Gas Transmission

Workshops

Charging Reforms: Additional Entry Charge

29 September 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 will be published for NTSCMF 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 and follows on from expected process from NTSCMFs / NG Workshops. Further details will be shared after the meeting to help illustrate any spreadsheets that would be helpful to see the supporting values broken down
- An illustration of how it would be calculated and an indicative rate is also presented along with an
 indicative spread across the Entry Point types compared to the current regime, using October 2022 as
 the comparison

Additional Charge – Current Entry FCC Methodology

Calculated Monthly – By Entry Point

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.

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.

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

Including EC

2,501,135,892

2,598,329,119

3,102,887,276

Totalled 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

Including EC

Excluding 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.
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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

Totalled 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.

Additional Charge – Entry Revenue to process via Additional Charge

Original Target Revenue

Gas Year Target Revenue known (as set including EC's) to meet the FY target (end March)

£457m (£235 Oct – Mar)

Forecast of "New" Capacity

 Forecast of "new" capacity volume calculated from Original FCC minus EC and "Shorthaul" Capacity across the Gas Year

536,114,016,497

Forecast of "New" Capacity Revenue

• New Capacity Revenues forecast based on capacity volume multiplied by the Reference Price calculated if there were no EC's (0.0444 p/kWh/d)

Adjusted to account for Storage and Interruptible discounts

£232m

Forecast of Total Revenue

Sum of "New" Capacity revenue, plus known EC revenue and forecast "Shorthaul" revenue.

£280m

Revenue Variance

Variance between Total Revenue forecast against the Original Gas Year Target sets the initial revenue to run through the new charge.

(£177m)

Revised Target Revenue

Gas Year Target revenue re-set to account for the revised revenue collection profile (FRY) due to the nature of a "flow-based" charge collection profile.

£426m (£235 Oct – Mar)

Iterative process to re-run until total revenues match targets for each of the 6 month periods within the Gas Year.

Additional Charge – Calculation of Additional Charge

Forecast Flow by Entry Point

Applicable 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.

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

Entry Revenue To Process via Additional Charge

The expected revenue shortfall to be recovered via the Additional Charge

2,501,135,892

829,749,872,126

£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)

Additional Charge – Indicative Impact of Additional Charge (2)

	Current Regime £m	Current Regime %	Additional Charge £m	Additional Charge %
Storage Site	£7.5	1.6%	£7.1m	1.7%
Interconnection Point	£28.9	6.3%	£16.8m	3.9%
Beach Terminal	£365.7	80.0%	£343.2m	80.6%
Onshore Field	£4.4	1.0%	£3.2m	0.7%
Biomethane Plant	-	-	-	-
LNG Importation Terminal	£50.9	11.1%	£55.3m	13.0%
TOTAL	£457.4		£425.6	

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4

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11

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