

Gas
Transmission

Workshops

Charging Reforms: Additional Entry Charge

14 October 2021

nationalgrid



Next Steps with Additional Charge / Revenues

- Focus in this pack is on the method being considered for the additional charge modification
 - Draft of the modification published ahead of NTSCMF, and discussed, on 5th October.
- High level of the proposal:
 - Flow based Entry Transmission Services Charge, determined after calculating an updated reference / reserve price compared to current method – calculates a price without influence of Existing Contracts
 - Applied to all entry flows except interconnector and storage flows
- The method of determining the charge is outlined in this presentation. This repeats details from 29 September workshop and makes some updates from what was seen on 14 September Workshop to the last table on slide 9.
- A spreadsheet to accompany the values to illustrate the calculation for 22/23 is now available on the National Grid website: <https://www.nationalgrid.com/uk/gas-transmission/charging/gas-charging-discussion-gcd-papers> under the section “May 2021 - Open Letter on the Future Of Gas Transmission Charging”. This is to help support understanding of the method calculations.

Additional Charge – Current Entry FCC Methodology

Calculated Monthly – By Entry Point

Including EC

Forecast Flow by Entry Point

- Average of 5 years historic flow data by each Entry Point for each month (Y-2 – Y-6).
- Convert into an average capacity (kWh/d) for each month.
- Normalised for each month based on monthly forecast demand.
- *Values removed from any sites no longer operational.*

2,501,135,892

Capacity Forecast by Entry Point

- Capacity utilisation average value calculated for each Sector / Entry Point Type and applied to relevant Entry Points for each month. (Calculated only for Entry Points where no excess of Existing Contract Capacity).
- Total Average applied to Entry Points where no sites without Existing Contracts.

2,598,329,119

Future Bookings / PARCA > Capacity Forecast by Entry Point

- Future Bookings value used for any Entry Point with capacity bookings for year Y greater than the calculated capacity forecast (includes Existing Contract Capacity).
- PARCA value used where at Stage 2 for relevant year Y

3,102,887,276

Totaled across all Entry Points to calculate a kWh/d FCC

4,674,213,218

Additional Charge – Entry FCC Methodology – Revised for Excluding EC's

Calculated Monthly – By Entry Point

Storage, Interconnectors, Beach, Onshore, Biomethane, LNG

Forecast Flow by Entry Point

- Average of 5 years historic flow data by each Entry Point for each month (Y-2 – Y-6).
- Convert into an average capacity (kWh/d) for each month.
- Normalised for each month based on monthly forecast demand.
- *Values removed from any sites no longer operational.*

Including EC

Excluding EC

2,501,135,892

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Capacity Forecast by Entry Point

- Capacity utilisation average value calculated for each Sector / Entry Point Type and applied to relevant Entry Points for each month. (Calculated only for Entry Points where no excess of Existing Contract Capacity).
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2,598,329,119

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Future Bookings / PARCA > Capacity Forecast by Entry Point

- Future Bookings value used for any Entry Point with capacity bookings for year Y greater than the calculated capacity forecast (~~includes Existing Contract Capacity~~).
- PARCA value used where at Stage 2 for relevant year Y

3,102,887,276

156,793,692

Totaled across all Entry Points to calculate a kWh/d FCC

4,674,213,218

2,598,329,119

Additional Charge – Entry Reference Price Calculation – Excluding EC's

Tx Charge Model

- Existing Tx Charge Model used to calculate Entry Capacity Reference Price: **but updated to reflect:**

Revised FCC

- Use of the Entry FCC - Revised to Exclude EC

Existing Contracts

- Existing Contract Capacity and Revenues Removed from the model

“Shorthaul”

- Forecast of “Shorthaul” capacity and revenues revised to account for no EC.

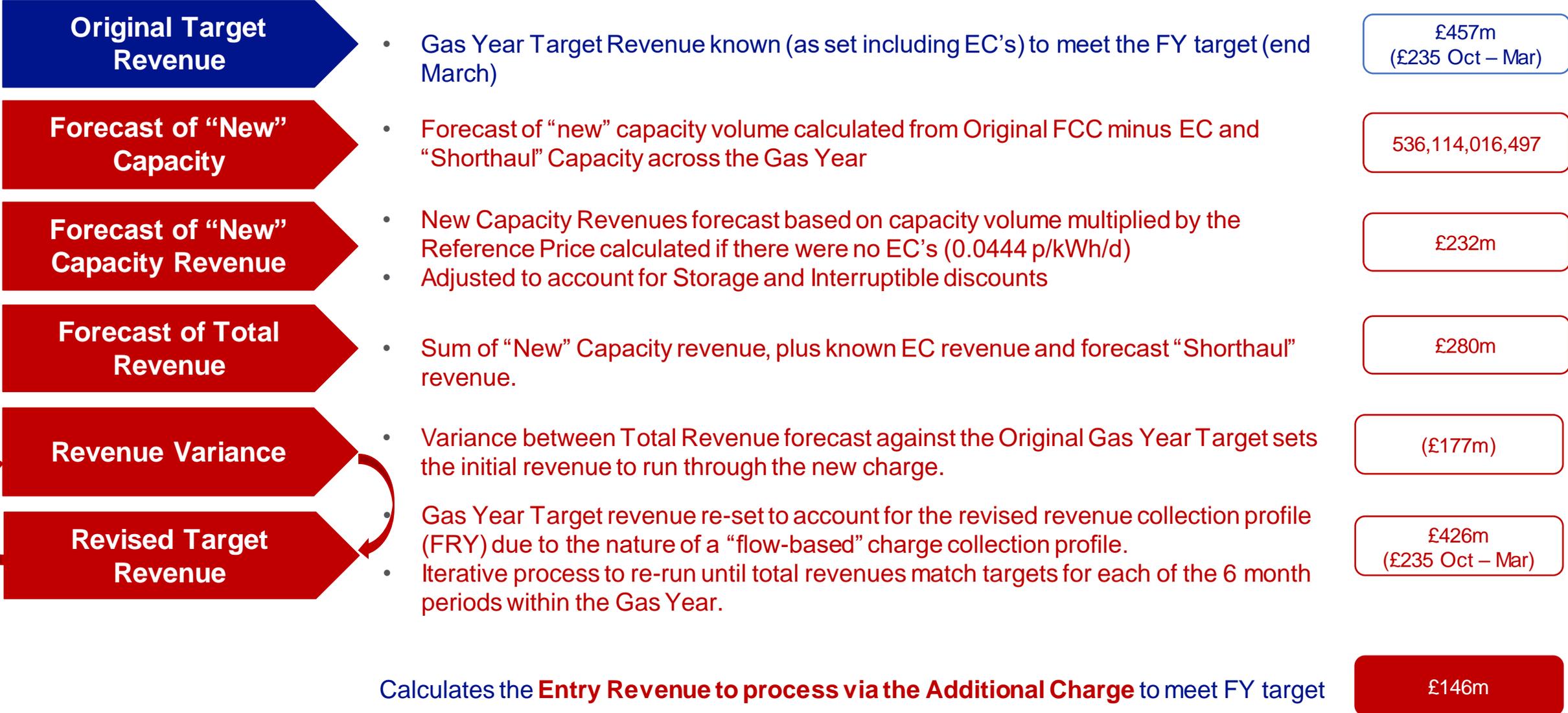
GY Target Revenues

- Target Revenues revised to account for the different “FRY” profile of revenue collection across the Gas Year if no EC.

Calculates an **Entry Capacity Reference Price** if there were no EC's

0.0444 p/kWh/d

Additional Charge – Entry Revenue to process via Additional Charge



Additional Charge – Calculation of Additional Charge

Forecast Flow by Entry Point

- Average of 5 years historic flow data by each Entry Point for each month (Y-2 – Y-6).
- Convert into an average capacity (kWh/d) for each month.
- Normalised for each month based on monthly forecast demand.
- *Values removed from any sites no longer operational.*

2,501,135,892

Applicable Forecast Flow by Entry Point

- Convert into an annual value, and remove exemptions:
- Two exemptions are applied:
 - Interconnection Points
 - This is due to consideration of compliance with TAR NC
 - Storage Sites
 - This avoids double charging the flow at a Storage point
- The forecast flow excluding exemption becomes the denominator for the Additional Charge

829,749,872,126

Entry Revenue To Process via Additional Charge

- The expected revenue shortfall to be recovered via the Additional Charge

£146m

Additional Charge rate in p/kWh/d

0.0176

Additional Charge – Indicative Impact of Additional Charge

**Current Regime
Indicative Entry
Capacity Reference
Price**

- As per indicative charge setting.

0.0774

**Indicative Combined
“New Capacity” Price
under Additional
Charge**

- Indicative Entry Capacity Reference Price: 0.0444, plus;
- indicative Entry Capacity Additional Charge 0.0176

0.0620

(0.0154)
-20%

Additional Charge – Indicative Impact of Additional Charge ⁽²⁾

	Current Regime £m	Current Regime %	Existing Contract Capacity ← →	Forecast "New" Capacity ← →	Forecast Eligible Flow →	Additional Charge £m	Additional Charge %
Storage Site	£7.5	1.6%	444,536,850,000	5,929,681,589	0	£7.1m	1.7%
Interconnection Point	£28.9	6.3%	10,466,874,270	36,323,068,701	0	£16.8m	3.9%
Beach Terminal	£365.7	80.0%	304,431,731,398	440,387,326,564	708,235,994,161	£343.2m	80.6%
Onshore Field	£4.4	1.0%	0	4,816,376,696	4,205,804,669	£3.2m	0.7%
Biomethane Plant	-	-	0	0	0	-	-
LNG Importation Terminal	£50.9	11.1%	373,118,400,000	48,657,562,947	117,308,073,296	£55.3m	13.0%
TOTAL	£457.4		1,132,553,855,668	536,114,016,497	829,749,872,126	£425.6	

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Additional Entry Charge

Further years

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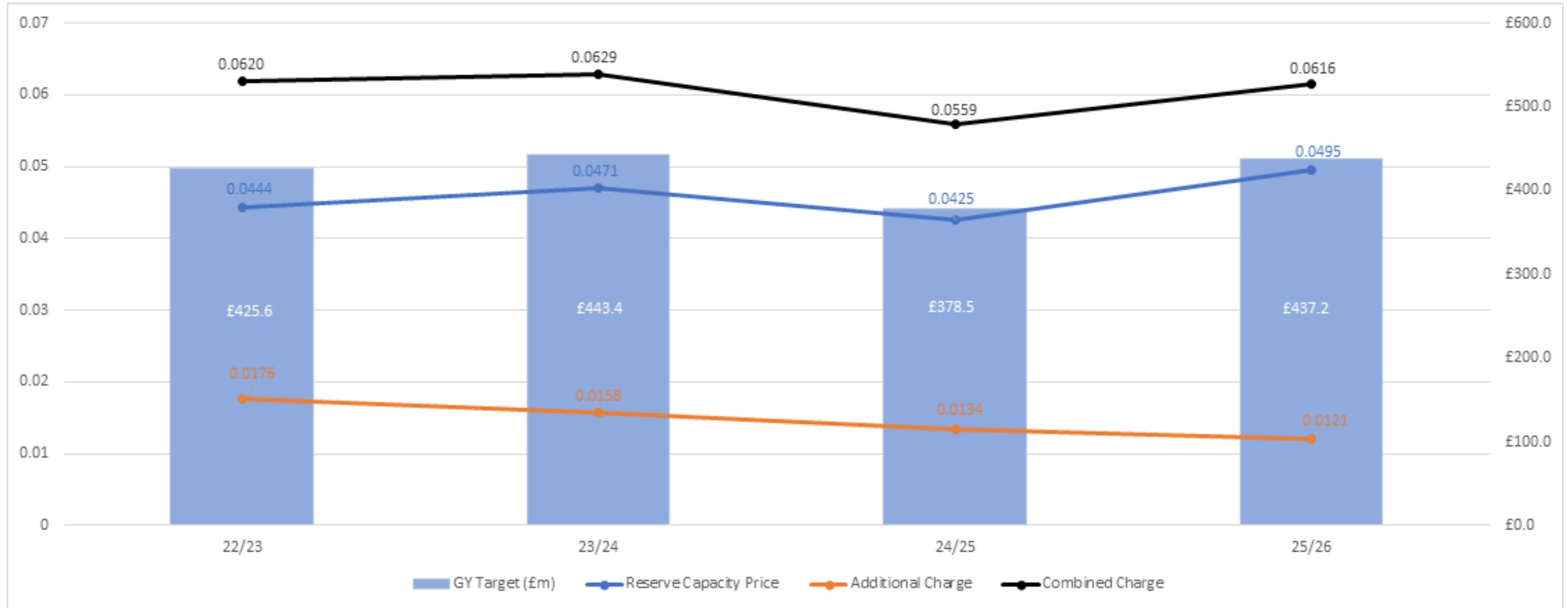
Additional years analysis (1)

- To date we have shown the analysis for indicative 22/23 values as discussed previously
- Below this expands to look at future years to illustrate potential changes over time covering the RII02 period

	22/23	23/24	24/25	25/26
GY Target (£m)	£425.6	£443.4	£378.5	£437.2
Reserve Capacity Price	0.0444	0.0471	0.0425	0.0495
Capacity Revenue	£279.5	£311.6	£272.4	£340.9
Rev. Via Addnl Charge	£146.1	£131.8	£106.1	£96.3
Additional Charge	0.0176	0.0158	0.0134	0.0121
Combined Charge	0.0620	0.0629	0.0559	0.0616

- The following slide charts these values

Additional years analysis (2)



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