

TRANSCO PRICING DISCUSSION DOCUMENT PD11

2000 NTS Capacity Charge Re-balancing

SUMMARY

This discussion paper presents the proposed re-balancing of Transco's NTS capacity charges. Capacity charges have been calculated using Transcost in conjunction with the Long Run Marginal Cost (LRMC) methodology described in Transco's Transportation Charging Methodology.

The proposals are based around an average increase in NTS capacity charges of 0.7% and a planned 65:35 capacity commodity split.

The partial re-balancing is carried out in line with the methodology used for setting the October 1999 charges in that both 2000 and 1999 LRMCs are considered. Capacity charges are re-balanced only when a consistent change is demonstrated by both sets of LRMCs. Within this constraint re-balancing has been capped to a maximum increase of 11% and maximum decrease of -10%.

Re-balancing enables Transco to improve the cost reflectivity of NTS capacity charges, in line with the PGT Licence requirements.

1. INTRODUCTION

LRMC based capacity charges are intended to provide forward looking signals to system users, who are then able to make economically efficient investment decisions. Failure to re-balance National Transmission System (NTS) capacity charges in line with the LRMC signals diminishes the appropriateness of the charging signals provided.

The proposals are based around an average increase in NTS capacity charges of 0.7% and a planned 65:35 capacity commodity split.

The methodology used for calculating LRMC charges in 2000 remains unchanged from that used in 1999. The methodology is described in Section 3.2 of the Statement of Gas Transportation Charges from 1 October 1999. The tool used to calculate reinforcements over a ten year period is Transco's economic model specifically developed to support the setting of capacity charges, Transcost.

Although entry capacity has been allocated by means of monthly auctions since October 1999, there remains a need to update the administered charges on the previous basis. These administered charges are used to both establish entry capacity target revenue, and auction floor prices. In any case there will also be a need to set exit capacity charges from October.

2. TRANSCOST

Transcost is an economic model developed by Transco to support the setting of capacity charges for transporting gas on the NTS .

Transcost is designed to provide LRMCs and thus entry and exit charges which the whole industry can scrutinise. Transcost is also capable of estimating LRMCs for alternative supply and demand patterns relatively quickly and easily.

A free copy of Transcost, supporting documentation and the data used to calculate the 2000 LRMC reflective charges can be obtained by calling Transco on 0121 623 2142.

3. LRMC REFLECTIVE CHARGES

The 2000 LRMC reflective charges have been scaled to recover the 2000/01 NTS capacity charge target revenue, based upon the forecast 2000/01 peak day flow.

Changes in the balance of charges between two sets of LRMC results based on data from different years are expected since they reflect a changing pattern of potential capacity constraints on the pipeline system. The entry and exit charges relating to Transcost estimated 1999 and 2000 LRMCs are shown in Appendix 1.

The main changes between the 1999 and 2000 scaled LRMCs are as follows:

- The largest exit zone increase is at NT3 (up 0.0065 p/pdkwh/d). This is due to greater capacity constraints around the Peterborough and Huntingdon compressors. These constraints

have been caused by the assumption of increased supplies from Bacton through the European interconnector.

- The largest entry point increase is at Glenmavis (up 0.0026 p/pdkwh/d). This is due to increased St. Fergus flows along the western leg of the NTS in Scotland, and increasing LNG supplies from Glenmavis itself, over the forecast period.
- The largest decreases are for Seabank PG and Terra Severnside (down 0.0086 p/pdkwh/d) exit points. In general the western leg of the NTS south of Barrow is projected to be less constrained than before. This, in part, is due to reduced supply from the Barrow terminal, increased LNG supplies from Avonmouth and the introduction of compression at Nether Kellet.

4. PARTIAL REBALANCING

Transco proposes a partial re-balancing of NTS capacity charges in 2000, in line with established practice. In 1999 NTS capacity charges were only re-balanced if the 1999 and 1998 LRMC reflective charges provided a consistent signal as to the direction a particular charge should be moved. This partial re-balancing was felt necessary in order to give more stable charges from one year to the next. Such a process is still thought by Transco to be appropriate. The rules for the partial re-balancing are:

- If both LRMCs are at a higher level than the existing capacity charge, then the charge will be re-balanced to a level no greater than the minimum LRMC value.
- If both LRMCs are at a lower level than the existing charge, then the charge will be re-balanced to a level no lower than the maximum of the two LRMC values.
- Capacity charges that are already positioned between the two LRMCs will remain unchanged.
- The maximum levels by which a charge may be re-balanced are either an increase of 11% or a decrease of -10%.

Appendix 2 shows the proposed charges effective from 1 October 2000. The largest increase in capacity charges after applying the partial re-balancing, is SW3 (up 0.0027 p/pdkwh/d) at exit and Teesside (up 0.0005 p/pdkwh/d) at entry. The largest decreases are SW2 and Terra Severnside (both down 0.0022 p/pdkwh/d) at exit.

5. IMPACT

Re-balancing will have no effect on the average level of charges. However, it will create regional variations around the average. For a domestic load in SW3 the proposed exit re-balancing along with an average entry charge (assuming auction revenue in line with the NTS target) would result in an 8.0% increase in NTS charges. However, this is equivalent to only a 1.7% increase in total transportation charges to such a supply point.

6. CONCLUSION

Transco would welcome respondents' views on the degree of re-balancing proposed for implementation from October 2000 and the level of any cap on increased charges and collar on decreased charges.

Appendix One : Comparison of LRMCs Scaled to Target Revenue

		Scaled LRMC's		
		1999	2000	Change
Entry - Beach	Bacton	0.0007	0.0009	0.0002
	Easington / Rough	0.0029	0.0024	-0.0005
	Theddlethorpe	0.0012	0.0012	0.0000
	St Fergus	0.0213	0.0192	-0.0021
	Teesside	0.0064	0.0072	0.0008
	Barrow	0.0042	0.0027	-0.0015
Entry - Onshore Fields	Hatfield Moors	0.0029	0.0027	-0.0002
	Wytch Farm	0.0000	0.0000	0.0000
	Caythorpe	0.0035	0.0024	-0.0011
	Burton Point	0.0000	0.0000	0.0000
	Hole House Farm	0.0002	0.0003	0.0001
Entry - Storage	Hornsea	0.0044	0.0038	-0.0006
	Glenmavis	0.0072	0.0098	0.0026
	Partington	0.0008	0.0019	0.0011
Exit LDZ	EA1 Eastern	0.0038	0.0020	-0.0018
	EA2 Eastern	0.0092	0.0105	0.0013
	EA3 Eastern	0.0043	0.0029	-0.0014
	EA4 Eastern	0.0102	0.0113	0.0011
	EM1 East Midlands	0.0018	0.0062	0.0044
	EM2 East Midlands	0.0001	0.0010	0.0009
	EM3 East Midlands	0.0062	0.0073	0.0011
	EM4 East Midlands	0.0067	0.0057	-0.0010
	NE1 North East	0.0001	0.0001	0.0000
	NE2 North East	0.0001	0.0026	0.0025
	NE3 North East	0.0001	0.0010	0.0009
	NO1 Northern	0.0001	0.0001	0.0000
	NO2 Northern	0.0006	0.0023	0.0017
	NT1 North Thames	0.0161	0.0210	0.0049
	NT2 North Thames	0.0134	0.0133	-0.0001
	NT3 North Thames	0.0090	0.0155	0.0065
	NW1 North West	0.0053	0.0091	0.0038
	NW2 North West	0.0046	0.0046	0.0000
	SC1 Scotland	0.0001	0.0001	0.0000
	SC2 Scotland	0.0043	0.0039	-0.0004
	SC4 Scotland	0.0001	0.0013	0.0012
	SE1 South East	0.0112	0.0105	-0.0007
	SE2 South East	0.0161	0.0210	0.0049
	SO1 Southern	0.0087	0.0145	0.0058
	SO2 Southern	0.0172	0.0191	0.0019
	SW1 South West	0.0088	0.0066	-0.0022
	SW2 South West	0.0185	0.0102	-0.0083
	SW3 South West	0.0329	0.0283	-0.0046
	WA1 Wales	0.0068	0.0086	0.0018
	WA2 Wales	0.0165	0.0151	-0.0014
	WM1 West Midlands	0.0052	0.0058	0.0006
	WM2 West Midlands	0.0075	0.0066	-0.0009
	WM3 West Midlands	0.0079	0.0066	-0.0013

			Scaled LRMC's		
			1999	2000	Change
Exit - NTS Interruptible	I06	Barking PG	0.0139	0.0142	0.0003
	I11	Brigg PG	0.0001	0.0005	0.0004
	I14	Connahs Quay PG	0.0056	0.0076	0.0020
	I17	Cottam PG	0.0001	0.0005	0.0004
	I24	Hays Chemicals	0.0048	0.0042	-0.0006
	I30	Little Barford PG	0.0055	0.0075	0.0020
	I32	Medway PG	0.0095	0.0085	-0.0010
	I34	Peterborough PG	0.0038	0.0020	-0.0018
	I38	Roosecote PG	0.0013	0.0031	0.0018
	I41	Sellafield PG	0.0014	0.0031	0.0017
	I46	Teesside PG	0.0001	0.0001	0.0000
	I10	Bridgewater Paper	0.0056	0.0076	0.0020
	I62	Drakelow	0.0062	0.0066	0.0004
	I63	Rolls Royce Ansty	0.0067	0.0077	0.0010
Exit - NTS Firm	I02	AM Paper	0.0041	0.0032	-0.0009
	I07	BASF Teesside	0.0001	0.0001	0.0000
	I08	BP Grangemouth	0.0001	0.0008	0.0007
	I09	BP Saltend (HP)	0.0001	0.0007	0.0006
	I21	Brimsgate PG	0.0131	0.0131	0.0000
	I60	British Sugar Cantley	0.0038	0.0029	-0.0009
	I13	Brunner Mond	0.0048	0.0037	-0.0011
	I15	Corby PG	0.0067	0.0054	-0.0013
	I16	Coryton PG	0.0131	0.0081	-0.0050
	I18	Deeside PG	0.0056	0.0076	0.0020
	I19	Didcot PG	0.0122	0.0167	0.0045
	I23	Great Yarmouth PG	0.0038	0.0019	-0.0019
	I25	ICI Runcorn	0.0056	0.0076	0.0020
	I26	Keadby PG	0.0001	0.0002	0.0001
	I27	Kemira Ince	0.0056	0.0076	0.0020
	I28	Kings Lynn PG	0.0038	0.0020	-0.0018
	I29	Kingsnorth PG	0.0095	0.0085	-0.0010
	I31	Longannet PG	0.0001	0.0008	0.0007
	I35	Peterhead PG	0.0001	0.0001	0.0000
	I36	Phillips Seal Sands	0.0001	0.0001	0.0000
	I37	Rocksavage PG	0.0056	0.0076	0.0020
	I39	Rye House PG	0.0131	0.0131	0.0000
	I40	Saltend PG	0.0001	0.0007	0.0006
	I58	Sappi Paper Mill	0.0053	0.0095	0.0042
	I03	Seabank PG	0.0185	0.0099	-0.0086
	I42	South Humber Bank PG	0.0001	0.0007	0.0006
	I45	Sutton Bridge PG	0.0018	0.0032	0.0014
	I47	Terra Billingham	0.0001	0.0001	0.0000
	I48	Terra Severnside	0.0185	0.0099	-0.0086
	I49	Thornton Curtis PG	0.0001	0.0007	0.0006
	I50	Zeneca	0.0001	0.0001	0.0000
Exit - NTS Interconnectors	I04	Bacton I/C	0.0038	0.0019	-0.0019
	I33	Moffat I/C	0.0002	0.0019	0.0017

Appendix Two : Comparison of May 2000 & Re-balanced October 2000 Charges

		Capacity Charges			
		May-00	Oct-00	p/pdkwh/d	Change %
Entry - Beach	Bacton	0.0007	0.0007	0.0000	0%
	Easington / Rough	0.0022	0.0024	0.0002	9%
	Theddlethorpe	0.0012	0.0012	0.0000	0%
	St Fergus	0.0209	0.0213	0.0004	2%
	Teesside	0.0047	0.0052	0.0005	11%
	Barrow	0.0043	0.0043	0.0000	0%
Entry - Onshore Fields	Hatfield Moors	0.0022	0.0024	0.0002	9%
	Wytch Farm	0.0000	0.0000	0.0000	0%
	Caythorpe	0.0018	0.0020	0.0002	11%
	Burton Point	0.0000	0.0000	0.0000	0%
	Hole House Farm	0.0003	0.0003	0.0000	0%
Entry - Storage	Hornsea	0.0022	0.0024	0.0002	9%
	Glenmavis	0.0082	0.0083	0.0001	1%
	Partington	0.0008	0.0008	0.0000	0%
Exit LDZ	EA1 Eastern	0.0038	0.0039	0.0001	3%
	EA2 Eastern	0.0094	0.0096	0.0002	2%
	EA3 Eastern	0.0043	0.0044	0.0001	2%
	EA4 Eastern	0.0102	0.0104	0.0002	2%
	EM1 East Midlands	0.0022	0.0022	0.0000	0%
	EM2 East Midlands	0.0007	0.0007	0.0000	0%
	EM3 East Midlands	0.0060	0.0063	0.0003	5%
	EM4 East Midlands	0.0061	0.0062	0.0001	2%
	NE1 North East	0.0001	0.0001	0.0000	0%
	NE2 North East	0.0019	0.0019	0.0000	0%
	NE3 North East	0.0010	0.0010	0.0000	0%
	NO1 Northern	0.0001	0.0001	0.0000	0%
	NO2 Northern	0.0006	0.0006	0.0000	0%
	NT1 North Thames	0.0139	0.0154	0.0015	11%
	NT2 North Thames	0.0133	0.0135	0.0002	2%
	NT3 North Thames	0.0115	0.0117	0.0002	2%
	NW1 North West	0.0060	0.0061	0.0001	2%
	NW2 North West	0.0079	0.0071	-0.0008	-10%
	SC1 Scotland	0.0001	0.0001	0.0000	0%
	SC2 Scotland	0.0007	0.0008	0.0001	14%
	SC4 Scotland	0.0001	0.0001	0.0000	0%
	SE1 South East	0.0112	0.0114	0.0002	2%
	SE2 South East	0.0139	0.0154	0.0015	11%
	SO1 Southern	0.0133	0.0135	0.0002	2%
	SO2 Southern	0.0184	0.0187	0.0003	2%
	SW1 South West	0.0121	0.0109	-0.0012	-10%
	SW2 South West	0.0210	0.0188	-0.0022	-10%
	SW3 South West	0.0261	0.0288	0.0027	10%
	WA1 Wales	0.0114	0.0102	-0.0012	-11%
	WA2 Wales	0.0195	0.0175	-0.0020	-10%
	WM1 West Midlands	0.0079	0.0071	-0.0008	-10%
	WM2 West Midlands	0.0080	0.0076	-0.0004	-5%
	WM3 West Midlands	0.0118	0.0106	-0.0012	-10%

			Capacity Charges			
			May-00	Oct-00	Change p/pdkwh/d	%
Exit - NTS Interruptible	I06	Barking PG	0.0097	0.0107	0.0010	10%
	I11	Brigg PG	0.0005	0.0005	0.0000	0%
	I14	Connaahs Quay PG	0.0104	0.0093	-0.0011	-11%
	I17	Cottam PG	0.0005	0.0005	0.0000	0%
	I24	Hays Chemicals	0.0023	0.0025	0.0002	9%
	I30	Little Barford PG	0.0047	0.0052	0.0005	11%
	I32	Medway PG	0.0095	0.0097	0.0002	2%
	I34	Peterborough PG	0.0035	0.0036	0.0001	3%
	I38	Rosecote PG	0.0017	0.0017	0.0000	0%
	I41	Sellafield PG	0.0017	0.0017	0.0000	0%
	I46	Teesside PG	0.0001	0.0001	0.0000	0%
	I10	Bridgewater Paper	0.0104	0.0093	-0.0011	-11%
	I62	Drakelow	0.0060	0.0063	0.0003	5%
	I63	Rolls Royce Ansty	0.0039	0.0043	0.0004	10%
Exit - NTS Firm	I02	AM Paper	0.0023	0.0025	0.0002	9%
	I07	BASF Teesside	0.0001	0.0001	0.0000	0%
	I08	BP Grangemouth	0.0001	0.0001	0.0000	0%
	I09	BP Saltend (HP)	0.0010	0.0009	-0.0001	-10%
	I21	Brimsgate PG	0.0104	0.0115	0.0011	11%
	I60	British Sugar Cantley	0.0038	0.0039	0.0001	3%
	I13	Brunner Mond	0.0023	0.0025	0.0002	9%
	I15	Corby PG	0.0039	0.0043	0.0004	10%
	I16	Coryton PG	0.0104	0.0106	0.0002	2%
	I18	Deeside PG	0.0104	0.0093	-0.0011	-11%
	I19	Didcot PG	0.0113	0.0124	0.0011	10%
	I23	Great Yarmouth PG	0.0038	0.0039	0.0001	3%
	I25	ICI Runcom	0.0106	0.0095	-0.0011	-10%
	I26	Keadby PG	0.0001	0.0001	0.0000	0%
	I27	Kemira Ince	0.0106	0.0095	-0.0011	-10%
	I28	Kings Lynn PG	0.0035	0.0036	0.0001	3%
	I29	Kingsnorth PG	0.0095	0.0097	0.0002	2%
	I31	Longannet PG	0.0001	0.0001	0.0000	0%
	I35	Peterhead PG	0.0001	0.0001	0.0000	0%
	I36	Phillips Seal Sands	0.0001	0.0001	0.0000	0%
	I37	Rocksavage PG	0.0106	0.0095	-0.0011	-10%
	I39	Rye House PG	0.0104	0.0115	0.0011	11%
	I40	Saltend PG	0.0010	0.0009	-0.0001	-10%
	I58	Sappi Paper Mill	0.0060	0.0061	0.0001	2%
	I03	Seabank PG	0.0191	0.0188	-0.0003	-2%
	I42	South Humber Bank PG	0.0010	0.0009	-0.0001	-10%
	I45	Sutton Bridge PG	0.0017	0.0018	0.0001	6%
	I47	Terra Billingham	0.0001	0.0001	0.0000	0%
	I48	Terra Severnside	0.0219	0.0197	-0.0022	-10%
	I49	Thornton Curtis PG	0.0005	0.0005	0.0000	0%
	I50	Zeneca	0.0001	0.0001	0.0000	0%
Exit - NTS Interconnectors	I04	Bacton I/C	0.0038	0.0039	0.0001	3%
	I33	Moffat I/C	0.0001	0.0001	0.0000	0%