nationalgrid

Explanation of the NTS SO and TO Commodity Charges for the formula year 2015/16

National Grid sets its charges to recover the price controlled allowances set by Ofgem. The current price control RIIO-T1 applies from 1 April 2013 and runs until 31 March 2021.

Introduction

This document seeks to provide greater transparency to the processes and data used by National Grid Gas NTS ("National Grid") to set the NTS System Operation (SO) and Transportation Owner (TO) Commodity Charges.

Charges are generally set before actual costs and allowed revenues have been finalised and can be subject to significant variances and volatility throughout the year, which are amplified by the fact that Indicative and Final notices and their related costs are forecast 150[1] days and 2 months before actual charges are implemented and costs incurred.

National Grid has an obligation to use its best endeavours in setting its charges to ensure that, in respect of any formula year, the revenue which it derives (from SOR_t & TOR_t) shall not exceed the maximum NTS allowed revenue ($SOMR_t$ & MR_t).

Therefore, as costs fluctuate throughout the year, the charging obligations on National Grid ensure that charges must fluctuate as well.

By providing greater transparency of the individual cost components and how these contribute to charges, NTS users could potentially forecast any future fluctuations and price changes.

If you would like further information on how the costs and allowed revenues are derived, please refer to System Operator incentive consultations, TO Price Control documents and charging notices for further detail regarding these matters.

Other related information sources

This document is one of a suite of documents that describe the NTS charges levied by National Grid and the methodologies behind them. The other documents that are available are:

- Statement of the Gas Transportation Charging Methodology
- UNC Section Y - Gas Transportation Charging Methodology
- Statement of Gas Transmission Transportation Charges
- Entry Capacity Release Methodology Statement
- Connection Charging Statement

These are available on our Charging website at:
http://www.nationalgrid.com/uk/Gas/Charges/statements/

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[1] In exceptional circumstances notices may be made in a time period less than 150 days such as a third price change

Structure of this document

This document is divided into three sections:

- Part A relates to the SO Commodity Charge;

- Part B relates to the TO Entry Commodity Charge;

- Part C relates to the TO Exit Capacity and TO Exit Commodity Charges;

- Part D provides details of the annual charge setting timetable and sources of further information.

Comments & Feedback

As part of our commitment to customers, National Grid welcomes comments and feedback on the information contained in this notice. In particular, to ensure that information is provided and presented in a way that is of most use to customers, we would welcome specific feedback on:

- the level of numeric detail provided to explain charge changes;

- the quality of the explanation given to describe and explain charge changes;

- information that is not useful and could be omitted; and

- information that is missing that could be added.

- These should be sent to:

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PART A: SO COMMODITY CHARGE

The SO Commodity Charge recovers the difference between the SO allowed revenue and revenues received from other SO charges.

To derive the SO Commodity Charge a number of high-level steps are required:

Step 1: Determine the SO allowed revenue

Step 2: Determine the actual revenue to be recovered from the SO Commodity Charge

Step 3: Determine the volumes that attract the SO Commodity Charge

Step 4: Calculate the SO Commodity Charge rate

Step 1: Determining the SO allowed revenue

The maximum NTS SO allowed revenue in respect of formula year t ($SOMR_t$) is defined in National Grid's Gas Transporter Licence for the NTS ("the Licence"). It is calculated using the following formula:

$$SOMR_t = SOBR_t + CM_t + SOOIRC_t + TSS_t + DELINC_t - SOK_t$$

Table 1 details the individual terms contained in the equation above, which have been used to determine the final prices that applied during the relevant year. Note that all the figures quoted within this note relate to the entire formula year, 2015/16.

Table 1

Terms used for notification of charges	April Value (£m)	Oct Ind Value (£m)
Base Price Control SO Revenue ($SOBR_t$)	165.6	165.7
Constraint Management revenue adjustment (CM_t)	11.9	11.9
SO external incentive adjustment ($SOOIRC_t$)	117.0	99.7
SO Transportation Support Services revenue adjustment (TSS_t)	3.5	3.5
SO Legacy accelerated incremental capacity delivery incentive ($DELINC_t$)	0.00	0.00
Revenue adjustment term for prior year (SOK_t) *	10.24	10.24
Maximum NTS SO allowed revenue ($SOMR_t$)	287.8	270.6

*SOK_t an over recovery is shown as a positive value. The value is deducted in the $SOMR_t$ formula.

For further details of the SO allowed revenue, refer to Special Condition 2A "NTS System Operation activity revenue restriction".

Typical variations in SOMR_t

The values in Table 1 are subject to uncertainty, particularly those that are linked to externalities such as gas costs. It is anticipated that separate reporting of the SO external incentive performance will allow shippers to better predict future price movements. However, shippers may wish to note that the new Licence makes allowances for many of the cost terms and so it is the variation from the allowance that is added on to the base revenue that makes up the maximum allowed revenue (SOMRt).

Step 2: Determining the target revenue for the SO Commodity Charge

The maximum NTS SO allowed revenue is collected though a number of charges in addition to the standard SO Commodity Charge. The revenue from these other charges must first be forecasted so that the residual target revenue to be collected through the SO Commodity Charge can be calculated. The SO Commodity charge is set such that the target actual SO Revenue equals the maximum NTS allowed revenue. The actual NTS SO revenue (SORt) is calculated using the following formula:

$$SOR_t = SOREntC_t + SORExC_t + RCOM_t + SOROC_t$$

Other SO Charges:
Associated SO charges

Forecasted revenue resulting from associated SO charges levied by National Grid is deducted from the maximum NTS SO allowed revenue total.

Table 2

Terms used for notification of charges	April Value (£m)	Oct Ind Value (£m)
Balancing Neutrality Charge	6.0	6.0
Capacity Neutrality Components (revenues)	A	A
Adjustment for Neutrality (SOROC$_t$)	**6.0+A**	**6.0+A**

Please refer to our Charging Methodology Statement for further information regarding any terms mentioned within this section of the document.

Adjustments for the sale of incremental capacity

Revenue from the sale of **legacy** incremental entry and exit capacity is deducted as this is recovered through the relevant capacity charges. For entry the amount equates to revenue resulting from any incremental capacity allocated through the Entry Capacity auctions held ahead of the gas day and this capacity may either be obligated or non-obligated. The revenue is effectively used to net off the incremental SO allowed costs included in SOMR$_t$. For exit the adjustment is equal to the forecasted revenue collected in the formula year in relation to Exit Charges for firm exit capacity above the baseline.

Table 3

Terms used for notification of charges	April Value (£m)	Oct Ind Value (£m)
Sales of Non-Obligated Exit	0.2	0.2
Legacy Entry Capacity Investment Revenue	33.5	33.5
Legacy Exit Capacity Investment Revenue	11.3	10.8
Adjustment for the sale of SO capacity	**45.0**	**44.5**

Adjustments for other Charges

A proportion of the SO costs are recovered through the St Fergus Compression Charge, Shorthaul Commodity Charge and Capacity Neutrality Buyback revenue. The St Fergus Compression Charge recovers the compression costs associated with the St. Fergus TOM sub-terminal directly from those shippers at that terminal due to local pressure tier arrangements. The optional Shorthaul Commodity Charge is offered as an alternative to the TO and SO Commodity Charges. In all cases, the forecast revenue recovered from these charges is deducted from $SOMR_t$.

Table 4

Terms used for notification of charges	April Value (£m)	Oct Ind Value (£m)
St Fergus Compression Revenue	13.4	12.8
Shorthaul Revenue	20.0	20.3
Capacity Neutrality Buyback Costs recovered through Capacity Neutrality	0.0	0.0
Capacity Neutrality Components (revenues credited via capacity neutrality)*	-A*	-A*
Adjustment for other Commodity Charges	**33.4-A**	**33.1-A**

*This cancels out the figure in Table 2 and therefore has no impact on the SO Commodity charge

The target revenue to be recovered through the SO Commodity Charge is as follows:

Table 5

Terms used for notification of charges	April Value (£m)	Oct Ind Value (£m)
Maximum Allowed NTS SO revenue ($SOMR_t$)	287.8	270.6
…less associated SO charges	6.0	6.0
…less sales of SO capacity	45.0	44.5
…less other charges	33.4	33.1
Remainder of RCOM i.e. revenue to be collected through SO Commodity Charge	**203.4**	**186.9**

The figure changes as National Grid's view of the above costs and revenue change. Table 6 details how the target revenue to be collected through the SO Commodity Charge has varied during the formula year.

Table 6

Target SO Commodity Charge Revenue in relevant year (£m)			
Prices to apply from April		Prices to apply from October	
Indicative	Final	Indicative	Final
215.3	203.4	186.9	-

Step 3: Determining the volumes that attract the SO Commodity Charge

The volumes that attract the SO Commodity Charge are those forecast entry and exit flows excluding storage flows, net of shorthaul volumes i.e. the volumes that shippers have nominated to attract the Shorthaul Commodity Charge. Shippers can nominate to go to Shorthaul at any time throughout the year.

Table 7 shows the volumes used for the prices set for the formula year.

Table 7

Volumes used for setting SO Commodity Charge in relevant year (GWh)			
Prices to apply from April *(April to March Volumes)*		Prices to apply from October *(October to March Volumes)*	
Indicative	Final	Indicative	Final
1,214,183	1,202,479	776,578	-

The flow data is updated as part of the demand forecasts published in mid-May. Therefore, shippers may observe different flow assumptions for the final notice of the October price change.

Step 4: Calculation of the SO Commodity Charge rate

The SO Commodity Charge is collected from non-storage entry and exit flows excluding shorthaul flows, therefore to calculate the charge rate to apply from April the following formula is used:

$$\frac{\text{Forecast revenue from SO Commodity Charge (\pounds m)}}{\text{Forecast Flows (GWh)}} \times 100$$

Mid-year updates to the SO Commodity Charge

The commercial framework allows the SO Commodity Charge to be revised in October. Further updates are permitted in exceptional circumstances.

When making a mid-year price update, the actual revenue collected during the year to date is deducted from the revised forecast annual revenue, and the remaining flows for the year considered.

For example, to update prices in October the following formula is applied:

$$\frac{\text{Forecast revenue from SO Commodity Charge - Revenue Apr to Sep (\pounds m)}}{\text{Forecast Flows between Oct and Mar (GWh)}} \times 100$$

Forecast revenue recovery through SO Commodity Charge

Table 8 shows the forecast monthly flows that will attract the SO Commodity Charge and the expected revenue from this charge. Data shown in red is based on actuals, other data is forecast.

Table 8

Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15
109,019 GWh	79,523 GWh	64,276 GWh	48,683 GWh	46,257 GWh	52,590 GWh
0.0169 p/kWh	0.0169 p/kWh	0.0169 p/kWh	0.0169 p/kWh	0.0169 p/kWh	0.0169 p/kWh
£18,424,278	£13,439,311	£10,862,610	£8,227,388	£7,817,492	£8,887,733

Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16
90,783 GWh	124,447 GWh	145,477 GWh	149,707 GWh	135,924 GWh	130,239 GWh
0.0154 p/kWh	0.0154 p/kWh	0.0154 p/kWh	0.0154 p/kWh	0.0154 p/kWh	0.0154 p/kWh
£13,980,540	£19,164,880	£22,403,534	£23,054,915	£20,932,270	£20,056,879

Charges are always set to recover the exact amount of allowed revenue for the formula year, however, as costs and volumes are not fixed and are subject to variability, any forecast/actual difference between allowed revenue and actual revenue feeds through into the formula year in two years time (with the appropriate interest adjustments made). This is through the NTS SO revenue adjustment term SOK_t which applies in that formula year.

PART B: TO ENTRY COMMODITY CHARGE

To derive the TO Entry Commodity Charge a number of high-level steps are required:

Step 1: Determine the TO Allowed Revenue

Step 2: Determine the target revenue to be collected via the TO Entry Commodity Charge

Step 3: Determine the volumes that attract the TO Entry Commodity Charge

Step 1 Determining the TO allowed revenue

The maximum NTS TO allowed revenue in respect of formula year t (MR_t) is defined the Licence. It is calculated using the following formula:

$$MR_t = BR_t + PT_t + OIR_t + NIA_t + NICF_t - K_t$$

Table 9 below details the terms used to determine the final prices to apply during the formula year. Until the NTS Licence has been updated to reflect the Final Proposals for 2015/16 the breakdown of information in Table 9 is not available.

Table 9

Terms used for notification of charges	Apr Value (£m)	Oct Ind Value (£m)
Base Price Control Revenue BR_t	686.5	686.7
The Network Innovation Allowance NIA_t	4.3	4.3
TO Cost Pass-Through (Rates + GT Licence Fees) Adjustment PT_t	12.3	12.3
Output Incentive revenue adjustment $TOOIR_t$	2.6	2.6
The Network Innovation Competition $NICF_t$	5.7	5.7
Under / Over- Recovery Carried Forward K_t	-37.4	-37.4
Entry K_t	-34.2	-34.2
Exit K_t	**-3.2**	**-3.2**
Maximum NTS TO revenue (MRt)	748.8	749.0

For further details of the TO allowed revenue, refer to Special Condition 2A "NTS transportation owner activity revenue restriction".

Typical variations in MR_t

Assuming no change to the Transportation Licence, shippers may wish to note that the new Licence makes allowances for many of the cost terms and so it is the variation from the allowance that is added on to the base revenue that makes up the maximum allowed revenue (MR_t).

Step 2: Determining the target revenue for the TO Entry Commodity Charge

The TO Entry Commodity Charge collects the difference between auction revenue applicable to the formula year and TO entry allowed revenue.

TO entry allowed revenue

The TO entry allowed revenue is equal to the TO maximum allowed revenue (net of K (K_t)). The revenue collected from the Pension Deficit Charge (levied on Distribution Networks) and Metering charges is then deducted. This is then divided by 2. Finally the TO Entry Allowed Revenue is then adjusted by the Entry K amount. Please see Table 9 and Table 11 to see how this works in detail.

Auction revenue

The obligated entry capacity revenue collected in the relevant year must be determined by considering all applicable capacity auctions (ahead of the day). A combination of forecast and actual data is used depending on the auction type and when it is held.

For instance, revenue from the Quarterly System Entry Capacity (QSEC) auctions is based on actual data. The QSEC auction sells entry capacity for capacity year+1 to capacity year+16 inclusive. The QSEC held in March 2015 sells capacity from 1 October 16 to 30 September 32. Therefore all QSEC auctions held previous to QSEC 2015 will have sold entry capacity for the 2015/16 formula year, hence why it is actual data. The Annual Monthly System Entry Capacity (AMSEC) auction sells capacity for capacity year+1 to capacity year+2. AMSEC 2014 and AMSEC 2015 will have therefore sold capacity for the 2015/16 formula year. To set the TO Entry Commodity Charge to apply from April, revenue from one AMSEC auction will be based on actual auction results and the other based on forecast data (as charges set in April will be set before the actual AMSEC auction is held). Actuals for both the AMSEC auctions are available for the October price changes.

Where forecast auction revenues are required, this will typically be based on the actual revenues generated from the same auction held the previous year unless National Grid receives better information from shippers. Shippers should note this is not always reliable particularly at times of regime change when shippers may adopt different bidding strategies.

For the Rolling Monthly Trades & Transfer System Entry Capacity (RMTNTSEC) and Day Ahead Daily System Entry Capacity (DADSEC) auction revenues, the final total is forecasted for April price changes (historically negligible change is seen between forecast and actual), as at the point when charges are finalised further auction revenue will be collected.

Table 10 shows the auction revenue assumptions used to set the final TO Entry Commodity Charge during the relevant year.

Table 10

Auction	Formula Year	
	April view of relevant year £m	Oct Ind view of relevant year £m
QSEC	76.9	76.9
MSEC (1st yr)	2.4	0.6
MSEC (2nd yr)	1.8	0.2
RMSEC	3.0	3.0
RMTNTSEC	1.2	0.8
DADSEC	0.5	0.3
Forecast Total Entry Auction Revenue	**85.6**	**81.7**

The target TO Entry Commodity Charge revenue is calculated as shown by Tables 11-13

Table 11

Term	Apr Value (£m)	Oct Ind Value (£m)
Maximum NTS TO revenue (MR_t)	748.8	749.0
…less DN Pension Charge revenue	59.8	59.8
…less metering charges	1.8	1.8
Revenue to be collected from TO Commodity and Capacity Charges	**687.2**	**687.4**
…eliminate (K_t) stated in Table 9	-37.4	-37.4
Revenue to be recovered through TO Entry and Exit Charges excluding Individual Entry and Exit K's	**649.8**	**650.0**

The purpose of this table is to remove K_t which forms part of the overall MR_t. This allows the individual Entry and Exit K's to be applied, and subsequently the amount of revenue to be collected from Entry and Exit charges for the year to be calculated accurately as shown in Table 12 on the next page.

Table 12

Terms	Apr Value (£m)	Oct Value (£m)
Revenue to be recovered through TO Entry and Exit Charges excluding Individual Entry and Exit K's	649.8	650.0
Divide by 2 to maintain 50/50 split	324.9	325.0
Apply Entry TOK_t = TO Entry allowed revenue (from Table 9)	359.1	359.2
Apply Exit TOK_t = TO Exit allowed revenue (from Table 9)	328.1	328.2
Revenue to be collected from TO Commodity and Capacity Charges	**687.2**	**687.4**

Now that the Individual Entry K has been applied, revenue collected from TO Capacity Auctions is deducted to leave the remaining TO Entry Allowed revenue, which is collected through the TO Entry Commodity Charge as shown in Table 13

Table 13

Terms used forl notification of TO Entry Commodity charges	Apr Value (£m)	Oct Ind Value (£m)
TO Entry allow ed revenue	359.1	359.2
less Forecast TO Auction revenue	85.6	81.7
TO Entry Commodity Revenue	**273.5**	**277.5**

Table 14 details how the target revenue to be collected through the TO Entry Commodity Charge varies during 2015/16.

Table 14

Target TO Commodity Charge Revenue in relevant year (£m)			
Prices to apply from April		Prices to apply from October	
Indicative	Final	Indicative	Final
271.7	273.5	277.5	

Step 3: Determining the volumes that attract the TO Entry Commodity Charge

The volumes that attract the TO Entry Commodity Charge are those forecast non-storage entry flows net of shorthaul volumes i.e. the volumes that shippers have nominated to attract the Shorthaul Commodity Charge.

Table 15 shows the volumes used for the prices set for 2015/16.

Table 15

Annual Volumes used for setting TO Commodity Charge in relevant year (GWh)			
Prices to apply from April *(April to March Volumes)*		Prices to apply from October *(October to March Volumes)*	
Indicative	Final	Indicative	Final
613,032	607,067	372,887	

The flow data is updated as part of the demand forecasts published in mid-May. Shippers will therefore observe different flow assumptions for indicative and final notices of the October price change to those made for the April prices.

Step 4: Calculating the TO Entry Commodity Charge rate

The TO Entry Commodity Charge is collected from non-storage entry flows excluding shorthaul flows, therefore to calculate the charge rate to apply from April the following formula was used.

$$\frac{\text{Forecast revenue from TO Commodity Charge (£m)}}{\text{Forecast entry flows (GWh)}} \times 100$$

Mid-year updates to the TO Entry Commodity Charge

The commercial framework allows the TO Entry Commodity Charge to be revised in October. Further updates are permitted in exceptional circumstances.

When making a mid-year price update, the actual revenue collected during the year to date is deducted from the revised annual revenue, and the remaining flows for the year considered.

For example, to update prices in October the following formula is applied:

$$\frac{\left(\begin{array}{l}\text{Forecast revenue from TO Commodity Charge} \\ \text{- Collected revenue between Apr and Sep}\end{array}\right)}{\text{Forecast flows between Oct and Mar (GWh)}} \times 100$$

Forecast revenue recovery through TO Entry Commodity Charge

Table 16 shows the forecast monthly flows that will attract the TO Entry Commodity Charge and the expected revenue from this charge. Data shown in red is based on actuals, other data is forecast.

If actual revenue recovered is greater than the TO entry allowance revenue then the over recovery will be dealt with first by the application of the buy-back offset mechanism, with any residual revenue credited back to entry shippers through the TO Entry Commodity Charge rebate mechanism.

Table 16

Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15
55,769 GWh	42,373 GWh	36,637 GWh	27,165 GWh	25,142 GWh	26,146 GWh
0.0451 p/kWh	0.0451 p/kWh	0.0451 p/kWh	0.0451 p/kWh	0.0451 p/kWh	0.0451 p/kWh
£25,151,868	£19,110,155	£16,523,376	£12,251,283	£11,339,029	£11,791,881

Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16
46,758 GWh	61,428 GWh	69,563 GWh	69,269 GWh	61,604 GWh	64,265 GWh
0.0486 p/kWh	0.0486 p/kWh	0.0486 p/kWh	0.0486 p/kWh	0.0486 p/kWh	0.0486 p/kWh
£22,724,398	£29,853,768	£33,807,650	£33,664,769	£29,939,340	£31,232,954

Any TO Entry over recovery not dealt with via the above mechanisms will flow through into the formula year in two years time (with the appropriate interest adjustments made) through the NTS TO revenue adjustment term K_t which applies in that formula year.

PART C: CALCULATING TO TARGET EXIT REVENUE

To derive the TO Target Exit Revenue a number of high-level steps are required:

Step 1: Determine the TO Allowed Revenue

Step 2: Determine the target exit revenue to be collected in formula year

Step 3: Determine the target exit revenue to be entered into the Transportation Model

Step 4: Determine the target revenue for the TO Exit Commodity Charge

Step 5: Determine the volumes that attract the TO Exit Commodity Charge

Step 6: Calculate the TO Exit Commodity Charge rate

Step 1 Determining the TO allowed revenue

This step is exactly the same as Step 1 used to calculate the TO Entry Commodity Charge as shown on page 8 of this document.

Step 2: Determining the initial target Exit Revenue

TO exit allowed revenue

The initial target Exit Revenue is shown in Table 17 (from Table 12)

Table 17

Target TO Exit Capacity Revenue			
Prices to apply from April		Prices to apply from October	
Indicative	Final	Indicative	Final
326.3	328.1	328.2	

This gives the TO Exit Revenue to recover within the formula year from TO Exit Capacity Charges

Step 3: Determining the Transportation Model target Exit Revenue

When setting the Exit Capacity charges in October, the revenue figure which is entered into the Transportation model differs from the target Exit Revenue to be collected for the formula year. This is because Exit charges are set and fixed for the capacity year $October_t$ to $September_{t+1}$ whereas the formula year runs from $April_t$ to $March_{t+1}$.

When setting Exit Capacity charges for $October_t$ the revenue recovered over the period $April_t$ to $October_t$ (set by the previous years Exit Capacity charges) needs to be taken into account.

Therefore the target exit revenue to input into the model is derived from the following formula.

Transportation model target Exit Revenue =

(Initial target Exit Revenue – Forecast Exit Revenue Apr to Oct) x 2

The formula is multiplied by two as Exit Charges are fixed for an entire Gas year. To recover £100m for the final 6 months, £200m needs to be entered into the Transport model as the Transportation Model calculates a daily exit charge per day for a full year $October_t$ to $September_{t+1}$.

The Transportation Model sets both Baseline and Incremental Exit Capacity charges. Revenue from Baseline Capacity is classed as TO, whereas revenue from Incremental is classed as SO.

Table 18

Terms used for notification of TO Exit Capacity charges	April Value (£m)*	Oct 15 Value (£m)
TO Exit Allowed revenue (from Table 12)	328.1	328.2
less forecast exit revenue from April to September	184.3	184.3
Remaining revenue to collect in the formula year	143.8	143.9
Final Target exit revenue to enter into the Transportation Model	**287.7**	**287.9**

*The April value is used for setting the TO Exit Commodity charge.

Step 4: Determining the target revenue for the TO Exit Commodity Charge

The TO Exit Commodity charge, which was introduced in October 2012, is a residual charge to enable National Grid to collect the correct TO Exit income from exit shippers when capacity has not been booked up to the baseline.

Once the TO Exit allowed revenue has been determined, take forecast income from baseline exit capacity from this to give the revenue to be collected though the TO Exit Commodity charge.

Table 19

Terms used for notification of TO Exit Commodity charges	April Value (£m)	October Value (£m)
Target Exit Revenue	328.1	328.2
less Forecast TO Exit Revenue from baseline capacity	210.4	210.7
Forecast TO Exit Commodity Revenue	117.7	117.5

Table 20 details how the target revenue to be collected through the TO Exit Commodity charge varies during 2015/16.

Table 20

Volumes used for setting TO Exit Commodity Charge in relevant year (GWh)			
Prices to apply from April *(April to March Volumes)*		Prices to apply from October *(October to March Volumes)*	
Indicative	Final	Indicative	Final
601,151	595,411	403,691	-

Step 5: Determining the volumes that attract the TO Exit Commodity Charge

The volumes that attract the TO Exit Commodity Charge are those forecast non-storage exit flows net of shorthaul volumes i.e. the volumes that shippers have nominated to attract the Shorthaul Commodity Charge.

Table 21 shows the volumes used for the prices set for 2015/16.

Table 21

Terms used for notification of TO Exit Commodity charges	Apr Value (£m)	Oct Ind Value (£m)
Total Exit Allowed Revenue	328.1	328.2
Revenue from booked capacity	210.4	210.7
Forecast "under / over (-)" Recovery	**117.7**	**117.5**

The flow data is updated as part of the demand forecasts published in mid-May. Shippers will therefore observe different flow assumptions for indicative and final notices of the October price change to those made for the April prices.

Step 6: Calculating the TO Exit Commodity Charge rate

The TO Exit Commodity Charge is collected from non-storage entry flows excluding shorthaul flows, therefore to calculate the charge rate to apply from April the following formula was used.

$$\frac{\text{Forecast revenue from TO Exit Commodity Charge (£m)}}{\text{Forecast exit flows (GWh)}} \times 100$$

Mid-year updates to the TO Exit Commodity Charge

The commercial framework allows the TO Exit Commodity Charge to be revised in October. Further updates are permitted in exceptional circumstances.

When making a mid-year price update, the actual revenue collected during the year to date is deducted from the revised annual revenue, and the remaining flows for the year considered.

For example, to update prices in October the following formula is applied:

$$\frac{\begin{pmatrix} \text{Forecast revenue from TO Exit Commodity Charge} \\ \text{- Collected revenue between Apr and Sep} \end{pmatrix}}{\text{Forecast flows between Oct and Mar (GWh)}} \times 100$$

Forecast revenue recovery through TO Exit Commodity Charge

Table 22 shows the forecast monthly flows that will attract the TO Exit Commodity Charge and the expected revenue from this charge. Data shown in red is based on actuals, other data is forecast.

If actual revenue recovered is greater than the TO entry allowance revenue then the over recovery will be dealt with first by the application of the buy-back offset mechanism, with any residual revenue credited back to entry shippers through the TO Entry Commodity Charge rebate mechanism.

Table 22

Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15
53,250 GWh	37,150 GWh	27,639 GWh	21,518 GWh	21,115 GWh	26,444 GWh
0.0198 p/kWh	0.0198 p/kWh	0.0198 p/kWh	0.0198 p/kWh	0.0198 p/kWh	0.0198 p/kWh
£10,543,557	£7,355,641	£5,472,443	£4,260,576	£4,180,845	£5,235,923

Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16
44,025 GWh	63,020 GWh	75,914 GWh	80,438 GWh	74,320 GWh	65,974 GWh
0.0199 p/kWh	0.0199 p/kWh	0.0199 p/kWh	0.0199 p/kWh	0.0199 p/kWh	0.0199 p/kWh
£8,760,917	£12,540,934	£15,106,971	£16,007,195	£14,789,731	£13,128,853

Any TO Exit under or over recovery will flow through into the formula year in two years time (with the appropriate interest adjustments made) through the NTS TO revenue adjustment term K_t which applies in that formula year.

PART D: CHARGING TIMETABLE & FURTHER INFORMATION

Charging timetable

Charge changes are published by the following dates throughout the year:

Date (by)	Notification of…
3 November	Indicative charges to apply from following 1 April
31 January	Final charges to apply from following 1 April
1 May	Indicative charges to apply from following 1 October
31 July	Final charges to apply from following 1 October

Notices of the updates will be posted on National Grid's industry website and on the Joint Office's website. The updates will also be notified via the Joint Office's email notification service.

Further information

If you require further details about any of the information contained within this document or have any comments on how this document might be improved please contact Colin Williams (01926 655916) or Karin Elmhirst (01926 655540) or email the charging team at box.transmissioncapacityandcharging@nationalgrid.com.