Introduction of Enduring NTS Exit Capacity Arrangements

Gas TCMF 7th May 2008

Content

- 1. Introduction
- 2. Pricing Discussions
- 3. Transportation Model Inputs
- 4. Indicative/Actual Price Setting Timelines
- 5. Charging Methodology Way Forward
- 6. Enduring Exit and the NTS Licence

1. Introduction

Gas TCMF 7th May 2008

UNC Modification Proposals

- There are 7 UNC Modification Proposals under consideration
 - UNC 0116
 - 0116A
 - 0116V
 - 0116BV
 - 0116CVV
 - 0116VD
 - UNC 0195
 - 0195
 - 0195AV
- This presentations will focus on NTS Exit (flat)
 Capacity prices as NTS Exit (flex) Capacity would have a zero reserve price
 nationalgrid

Products - Flat

UNC No	0116A	0116V	0116BV	016CVV	0166VD	0195	0195AV
Proposer	EON	NG	RWE	BGT	SGN	RWE	EON
Products	As now Direct Connects – bundled NTS Exit Capacity product	Gas Ye Annual NTS Users will Year Y Daily NTS E Users will Gas Da Daily Interruptik	be able to a ar Y+4 onward Fait (Flat) be able to be for Gas Year Exit (Flat) Company to be able to be able to be able to be a buy via daily au auptible/Office.	pply for sultrds; Capacit id/apply for s Y+1, Y+2 apacity id for such actions; and -Peak NT (Flat) Capa	ch rights in y r such righ 2 and Y+3 rights ahe d S Exit (F	ts in August o via annual professional during the state of and during the state of a ble to the state of a ble	f Gas ocess; ing the



Interruptible/Off-Peak Exit (flat) Capacity Release

No	0116A	0116V	0116BV	0116CVV	0116VD	0195	0195AV
Proposer	EON	NG	RWE	BGT	SGN	RWE	EON
Release	Interruptible	"Daily	Interrup	tible NTS	Exit (F	lat)	"Daily Off-peak NTS Exit
	sites, no	Capac	ity"				(Flat) Capacity"
	change to	Inte	erruptible	NTS Exit (F	lat) Capa	city.	
	current	ι	Jsers will	be able to b	oid for suc	h rights	Auction on D-1 but on
	UNC			he Gas Day	via daily		days where forecast
		a	auctions.				demand at 13.30 D-1 is
			_	. Available			less than 80% of 1 in 20 peak day demand the
		up or C	JIOLI and	d discretio	nary rele	ease	amount available also
							includes Maximum Supply
							Point Offtake rate * 24 –
							Firm sold.



Flat Capacity Application/Auction

No	0116A	0116V	0116BV	0116CVV	0116VD	0195	0195AV		
Proposer	EON	NG	RWE	BGT	SGN	RWE	EON		
Long Term Release (allocated on an enduring basis)	NA	Application				Application			
Medium Term Release (Gas Years Y _{N+1} to Y _{N+3})	Application	Auction				Appli	cation		
Short Term Release (offered Day ahead and within Day)	NA	Auction				Auction Au		Aud	etion



2. Pricing Discussions

Gas TCMF
7th May 2008



Pricing Discussions - Introductions

 This section of the presentation represents the slides presented to the TCMF (two dates) updated for recent UNC & Charging proposals



Background

- Pricing Discussions held (Oct/Nov '06)
 - GCD 01 NTS Exit (Flat) Capacity
 - NTS Exit (Flat) Capacity
 - Prevailing prices and annual and daily reserve prices
 - GCD 02- NTS Exit (Flexibility) Capacity and Commodity
 - Reserve prices for annual and daily auctions
 - New SO Flexibility Commodity Charge Rate
 - Revised SO Commodity Charge Rate
 - GCD 03 TO Under/over-recovery mechanisms
- Pricing Consultations held (Feb/Mar '07)
 - GCM04 NTS Exit (Flexibility) Capacity
 - Zero reserve prices for annual and daily auctions



Charges

- Flat Exit Capacity
 - NTS TO Exit (Flat) Capacity
 - Interruptible/Off-Peak NTS TO Exit (Flat) Capacity
- Flex Exit Capacity
 - NTS TO Exit (Flex) Capacity
- SO Cost Recovery
 - NTS SO Exit (Flex) Commodity Charge
 - NTS SO Exit (Flat) Commodity Charge
- TO Over/Under Recovery
 - NTS TO Exit (Flat) Commodity



Flat Exit Capacity



Flat Exit Capacity (Excluding 116A)

Prevailing/Enduring NTS Exit (Flat) Capacity

 Users will be able to apply for such rights in Summer of Gas Year Y for Gas Year Y+4 onwards;

Annual NTS Exit (Flat) Capacity

 Users will be able to bid/apply for such rights in Summer of Gas Year Y for Gas Years Y+1, Y+2 and Y+3 via annual process;

Daily NTS Exit (Flat) Capacity

 Users will be able to bid for such rights ahead of and during the Gas Day via daily auctions; and

Daily Interruptible/Off-Peak NTS Exit (Flat) Capacity

• Interruptible NTS Exit (Flat) Capacity. Users will be able to bid for such rights ahead of the Gas Day via daily auctions.



NTS TO Exit (Flat) Capacity Price Proposals

- Based on prevailing methodology, except for
 - Nodal as opposed to zonal prices for NTS/LDZ offtakes
 - Interruption Payments Removed
- Applicable for
 - Prevailing/Enduring NTS Exit (Flat) Capacity Price
 - Annual NTS Exit (Flat) Capacity Reserve Price
 - Daily NTS Exit (Flat) Capacity Reserve Price
 - Exception
 - Daily Interruptible/Off-Peak NTS Exit (Flat) Capacity
 - Anticipate a zero reserve price however likelihood of interruption may have to be factored in to comply with EU regulations, dependent on which mod is implemented and how the demand position develops



NTS TO Exit (Flat) Capacity Price Proposals

- NTS TO Exit (Flat) Capacity
 - Transportation Model
 - Prices <u>adjusted</u> to collect forecast allowed revenue
 - Proposed input data changes
 - Network & Supply/demand input data based on year for which capacity is being released
 - Investment costs from 3 years prior to capacity release



Flex Exit Capacity

NTS TO Exit (Flex) Capacity Price Proposals

- NTS TO Exit (flex) Capacity
 - Zero Flex Capacity Reserve Price
 - Implemented through GCM04
- No Target Revenue associated with Flex
- Any Flex Capacity Revenue treated as over recovery and re-cycled through negative TO Exit (Flat) Commodity Charge



SO Revenue Recovery



SO Cost Recovery Proposals

NTS SO Exit (Flex) Commodity

- Defer any proposal as implementation not required until 2012
- Raise proposal subject to further monitoring of usage and costs indicating material change in behaviour/cost

NTS SO Exit (Flat) Commodity

- Map to NTS SO Exit Commodity for non-storage sites
- If introduced, Map to NTS SO Storage Commodity charge for storage sites
- View previously agreed by Gas TCMF:
 - No immediate requirement for a proposal
 - Consider as part of wider review of commodity charges
 - Views?



TO Under/Over Recovery



TO Over/Under Recovery

NTS TO (Flat) Commodity Charge

- Sole revenue recovery correction mechanism
 - The absence of a buy-back incentive scheme means that any buy-back offset mechanism would be redundant
- Calculated to ensure that 50% of TO Allowed Revenue (less revenue collected from DN Pensions charge) is recovered from NTS Exit Charges
- Capped to ensure net commodity charge is non-negative
- Applicable to all Exit Points (potentially excluding storage as now)
- View previously agreed by Gas TCMF:
 - No immediate requirement for a proposal
 - Consider as part of wider review of commodity charges

Proposed Exit Reform Charging Way Forward

Issue	Proposal	Way Forward			
Flat Exit Capacity	Raise between Summer '08 and Winter 08/09	Prevailing Methodology with minor variations & Removal of Interruption Payments (CONSISTENT APPROACH FOR ALL PROPOSAL EXCLUDING 0116A)			
Flex Exit Capacity	Proposal implemented.	GCM04: Zero Reserve Price - Recycle any revenue (116V) through negative TO Commodity charge			
SO Cost Recovery	No proposal at this stage. Consider as part	No Change to Flat SO Commodity No Flex SO Commodity Proposal at this stage (effectively zero rate)			
TO Over/Under Recovery	of wider commodity review	TO commodity charge may be required but would only be applicable from 2012			



3. Transportation Model Inputs

Gas TCMF 7th May 2008



Transportation Model Inputs

Issue	Options	Prevailing
Network	Which year?	Year of capacity release
Supply	TYS	TYS
	Obligated Capacity	
Demand	Forecast	Forecast
	Baseline	
	Committed	
Balancing S&D	Merit order	Merit order
	Scale Supply/Demand	
Expansion Factor	Calculated in which year?	Calculated from
	Commitment Year	investment costs at
	Capacity (Gas) Year	Capacity (Gas) Year
Anuitisation	Licence implied but what	Licence implied
Factor	about PCR overlap?	



TM Inputs: Discussion

Network	Year of capacity release
Supply	Using TYS data would be consistent with Entry.
	Obligated Capacity could potentially provide more price stability however it will vary with the entry substitution obligation as well as incremental
Demand	Baseline may overstate flows. Committed seems the most appropriate option with forecast/initial allocation in the interim for indicative charges until commitment occurs.
Balancing S&D	Merit order approach is consistent with the planning approach however scaling all supplies may lead to more stable prices. What if supplies are insufficient. ICUK capability (replacing forecast flows) has been used in the past.
Expansion Factor	Calculation in the year of commitment would allow prices to be forecast more easily hence increasing transparency.
Anuitisation Factor	Licence implied but what about PCR overlap?

Does this warrant a charging discussion paper?

4. Indicative/Actual Price Setting Timelines

Gas TCMF 7th May 2008



Timeline Example 2009 – Auctions/Applications

Gas Year	Used For	Gas Day - C	apacity	Application Window / Date	
Modelled		From	То	Auction(s) Held	
	INDICATIVE Prevailing NTS Exit (Flat) Capacity	1 Oct 2012	-		
2012/13		1 Oct 2013	1	Summer 2009 Application Window	
		1 Oct 2014	-		



Timeline Example 2010 – Auctions/Applications

Gas Year	Used For	Gas Day -	Capacity	Application Window / Date	
Modelled		From	То	Auction Held	
2012/13	Annual NTS Exit (Flat) Capacity**	1 Oct 2012	30 Sep 2013	Summer 2010 Application Window or Auction	
	INDICATIVE Prevailing NTS Exit (Flat)	1 Oct 2013	-		
2013/14		1 Oct 2014	-	Summer 2010 Application Window	
	Capacity	1 Oct 2015	-		

^{**} Reserve Prices under 116 (other than A), Indicative Prices under 195/A



Timeline Example 2011 – Auctions/Applications

Gas Year	Hand Fair	Gas Day -	Capacity	Application Window / Date	
Modelled	Used For	From	То	Auction Held	
2012/13	Annual NTS Exit (Flat) Capacity**	1 Oct 2012	30 Sep 2013	Summer 2011 Application Window or Auction	
2013/14	Annual NTS Exit (Flat) Capacity**	1 Oct 2013	30 Sep 2014	Summer 2011 Application Window or Auction	
	INDICATIVE	1 Oct 2014	-		
2014/15	Prevailing NTS Exit (Flat) Capacity	1 Oct 2015	-	Summer 2011 Application Window	
	Oapacity	1 Oct 2016	-		

^{**} Reserve Prices under 116 (other than A), Indicative Prices under 195/A



Timeline Example 2012 – Auctions/Applications

Gas Year	Used For	Gas Day	- Capacity	Application Window / Date	
Modelled	Used For	From	То	Auction(s) Held	
	Annual NTS Exit (Flat) Capacity**	1 Oct 2012	30 Sep 2013	Summer 2012 Application Window or Auction	
2012/13	Daily Firm NTS Exit (Flat) Capacity (Day Ahead)	1 Oct 2012	30 Sep 2013	30 Sep 2012 to 29 Sep 2013	
2012/13	Daily Firm NTS Exit (Flat) Capacity (Within Day)	1 Oct 2012	30 Sep 2013	1 Oct 2012 to 30 Sep 2013	
	Daily Interruptible NTS Exit (Flat) Capacity	1 Oct 2012	30 Sep 2013	30 Sep 2012 to 29 Sep 2013	
2013/14	Annual NTS Exit (Flat) Capacity**	1 Oct 2013	30 Sep 2014	Summer 2012 Application Window or Auction	
2014/15	Annual NTS Exit (Flat) Capacity**	1 Oct 2014	30 Sep 2015	Summer 2012 Application Window or Auction	
	INDIOATIVE	1 Oct 2015	-		
2015/16	INDICATIVE Prevailing NTS Exit (Flat) Capacity	1 Oct 2016	-	Summer 2012 Application Window	
		1 Oct 2017	-		

^{**} Reserve Prices under 116 (other than A), Indicative Prices under 195/A



5. Charging Methodology Way Forward



Summary

- A consistent approach to pricing NTS Exit (flat) Capacity can be taken for all proposal other than 0116A which requires no changes
- Required Exit Reform Methodology changes
 - Nodal NTS Exit (flat) Capacity prices
 - Remove interruption payments
 - Define inputs to the Transportation Model
- Transportation Model inputs could be the subject of a Charging Methodology Discussion Paper if required
- Further proposals as required subject to Ofgem decision on UNC Modification Proposals



Exit Reform Flat Capacity Charging Timeline*

Milestone	Date
Raise Proposals (Latest Date)	Nov/Dec 2008
Consultation Ends	Dec/Jan 2008
Consultation Conclusions inc. Final Proposals	30 th January 2009
Ofgem veto period expires (Assumes Regulatory Impact Assessment)	30 th April 2009
Notice of Prices	30 th April 2009
Application/Auction	Summer 2009



^{*} Assumes an approved charging methodology is required to generate indicative prices in time for a Summer 2009 Application window

6. Enduring Exit and the NTS Licence

Gas TCMF 7th May 2008



'Charges Foregone'

- Interruptible supply points do not currently attract NTS Exit Capacity charges
- Definition:
 - 'Charges Foregone' are those NTS Exit
 Capacity charges that Interruptible supply points would pay if they were Firm



Licence Implications (SO) – Allowed Revenue

- SO exit incentives, costs and revenues (SOExIRCt) includes:
 - Buy-back and interruptions incentive (ExCBBIIRt) (only until exit reform);
 - Constrained LNG target (ExCITt);
 - Exit capacity investment incentive (ExCIIRt);
 - Long run contracting incentive costs and revenue (ExLRCIRt);
 - Non-obligated exit capacity revenue (ExNOCIRt) (only after exit reform);
 - Exit investment buyback incentive (ExXSIBBCt) (only after exit reform);
 - Allowance for 'charges foregone' (ExNTSSICt) (only until exit reform)



Licence Implications (SO) – Actual Revenue

- SO Exit Capacity actual revenue (SOExRFt)
 - Until Exit Reform
 - SO revenue from charges levied with regards provision of exit capacity above baseline ~ total charges – baseline charges (TOExt-TOExRFt)
 - Enduring
 - SO revenue from charges levied with regards provision of
 - obligated incremental NTS Exit flat capacity (REVOIExCt)
 - obligated incremental NTS Exit flow flex capacity (REVOIFFt)
 - non-obligated incremental NTS Exit flat & flow flex capacity & short term interruptible (ExREVNOCt)



Licence Implications (TO) – Actual Revenue

- TOExRt = TOExRFt + ExNTSSICt + TORREVBExCt
- TO Exit actual revenue equals:
 - TO revenue from sale of exit baseline capacity (until exit reform)
 (TOExRFt)
 - Plus
 - TO Exit capacity 'charges foregone' (until exit reform) (ExNTSSICt)
 - Plus
 - TO revenue from sale of NTS exit flat & flow flexibility baseline capacity (enduring) (TOREVBExCt)



'Charges Foregone'

- Charges Foregone are (up to exit reform) included as
 - SO allowed revenue
 - TO actual (collected) revenue
 - i.e. an increase in SO allowed revenue is cancelled out by a net reduction in TO allowed exit revenue
- Post Exit Reform 'No Charges Foregone'
 - In theory this means that NTS Exit (Flat) Capacity charges could remain unchanged, if all 'interruptible' demand converted to firm, with a decrease in SO Commodity charges

