Appendix A12

NTS NGN Capacity Interaction

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Consideration of mutual efficient trade-offs between NGN's RIIO-GD1 business plan and NG NTS' RIIO-T1 business plan

7th November 2011

Overview

Northern Gas Networks Ltd (NGN) and National Grid NTS (NG NTS) are mutual stakeholders in each other's business primarily through the interface between NGN's gas distribution network and NG NTS' transmission network at the 23 offtakes across the North East and North LDZs. The two companies are subject to concurrent price control reviews RIIO-GD1 and RIIO-T1 which will set price controls for the period 1 April 2013 to 31 March 2021. Both companies recognise that it is important they engage each other as part of their respective price control reviews. More importantly both companies understand they have a responsibility to their customers to ensure their business plans include consideration of all economic trade-offs between the two networks and wherever possible the companies choose the most efficient option including where this involves the other company's network.

NGN and NG NTS have successfully concluded a process designed to enable consideration of all trade offs between the two networks for purpose of RIIO-GD1 and RIIO-T1 the outcome of this process is that:

1. The most efficient solutions have been agreed across both networks for the period 2013/14 to 2020/21. This is manifest in:
    a. agreed enduring peak day NTS Exit flat and flexibility capacities; and
    b. agreed enduring peak day assured offtake pressures at the 23 offtakes connecting both networks
2. As far as they are aware neither company will be proposing investments or initiatives as part of RIIO-GD1 and RIIO-T1 that could be done more efficiently on the other company's network. This is reflected in NGN's RIIO-GD1 business plan and will be reflected in NG NTS's RIIO-T1 final submission in March 2012

This joint statement by NGN and NG NTS:

- summarises the interactive process that has enabled them to evaluate all trade-offs between them over RIIO-GD1 and RIIO-T1
- sets out the intentions of both companies for future engagement with each other over RIIO-GD1 and RIIO-T1
- Appendix 1 details the information exchanged between NGN and NG NTS in the interactive process
- Appendix 2 sets out the agreed Assured Pressures and Enduring Peak Day NTS Exit Flat and Flexibility capacities at each offtake for the period Oct 2011 to Oct 2017

Interactive Process between NGN and NG NTS for RIIO-GD1 and RIIO-T1

Following discussions between NGN and NG NTS both companies identified that the main interactions between them are:

- NGN's gas distribution network capacity and storage that can be substituted with NTS Exit Flat and Flexibility capacity

RIIO GD1

RIIO T1

- NG NTS' transmission system compressor station operation and investment that can be mitigated with agreed reduced assured offtake pressure with NGN

It was recognised that these trade-offs are considered annually through the Offtake Capacity Statement (OCS) process under Section B3.7 of the UNC Transportation Principal Document (TPD), and NTS exit capacity arrangements under UNC TPD Section B3.2 for NTS Exit (Flat) capacity and Section J2.5 for Assured Offtake Pressure.

"Pseudo" OCS process

Both companies agreed that in order to meet the RIIO-GD1 and RIIO-T1 timescales they had to exchange required information ahead of the defined 2011 OCS timetable. It was recognised this would mean that both companies would base their requirements on their respective 2010 demand forecasts. Appendix 1 sets out the specific information exchanges between NGN and NG NTS.

Effectively NGN sent NG NTS its NTS flexibility exit capacity requirements for 2011 to 2021 i.e. covering RIIO-GD1, NG NTS sent NGN its offtake pressure requirements for same period therefore covering RIIO-T1. Both companies were able to consider each others' requests and quantify whether this required additional costs or investment. A provisional agreement was reached by both companies at a meeting on 9 June 2011 whereby both companies where able to facilitate each other's requests without additional investment.

2011 OCS Process

By July the provisional agreed position of 9 June had not been formally agreed by both companies. NGN decided to accomplish this by submitting its RIIO-GD1 requirements into the formal 2011 OCS Process at this stage NGN was able to update its requirements using its 2011 demand forecasts. Given the RIIO-T1 timescale NG NTS was required to submit its RIIO-T1 business plan on 31 July 2011 ahead of the conclusion of the 2011 OCS process. Appendix 1 details the information exchange between both companies during the 2011 OCS process.

Final Outcome

NGN confirm based on its 2011 demand forecast the 2011 OCS allocation of NTS flexibility exit capacity and agreed assured offtake pressures facilitate NGN's RIIO-GD1 business plan assuming that NTS flex capacity or assured pressures after 2016/17 are only modified with NGN's agreement.

NGN confirm that as far as it is aware following the conclusion of the 2011 OCS Process, there are no initiatives or investments in NGN's RIIO-GD1 business plan that could be delivered by NG NTS.

NG NTS confirm that there are no costs or investments in its RIIO-T1 business plan that is driven by, or attributable to NGN.

As both companies have agreed that their respective RIIO-GD1 and RIIO-T1 requirements can be delivered without any additional cost to either company this represents the most efficient solution for both companies and their customers.

Next steps and future engagement

NGN and NG NTS have found the information exchange and dialogue during the RIIO interactive process extremely useful and both companies will review existing arrangements to see if such engagement can be incorporated into the annual planning cycles for both companies and potentially extended to include consideration of other issues, such as off-peak pressures.

Both companies, together with the wider industry will keep existing commercial and regulatory arrangements under review to determine whether any amendments are required in order to facilitate cross network investment and also whether any changes are required to the current NTS flexibility exit arrangements.

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Signed

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APPENDIX 1 Timeline of NGN/NG NTS interactive process for RIIO-GD1 and RIIO-T1

"Pseudo" OCS process	
1 March 2011	NGN submitted to NG NTS its peak day NTS Exit flexibility capacity requirements for each offtake for each year from 2011 to 2021 NG NTS submitted to NGN its assured pressure requirements at each offtake for the period 2011 to 2021
27 May 2011	NGN submitted to NG NTS: • Indicative minimum offtake pressures NGN could in theory, operate to on certain days down the demand duration curve • NGN's response to NG NTS' requested assured offtake pressures for the period 2011 2021 o This was in the form of either an acceptance of the stated pressure or quantification of investment at the relevant offtake to accommodate the pressure reduction
31 May 2011	NG NTS submitted to NGN its response to NGN's NTS Flexibility Exit capacity requirements for 2011-2021 o This was in the form of either acceptance of the stated NTS Flexibility Exit capacity or quantification of reinforcement investment required to facilitate the provision of the required NTS flexibility exit capacity
9 June 2011	NGN and NG NTS met directly to discuss the above information exchange following the discussions the two companies were able to establish a "provisional" agreed position accommodating NGN's RIIO-GD1 NTS Flexibility Exit capacity requirements and NG NTS RIIO-T1 requested assured pressures without any additional investment from either company.
2011 OCS Process	
30 June 2011	NGN submitted its response to NG NTS' OCS requested Assured Pressure reductions (submitted by the NG NTS to NGN on 30 April 2011) NGN's response was consistent with its response on 27 May 2011 (see above)
31 July 2011	NGN submitted its 2011 OCS request for enduring peak day NTS flat and flexibility exit capacities. This information was consistent with NGN 's request in the "pseudo" process but rebased for 2011 demand forecasts
19 August 2011	NG and NG NTS discussed the exchanged 2011 OCS information via a teleconference. Following discussion the "provisional" RIIO-GD1 and RIIO-T1 position established NGN and NG NTS by 9 June was confirmed by both companies this time the information considered was based on the respective companies 2011 demand forecasts.

RIIO GD1

RIIO T1

24 August 2011	NG NTS wrote to NGN to confirm the position agreed on 19 August in the letter NG NTS confirmed that subject to confirmation by NGN of agreed permanent assured offtake pressure reductions at specified offtakes, NGN's requested NTS Flexibility Exit capacity for RIIO-GD1 i.e. on an enduring basis, could be provided without any additional reinforcement investment.
30 September 2011	NGN received its 2011 OCS allocation of NTS Exit Flat and Flex capacity which was consistent with the position in NG NTS' letter on 24 August.

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APPENDIX 2: NGN's Assured Pressures and Enduring NTS Flat and Flexibility Exit capacities agreed during the 2011 Process.

BA Code	Location	Gas Year	Flex (mcm/d)	CV (mJ/m3)	Flex (kWh)	SOD Pressure (bar)	EOD Pressure (bar)
DNN	ASSELBYOT	Oct-11	0.0605	40.07	673235	41	38
DNN	ASSELBYOT	Oct-12	0.0604	39.93	670425	41	38
DNN	ASSELBYOT	Oct-13	0.0601	40.06	668727	41	38
DNN	ASSELBYOT	Oct-14	0.0598	40.25	668107	41	38
DNN	ASSELBYOT	Oct-15	0.0596	40.22	666082	41	38
DNN	ASSELBYOT	Oct-16	0.0594	40.24	663894	41	38
DNN	AUCKLANDOT	Oct-11	0.5248	39.93	5820005	41	38
DNN	AUCKLANDOT	Oct-12	0.5290	39.85	5855250	41	38
DNN	AUCKLANDOT	Oct-13	0.5262	39.88	5829736	41	38
DNN	AUCKLANDOT	Oct-14	0.5241	39.90	5808705	41	38
DNN	AUCKLANDOT	Oct-15	0.5196	39.94	5765173	41	38
DNN	AUCKLANDOT	Oct-16	0.5185	39.96	5754675	41	38
DNN	BALDERSBYOT	Oct-11	0.0128	40.07	142348	41	38
DNN	BALDERSBYOT	Oct-12	0.0128	39.93	141872	38	38
DNN	BALDERSBYOT	Oct-13	0.0127	40.06	141423	38	38
DNN	BALDERSBYOT	Oct-14	0.0126	40.25	141113	38	38
DNN	BALDERSBYOT	Oct-15	0.0126	40.22	140657	38	38
DNN	BALDERSBYOT	Oct-16	0.0125	40.24	140043	38	38
DNN	BURLEYBANKOT	Oct-11	0.0201	40.07	223484	43.5	43.5
DNN	BURLEYBANKOT	Oct-12	0.0210	39.93	232718	43.5	43.5
DNN	BURLEYBANKOT	Oct-13	0.0220	40.06	244680	43.5	43.5
DNN	BURLEYBANKOT	Oct-14	0.0219	40.25	244879	43.5	43.5
DNN	BURLEYBANKOT	Oct-15	0.0219	40.22	245116	43.5	43.5
DNN	BURLEYBANKOT	Oct-16	0.0220	40.24	245774	43.5	43.5
DNN	COLDSTREAMOT	Oct-11	0.0359	39.93	398041	53.2	51.5
DNN	COLDSTREAMOT	Oct-12	0.0359	39.85	397707	53.2	50
DNN	COLDSTREAMOT	Oct-13	0.0358	39.88	397046	53.2	50
DNN	COLDSTREAMOT	Oct-14	0.0358	39.90	396320	53.2	50
DNN	COLDSTREAMOT	Oct-15	0.0355	39.94	394212	53.2	50
DNN	COLDSTREAMOT	Oct-16	0.0354	39.96	393368	53.2	50
DNN	CORBRIDGEOT	Oct-11	0.0010	39.93	11201	45	38
DNN	CORBRIDGEOT	Oct-12	0.0010	39.85	11179	38	38
DNN	CORBRIDGEOT	Oct-13	0.0010	39.88	11189	38	38
DNN	CORBRIDGEOT	Oct-14	0.0010	39.90	11193	38	38
DNN	CORBRIDGEOT	Oct-15	0.0010	39.94	11206	38	38
DNN	CORBRIDGEOT	Oct-16	0.0010	39.96	11210	38	38
DNN	COWPENBEWLEYOT	Oct-11	0.4919	39.93	5455014	54.5	38
DNN	COWPENBEWLEYOT	Oct-12	0.4943	39.85	5471821	54.5	38
DNN	COWPENBEWLEYOT	Oct-13	0.4924	39.88	5455400	54.5	38
DNN	COWPENBEWLEYOT	Oct-14	0.4909	39.90	5440757	54.5	38
DNN	COWPENBEWLEYOT	Oct-15	0.4868	39.94	5400807	54.5	38
DNN	COWPENBEWLEYOT	Oct-16	0.4849	39.96	5382507	54.5	38
DNN	ELTONOT	Oct-11	0.7117	39.93	7893611	50	50
DNN	ELTONOT	Oct-12	0.7088	39.85	7845114	50	50

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BA Code	Location	Gas Year	Flex (mcm/d)	CV (mJ/m3)	Flex (kWh)	SOD Pressure (bar)	EOD Pressure (bar)
DNN	ELTONOT	Oct-13	0.7089	39.88	7853632	50	50
DNN	ELTONOT	Oct-14	0.7078	39.90	7844390	50	50
DNN	ELTONOT	Oct-15	0.7067	39.94	7840419	50	50
DNN	ELTONOT	Oct-16	0.7022	39.96	7793885	50	50
DNN	GANSTEADOT	Oct-11	-0.1380	40.07	-1535675	47.3	38
DNN	GANSTEADOT	Oct-12	-0.1361	39.93	-1509123	47.3	38
DNN	GANSTEADOT	Oct-13	-0.1377	40.06	-1532176	47.3	38
DNN	GANSTEADOT	Oct-14	-0.1378	40.25	-1540953	47.3	38
DNN	GANSTEADOT	Oct-15	-0.1392	40.22	-1555273	47.3	38
DNN	GANSTEADOT	Oct-16	-0.1411	40.24	-1577027	47.3	38
DNN	GUYZANCEOT	Oct-11	0.0355	39.93	393161	45	38
DNN	GUYZANCEOT	Oct-12	0.0351	39.85	388187	38	38
DNN	GUYZANCEOT	Oct-13	0.0351	39.88	389291	38	38
DNN	GUYZANCEOT	Oct-14	0.0352	39.90	389559	38	38
DNN	GUYZANCEOT	Oct-15	0.0352	39.94	389996	38	38
DNN	GUYZANCEOT	Oct-16	0.0350	39.96	388262	38	38
DNN	HUMBLETONOT	Oct-11	0.0021	39.93	23179	45	38
DNN	HUMBLETONOT	Oct-12	0.0021	39.85	23355	38	38
DNN	HUMBLETONOT	Oct-13	0.0021	39.88	23264	38	38
DNN	HUMBLETONOT	Oct-14	0.0021	39.90	23273	38	38
DNN	HUMBLETONOT	Oct-15	0.0021	39.94	23078	38	38
DNN	HUMBLETONOT	Oct-16	0.0021	39.96	23198	38	38
DNN	KELDOT	Oct-11	0.0170	39.93	188429	45	38
DNN	KELDOT	Oct-12	0.0169	39.85	187065	38	38
DNN	KELDOT	Oct-13	0.0169	39.88	187112	38	38
DNN	KELDOT	Oct-14	0.0169	39.90	187188	38	38
DNN	KELDOT	Oct-15	0.0168	39.94	186510	38	38
DNN	KELDOT	Oct-16	0.0168	39.96	186361	38	38
DNN	LTBURDONOT	Oct-11	0.1431	39.93	1586507	45	38
DNN	LTBURDONOT	Oct-12	0.1440	39.85	1593485	38	38
DNN	LTBURDONOT	Oct-13	0.1434	39.88	1588185	38	38
DNN	LTBURDONOT	Oct-14	0.1428	39.90	1582953	38	38
DNN	LTBURDONOT	Oct-15	0.1417	39.94	1572632	38	38
DNN	LTBURDONOT	Oct-16	0.1412	39.96	1567035	38	38
DNN	MELKINTHORPEOT	Oct-11	0.0246	39.93	272717	45	38
DNN	MELKINTHORPEOT	Oct-12	0.0243	39.85	269418	38	38
DNN	MELKINTHORPEOT	Oct-13	0.0244	39.88	269867	38	38
DNN	MELKINTHORPEOT	Oct-14	0.0244	39.90	270308	38	38
DNN	MELKINTHORPEOT	Oct-15	0.0243	39.94	269724	38	38
DNN	MELKINTHORPEOT	Oct-16	0.0243	39.96	269830	38	38
DNN	PANNALOT	Oct-11	1.6817	40.07	18716250	49	44.1
DNN	PANNALOT	Oct-12	1.7172	39.93	19047786	49	44.1
DNN	PANNALOT	Oct-13	1.6986	40.06	18900514	49	44.1
DNN	PANNALOT	Oct-14	1.6845	40.25	18835275	49	44.1
DNN	PANNALOT	Oct-15	1.6741	40.22	18703501	49	44.1
DNN	PANNALOT	Oct-16	1.6589	40.24	18541307	49	44.1
DNN	PAULLOT	Oct-11	0.2774	40.07	3087265	47.7	44

Appendix A12: NTS NGN Capacity Interaction

BA Code	Location	Gas Year	Flex (mcm/d)	CV (mJ/m3)	Flex (kWh)	SOD Pressure (bar)	EOD Pressure (bar)
DNN	PAULLOT	Oct-12	0.2775	39.93	3077923	46	44
DNN	PAULLOT	Oct-13	0.2754	40.06	3064464	46	44
DNN	PAULLOT	Oct-14	0.2737	40.25	3060325	46	44
DNN	PAULLOT	Oct-15	0.2728	40.22	3047647	46	44
DNN	PAULLOT	Oct-16	0.2713	40.24	3032564	46	44
DNN	PICKERINGOT	Oct-11	0.0559	40.07	622595	41	38
DNN	PICKERINGOT	Oct-12	0.0564	39.93	625612	41	38
DNN	PICKERINGOT	Oct-13	0.0555	40.06	617432	41	38
DNN	PICKERINGOT	Oct-14	0.0549	40.25	613429	41	38
DNN	PICKERINGOT	Oct-15	0.0543	40.22	606870	41	38
DNN	PICKERINGOT	Oct-16	0.0536	40.24	598734	41	38
DNN	RAWCLIFFEOT	Oct-11	0.0535	40.07	595327	41	38
DNN	RAWCLIFFEOT	Oct-12	0.0535	39.93	593555	38	38
DNN	RAWCLIFFEOT	Oct-13	0.0532	40.06	591395	38	38
DNN	RAWCLIFFEOT	Oct-14	0.0528	40.25	590283	38	38
DNN	RAWCLIFFEOT	Oct-15	0.0526	40.22	588101	38	38
DNN	RAWCLIFFEOT	Oct-16	0.0524	40.24	585769	38	38
DNN	SALTWICKHOT	Oct-11	0.0950	39.93	1054049	48	47.1
DNN	SALTWICKHOT	Oct-12	0.0952	39.85	1053210	48	46
DNN	SALTWICKHOT	Oct-13	0.0949	39.88	1051331	48	46
DNN	SALTWICKHOT	Oct-14	0.0947	39.90	1049428	48	46
DNN	SALTWICKHOT	Oct-15	0.0941	39.94	1043946	48	46
DNN	SALTWICKHOT	Oct-16	0.0938	39.96	1041582	48	46
DNN	SALTWICKOT	Oct-11	0.5248	39.93	5820005	48	47.1
DNN	SALTWICKOT	Oct-12	0.5290	39.85	5855250	48	46
DNN	SALTWICKOT	Oct-13	0.5262	39.88	5829736	48	46
DNN	SALTWICKOT	Oct-14	0.5241	39.90	5808705	48	46
DNN	SALTWICKOT	Oct-15	0.5196	39.94	5765173	48	46
DNN	SALTWICKOT	Oct-16	0.5185	39.96	5754675	48	46
DNN	THRINTOFTOT	Oct-11	0.0673	39.93	746396	51.5	49.4
DNN	THRINTOFTOT	Oct-12	0.0675	39.85	747264	51.5	48
DNN	THRINTOFTOT	Oct-13	0.0673	39.88	745459	51.5	48
DNN	THRINTOFTOT	Oct-14	0.0671	39.90	743765	51.5	48
DNN	THRINTOFTOT	Oct-15	0.0667	39.94	739494	51.5	48
DNN	THRINTOFTOT	Oct-16	0.0664	39.96	737454	51.5	48
DNN	TOWLAWOT	Oct-11	0.0101	39.93	112236	45	38
DNN	TOWLAWOT	Oct-12	0.0100	39.85	110910	38	38
DNN	TOWLAWOT	Oct-13	0.0100	39.88	111226	38	38
DNN	TOWLAWOT	Oct-14	0.0100	39.90	111271	38	38
DNN	TOWLAWOT	Oct-15	0.0100	39.94	111395	38	38
DNN	TOWLAWOT	Oct-16	0.0100	39.96	110884	38	38
DNN	TOWTONOT	Oct-11	0.2812	40.07	3129670	44.7	38
DNN	TOWTONOT	Oct-12	0.2778	39.93	3081917	45.7	38
DNN	TOWTONOT	Oct-13	0.2699	40.06	3002932	45.7	38
DNN	TOWTONOT	Oct-14	0.2688	40.25	3005982	45.7	38
DNN	TOWTONOT	Oct-15	0.2793	40.22	3120378	45.7	38
DNN	TOWTONOT	Oct-16	0.2899	40.24	3239892	45.7	38

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BA Code	Location	Gas Year	Flex (mcm/d)	CV (mJ/m3)	Flex (kWh)	SOD Pressure (bar)	EOD Pressure (bar)
DNN	WETHERALOT	Oct-11	0.3089	39.93	3426213	45.7	45.7
DNN	WETHERALOT	Oct-12	0.3083	39.85	3412112	45.7	45.7
DNN	WETHERALOT	Oct-13	0.3077	39.88	3409016	45.7	45.7
DNN	WETHERALOT	Oct-14	0.3075	39.90	3407732	45.7	45.7
DNN	WETHERALOT	Oct-15	0.3052	39.94	3385698	45.7	45.7
DNN	WETHERALOT	Oct-16	0.3046	39.96	3380591	45.7	45.7