CONSULTATION DOCUMENT

Modification Proposals to the Gas Transmission Transportation Charging Methodology

NTS GCM 13:

April NTS Exit Capacity Price Changes [Updated post 2008 AQ Review]

19th December 2008

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1 Executive Summary

This document is issued by National Grid in its role as Gas Transporter Licence holder in respect of the NTS ("National Grid").

This document sets out for consultation National Grid's proposals for amending the Gas Transmission Transportation Charging Methodology (the "Charging Methodology") in respect of the timing and data used for setting NTS Exit Capacity Prices ("Exit Prices").

Currently Exit Prices are set each year in October for the following 12 months but the Transportation Owner Maximum Allowed Revenue (TO MAR), defined by the Licence, changes in April of each year. This misalignment of gas year (October – September) and formula year (April – March) can lead to an initial under- or over-recovery for the first six months of the formula year. This in turn can lead to volatile Exit Prices at an aggregate level from year to year as they are set to try and compensate for the initial under- or over-recovery during the first six months of each formula year.

This consultation paper (GCM13) outlines options for addressing Exit Price volatility and seeks to gauge industry support for a change to the current Exit Price setting arrangements. Exit Prices, while volatile, are predictable at an aggregate level, which is favourable when agreeing contracts, and hence no change may be identified as being appropriate. A GCM13 consultation conclusions report containing a final proposal to change the methodology will only be raised with industry support.

National Grid, via the Gas Transmission Charging Methodologies Forum (TCMF), has considered four options with regards to Exit Price volatility:

- Option One: Do nothing;
- Option Two: Apply Exit Prices from April to March of formula year t;
- Option Three: One-off Exit Price changes in April, with Exit Prices recalculated using updated supply, demand, network, and target exit revenue data;
- Option Four: One-off Exit Price changes in April, with Exit Prices recalculated without updating supply flow data.

National Grid believes that Option Four would be most appropriate for addressing Exit Price volatility, should it occur and should Users show support for the proposal. The main reasons for this are as follows:

- Option One: The option of doing nothing could result in continued volatile Exit Prices year on year.
- Option Two: The 0116 and 0195 suites of UNC Modification Proposals, which are seeking to introduce NTS Exit Reform, have been developed based on an annual product released from 01 October. National Grid therefore considers applying Exit Prices from April – March inappropriate.
- Option Three: Supply and demand flow data has a significant effect on Exit Prices. A one-off Exit Price change in April, using updated supply, demand and network data, could produce more volatile Exit Prices than those produced by the current regime i.e. while prices on average would reduce if the target exit revenue was reduced, some prices could increase. National Grid is currently analysing the impact of supply and demand balancing rules within the Transportation Model and will publish a paper in 2009.

- Option Four: Recalculating Exit Prices in April, updating the TO target exit revenue without updating supply data, would result in a constant adjustment to all Exit Prices. Exceptions to the constant adjustment would occur where it would reduce the price below 0.0001p/kWh, in which case the Exit Price would be capped at the minimum permitted level of 0.0001p/kWh. The averaging of the DN Exit Point Prices in the Transportation Model could also result in DN Exit Zone Prices reducing by a non-constant adjustment.

Therefore, through GCM13, National Grid proposes:

- A change to the Charging Methodology to facilitate Option Four - one-off April Exit Price changes with Exit Prices recalculated without updating supply data.

The term "one-off" is used as National Grid does not foresee making regular April Exit Price changes based on anticipated allowed revenue and exit capacity levels, however we recognise that future circumstances may reintroduce exit price volatility, e.g. the start of the next price control from 01 April 2012 or other unforeseen changes in allowed revenue, which may warrant an April price change. National Grid would envisage consulting the industry before making an April price change should exit price volatility reoccur.

Through discussions at the Gas TCMF it has been identified that an April price change could be notified at the same time as the October price change i.e. by the preceding 1st August. This would be in the spirit of setting exit capacity prices once a year as effectively a single price schedule would be being set.

The inputs to the Transportation Model used to calculate the April Exit Prices would therefore be:

- Network – the network model comprising the nodes and pipe lengths would represent the year of capacity release. The model would represent committed projects as indicated by the Ten Year Statement. Sufficient pipe sections would be included to connect all entry and exit points for which prices were required.
- Supply Data – the Ten Year Statement used to calculate the Exit Prices effective from the previous October (i.e. the December 2008 Ten Year Statement would be used to calculate the April 2010 Exit Prices)
- Demand Data – Offtake Capacity Statements (for DN Demand) and Balance Sheets (for DC Demand).
- Expansion factor – calculated based on the costs of constructing NTS capacity for the gas year.
- Annuitisation Factor – Implied by the Licence (6.25% rate of return and 45 year annuitisation period)
- Target revenue – Set to the TO MAR for the formula year.

Appendix A contains a table that compares current Exit Prices with indicative prices applicable to Option Four.

Appendix B contains a table that shows the impact of an April Price Change on TO target exit revenue and collected revenue.

Appendix C contains a presentation on the impact of RPI on Exit Capacity Prices, which was given at the October 2008 TCMF.

Implementation

The proposal would be implemented on the 1st October 2009. National Grid would envisage consulting the industry before making an April price change should exit price volatility reoccur.

The closing date for submission of your response to this consultation has been extended to **16th January 2009**. Your response should be e-mailed to:

box.transmissioncapacityandcharging@uk.ngrid.com

or alternatively sent by post to

Jemma Spencer, Regulatory Frameworks, National Grid, National Grid House, Gallows Hill, Warwick, CV34 6DA.

If you wish to discuss any matter relating to this Charging Methodology consultation then please call Jemma Spencer ☎ 01926 654212 or Eddie Blackburn☎ 01926 656022.

Responses to this consultation will be incorporated within National Grid's conclusion report. If you wish your response to be treated as confidential then please mark it clearly to that effect.

2 Introduction

2.1 This document is issued by National Grid in its role as Gas Transporter Licence holder in respect of the NTS.

2.2 NTS Exit Capacity Prices (“Exit Prices”) are currently set from October of formula year t to September of formula year t+1 in accordance with Standard Special Condition A4 2(a)(ii) of the Gas Transporter Licence in respect of the NTS (the “Licence”).

2.3 NTS Transportation Owner Maximum Allowed Revenue (TO MAR) applies for April to March of formula year t as detailed in Special Condition C8B 3(a) of the Licence.

2.4 In any formula year t, Exit Prices set in October take into account revenue recovered from April to September and are set at a level to recover the remaining TO MAR in the final six months of the formula year.

2.5 The TO MAR will change in April of formula year t+1 but Exit Prices will still be set at the rate required to collect the remaining TO MAR for formula year t. National Grid might therefore initially under- or over-recover for the first six months of formula year t+1.

2.6 In October of formula year t+1 Exit Prices will be set at a level to compensate for the initial under- or over-recovery in the first half of the formula year.

2.7 In April of formula year t+2 the TO MAR will change. If the change in TO MAR is not equal to the level of Exit Prices set in October of formula year t+1 National Grid will under- or over-recover.

2.8 This misalignment of formula year and gas year can cause volatile Exit Prices.

3 Impact of AQ Review & Clarification

3.1 This proposal, NTS GCM 13, was raised because National Grid foresaw volatility in future NTS Exit Prices, i.e. prices would rise and then fall on an annual basis. Based on industry feedback about this type of charge volatility, we looked for ways that this could be dampened i.e. an exit capacity price change from 01 April 2009.

3.2 The AQ Review Process is an annual series of events which culminates in the calculation of the annual quantity for all NDM and DM meter points. The NDM SOQs (System Offtake Quantities) are the quantities on which capacity is charged. The outcome of the AQ Review is not known in time to feed into the Exit Capacity Price setting process for prices effective from 01 October each year.

3.3 Following the recent AQ Review, SOQs have fallen reducing NTS exit charge revenue from 01 October 2008 and hence also reducing charge revenue from 01 April 2009. As a result, National Grid no longer considers an Exit Price reduction from 01 April 2009 to be required as the fall in SOQs will reduce charge revenue and should remove volatility of prices.

3.4 The term "one-off" was used because at the time of initial publication of GCM13 National Grid did not foresee making regular April Exit Price changes after April 2009, based on anticipated allowed revenue and exit capacity levels. However we recognise that future circumstances may reintroduce exit price volatility, e.g. the start of the next price control from 01 April 2012 or other unforeseen changes in allowed revenue, which may warrant an April price change.

3.5 Through discussions at the Gas TCMF it has been identified that an April price change could be notified at the same time as the October price change i.e. by the preceding 1st August. This would be in the spirit of setting exit capacity prices once a year as, effectively a single price schedule would be being set.

3.6 This proposal is seeking Ofgem's approval to make a change to the Charging Methodology such that if Exit Prices were changed in any April, the prices could be recalculated without updating the supply data from that used in the previous October. This would result in a constant adjustment to all Exit Prices (except where the minimum price would apply) rather than causing some prices to increase and some to decrease as per the prevailing methodology.

4 Background

4.1 The calculation of TO MAR in respect of formula year t includes an NTS TO revenue adjustment factor ("revenue adjustment", "TOK_t") for any under- or over-recovery in formula year t-1.

4.2 In formula year 2006/07 National Grid incurred a revenue adjustment, which reduced the TO MAR for 2007/08 by c£11m. This was primarily due to the 2007 Price Control Review.

4.3 Therefore, the increase in TO MAR from 2007/08 to 2008/09 was greater than the projected increase from 2008/09 to 2009/10.

4.4 As a consequence of paragraphs 3.2 and 3.3:

- Exit Prices set in October 2007 under-recovered from April 2008 – October 2008;
- Exit Prices set in October 2008 will be set at a higher rate to compensate for this under-recovery;
- The higher rate from October 2008 will over-recover from April 2009 – October 2009 due to the small increase in TO MAR;
- In October 2009 Exit Prices will have to be reduced to prevent over-recovery.

4.5 This would have resulted in unstable Exit Prices.

5 Discussion and Issues

Impact of RPI on Exit Prices

5.1 Industry concerns were raised at the September 2008 Gas TCMF with regard to the impact of RPI on the setting of NTS Exit Capacity Prices. The industry wanted reassurance that the variability of the RPI, which is used in the calculation of TO allowed revenue, wouldn't undermine the benefits of this proposal (GCM13).

5.2 Appendix C contains a presentation given at the October 2008 TCMF, which demonstrates that an April NTS exit capacity price change (as facilitated by GCM13) could reduce exit price volatility given variable RPI over the remainder of the price control. This is based on the assumption that the GCM12 charging proposal, which manages entry and exit under and over recovery (“K”) separately for charging purposes, is implemented.

Options to Address Exit Price Volatility

5.3 National Grid considered four options to address Exit Price volatility:

- Option One: Do nothing;
- Option Two: Apply Exit Prices from April to March of formula year t;
- Option Three: One-off Exit Price changes in April, with Exit Prices recalculated using updated supply, demand, network, and target exit revenue data;
- Option Four: One-off Exit Price changes in April, with Exit Prices recalculated without updating supply data.

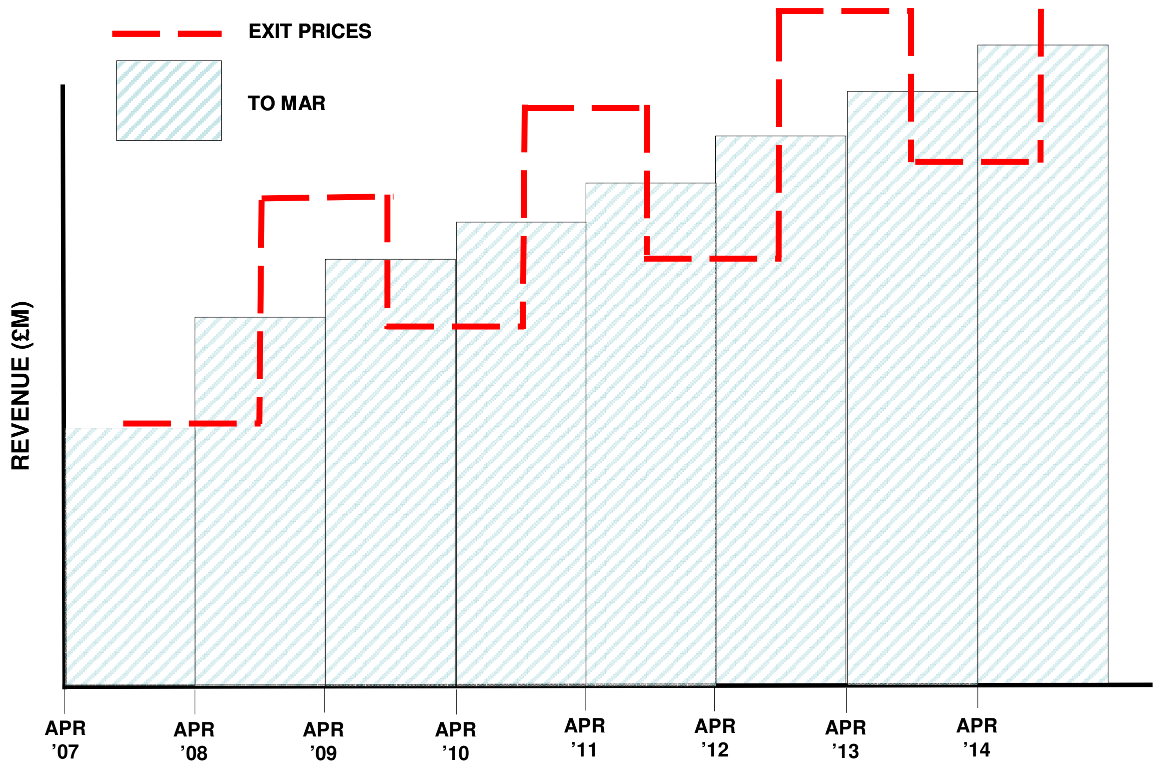
5.4 Appendix B contains a table that shows the impact of an April Price Change on TO target exit revenue and collected revenue.

Option One: Do Nothing

5.5 National Grid, through Option One, would make no change to the current Exit Price setting regime:

- Exit Prices would be aligned with the gas year;
- Final Exit Prices would be set in August using supply data from December and demand data from May;
- There would be the risk of a continuing cycle of unstable Exit Prices.

Option One: Do Nothing



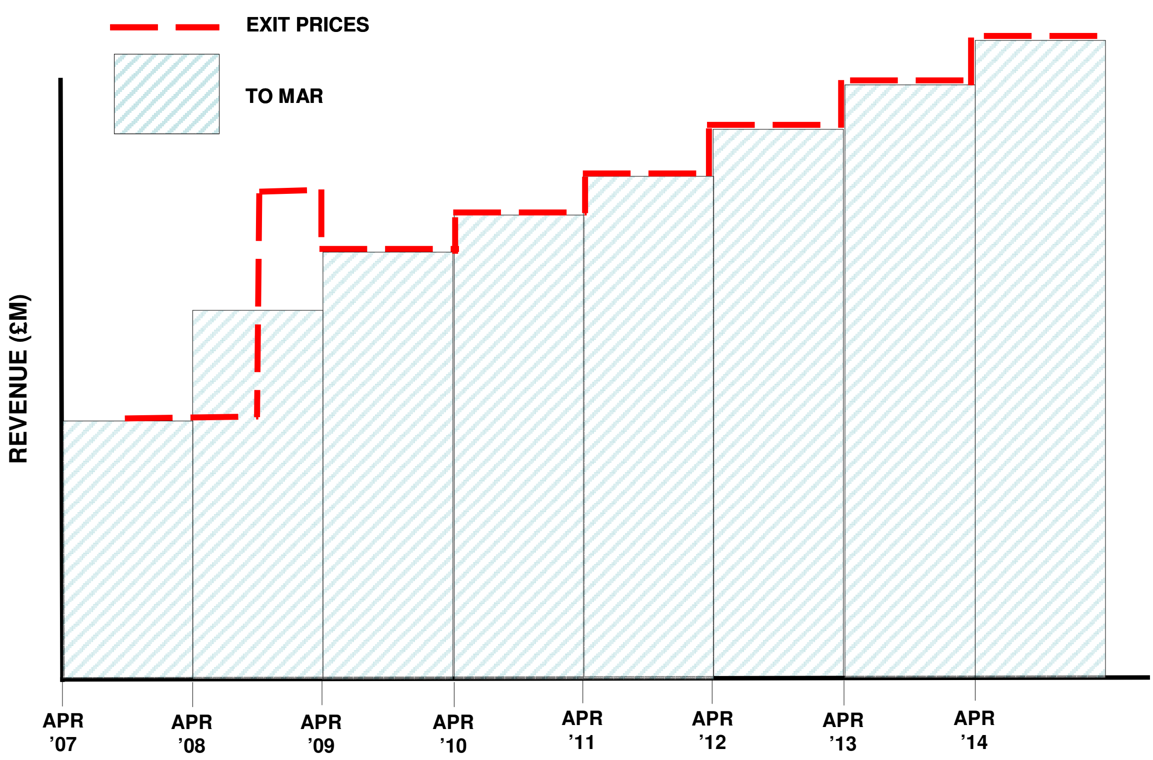
Option Two: Apply Exit Prices from April to March of Formula Year t

5.6 National Grid, through Option Two, would apply Exit Prices from April to March of formula year t, commencing April 2009.

5.7 Differences to Option One include:

- Exit Prices would be aligned with the formula year;
- Final Exit Prices would be set in February (using supply data from December and demand data from May);
- Exit Price setting would be aligned with the proposed March QSEC auction. This would allow National Grid to set all prices using one set of Transportation Models;
- Exit Prices are set using the Transportation Model, which is based on a 1-in-20 peak day demand for the relevant gas year. The proposal would result in Exit Prices being set for the formula year, so Non-Daily Metered (NDM) Exit and annual demand changes, notified in the summer to be effective from October, would not be accounted for;
- This option is incompatible with the Annual Product (from October – September) proposed by Exit Reform;
- The proposal would require a Licence change.

Option Two: Apply Exit Prices from April to March of Formula Year t



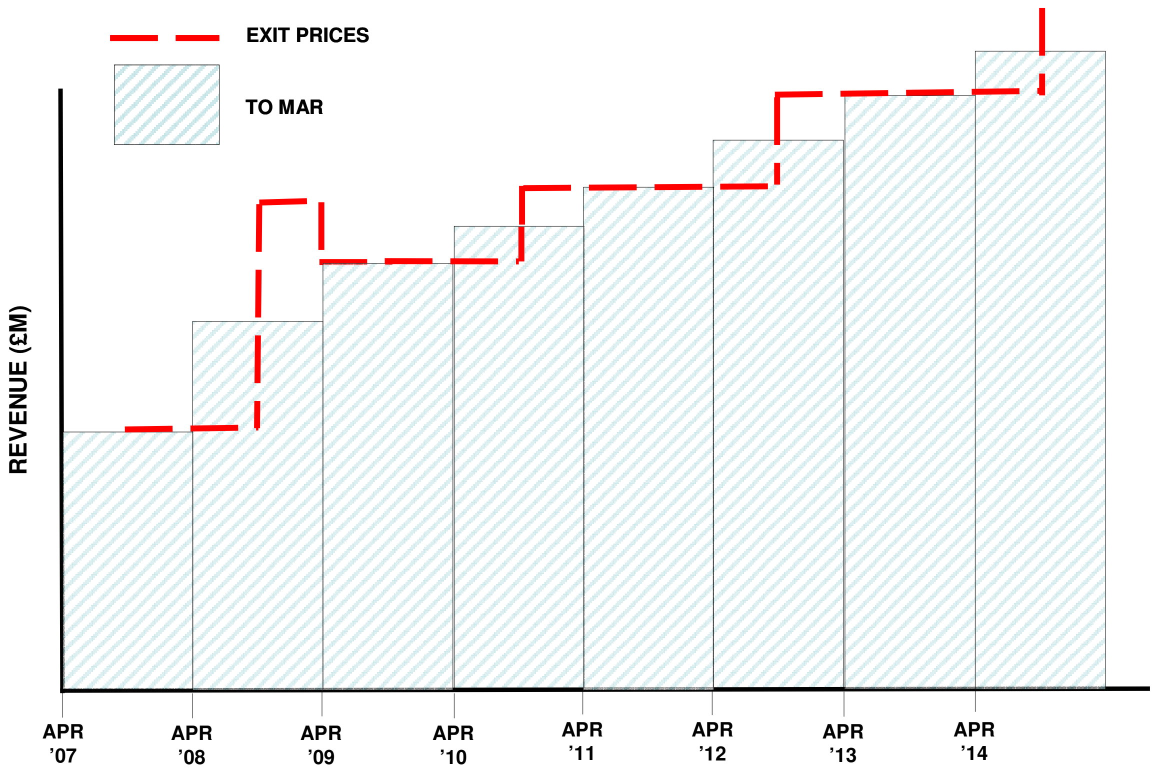
Option Three: One-Off Exit Price Change in April 2009 (full recalculation)

5.8 National Grid, through Option Three, would implement one-off Exit Price changes in April, recalculating Exit Prices using updated supply, demand, network, and target exit revenue data.

5.9 Comparing with Option One:

- The April Exit Prices would be aligned with the formula year;
- The April 2009 Exit Prices would be set in February 2009 using supply data from December 2008 and demand data from May 2008;
- Two Exit Price changes in six months would facilitate incorporating any within-year changes in TO MAR;
- National Grid would need to produce two sets of Transportation Models using different sets of data;

Option Three: One-Off Exit Price Change in April (full recalculation)



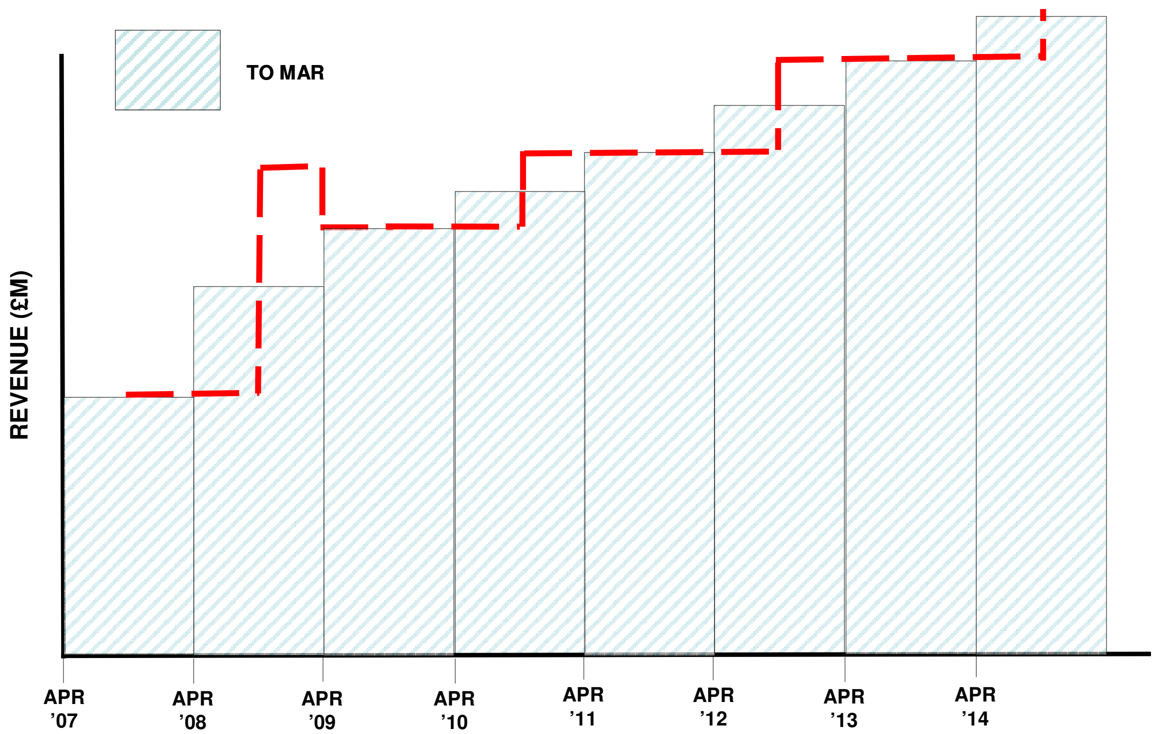
Option Four: One-Off Exit Price Change in April 2009 (recalculating Exit Prices without updating supply data)

5.10 National Grid, through Option Four, would implement a one-off Exit Price change in April, recalculating Exit Prices without updating supply data.

5.11 Differences to Option One include:

- The April Exit Prices would be aligned with the formula year;
- The April 2009 Exit Prices would be set in February 2009 using supply data from December 2007 and demand data from May 2008 (unchanged from October 2008 Exit Price setting);
- Two Exit Price changes in six months would facilitate incorporating any within-year changes in TO MAR.
- Exit Prices would be stable:
    - An adjustment would be applied to all Exit Prices in April 2009. The adjustment would be constant except where it would reduce the price below 0.0001p/kWh, in which case the price would be capped at the minimum permitted level of 0.0001p/kWh. DN exit prices are the weighted average of the relevant offtake exit prices and this could also result in a non-constant adjustment.
- The proposal would lead to three Exit Price changes in 18 months. This could cause confusion.
- The proposal would require a change to the Charging Methodology to allow recalculation of Exit Prices without updating the supply data.

Option Four: One-Off Exit Price Change in April 2009 (recalculating Exit Prices without updating Supply Data)



Comparison of Option Three and Option Four

5.12 The difference in the resulting Exit Prices for Option Three and Option Four is as follows:

- Option Three would recalculate Exit Prices using updated supply, demand, network and target exit revenue data. This complete recalculation would result in some Exit Prices increasing and some Exit Prices decreasing.
- Option Four would recalculate Exit Prices using updated target exit revenue without updating supply data. This would result in a constant adjustment to all Exit Prices[1], therefore making them stable.

National Grid's View

5.13 National Grid believes that Option Four would be most appropriate for addressing Exit Price volatility. The main reasons for this are as follows:

- Option One: The option of doing nothing could result in continued volatile Exit Prices year on year.
- Option Two: The 0116 and 0195 suite of proposals, which are seeking to introduce NTS Exit Reform, have been developed on an annual product released from 01 October. National Grid therefore considers applying Exit Prices from April – March inappropriate.
- Option Three: Supply and demand data has a significant effect on Exit Prices. Therefore, a one-off Exit Price change in April using updated supply, demand and network data could produce more volatile Exit Prices than those produced by the current regime. National Grid is currently analysing supply and demand balancing within the Transportation Model and will publish a discussion paper later in the year.
- Option Four: Recalculating Exit Prices in April, updating the TO target exit revenue without updating supply data, would result in a constant adjustment to all Exit Prices. Exceptions to the constant adjustment would occur where it would reduce the price below 0.0001p/kWh, in which case the Exit Price would be capped at the minimum permitted level of 0.0001p/kWh. DN exit prices are the weighted average of the relevant offtake exit prices and this could also result in a non-constant adjustment.

Licence Implications

5.14 Under Standard Special Condition C7 of the Licence, National Grid has a reasonable endeavours obligation to only amend Exit Prices once a year on 01 October, or at any other time as directed by the Authority. However, it is National Grid's view that GCM13 would benefit exit shippers and hence consumers by producing more stable Exit Prices. Therefore, a final proposal will only be raised subject to industry support.

[1] The adjustment to Exit Prices would be constant (taking into account rounding within the Transportation Model) except in those cases where such an adjustment would reduce the offtake Exit Price below the minimum permitted level of 0.0001p/kWh. DN exit prices are the weighted average of the relevant offtake exit prices and this could also result in a non-constant adjustment.

6 National Grid's Proposal

6.1 National Grid believes that Option Four – One-off Exit Price changes in April, recalculating exit prices based on an updated TO Target Exit Revenue value, without updating supply data, is most appropriate for addressing Exit Price volatility at an aggregate level.

6.2 Therefore, through GCM13, National Grid proposes:

- A change to the Charging Methodology to facilitate Option Four - One-off April Exit Price changes with Exit Prices recalculated without updating supply data.

6.3 The inputs to the Transportation Model used to calculate the April Exit Prices would therefore be:

- Network – the network model comprising the nodes and pipe lengths would represent the year of capacity release. The model would represent committed projects as indicated by the Ten Year Statement. Sufficient pipe sections would be included to connect all entry and exit points for which prices were required.
- Supply Data – the Ten Year Statement used to calculate the Exit Prices effective from the previous October (i.e. the December 2008 Ten Year Statement would be used to calculate the April 2010 Exit Prices)
- Demand Data – Offtake Capacity Statements (for DN Demand) and Balance Sheets (for DC Demand).
- Expansion factor – calculated based on the costs of constructing NTS capacity for the gas year.
- Annuitisation Factor – Implied by the Licence (6.25% rate of return and 45 year annuitisation period)
- Target revenue – Set to the TO MAR for the formula year.

Implementation

The proposal would be implemented for the 1st October 2009. National Grid would envisage consulting the industry before making an April price change should exit price volatility at an aggregate level reoccur.

7 Justification

Assessment against Licence Objectives

7.1 The National Grid plc Gas Transporter Licence in respect of the NTS requires that proposed changes to the Charging Methodology shall achieve the relevant methodology objectives.

7.2 Where transportation prices are not established through an auction, prices calculated in accordance with the methodology should:

- 1) Reflect the costs incurred by the licensee in its transportation business;
- 2) So far as is consistent with (1) properly take account of developments in the transportation business;
- 3) So far as is consistent with (1) and (2) facilitate effective competition between gas shippers and between gas suppliers.

7.3 National Grid believes that this proposal (GCM13) would achieve the relevant objectives.

7.4 The proposal contained in this paper will continue to reflect the costs incurred by the licensee in its transportation business.

7.5 The proposal facilitates effective competition between gas shippers and suppliers as more stable exit prices should reduce the risks associated with reflecting transportation charges within their contracts.

Assessment against EU Gas Regulations

7.6 EC Regulation 1775/2005 on conditions for access to the natural gas transmission networks (binding from 1 July 2006) are summarised below. The principles for network access tariffs or the methodologies used to calculate them shall:

- Be transparent
- Take into account the need for system integrity and its improvement
- Reflect actual costs incurred for an efficient and structurally comparable network operator
- Be applied in a non-discriminatory manner
- Facilitate efficient gas trade and competition
- Avoid cross-subsidies between network users
- Provide incentives for investment and maintaining or creating interoperability for transmission networks
- Not restrict market liquidity
- Not distort trade across borders of different transmission systems.

7.7 National Grid believes that this proposal (GCM13) is consistent with the principles listed above.

7.8 In particular, it is National Grid's view that GCM13 will lead to Exit Prices that would:

- Be transparent
- Be applied in a non-discriminatory manner
- Facilitate efficient gas trade and competition

8 Questions for Consultation

8.1 National Grid invites views on whether the proposed changes to our Gas Transmission Transportation Charging Methodology meet National Grid's relevant GT Licence objectives.

8.2 National Grid also invites views on whether Option Four is the correct approach to addressing Exit Price volatility at an aggregate level. In particular:

- Is a one-off April Exit Price change an appropriate way of avoiding future Exit Price volatility?
- Should April Price changes only be considered when they can be notified at the same time as the October prices i.e. by the preceding 1st August.
- Would recalculating Exit Prices in April without updating supply data be more appropriate than recalculating Exit Prices using updated supply data?

The closing date for submission of your responses has been extended to **16th January 2008**. Your response should be e-mailed to:

box.transmissioncapacityandcharging@uk.ngrid.com

or alternatively sent by post to

Jemma Spencer, Regulatory Frameworks, National Grid, National Grid House, Gallows Hill, Warwick, CV34 6DA.

If you wish to discuss any matter relating to this Charging Methodology consultation then please call Jemma Spencer ☎ 01926 654212 or Eddie Blackburn☎ 01926 656022.

Responses to this consultation will be incorporated within National Grid's conclusion report. If you wish your response to be treated as confidential then please mark it clearly to that effect.

Appendix A – Indicative Exit Prices

- The "As-Is" Indicative Exit Prices are taken from the 2008/09 Transportation Model, updated for the addition of Centrax industrial site, for which prices are now required.
- The Option Four Indicative Exit Prices were calculated based on the latest estimate of the 2009/10 formula year target exit revenue, which includes a forecasted adjustment for revenue foregone. [NB these figures do not take into account the impact of the 2008 AQ review and consequential reduction in SOQs which have superseded the requirement for an April 2009 price change]
- The table shows an adjustment to Exit Prices of -0.0003 or -0.0004p/kWh (the two different prices can be explained by rounding within the Transportation Model) except in those cases where such an adjustment would reduce the Exit Price below the minimum permitted level of 0.0001p/kWh.
- In some cases the Exit Prices by DN Zone are adjusted by -0.0001 or -0.0002p/kWh, which is a result of the averaging of the DN Exit Points in the Transportation Model.
- A table showing the impact of GCM13 on TO exit revenue and collected revenue is included in Appendix B.

Table One: Exit Prices by DN Exit Zone

Network	Exit Zone	Indicative Exit Prices (p/kWh/day) "As-Is" (Option One – Do nothing	Option Four (April Price Change recalculating Exit Prices, without updating supply data)	Difference between Option Four and Option One
East of England	EA1	0.0069	0.0066	-0.0003
	EA2	0.0076	0.0073	-0.0003
	EA3	0.0031	0.0028	-0.0003
	EA4	0.0126	0.0123	-0.0003
	EM1	0.0003	0.0001	-0.0002
	EM2	0.0053	0.0050	-0.0003
	EM3	0.0152	0.0149	-0.0003
	EM4	0.0109	0.0106	-0.0003
North of England	NE1	0.0058	0.0055	-0.0003
	NE2	0.0006	0.0005	-0.0001
	NE3	0.0001	0.0001	0.0000
	NO1	0.0007	0.0005	-0.0002
	NO2	0.0003	0.0003	0.0000
London	NT1	0.0209	0.0206	-0.0003
	NT2	0.0130	0.0127	-0.0003
	NT3	0.0126	0.0123	-0.0003
North West	NW1	0.0097	0.0094	-0.0003
	NW2	0.0146	0.0143	-0.0003
Scotland	SC1	0.0001	0.0001	0.0000
	SC2	0.0001	0.0001	0.0000
	SC4	0.0001	0.0001	0.0000
South of England	SE1	0.0157	0.0154	-0.0003
	SE2	0.0209	0.0206	-0.0003
	SO1	0.0159	0.0156	-0.0003
	SO2	0.0236	0.0233	-0.0003
Wales and the West	SW1	0.0161	0.0158	-0.0003
	SW2	0.0235	0.0232	-0.0003
	SW3	0.0347	0.0344	-0.0003
	WN	0.0187	0.0184	-0.0003
	WS	0.0096	0.0093	-0.0003
West Midlands	WM1	0.0174	0.0171	-0.0003
	WM2	0.0158	0.0155	-0.0003
	WM3	0.0143	0.0140	-0.0003

Table Two: Exit Prices by NTS Site

NTS Site	Indicative Exit Prices (p/kWh/day) “As-Is” (Option One – Do nothing	Option Four (April Price Change recalculating Exit Prices, without updating supply data)	Difference between Option Four and Option One
AM_PAPER	0.0110	0.0107	-0.0003
BAGLAN_BAY_PG	0.0076	0.0073	-0.0003
BARKING_PG	0.0129	0.0126	-0.0003
TERRA_BILLINGHAM	0.0006	0.0003	-0.0003
BP_GRANGEMOUTH	0.0001	0.0001	0.0000
BP_SALTEND_HP	0.0001	0.0001	0.0000
BRIDGEWATER_PAPER	0.0164	0.0161	-0.0003
BRIGG_PG	0.0042	0.0039	-0.0003
BRIMSDOWN_PG	0.0143	0.0140	-0.0003
BRUNNER_MOND	0.0143	0.0140	-0.0003
CONNAHS_QUAY_PS	0.0160	0.0157	-0.0003
CORBY_PS	0.0108	0.0105	-0.0003
CORYTON_PG	0.0132	0.0129	-0.0003
COTTAM_PG	0.0051	0.0048	-0.0003
DAMHEAD_CREEK	0.0126	0.0123	-0.0003
DEESIDE_PS	0.0163	0.0160	-0.0003
DIDCOT_PS	0.0192	0.0189	-0.0003
TEESSIDE_PG	0.0006	0.0003	-0.0003
GOOLE_GLASS	0.0033	0.0030	-0.0003
GRAIN_GAS	0.0126	0.0123	-0.0003
GREAT_YARMOUTH	0.0009	0.0006	-0.0003
HAYS_CHEMICALS	0.0151	0.0148	-0.0003
ICI_RUNCORN	0.0180	0.0177	-0.0003
IMMINGHAM_PG	0.0003	0.0001	-0.0002
KEADBY_PS	0.0044	0.0041	-0.0003
KEMIRAINCE_CHP	0.0177	0.0174	-0.0003
KINGS_LYNN_PS	0.0061	0.0058	-0.0003
LANGAGE_PG	0.0325	0.0322	-0.0003
LITTLE_BARFORD_PS	0.0122	0.0119	-0.0003
LONGANNET	0.0001	0.0001	0.0000

NTS Site	Indicative Exit Prices (p/kWh/day) "As-Is" (Option One – Do nothing)	Option Four (April Price Change recalculating Exit Prices, without updating supply data)	Difference between Option Four and Option One
MARCHWOOD	0.0245	0.0242	-0.0003
MEDWAY_PS	0.0125	0.0122	-0.0003
PETERBOROUGH_PS	0.0080	0.0077	-0.0003
PETERHEAD_PG	0.0001	0.0001	0.0000
PHILLIPS_SEAL_SANDS	0.0001	0.0001	0.0000
ROCKSAVAGE_PG	0.0180	0.0177	-0.0003
ROOSECOTE_PS	0.0018	0.0015	-0.0003
RYE_HOUSE_PS	0.0147	0.0144	-0.0003
SALTEND	0.0001	0.0001	0.0000
SAPPIPAPERMILLCHP	0.0098	0.0095	-0.0003
SEABANK_POWER	0.0225	0.0222	-0.0003
SEABANK_POWER_II	0.0242	0.0239	-0.0003
SELLAFIELD_PS	0.0001	0.0001	0.0000
TERRA_SEVERNSIDE	0.0241	0.0238	-0.0003
SHOTTON_PAPER	0.0161	0.0158	-0.0003
SPALDING_PG	0.0065	0.0062	-0.0003
STALLINGBOROUGH_PS	0.0012	0.0008	-0.0004
STAYTHORPE	0.0028	0.0025	-0.0003
SUTTON_BRIDGE_PS	0.0073	0.0070	-0.0003
TEESSIDE_BASF	0.0001	0.0001	0.0000
TEESSIDE_HYDROGEN	0.0001	0.0001	0.0000
THORNTON_CURTIS_PG	0.0003	0.0001	-0.0002
ZENECA	0.0006	0.0003	-0.0003
CENTRAX	0.0338	0.0335	-0.0003

Table Three: Interconnector Exit Prices

	Indicative Exit Prices (p/kWh/day)		
Interconnector	**"As-Is" (Option One – Do nothing**	**Option Four (April Price Change recalculating Exit Prices, without updating supply data)**	**Difference between Option Four and Option One**
Bacton Interconnector	0.0009	0.0006	-0.0003
Moffat	0.0001	0.0001	0.0000

Table Four: Exit Prices by NTS Storage Site

	Indicative Exit Prices (p/kWh/day)		
Storage Site	**"As-Is" (Option One – Do nothing**	**Option Four (April Price Change recalculating Exit Prices, without updating supply data)**	**Difference between Option Four and Option One**
AVONMOUTH_LNG	0.0241	0.0238	-0.0003
BARTON_STACEY_(MRS)	0.0228	0.0225	-0.0003
CHESHIRE	0.0139	0.0136	-0.0003
DYNEVOR_ARMS_LNG	0.0093	0.0090	-0.0003
GARTON_(MRS)	0.0001	0.0001	0.0000
GLENMAVIS	0.0001	0.0001	0.0000
HATFIELD_MOOR_(MRS)	0.0038	0.0035	-0.0003
HOLEHOUSE_FARM_(MRS)	0.0151	0.0148	-0.0003
HORNSEA_(MRS)	0.0001	0.0001	0.0000
PARTINGTON	0.0137	0.0134	-0.0003
ROUGH	0.0001	0.0001	0.0000

Appendix B – Impact of GCM13 on TO Target Exit Revenue and Collected Revenue

		2008/09	2009/10
A	TO Allowed Revenue (April - March)	£561.9m	£590.5m
B	DN Pensions	£26.5m	£26.5m
C	Metering	£1.0m	£1.0m
D	TO Allowed Revenue - DN Pensions - Metering (A - B - C)	£534.4m	£563.0m
E	TO Exit Allowed (Target) Revenue 50% (April - March) (D / 2)	£267.2m	£281.5m
F	Revenue Foregone	£54.1m	£55.3m
G	TO Exit Capacity Target Revenue (April - March) (E - F)	£213.1m	£226.2m
H	Forecast Collected TO Exit Revenue (October - September)	£231.7m	£220.7m
I	Incremental Amount Assumed In October	£6.8m	£6.8m
J	Target Exit Revenue used in Transportation Model to Calculate October Prices (H + I)	£238.5m	£227.5m
K	TO Exit Capacity Target Revenue (April - March)		£226.2m
L	Incremental Amount Assumed In October		£6.8m
M	Target Exit Revenue used in Transportation Model to Calculate April Prices (K + L)		£233.0m
	Change in Target Exit Revenue used in Transportation Model from October 2008 to October 2009 (2008/09 H - 2009/10 H)		-£11.0m
	Change in Target Exit Revenue used in Transportation Model from October 2008 to April 2009 (GCM13) (2008/09 H - 2009/10 G)		-£5.5m

i.e. a 1st April 2009 price reduction of £5.5m will lead to a 1st October 2010 increase of £14m whereas waiting until 1st October 2009 would result in a £11m reduction followed by a 1st October 2010 increase of £25m. This summary is the key driver for GCM13. [NB these figures do not take into account the impact of the 2008 AQ review and consequential reduction in SOQs which will lead to lower exit charge revenue from 1st October 2008 and hence under recovery for the 2008/9 formula year.]

Appendix C – Impact of RPI on Exit Capacity Prices

NTS Exit Capacity Charging
April Price Changes

Gas TCMF 2nd October 2008

Eddie Blackburn

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Introduction

Draft Consultation Paper GCM13 "April NTS Exit Capacity Price Changes" was discussed at the September Gas TCMF as a means of reducing exit capacity price variability.

Concerns were raised that the variability of the RPI, which is used in the calculation of TO allowed revenue, would undermine the benefits of the proposal.

This presentation demonstrates the impact that the RPI has on the setting of NTS Exit Capacity prices and has been produced to further inform the debate regarding GCM13

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Base NTS TO Allowed Revenue (TOZt)

In respect of any formula year commencing on 1 April 2008 or on 1 April in any subsequent formula year:

$$TOZ_t = TOZ_{t-1} \times \left[1 + \left(\frac{RPI_t - X}{100}\right)\right]$$

Where X =0

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RPI Calculation

RPI_t means the percentage change (whether of a positive or a negative value) in the arithmetic average of the retail prices index published or determined with respect to each of the six months from July to December (both inclusive) in formula year t-1 and the arithmetic average of the retail prices index numbers published or determined with respect to the same months in formula year t-2

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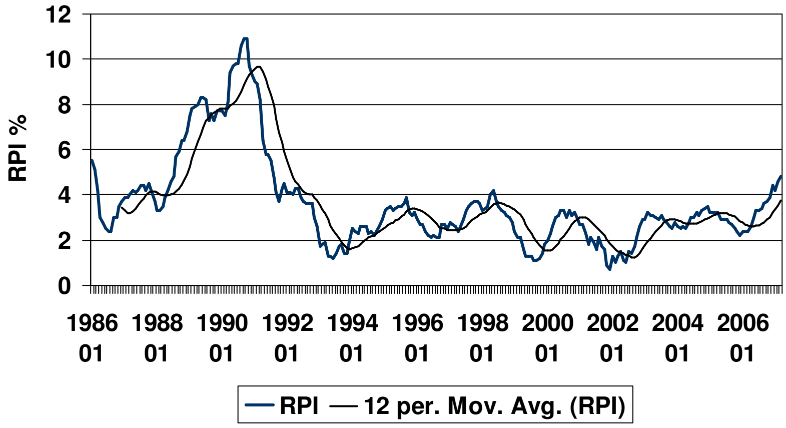
RPI Data



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Impact of RPI Changes on NTS Exit Capacity Prices

Four Scenarios Investigated

1. **No GCM13 – No April Price Change – RPI Constant***
2. **No GCM13 – No April Price Change – RPI Variable****
3. **GCM13 – April Price Change – RPI Constant***
4. **GCM13 – April Price Change – RPI Variable****

Results presented relative to the 2008/9 Price Level

- ***Constant 5%***
- ***Variable RPI 4%/6% alternating annually***

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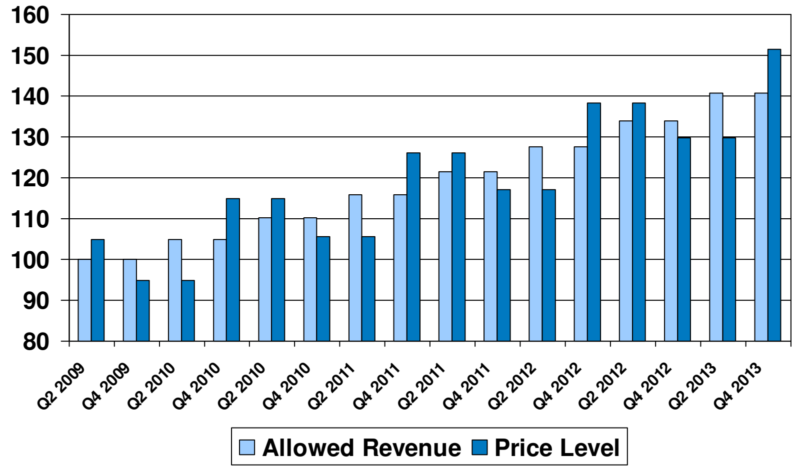
Allowed & Collected Revenue
No GCM13 - Constant RPI



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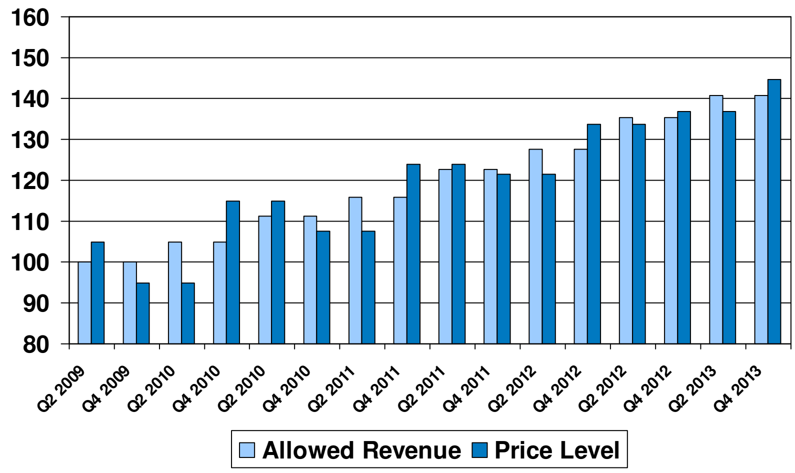
Allowed & Collected Revenue
No GCM13 - RPI Variable



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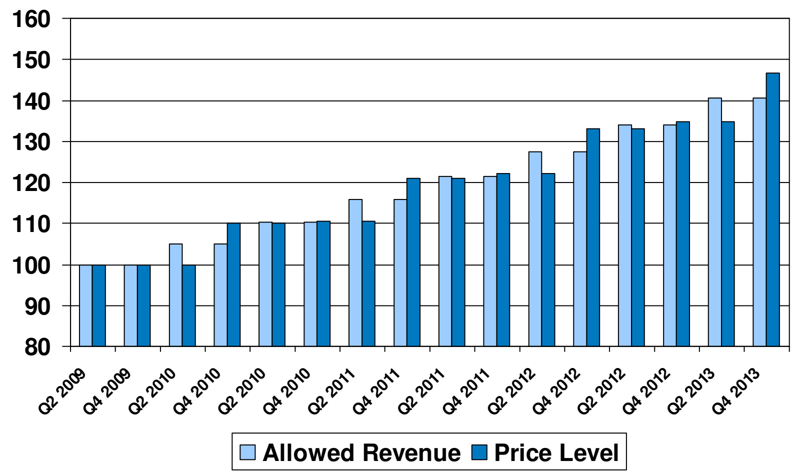
Allowed & Collected Revenue
GCM13 - Constant RPI



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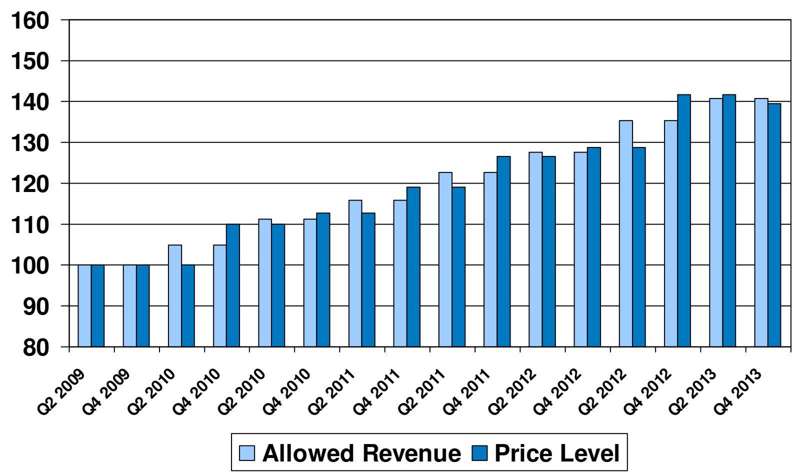
Allowed & Collected Revenue
GCM13 - RPI Variable



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Summary

The results indicate that an April NTS exit capacity price change (as facilitated by GCM13) would reduce exit price volatility given variable RPI over the remainder of the price control

- **This assumes that the separate management of K (GCM12) has been implemented**
- **NB ~ NTS TO Exit is 100% capacity and hence not subject to the demand uncertainty variability that has previously affected DN charges.**

While this may not be an enduring solution it may be an appropriate short-term solution while other options are identified

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