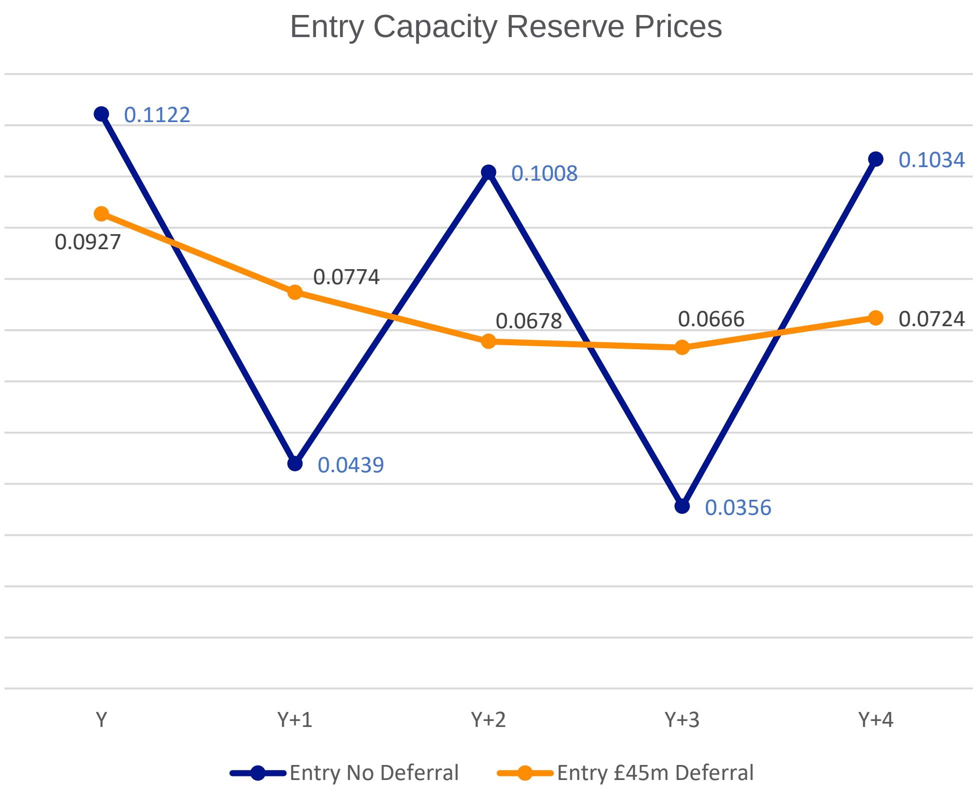
£203.2m (21.4%)

TO MAR 21/22 (inc. 'K' & 'LK') £987.4m
Transmission Services / General Non Transmission Services (DN Pension / Meter Maintenance / SO Capacity) Adjustments £7.6m
Allowed Revenue £995m
Deferral of Entry Allowed Revenues -£45m
Allowed Revenue £950m



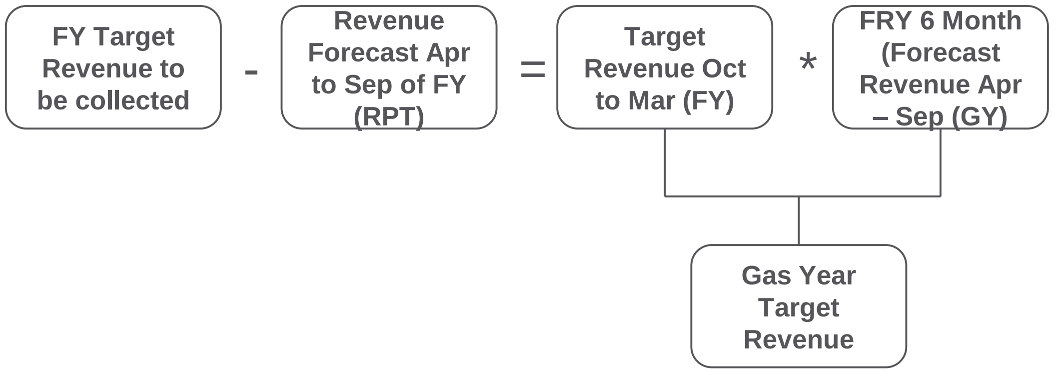
Deferral of £45m of Entry GY Allowed Revenues



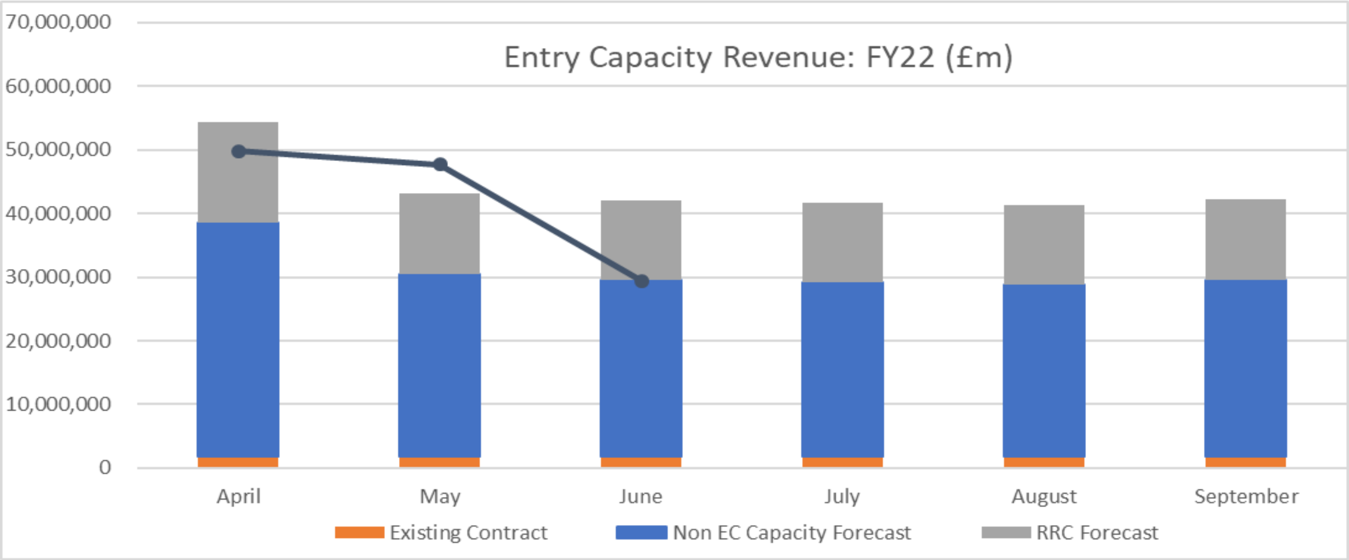


Revenue Profiles: Financial Year v Gas Year

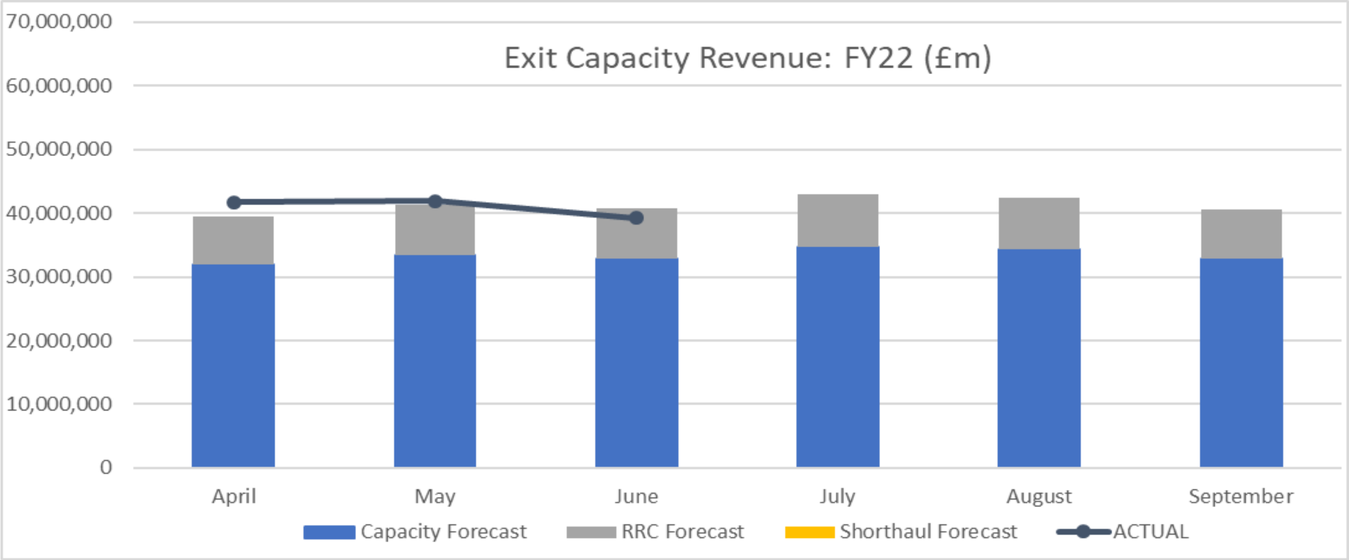
- National Grid’s Allowed Revenues are set for Formula / Financial / Regulatory Year (April – March)
- Transmission Services Entry / Exit & IP Capacity Reserve prices are set for Gas Year (October – September)
  - Reserve prices have to be set to ensure National Grid meets its Allowed Revenues for the Financial Year.
  - Prices driven by revenue required to be collected in the period October to March of the Gas Year.
    - ARy = (ARt – Rpt) * Fry *2



RPT: FY22 – April 21 – September 21

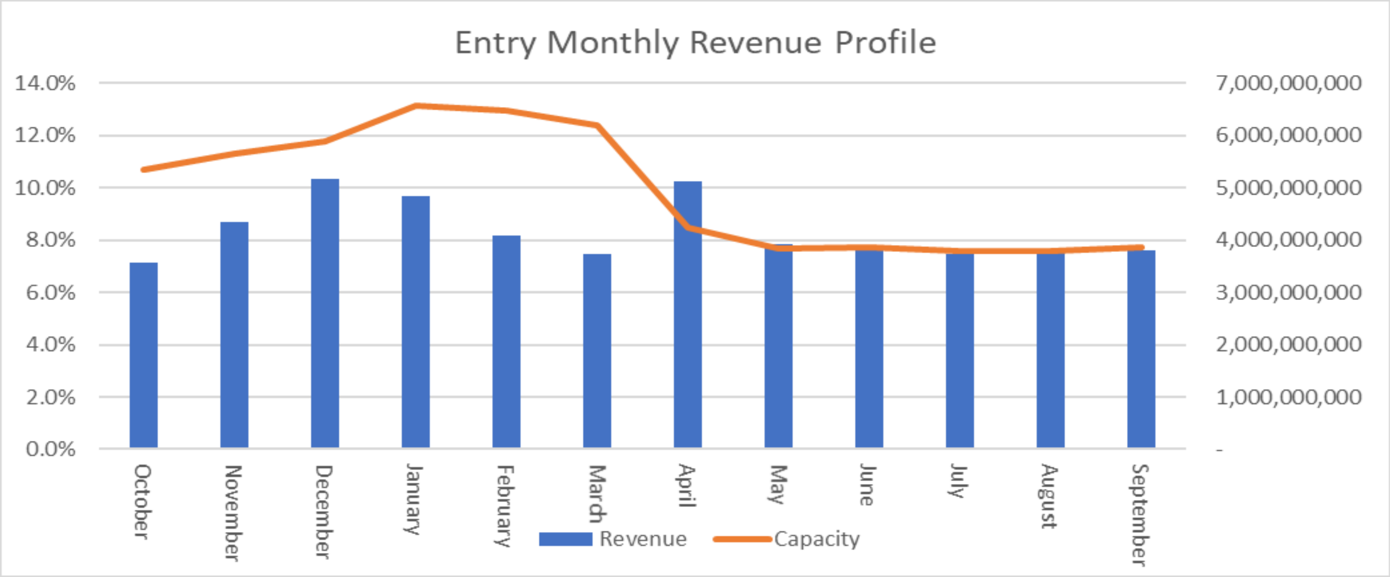


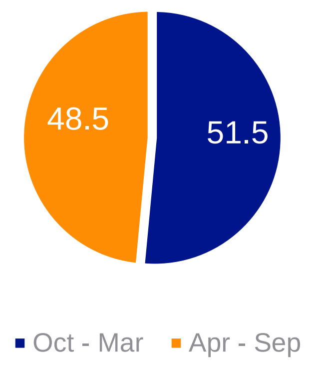
Entry	
RPT	**£264.8m**
Forecast to Date (FY)	£139m
Actual to Date (FY)	£127m



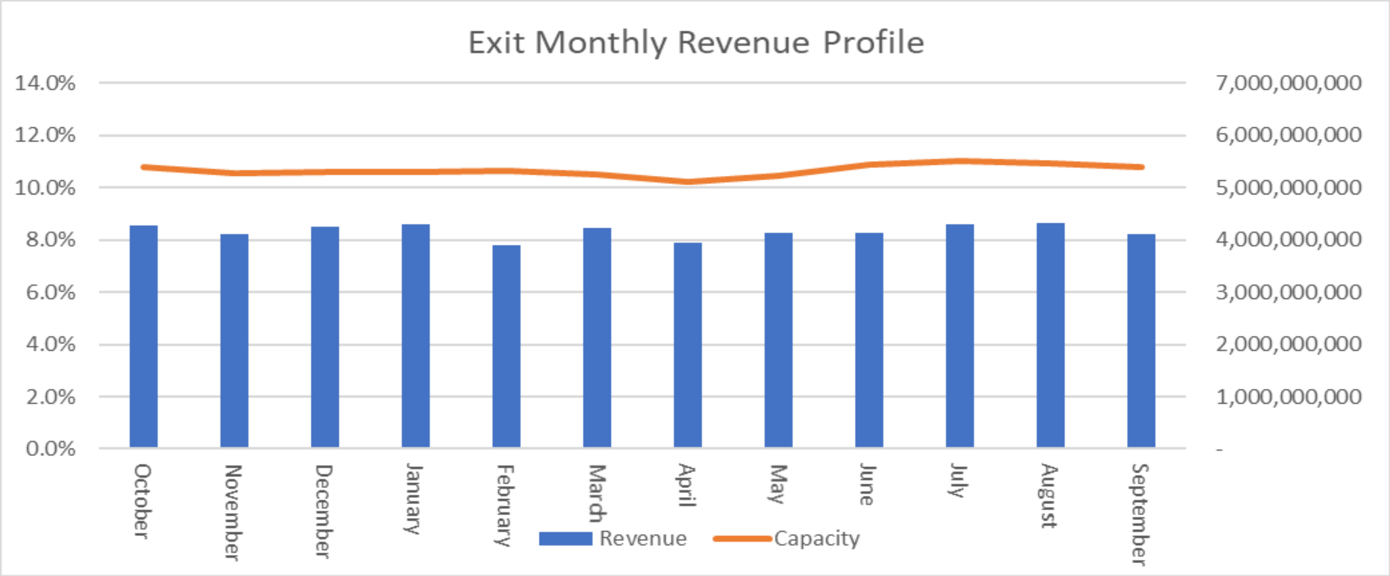
Exit	
RPT	**£247.4m**
Forecast to Date (FY)	£122m
Actual to Date (FY)	£120m

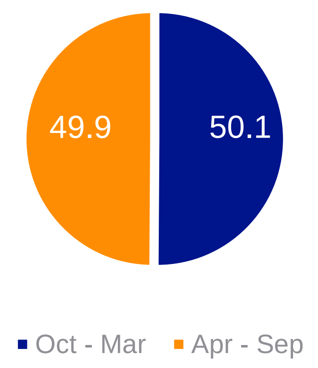
FRY





Entry Fry: 0.970





Exit Fry: 0.997

GY Target Revenues

ENTRY

TO MAR / 2

£424.8m

+ TO ‘K’ and ‘LK’ and SO Capacity £90.3m

= £515.1m

- RPT £264.8m

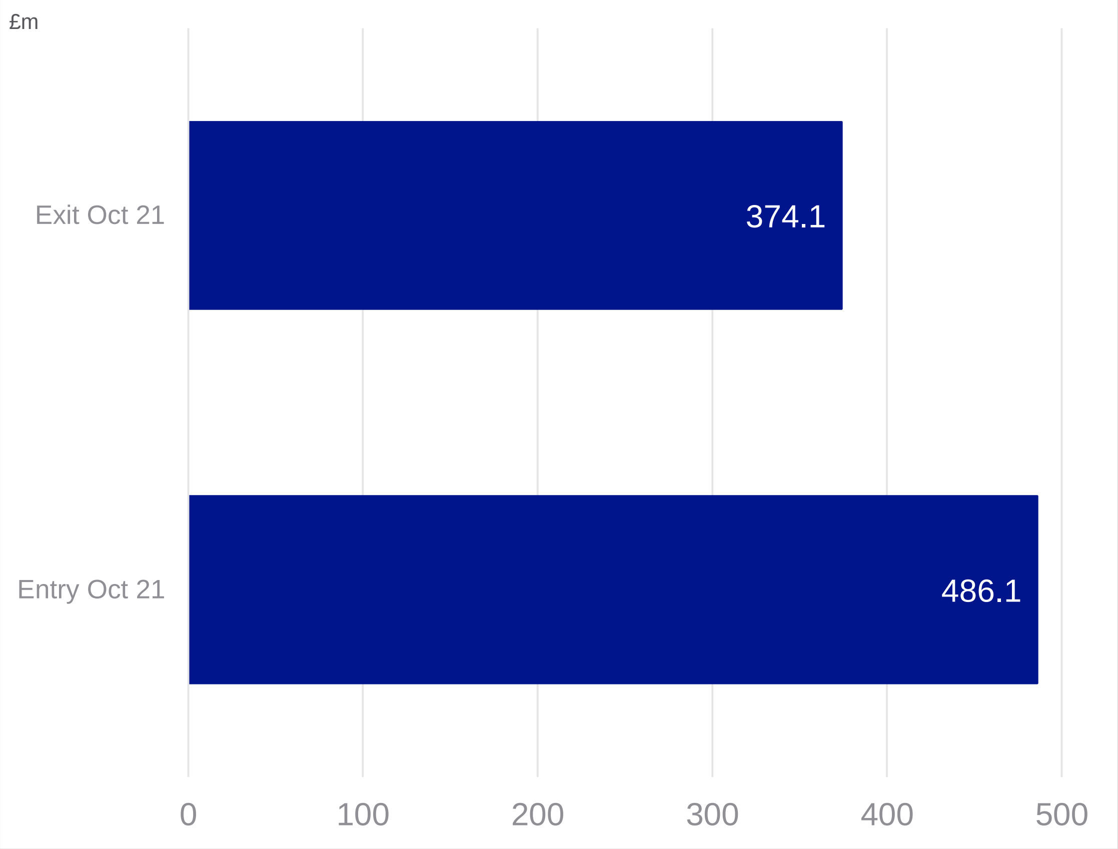
= £250.4m

+ FRY £235.7m

=

Allowed Revenue

£486.1m



EXIT

TO MAR / 2

£424.8m

+ TO ‘K’ and ‘LK’ and SO Capacity £10.1m

= £434.9m

- RPT £247.4m

= £187.5m

+ FRY £186.6m

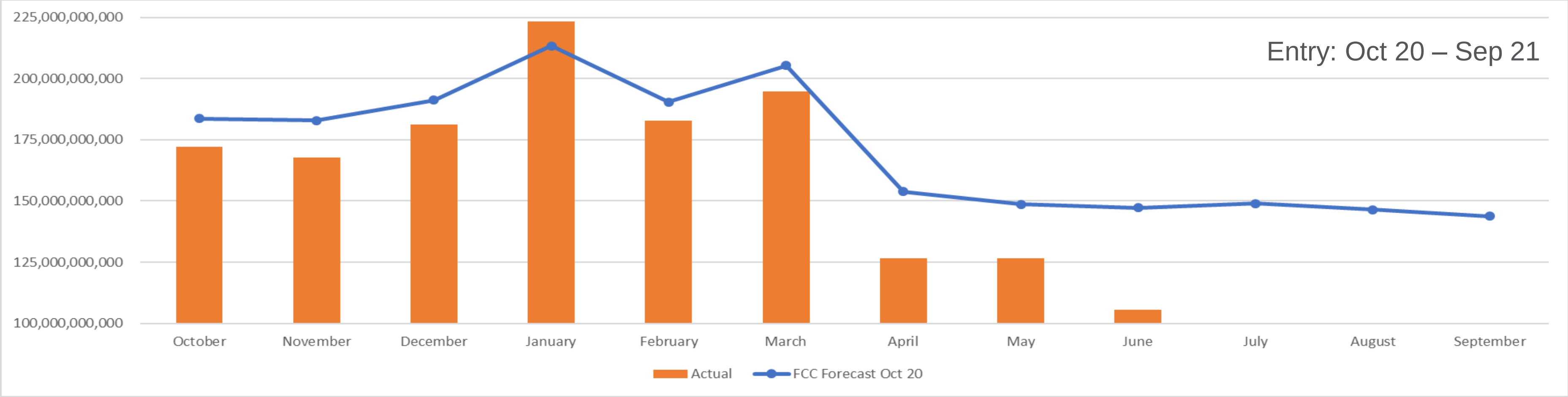
=

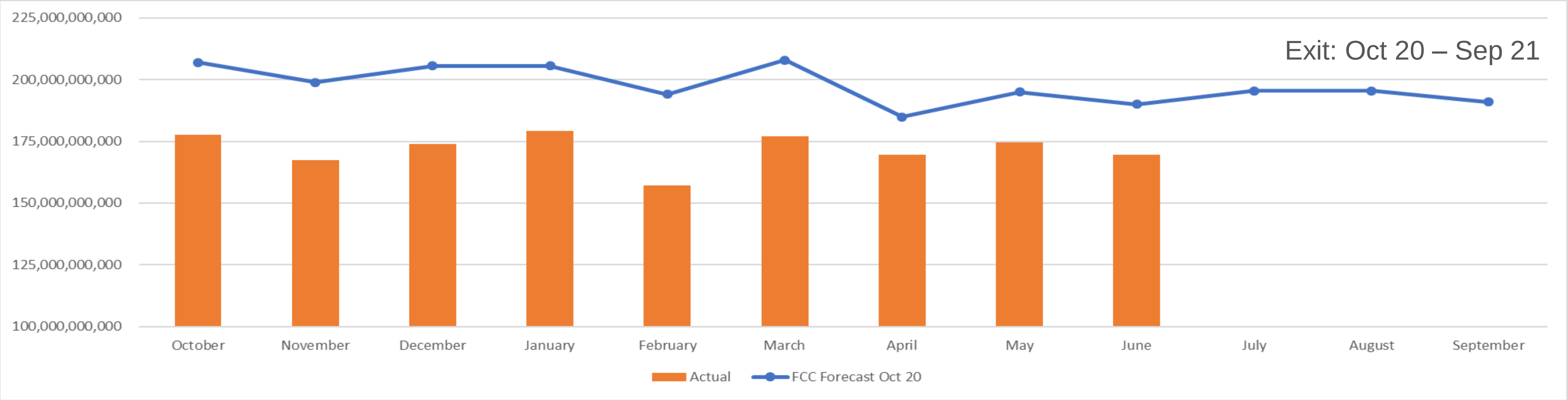
Allowed Revenue

£374.1m

Forecasted Contracted Capacity (FCC)

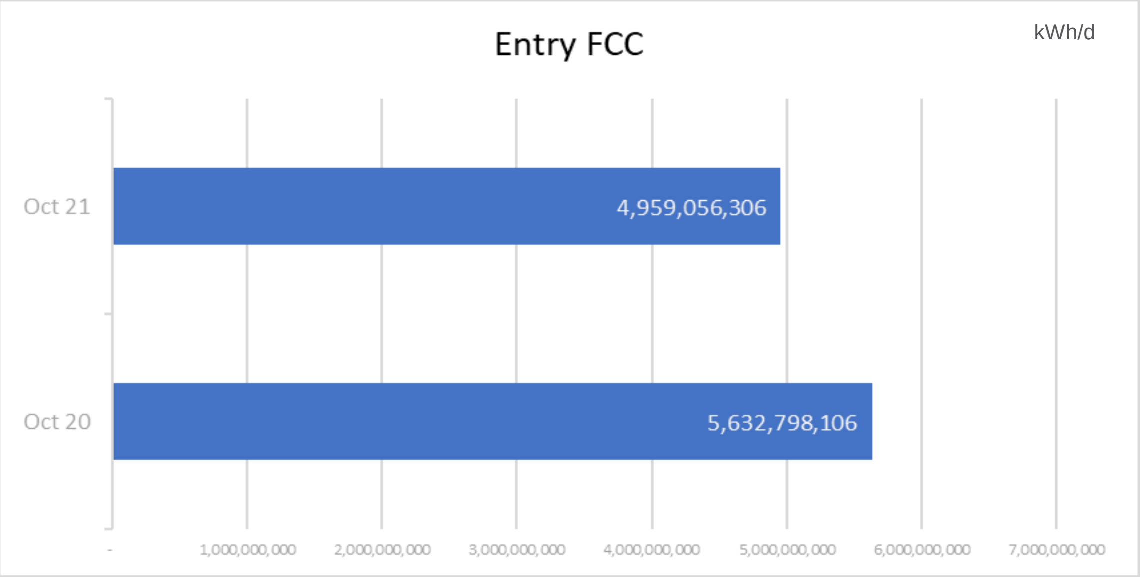
The FCC methodology used for October 2020 charge setting overstated the volumes of capacity that would be booked, and therefore led to an under-recovery of revenues against target.

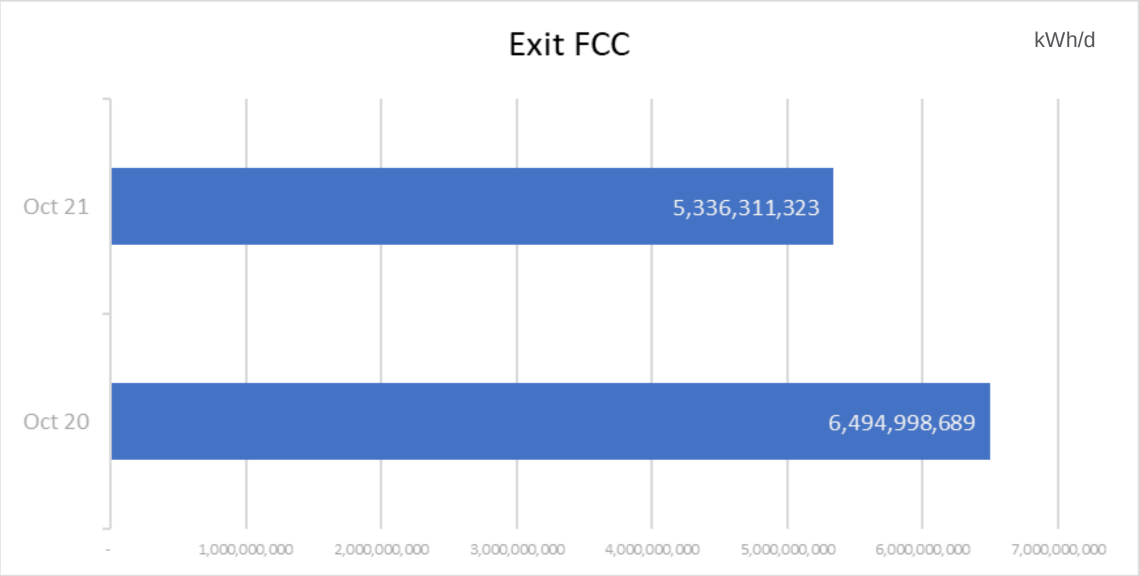




FCC methodology revised for October 2021 charge setting, in collaboration with the industry, to be based on forecast flows and capacity utilisation, revised where guaranteed future capacity bookings are above these forecasts.

Forecasted Contracted Capacity (FCC)





Entry FCC

Entry FCC has decreased by 673,741,800 kWh/d

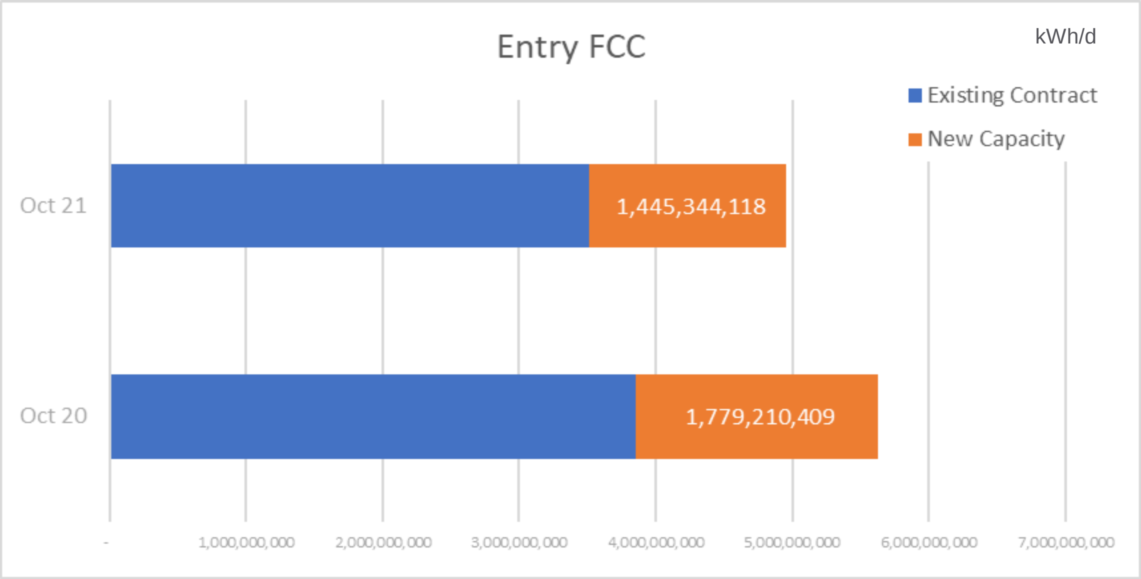
- 11.9%

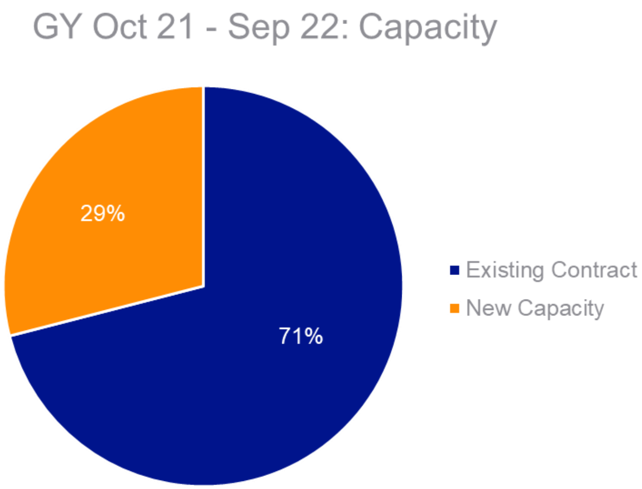
Exit FCC

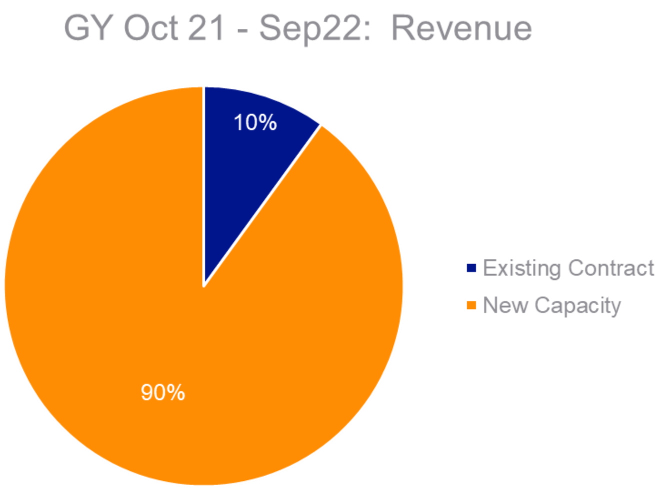
Exit FCC has decreased by 1,158,687,366 kWh/d

- 17.8%

FCC – Entry Adjusted for Existing Contracts







Conditional Discount for Avoiding Inefficient Bypass of the NTS - Shorthaul

Discount levels:

- The distance between Entry and Exit Points determines the discount value
- Any route greater than 28km is excluded
- Any route starting or ending at a Storage Point or a DN Offtake is excluded

Eligible Quantities are calculated based on the minimum of four actual figures (daily):

- Firm Available Entry Capacity excluding Existing Available Holdings
- Entry Flow
- Firm Available Exit Capacity
- Exit Flow

For this charge setting forecast, figures were calculated using the following assumptions:

- FCC Values, adjusted to exclude Interruptible to forecast capacity
- The Flow Values used in the FCC calculation
- Entry Points with Existing Available Holdings are assumed to flow against these first, with discounts only applied to flows which exceed the EAH value
- Once Eligible Quantities have been calculated, an Optional Charge Utilisation Factor is applied to these values based on historic uptake of the old Shorthaul product

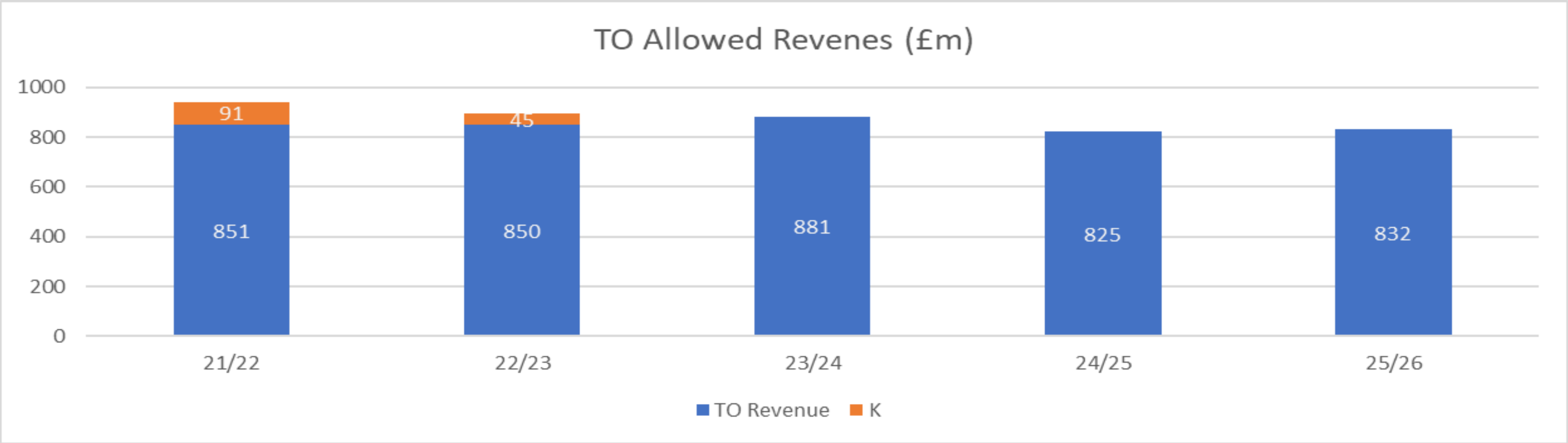
Assumptions Used in October 21 Charge Setting			
Entry		Exit	
37,419,952,303 kWh (p.a.)	£3,916,273	93,450,889,625 kWh (p.a.)	£4,671,851

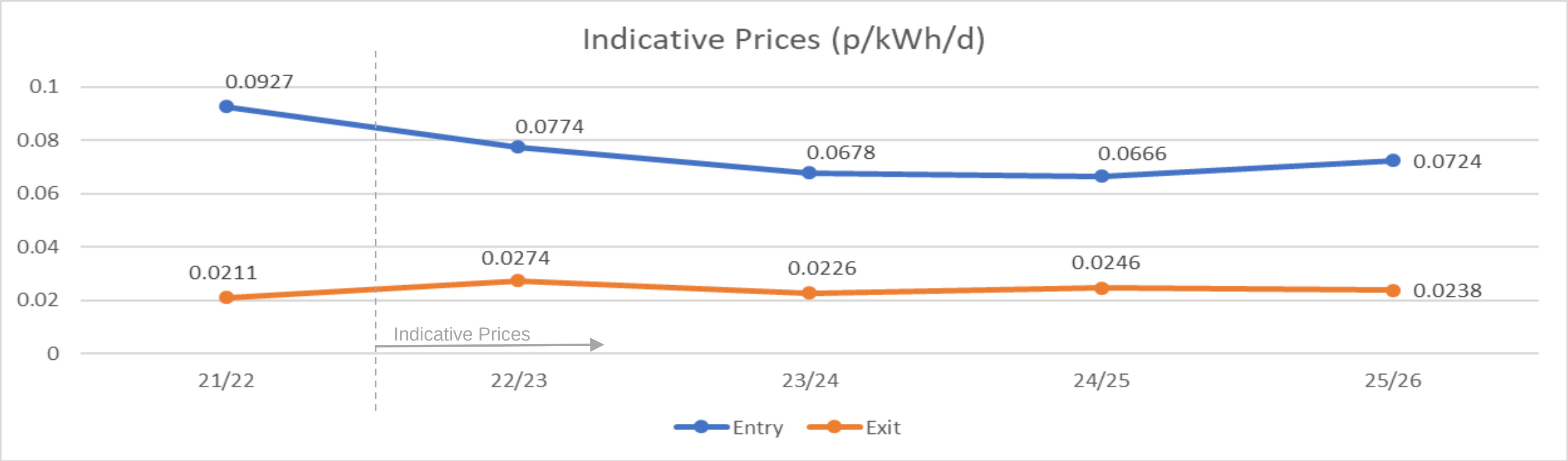
Transmission Services Reference Price Calculation

	Entry & Exit Forecasted Contracted Capacity (FCC)	Gas Year Transmission Services Entry & Exit Target Revenues	
Adjust for	Existing Contract Capacity	Existing Contract Revenue	* Entry Only
Adjust for	Forecast Shorthaul Capacity	Forecast Shorthaul Revenue	
	Revised Entry & Exit Capacity	Revised Gas Year Transmission Services Entry & Exit Revenue	
Account for	Storage Capacity	Storage Revenue (80% discount)	
Account for	Interruptible Entry Capacity	Interruptible Entry Revenue (10% discount)	
	Adjusted Entry & Exit Capacity	Adjusted Gas Year Transmission Services Entry & Exit Revenue	

Entry & Exit Capacity Reference Prices

Revenue & Prices: 2021/22 – 2024/25





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2

Further Reform proposals

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Focus of this section is to cover

- Why change?
- Objectives to measure against
- Approach and priorities
- Suggested timelines
- Options (at this stage)
- Ways of working (NTSCMF, Workshops, etc)

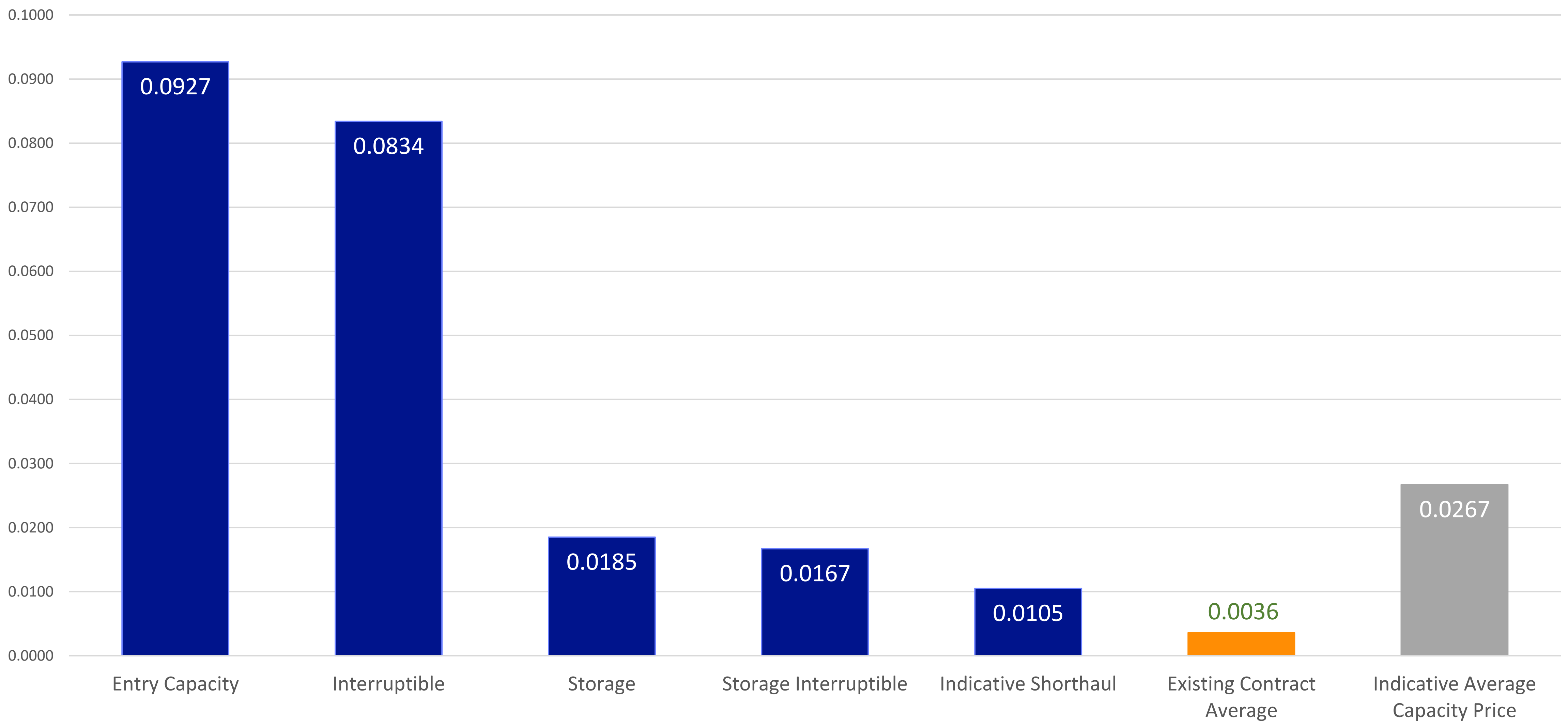
Why are changes considered necessary? Open Letter

- 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

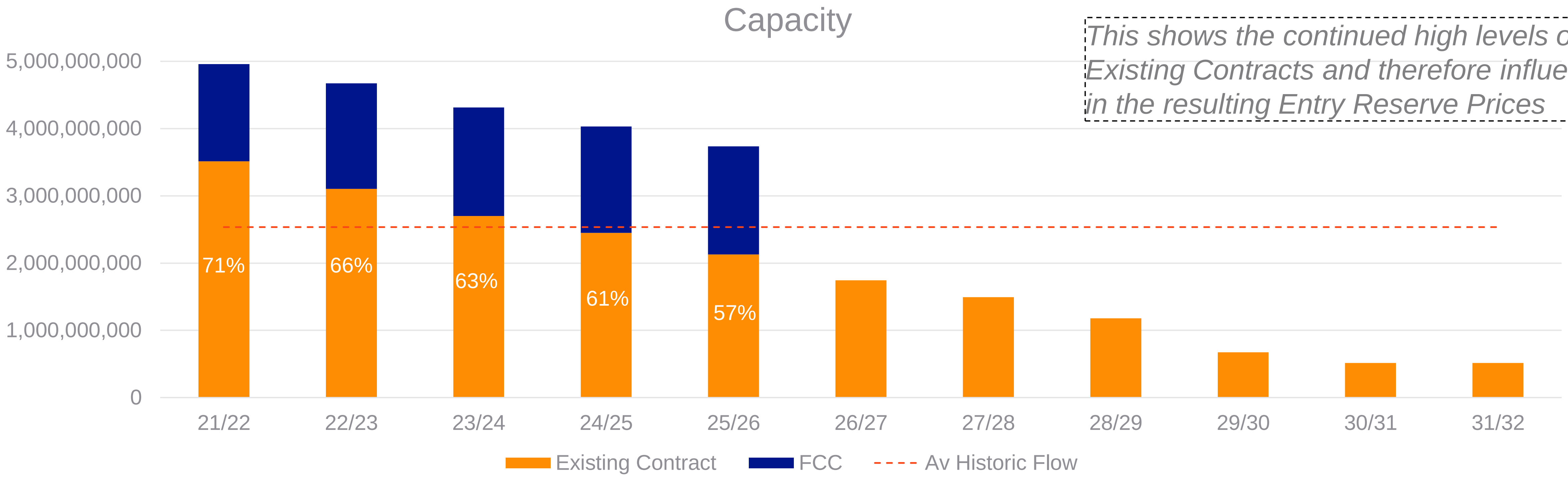
- Unless addressed risks remain of:
  - Potential sizeable revenue swings tariff year to tariff year leaving volatility of prices an ever present and likely risk;
  - Consistently high Entry Reserve prices relative to the average overall and to the average Existing Contract price impacting the fairness 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

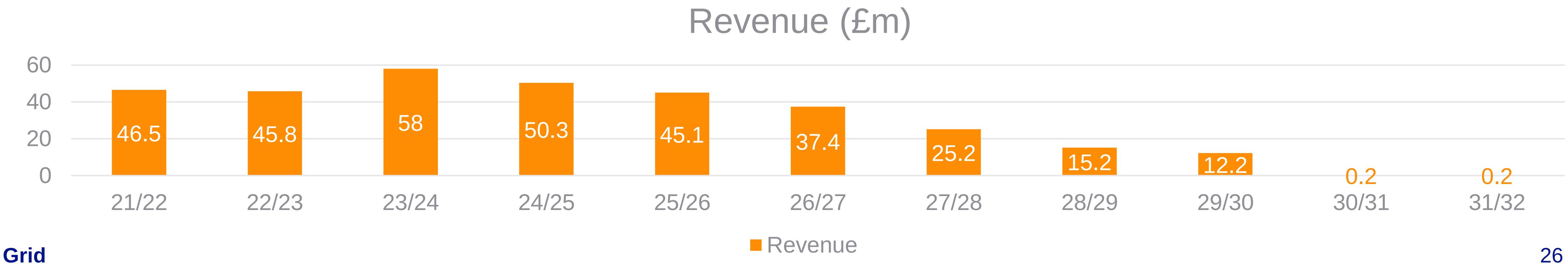
Entry Capacity GY Oct 21 – Sep 22: Average Capacity Prices (p/kWh/d)



EC Capacity and Revenues (Entry) 2021/22 – 2031/32

This shows the continued high levels of Existing Contracts and therefore influence in the resulting Entry Reserve Prices





Objectives

- **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

Charging Changes: Approach to Likely Change Areas

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)

Charging Changes: Timings and Scope

Timescales

Within the area of charging changes there could be multiple pieces of work running in parallel with different timescales.

Workstream	Overview	Scope
Workstream 1	Priority workstream Changes aiming to be implemented in time to set Transmission Services Charges applicable from 01 October 2022.	Additional charges Changes to revenue calculation
Workstream 2	Working in parallel with the Short term to consider changes together to benefit from the ongoing discussions. Changes would be aiming for a likely 01 October 2023 implementation, or later.	More fundamental changes (e.g. broader than simply Entry such as reviewing the Entry Exit Split)
Watchlist	Topics that benefit from monitoring where change may not be material or as high a priority	Items that could deliver benefits, timing could mean they come under Workstream 1 or Workstream 2

The length of time it takes to develop the Modification(s) and for the Modification(s) to be considered, including potential impact assessments or consultations to be completed, this all needs to be taken into account within any development timelines.

As an example UNC0728/A/B/C/D, took 10 months from urgency being granted in June 2020 to a final decision being made in April 2021 on UNC0728B.

Charging Changes: Timings and Scope

- 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

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2a

Revenues

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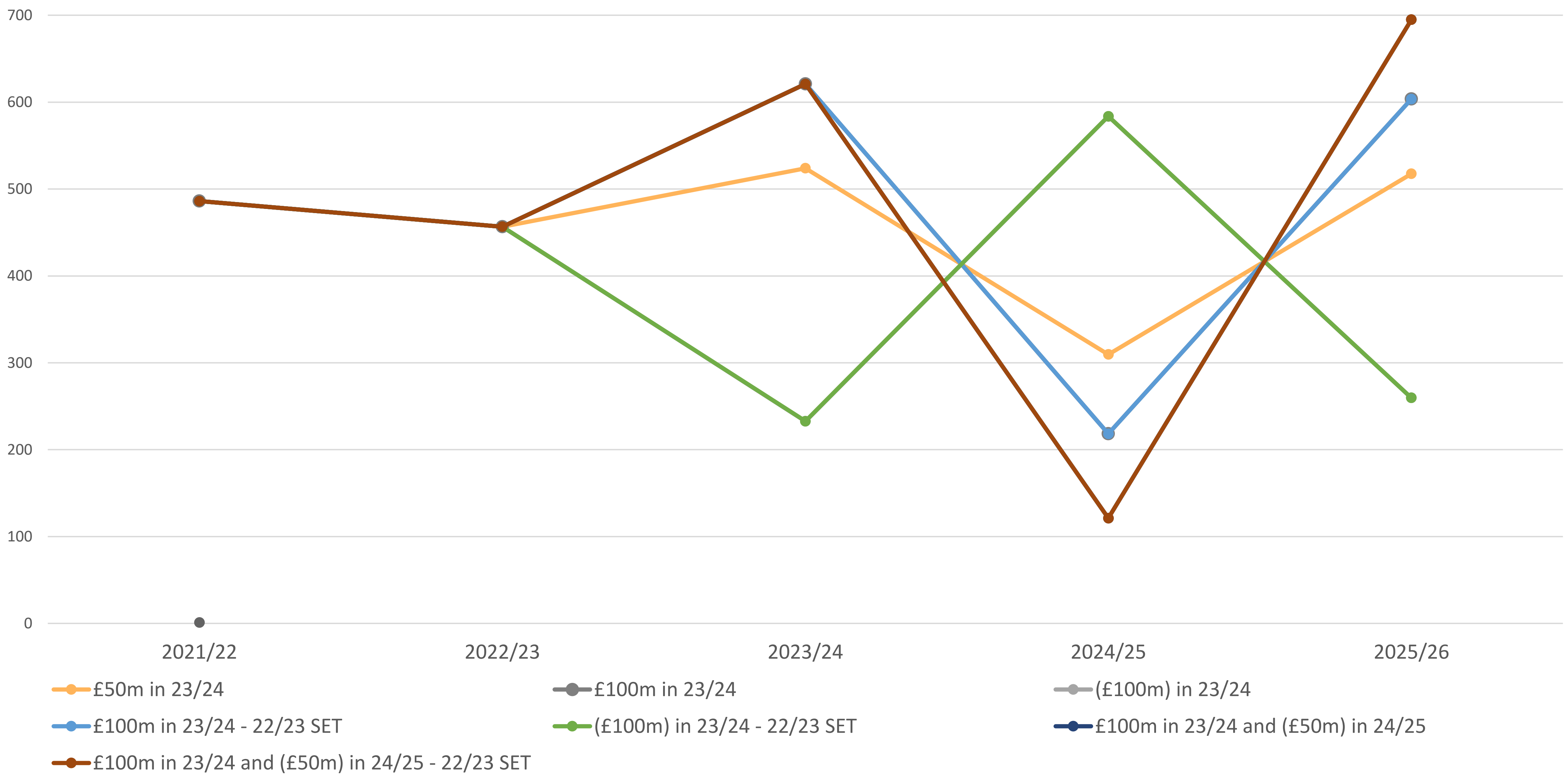
Options at this stage: Revenues

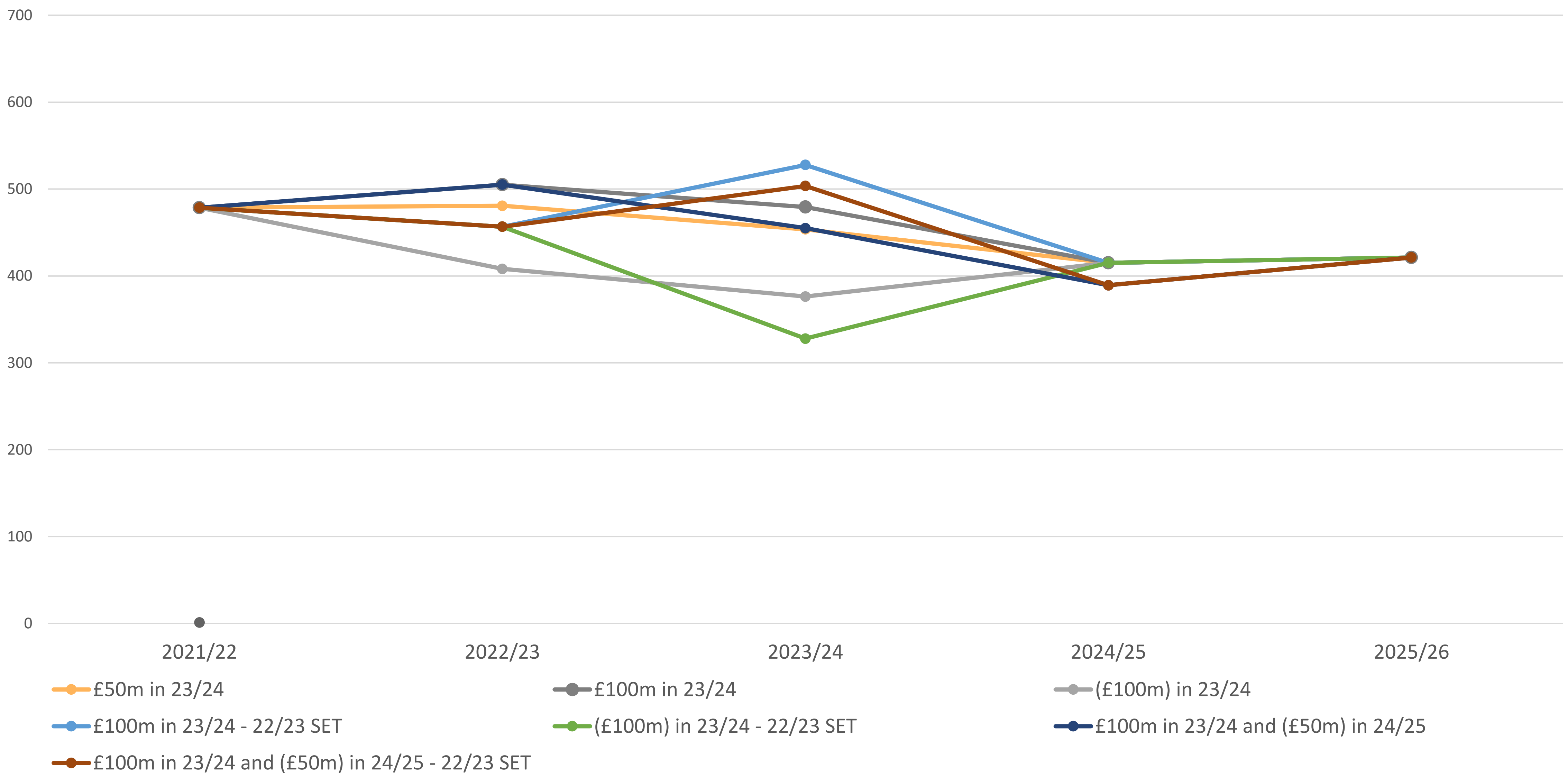
- In reviewing areas we believe can realistically deliver change for October 2022 under the two areas of Revenues and Tariffs we are sharing some thoughts on what could be done to achieve the objectives. This section looks at a way in which adjusting how the target revenues for a Gas Year are determined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

Current Methodology – Revenue Sensitivity - All Scenarios



Revised Methodology – Revenue Sensitivity - All Scenarios



Options at this stage: Revenues

- 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

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2b

Tariffs

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Options at this stage: Tariffs

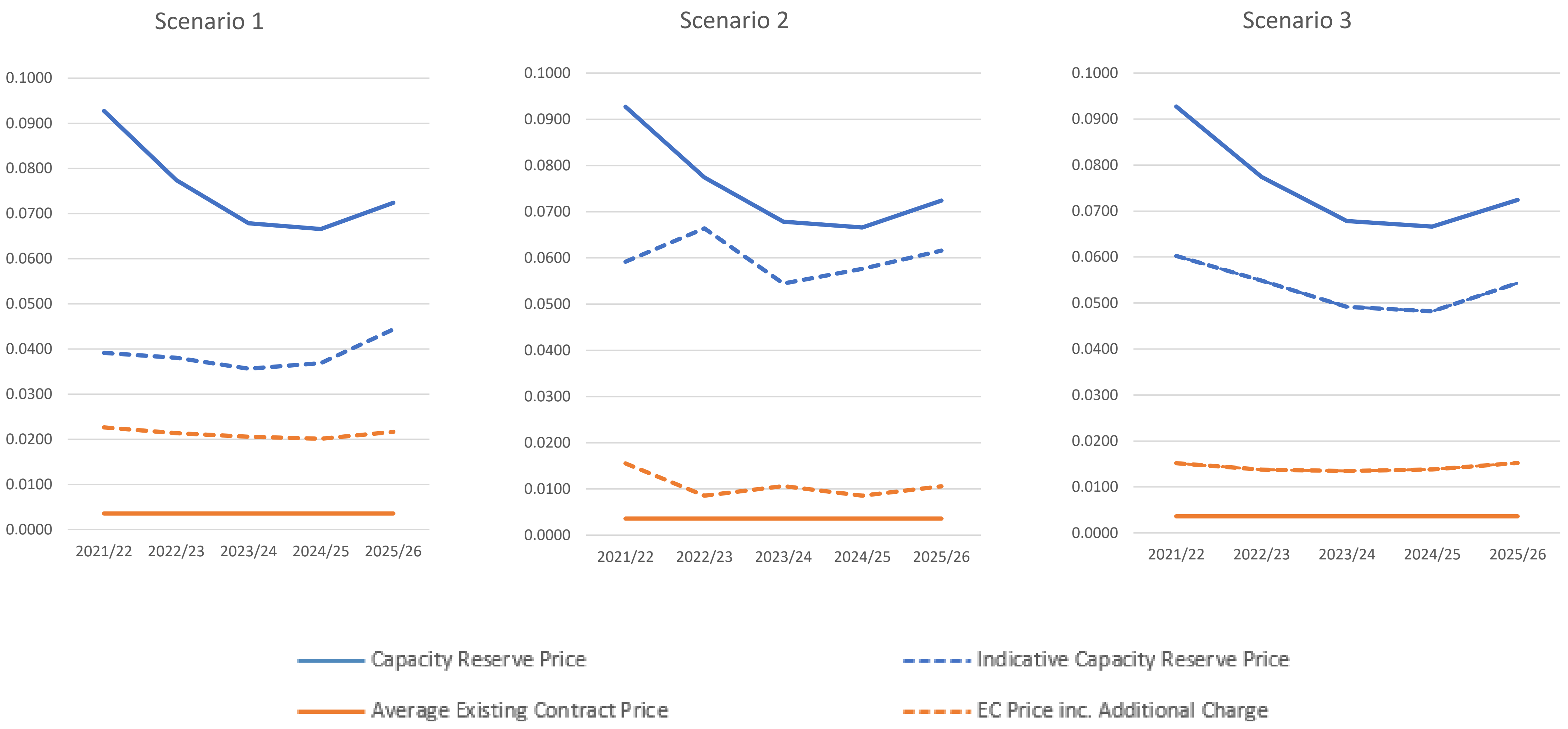
- In reviewing areas we believe can realistically deliver change for October 2022 under the two areas of Revenues and Tariffs we are sharing some thoughts on what could be done to achieve the objectives. This section looks at the impact of an additional charge within the charging framework.

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.

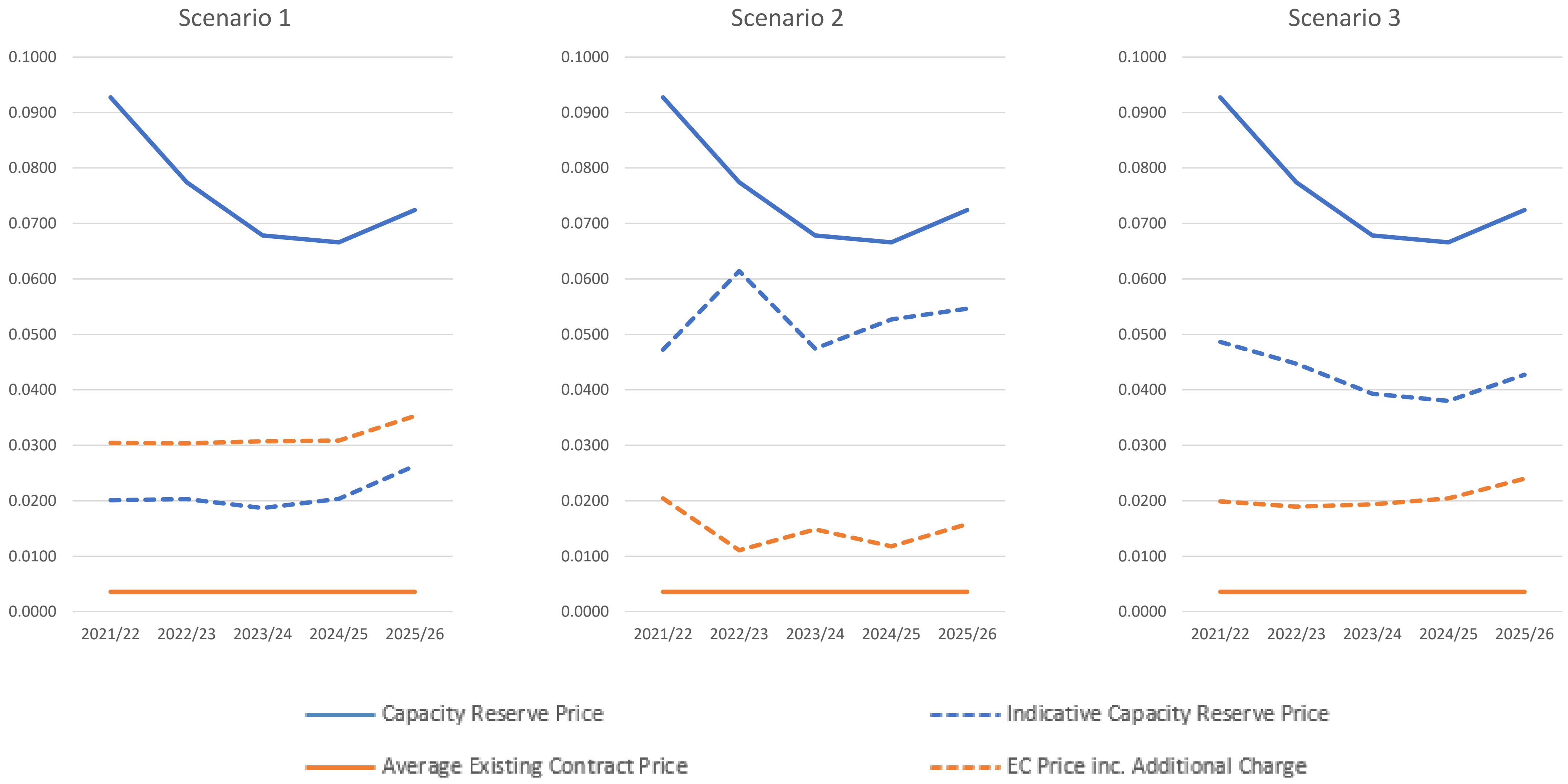
Modelling the outcomes

- **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



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



Options at this stage: Tariffs

- 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.

Ways of working

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

Further thought and development

- Options presented today on both the revenues and tariffs represent some ways we believe the objectives laid out could be met
- Further work is needed for example:
  - To assess options around these and how they may be applied as part of the charging framework. The options and scope presented today show the potential using some ranges however we appreciate more work is needed on details in terms of application.
  - To consider optionality and any wider impacts (e.g. if the Licence is impacted and / or any remediation that might be necessary)
  - To detail compliance with the EU Tariff Code and any other relevant legislation

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3

Next Steps

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Next Steps

- We plan to develop options and present our views back to Stakeholders for their views and with likely UNC changes to follow shortly.
- In order to work with the UNC change process proposals will need to be discussed and raised soon, in the coming months to give best possible chance of successfully implementing for 01 October 2022 and into further years as appropriate
- We plan to use NTSCMF as it provides a constructive home for discussing these topics in addition to National Grid led workshops to complement this process.
- We will provide an update the next NTSCMF on 3 August 2021 https://www.gasgovernance.co.uk/ntscmf/030821

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4

Q&A

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Q & A – Ways to ask a question

Please ask questions using this Form – available in the webinar invitation:

https://forms.office.com/r/HsmrKSGAbN

Alternatively the form can be accessed via a smart phone of tablet scanning the QR Code below

If you have more than one question, please submit each one separately. After submitting each one, there is an option to “submit another response” where it can be raised.

Gas Transmission

5

Contact

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Contact

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