DISTRIBUTION NETWORKS PRICING DISCUSSION PAPER DNPD04

Proposals for LDZ Exit Capacity Charges

A discussion paper on behalf of all Distribution Networks

1. Introduction

Currently NTS Exit Capacity and Commodity Charges for transportation to DN connected Supply Points are set by NG NTS and the revenue from the charges is credited directly to NG NTS.

Under the provisions of UNC Modification 195AV with effect from 1 October 2012 NG NTS will levy the NTS Exit Capacity Charges for transportation to all NTS/LDZ Offtakes directly to the DNs and at the same time will cease to levy NTS Exit Capacity Charges direct to DN shippers.

Under Special Condition E6, paragraph 2, of the DN Transporter's Licence the total costs incurred by a DN Licensee for NTS Exit (Flat) Capacity in respect of all NTS/LDZ Offtakes in its Distribution Network will be included in the DN's Allowed Revenue and the DN will then charge the DN shippers to recover the cost of these NTS charges. To do this, the DNs are proposing that new LDZ Exit Capacity Charges be introduced, which will be payable by DN Shippers to the DNs and not to the NTS as at present. The DN shippers will continue to pay the other NTS charges (including all NTS Commodity Charges) in respect of their DN registered supply points and DN CSEPs to the NTS.

The purpose of this paper is to discuss how these new LDZ Exit Capacity charges which will be applied with effect from 1 October 2012 might be structured.

2. NG NTS Proposals

As part of the Exit Reform proposals UNC modification 195AV introduced NTS Exit (Flat) capacity, which will be available as Enduring, Enduring Annual, Daily and Off-Peak Daily (interruptible) capacity products from 1 October 2012. The Enduring and Enduring Annual Products will be released by means of application windows whilst the Daily and Off-Peak Daily products will be released through auction. The NG NTS Proposals for charging the DNs for enduring exit capacity were set out in consultation document NTS GCM 05 NTS Exit (Flat) Capacity. The main proposals in this document were:

- Nodal, offtake specific exit capacity charges would be set.
- Exit capacity charges would be calculated using the prevailing charging methodology for NTS exit capacity charges based on the use of the Transportation model. This methodology is briefly described in NTS GCM05.
- NTS Interruption credits would be removed from the NTS charging methodology.

Indicative charges published in the above document showed that the NTS charges would be a flat pence per peak day kWh per day rate at each NTS/LDZ Offtake and would be applied to DN capacity booked at each NTS/LDZ Offtake. The NTS Indicative charges published in GCM05 are shown in Appendix 1.

3 DNs' Proposals

3.1 LDZ Exit Capacity Charges

The primary objective of the charging methodology is that it should lead to charges which are cost reflective. On that basis the LDZ Exit Capacity charges should reflect the costs incurred by the DNs through the NTS charges. This would imply that the LDZ Exit Capacity charges to supply points would be most cost reflective based on a flat pence per peak day kWh per day unit rate applied to the Supply Point Capacity (SOQ). The unit rate might vary depending on the Offtake or Exit Zone which specific supply points were mapped to (depending on the option below chosen, if any) but would not vary with the supply point capacity as most existing LDZ charges do.

There appear to be a number of possible options for structuring the LDZ Exit Capacity charges. The first three options below involve setting up a new charge based on a flat pence per peak day kWh per day unit rate applied to the Supply Point Capacity (SOQ), following the NTS structure, but the new charge could be by Offtake, by Exit Zone or by Network. (The NG NTS proposal is that the capacity charges will be by NTS/LDZ Offtake.) The last two options involve including the NTS costs in the existing structure of LDZ charges.

1. **By Offtake** – This follows the NG NTS methodology and applies a rate based on the NTS/LDZ Offtake from which a Supply Point is supplied at the peak. If there were a straightforward and consistent mapping of DN supply points to NTS/LDZ Offtakes then this option might be considered to be the most cost reflective and might provide the most precise locational signals. However, DN experience suggests that this mapping at peak conditions is not necessarily the same over time for operational reasons. In addition, under Exit Reform the DNs have an incentive to book NTS Exit Capacity in the most efficient way available. This may also cause NTS/LDZ Offtake to DN Supply Point mappings to change. These issues suggest that it may not be practical or desirable to apply such a mapping for charging purposes.

   In cases where the NTS/LDZ Offtake mapping changed from one year to the next there might be a considerable change in LDZ Exit Capacity charges for the impacted DN Supply Points. This would reduce the predictability of charges for shippers. In addition, experience suggests that the NTS charges for individual NTS/LDZ Offtakes are likely to vary more than the charges averaged over Exit Zones. If the DNs adopted charging by individual NTS/LDZ Offtake this could again reduce the predictability of charges for shippers compared with the other two options below.

   A further drawback of this option is that currently UK Link is not set up to bill on this basis. The cost of amending the system to make it possible is being investigated.

   There would also be a cost to the DNs in mapping the supply points to offtake for billing purposes and in maintaining the mapping from year to year. This option is also likely to involve the most changes for shippers to accommodate.

2. **By Exit Zone** - This is how the NTS Exit Capacity Charges are applied for DN Supply Points at the moment. The Exit Zone charge is effectively a flow-weighted average of the individual NTS/LDZ Offtake "charges" for all the NTS/LDZ Offtakes making up the Exit Zone. There should therefore be no practical problems in applying LDZ Exit charges on this basis as all DN Supply Points are already mapped to Exit Zones. Currently the mapping of DN Supply Points to exit zones does not change from year to year. However there may still be administrative costs in changing the billing systems.

   Charging by Exit Zone might be considered to be slightly less cost reflective than charging by NTS/LDZ Offtakes but, given the issues highlighted above, it might in fact be the most cost-reflective practical option and would be consistent with the current NTS charging arrangements.

   Also, charging by Exit Zone should produce more stable charges than charging by NTS/LDZ Offtake because of the averaging of the individual NTS/LDZ Offtake charges. It should also give more robust and consistent (and hence useful) cost signals to shippers.

3. **By Network** – The total NTS/LDZ Offtake charges for a DN could be averaged across the whole network by calculating a total Network flow weighted average of the NTS/LDZ Offtake charges. This would be the least cost reflective, and locational transportation charge signals within the network would be lost. However, it would preserve the existing principle of having the same DN charges across the whole Network and would be the simplest to administer.

   In terms of the stability of the charges this option is likely to produce the most stable charges from year to year because the individual NTS/LDZ Offtake charges would be averaged across the whole Network. It would also not require any mapping of DN supply points to offtakes or exit zones.

4. **Include NTS Costs in the DN Cost Analysis** An alternative would be for the DNs to incorporate the NTS costs into the cost analysis currently being done to revise the structure of the LDZ System charges. The NTS costs would constitute a new cost tier in the analysis which could be allocated across supply points based on SOQs, which would make it relatively cost reflective, at least on a Network level. This would be a simpler and cheaper alternative as it would not require any new charges to be set up or any amendments to the billing system.

5. **Scale Existing LDZ System Charges** An even simpler alternative would be to scale the existing LDZ System Capacity charges to recover the additional revenue. However, as the existing LDZ System charges reflect the structure of DN costs and not the structure of the charges which the NTS will apply to the DNs, this is considered to be less cost reflective than the alternative above and less cost reflective than having a new charge element focussed on reflecting the new NTS Exit costs incurred by the DNs.

Flex Capacity Charges

Under the current proposals the DNs will not be charged for Flex Capacity by the NTS so there will be no Flex Capacity Charges to consider.

3.3 Adjustment for Interruptible Contracts

After 1 October 2011 all DN supply points will be firm and will pay firm Capacity Charges. Through the Interruption Invitations DNs are able to purchase interruption rights from Supply Points. Where interruption rights have been secured it is likely that the requirement for NTS Exit Capacity will be reduced, although this is not necessarily on a one-for-one basis. The total to be recovered through the LDZ Exit Capacity Charges will be based on the total amount paid to the NTS.

3.4 UNC based charges

There are a number of UNC based charges, including overrun and ratchet charges which are not part of the DN Charging Methodology and are therefore not dealt with in this paper. However with the potential introduction of a new LDZ charge it would seem appropriate to review whether these UNC based charges are still appropriate as they stand. Any proposed changes will be made as UNC Modification Proposals raised at the appropriate time.

3.5 Other NTS Charges and Adjustments

There are other NTS charges, including TO Entry Capacity and Commodity charges, Short-haul charges and the St Fergus Compression charge, but these charges do not affect the Exit Capacity charges applied to the DNs. In NTS GCM12 the NTS have proposed the separate management of the Entry and Exit elements of TO under- and over-recovery (TO K). This should make the NTS Exit Capacity charges more stable because most over- and under-recovery in the NTS revenues is due to the unpredictability of the entry auction revenues.

3.6 Timing of Changes to the Level of Charges

NG NTS changes its Exit Capacity Charges on 1 October each year. With effect from 1 April 2009 the normal date for the DNs to change their charges, specified in their Licences (Standard Special Condition A4,2(a)), is 1 April each year.

This misalignment in the timing of changes to the NTS and DN charges may need to be addressed if a potential under- or over-recovery which would tend to contribute to instability in the level of the DN charges is to be avoided. One option would be for the DNs to be allowed to set the LDZ Exit Capacity charge(s) from October each year so as to align the NTS Exit charge and LDZ Exit charge setting periods. This would require a change in the DN Licences to implement and would result in this element of the DN transportation charges changing at a different time from all the other elements.

However their Licences do allow the DNs to change their charges at dates other than 1 April if there is good reason to do so and they inform Ofgem. Therefore the status quo could be maintained until some experience has been gained of the operation of the new regime.

3.7 Separate Management of K.

A separate K for the recovery of the cost of the NTS Exit Capacity Charges could also be considered along with the issue of the timing of price changes. A separate K

would mean that under- or over-recovery within a period from the Exit Capacity charges could be recovered from or paid back to shippers in the same proportions in which it arose. This might be seen to be fairer than combining the Exit Capacity over- or under-recovery within the total DN K as this would mean that recovery from or repayment to shippers would predominantly reflect the structure of the DN system and customer charges.

This separation identification of a LDZ Exit K could be beneficial whenever the LDZ Exit capacity charges were to be set. This separation of K could be established purely for charge-setting purposes so that no formal modification of the DN licence "K" would be required.

This proposal is similar to that made by NG NTS in their consultation paper NTS GCM 12, "Retrospective Negative TO Entry Commodity Charge and Separate Management of K" where they propose that there should be separate Ks for Entry and Exit revenues.

4. Objectives of the Charging Methodology

The proposed change would mean a change to the charging methodology so it should therefore be considered with respect to the achievement of the objectives of the charging methodology, set out in Standard Special Condition A5 of the Gas Transporter Licence. The relevant objectives are:

(a) That compliance with the charging methodology results in charges which reflect the costs incurred by the licensee in its transportation business;

(b) That, so far as is consistent with (a), the charging methodology properly takes account of developments in the transportation business;

(c)That, so far as is consistent with (a) and (b), compliance with the charging methodology facilitates effective competition between gas shippers and between gas suppliers.

(a) Cost Reflectivity

Of the three options for the LDZ Exit Capacity charges in paragraph 3.1 both the first and second options might be considered to be more cost reflective than the third option. However the benefit of better cost reflectivity under the first two options compared to the third needs to be balanced against the additional cost and complexities of these options, and whether the additional cost reflectivity of the transportation charges would be likely to feed through to better cost signals for end-users.

The charges could also be kept more cost reflective if the timing of changes to the LDZ Exit Capacity charges were aligned with the timing of changes to the NTS Exit Capacity charges. A separate K would also help to ensure that an appropriate level of revenue was obtained from LDZ Exit capacity charges over a number of years, so improving cost reflectivity.

(b) Take account of developments within the transportation business

The proposals for LDZ Exit Capacity charges take account of Exit Reform and the changes in the way NG NTS Exit Capacity charges will be applied from 1 October 2012.

(c) Facilitating Competition

The proposed change would probably have little impact on competition between shippers but would do nothing to discourage it.

5. Impact of the Change

The impact of the change would be minimised if the DN charges are based on Exit Zones as the NTS charges are at present (the second option in section 3.1) If either of the other two options were adopted then a greater level of change might be expected in the level of transportation charges for individual supply points.

6. Implementation of the change

The change would be implemented on 1 October 2012 to coincide with the implementation of the changes to the way the NG NTS charges are levied. The DNs have asked xoserve to provide high-level estimates of the costs of changes to their billing systems under each of the options. It is likely that the option of structuring the charge by Offtake would be the most expensive billing option; this option is also likely to require the greatest level of change for shippers.

7. Questions for Discussion

Responses are welcomed on any issue within the paper or on any other relevant issues which have been omitted. We would particularly welcome comments on:

1. Should LDZ Exit Capacity charges be based on a flat rate pence per peak day kWh per day rate in the same way as the NTS Exit Capacity charges are now or should some alternative be considered.

2. Should LDZ Exit Capacity charges be applied by Offtake, by Exit Zone or by Network as discussed in section 3.1, should they be included in the existing LDZ system charges or should some other alternative be considered.

3. Should the misalignment of NTS and DN dates for changing charges be addressed by the DNs seeking to change the LDZ Exit Capacity Charges in October or should no change be sought until the industry has some experience of the operation of the new regime.

4. Should we introduce a separate “K” for the LDZ Exit charges, for the purposes of setting the level of the charges.

Responses to this Discussion Paper should be sent to enquiries@gasgovernance.com to arrive by close of play on 22 May 2009.

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Appendix 1. Indicative NTS Exit (Flat) Capacity Charges by Offtake within DNs

The indicative exit charges below were published in the NTS paper GCM05. They are based on the methodology described in that paper and are for illustration only. The "As-Is" column is based on 2008 Forecast Firm Demand for 2012/13 and the "Baseline" column is based on the Licence exit baseline quantities for 2012/13.

	Indicative Exit charge 2012/13 (p/pkday kWh/day		
Offtake Point	**DN**	**As Is**	**Baseline**
BACTON_OT	EA	0.0004	0.0005
BRISLEY	EA	0.0031	0.0032
GREAT_WILBRAHAM	EA	0.0082	0.0083
MATCHING_GREEN	EA	0.0129	0.0130
PETERBOROUGH_TEE	EA	0.0080	0.0081
ROUDHAM_HEATH	EA	0.0046	0.0048
ROYSTON	EA	0.0099	0.0100
WEST_WINCH	EA	0.0053	0.0054
WHITWELL	EA	0.0117	0.0119
YELVERTON	EA	0.0026	0.0027
ALREWAS_EM	EM	0.0156	0.0157
BLABY	EM	0.0123	0.0124
BLYBOROUGH	EM	0.0047	0.0048
CALDECOTT	EM	0.0100	0.0101
DROINTON_OT	EM	0.0166	0.0167
GOSBERTON	EM	0.0057	0.0058
KIRKSTEAD	EM	0.0037	0.0038
MARKET_HARBOROUGH	EM	0.0111	0.0112
SILK_WILLOUGHBY	EM	0.0049	0.0050
SUTTON_BRIDGE	EM	0.0070	0.0071
THORNTON_CURTIS_LDZ	EM	0.0001	0.0001
TUR_LANGTON	EM	0.0113	0.0114
WALESBY	EM	0.0014	0.0015
ASSELBY	NE	0.0023	0.0024
BALDERSBY	NE	0.0072	0.0073
BURLEY_BANK	NE	0.0064	0.0065
GANSTEAD	NE	0.0001	0.0001
PANNAL	NE	0.0060	0.0061
PAULL	NE	0.0001	0.0001
PICKERING	NE	0.0033	0.0014
RAWCLIFFE	NE	0.0025	0.0026
TOWTON	NE	0.0044	0.0045
BISHOP_AUCKLAND	NO	0.0062	0.0067
COLDSTREAM	NO	0.0001	0.0001
CORBRIDGE	NO	0.0019	0.0025
COWPEN_BEWLEY	NO	0.0081	0.0066
ELTON	NO	0.0075	0.0056
GUYZANCE	NO	0.0001	0.0001
HUMBLETON	NO	0.0001	0.0001
KELD	NO	0.0082	0.0088
LITTLE_BURDON	NO	0.0073	0.0059
MELKINTHORPE	NO	0.0075	0.0081
SALTWICK	NO	0.0007	0.0013
THRINTOFT	NO	0.0089	0.0076
TOW_LAW	NO	0.0081	0.0086

	Indicative Exit charge 2012/13 (p/pkday kWh/day		
Offtake Point	**DN**	**As Is**	**Baseline**
WETHERAL	NO	0.0051	0.0057
HORNDON	NT	0.0124	0.0126
LUXBOROUGH_LANE	NT	0.0127	0.0128
PETERS_GREEN	NT	0.0121	0.0123
PETERS_GREEN_SOUTH_MIMMS	NT	0.0121	0.0123
WINKFIELD_NT	NT	0.0204	0.0205
AUDLEY_NW	NW	0.0200	0.0201
BLACKROD	NW	0.0162	0.0167
ECCLESTON	NW	0.0219	0.0220
HOLMES_CHAPEL	NW	0.0201	0.0202
LUPTON	NW	0.0107	0.0112
MALPAS	NW	0.0218	0.0219
MICKLE_TRAFFORD	NW	0.0212	0.0213
PARTINGTON	NW	0.0188	0.0186
SAMLESBURY	NW	0.0148	0.0154
WARBURTON	NW	0.0186	0.0187
WESTON_POINT	NW	0.0221	0.0222
ABERDEEN	SC	0.0001	0.0001
ARMADALE	SC	0.0001	0.0001
BALGRAY	SC	0.0001	0.0001
BATHGATE	SC	0.0001	0.0001
BROXBURN	SC	0.0001	0.0001
CARESTON	SC	0.0001	0.0001
DRUM	SC	0.0001	0.0001
GLENMAVIS	SC	0.0001	0.0001
HUME	SC	0.0001	0.0001
KINKNOCKIE	SC	0.0001	0.0001
LANGHOLM	SC	0.0028	0.0034
LAUDERHILL	SC	0.0001	0.0001
LOCKERBIE	SC	0.0020	0.0025
MOSSIDE	SC	0.0001	0.0001
NETHER_HOWCLEUGH	SC	0.0002	0.0008
PITCAIRNGREEN_OT	SC	0.0001	0.0001
SOUTRA	SC	0.0001	0.0006
ST_FERGUS_OT	SC	0.0001	0.0001
STRANRAER	SC	0.0009	0.0015
FARNINGHAM	SE	0.0144	0.0145
SHORNE	SE	0.0134	0.0135
TATSFIELD	SE	0.0160	0.0161
WINKFIELD_SE	SE	0.0204	0.0205
BRAISHFIELD_A_&_B	SO	0.0238	0.0239
HARDWICK	SO	0.0154	0.0155
IPSDEN	SO	0.0185	0.0186
IPSDEN_2	SO	0.0185	0.0186
MAPPOWDER	SO	0.0280	0.0241
WINKFIELD_SO	SO	0.0204	0.0205
AYLESBEARE	SW	0.0300	0.0301
CHOAKFORD	SW	0.0351	0.0352
CIRENCESTER	SW	0.0199	0.0201
COFFINSWELL	SW	0.0325	0.0327
EASTON_GREY	SW	0.0205	0.0206
EVESHAM	SW	0.0166	0.0167

Offtake Point	DN	Indicative Exit charge 2012/13 (p/pkday kWh/day As Is	Baseline
FIDDINGTON	SW	0.0159	0.0160
ILCHESTER	SW	0.0260	0.0261
KENN	SW	0.0311	0.0312
LITTLETON_DREW	SW	0.0212	0.0213
PUCKLECHURCH	SW	0.0220	0.0221
ROSS_SW	SW	0.0133	0.0134
SEABANK_LDZ	SW	0.0238	0.0206
ALREWAS_WM	WM	0.0156	0.0157
ASPLEY	WM	0.0184	0.0185
AUDLEY_WM	WM	0.0200	0.0201
AUSTREY	WM	0.0149	0.0150
LEAMINGTON_SPA	WM	0.0141	0.0142
LOWER_QUINTON	WM	0.0159	0.0160
MILWICH	WM	0.0172	0.0173
ROSS_WM	WM	0.0133	0.0134
RUGBY	WM	0.0131	0.0132
SHUSTOKE	WM	0.0160	0.0161
STRATFORD_UPON_AVON	WM	0.0154	0.0155
MAELOR	WN	0.0225	0.0227
DOWLAIS	WS	0.0094	0.0095
DYFFRYN_CLYDACH	WS	0.0074	0.0075
GILWERN	WS	0.0105	0.0106

Indicative NTS Exit (Flat) Capacity Charges Averaged by Exit Zone, 1st October 2012

For comparison with prevailing NTS Exit Capacity prices only, the following table shows indicative NTS Exit (Flat) Capacity prices generated on a flow weighted average NTS exit zone basis, in accordance with the prevailing methodology for setting charges for LDZ Exit points. National Grid anticipates that DNOs would bring forward DN Charging Methodology proposals as required to pass these costs on to Shippers. There is the potential for NTS exit zones to be retained within the DN Charging Methodology.

		Average Indicative Exit Charge (p/pkday kWh/day) by Exit Zone	
Area	**Zone**	**As-Is**	**Baseline**
East of England	EA1	0.0064	0.0064
	EA2	0.0073	0.0066
	EA3	0.0027	0.0026
	EA4	0.0123	0.0122
	EM1	0.0001	0.0001
	EM2	0.0050	0.0049
	EM3	0.0147	0.0148
	EM4	0.0106	0.0105
North of England	NE1	0.0055	0.0054
	NE2	0.0005	0.0010
	NE3	0.0001	0.0001
	NO1	0.0048	0.0053
	NO2	0.0060	0.0054
London	NT1	0.0205	0.0204
	NT2	0.0128	0.0126
	NT3	0.0123	0.0121
North West	NW1	0.0158	0.0154
	NW2	0.0196	0.0194
Scotland	SC1	0.0001	0.0001
	SC2	0.0002	0.0001
	SC4	0.0002	0.0002
South of England	SE1	0.0153	0.0152
	SE2	0.0205	0.0204
	SO1	0.0155	0.0154
	SO2	0.0226	0.0233
Wales and the West	SW1	0.0158	0.0157
	SW2	0.0220	0.0231
	SW3	0.0309	0.0331
	WN	0.0227	0.0225
	WS	0.0093	0.0094
West Midlands	WM1	0.0186	0.0185
	WM2	0.0155	0.0154
	WM3	0.0140	0.0139