

Explanation of the NTS SO and TO Commodity Charges

May 2012

Formula year 2012/13

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 set before actual costs and allowed revenues have been finalised. In the case of the SO Commodity Charges actual allowed revenue (SO MAR) is not known until outturn costs for the formula year have been determined, therefore the SO and TO allowed revenues and their individual components have to be forecasted so as to allow charges to be set.

Forecasts are based on a number of different factors and assumptions including but not limited to, historical costs, historical auction revenues, the forward cost of gas, flows on the system, incentive schemes and regime changes. These 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 150¹ 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 & TOMR_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:

- UNC TPD Section Y NTS Charging Methodology
- Statement of Gas Transmission Transportation Charges
- Incremental Entry Capacity Release Methodology Statement
- Metering Charging Statement
- Connection Charging Statement

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

These are available on our Charging website at:

<http://www.nationalgrid.com/uk/Gas/Charges/statements/>

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 TO Exit Capacity Charges and TO Exit Commodity Charge
- Part D provides details of the annual charge setting timetable and sources of further information.

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:

$$SOMR_t = SOEIRC_t + SOExIRC_t + SOOIRC_t + SOIntIRC_t + SORA_t + BBIOCA_t + DELINC_t - SOK_t$$

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, 2012/13.

Table 1

Terms used for Final notification of charges	April Value (£m)	Oct Ind Value (£m)
SO entry incentives, costs and revenues ($SOEIRC_t$)	101.3	101.3
SO exit incentives, costs and revenues ($SOExIRC_t$)	83.1	85.1
SO external incentives, costs and revenues ($SOOIRC_t$)	135.2	127.6
SO internal incentives, costs and revenues ($SOIntIRC_t$)	73.5	73.5
SO income adjusting event adjustment ($SORA_t$)	0	0
SO buyback overall incentive collar adjustment ($BBIOCA_t$)	0	0
SO accelerated incremental capacity delivery incentive ($DELINC_t$)	49.8	49.8
Revenue adjustment term for prior year (SOK_t) *	12.4	9.0
Maximum NTS SO allowed revenue ($SOMR_t$)	430.6	428.4

³* SOK_t is deducted in the $SOMR_t$ formula. Therefore any under recovery is shown as ().

For further details of the SO allowed revenue, refer to Special Condition C8C "NTS System Operation activity revenue restriction" Paragraph 3a of the Licence.

³ Meter revenue adjustments are included within the SO external incentives, costs and revenues ($SOOIRC_t$) term.

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:

- typically $SOIntRC_t$ shows relatively little fluctuation throughout the year, as this term relates to the internal costs applicable to the SO activity;
- the $SOEIRC_t$ and $SOExIRC_t$ terms are largely collected through capacity and neutrality charges and hence do not contribute significantly to the variability of the SO Commodity charge;
- the $SOOIRC_t$ term has been subject to large fluctuations. This is because the term includes System Balancing Costs which are heavily linked to gas costs, flows on the NTS and any meter error reconciliation adjustments; and
- the SOK_t term will not be subject to a significant variation when indicative October prices are published in May each year as it relates to any under/over recovery from the previous formula year, which will be largely finalised by that point in time.

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

The maximum NTS SO allowed revenue is collected through 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 (SOR_t) is calculated using the following formula:

$$SOR_t = SOROC_t + SORCAP_t + SOExRF_t + RCOM_t$$

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 Final notification of charges	April Value (£m)	Oct Ind Value (£m)
Balancing Neutrality Charge (RNC_t)	10.0	10.0
Capacity Neutrality Components (revenues)	A	A
Adjustment for Neutrality ($SOROC_t$)	10.0+A	10.0+A

Please refer to our Charging Methodology (UNC Section Y) 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 incremental entry (SOEIRC_t) and exit (SOExRF_t) 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 Final notification of charges	April Value (£m)	Oct Ind Value (£m)
Entry Capacity Investment Revenue (SORCAP _t)	35.9	36.5
Exit Capacity Investment Revenue (SOExRF _t)	11.7	13.8
Adjustment for the sale of incremental capacity	47.7	50.3

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 a replacement 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 Final notification of charges	April Value (£m)	Oct Ind Value (£m)
St Fergus Compression Revenue	14.7	14.0
Shorthaul Revenue	10.9	13.7
Capacity Neutrality Buyback Costs recovered through Capacity Neutrality	8.4	0.5
Capacity Neutrality Components (revenues credited via capacity neutrality)*	-A*	-A*
Adjustment for other Commodity Charges	34.0-A	28.2-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 Final notification of charges	April Value (£m)	Oct Ind Value (£m)
Maximum Allowed NTS SO revenue (SOMR _t)	430.6	428.4
...less associated SO charges	10.0	10.0
...less sales of incremental capacity	47.7	50.3
...less other charges	34.0	28.2
Remainder of RCOM i.e. revenue to be collected through SO Commodity Charge	338.9	339.9

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
376.5	338.9	339.9	-

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
1,639,858	1,658,338	989,158	-

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:

$$\frac{\text{Forecast revenue from SO Commodity Charge (£m)}}{\text{Forecast Flows (GWh)}} \times 100 = 0.0242 \text{ p/kWh}$$

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:

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

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-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12
84,491 GWh	86,549 GWh	82,792 GWh	83,141 GWh	82,902 GWh	79,419 GWh
0.0242 p/kWh	0.0242 p/kWh	0.0242 p/kWh	0.0242 p/kWh	0.0242 p/kWh	0.0242 p/kWh
£20,446,712	£20,944,859	£20,035,677	£20,120,075	£20,062,215	£19,219,292

Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13
126,850 GWh	161,275 GWh	181,867 GWh	186,236 GWh	166,542 GWh	166,387 GWh
0.0221 p/kWh	0.0221 p/kWh	0.0221 p/kWh	0.0221 p/kWh	0.0221 p/kWh	0.0221 p/kWh
£28,033,916	£35,641,737	£40,192,582	£41,158,185	£36,805,853	£36,771,549

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 following formula year (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 TOEntry 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 Commodity Charge

Step 1 Determining the TO allowed revenue

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

$$TOMR_t = TOZ_t - TOZA_t + TOF_t + TOG_t - TOK_t$$

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 2012/13 the breakdown of information in Table 9 is not available.

Table 9

Terms used for Final notification of April 2012 charges	Apr Value (£m)	Oct Ind Value (£m)
TO core allowance (TOZ_t)	655.6	655.6
TO revenue adjustment for Milford-Haven ($TOZA_t$)	12.8	12.8
TO pass-through costs (TOF_t)	25.6	25.6
TO incentive costs and revenue (TOG_t)	15.3	15.3
Revenue adjustment term for prior year (TOK_t)	(4.8)	11.2
Entry K	(9.0)	14.0
Exit K	4.2	2.8
Maximum NTS TO revenue ($TOMR_t$)	688.5	694.9

For further details of the TO allowed revenue, refer to Special Condition C8B “NTS transportation owner activity revenue restriction”, Paragraph 3a of the Licence.

Typical variations in $TOMR_t$

Assuming no change to the Transportation Licence, shippers may wish to note:

- TOZ_t is typically fixed from the January (final) notification of the April charges, once the inflation data is based on actuals rather than on any forecast;
- TOF_t should be relatively stable during the price control period, as the majority of this term relates to pension costs allowances that are fixed for the period. This term can typically move by $\pm 10\%$;

- **TOG_t** is mainly driven by changes in the core allowance and may vary by $\pm£1m$ throughout the year; and
- **TOK_t** will be relatively fixed when indicative October prices are published in May each year. Please note that TOK is now split into Entry and Exit,

The forecast RPI rate for the 2012/13 formula year is not applicable as the rollover year is determined via Final Proposals.

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 (TOK_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 compare 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 to be held in March 2012 sells capacity from 1 October 13 to 30 September 29. Therefore all QSEC auctions held previous to QSEC 2012 will have sold entry capacity for the 2012/13 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 2011 and AMSEC 2012 will have therefore sold capacity for the 2012/13 formula year. To set the TO 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 Commodity Charge during the relevant year (equivalent numbers for the prior year are shown in grey for comparison). Actual auction revenues are shown in blue and forecasts in red.

Table 10

Auction	Formula Year	
	April view of relevant year £m	October ind view of relevant year £m
QSEC Auctions	113.0	113.0
AMSEC 2011	0.5	0.5
AMSEC 2012	3.5	0.7
RMTNTSEC	0.7	0.6
DADSEC	0.0	0.0
DRSEC	0.0	0.0
Total auction revenue	117.7	114.9

The target TO Entry Commodity Charge revenue is calculated as shown by Table 11 to Table 13.

Table 11

Term	Apr Value (£m)	Oct Ind Value (£m)
Maximum NTS TO revenue ($TOMR_t$)	688.5	694.9
...less DN Pension Charge revenue	37.0	37.0
...less metering charges	1.6	1.6
Revenue to be collected from TO Commodity and Capacity Charges	649.9	656.3
...eliminate (TOK_t) stated in Table 9	(4.8)	11.2
Revenue to be recovered through TO Entry and Exit Charges excluding Individual Entry and Exit K's	645.1	645.1

The purpose of this table is to remove TOK_t which forms part of the overall $TOMR_t$. 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 Ind Value (£m)
Revenue to be recovered through TO Entry and Exit Charges excluding Individual Entry and Exit K's	645.1	645.1
Divide by 2 to maintain 50/50 split	322.5	322.5
Apply Entry $TOK_t = TO \text{ Entry allowed revenue (from Table 9)}$	331.5	336.6
Apply Exit $TOK_t = TO \text{ Exit allowed revenue (from Table 9)}$	318.3	319.7
Revenue to be collected from TO Commodity and Capacity Charges	649.9	656.3

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 Commodity Charge as shown in [Table 13](#).

Table 13

Terms used for Final notification of TO Entry Commodity charges	Apr Value (£m)	Oct Ind Value (£m)
TO Entry allowed revenue	331.5	336.6
less Forecast TO Auction revenue	117.7	114.9
TO Commodity Revenue	213.8	221.7

Table 14 details how the target revenue to be collected through the TO Commodity Charge varies during 2012/13.

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
196.5	213.8	221.7	

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 2012/13.

Table 15

Annual Volumes used for setting TO Entry 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
824,136	833,376	482,248	

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.

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.

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

$$\frac{£213.8\text{m}}{833,376\text{GWh}} \times 100 = 0.0257 \text{ p/kWh}$$

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:

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

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-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12
44,474 GWh	45,578 GWh	43,625 GWh	43,874 GWh	43,754 GWh	41,938 GWh
0.0257 p/kWh	0.0257 p/kWh	0.0257 p/kWh	0.0257 p/kWh	0.0257 p/kWh	0.0257 p/kWh
£11,429,898	£11,713,506	£11,211,642	£11,275,552	£11,244,829	£10,778,149

Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13
64,571 GWh	80,071 GWh	86,948 GWh	87,524 GWh	79,603 GWh	83,531 GWh
0.0319 p/kWh	0.0319 p/kWh	0.0319 p/kWh	0.0319 p/kWh	0.0319 p/kWh	0.0319 p/kWh
£20,598,059	£25,542,805	£27,736,344	£27,920,044	£25,393,297	£26,646,538

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

PART C: CALCULATING TO TARGET EXIT REVENUE AND TO EXIT COMMODITY CHARGE

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 to be collected via the TO Exit Commodity Charge
- Step 5:** Determine the volumes that attract the TO Exit Commodity Charge

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

To see how TO Exit Allowed Revenue is calculated please refer to Table 11 and 12.

Interruptible supply points do not currently attract NTS Exit Capacity charges.

The revenue which would be recovered if these Interruptible supply points were firm is forecasted and called 'Charges Foregone'.

Charges foregone are (up to 2012/13 Gas Year) included within the NTS Licence as SO allowed revenue and as TO actual (collected) revenue.

The licence allows this revenue to be recovered through the term SOExIRC_t.

Charges foregone are therefore recovered through the SO Commodity Charge, but the actual revenue recovered is treated as TO Actual revenue. Charges Foregone therefore needs to be deducted from the TO exit allowed revenue. Forecasts of charges foregone are shown in Table 17.

Table 17

Charges Foregone (ExNTSSIC _t) year (£m)			
Prices to apply from April		Prices to apply from October	
Indicative	Final	Indicative	Final
37.4	38.7	38.5	

The initial target Exit Revenue is shown in Table 18.

Table 18

Terms used for Final notification of TO Exit Capacity charges	Apr Value (£m)	Oct Ind Value (£m)
TO Exit Allowed revenue (from Table 12)	318.3	319.7
less Charges Foregone	38.7	38.5
Initial Target Exit Revenue	279.6	281.2

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

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 19

Terms used for Final notification of TO Exit Capacity charges	October 2012 Ind Value (£m) at April 12	October 2012 Ind Value (£m)
Initial Target Exit Revenue	318.3	281.2
less Forecast TO Exit Revenue Apr to Oct	110.2	110.2
Remaining revenue to recover within formula year	208.1	171.0
Final Target Exit Revenue to be inputted into the Transportation Model	416.3	342.0

Step 4: Determine the target revenue to be collected via the TO Exit Commodity Charge

Table 20

Terms used for Final notification of TO Exit Commodity charges	Apr Value (£m)	Oct Ind Value (£m)
Revenue at baselines	-	171.6
Revenue at booked capacity	-	127.7
Forecast “under / over (-)” Recovery	-	43.9

The TO Exit Commodity Charge is collected from exit flows excluding shorthaul flows, therefore to calculate the charge rate to apply from October;

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

$$\frac{£43.9\text{m}}{506,910\text{GWh}} \times 100 = 0.0087 \text{ p/kWh}$$

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

Table 21

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
-	-	506,910	-

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.

Table 22

Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-

Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13
64,571 GWh	80,071 GWh	86,948 GWh	87,524 GWh	79,603 GWh	83,531 GWh
0.0087 p/kWh	0.0087 p/kWh	0.0087 p/kWh	0.0087 p/kWh	0.0087 p/kWh	0.0087 p/kWh
£5,617,653	£6,966,220	£7,564,458	£7,614,557	£6,925,445	£7,267,238

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	Final Exit Capacity charges to apply from following 1 October
3 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 our UK Transmission Charging and Revenue team, on 01926 654633.