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Changes to reasonable profit tests applied under SLCs 4 & 4A of the GT Licence.

- 1 The purpose of this letter is to consult on proposed changes to the method of calculating independent gas transporters (IGTs) reasonable profit under standard conditions (SLCs) 4 (Charging of Gas Shippers – General) and 4A (Obligations as Regards Charging Methodology) of the gas transporter licence in response to concerns expressed by industry participants.
- 2 Two tests are currently applied in calculating reasonable profit. The changes include removing and discontinuing the Return on Capital Employed (ROCE) test and amending the calculation period of the Net Present Value (NPV) test by pegging it to a fixed 24 year time frame. Currently the NPV test is based on cash flows from the previous three financial years and the current year, together with the forecast for the next 20 years. At the moment this timescale is updated on a rolling basis, but we believe that the charging methodology objective of permitting the independent gas transporter to make a reasonable profit would be better served by pegging this timescale to a fixed period running 2000 – 2023.
- 3 We invite views on both of these issues. Any correspondence should be submitted to lewis.hodgart@ofgem.gov.uk no later than 29 June 2006.

Analysis of existing NPV Test Calculation Period

- 4 Ofgem has previously issued guidance in relation to the interpretation of reasonable profit under SLCs 4 and 4A of the gas transporter licence. This includes a letter on *Further Guidance on reasonable profit tests under SLC4* published on 15 November 2004. The document is available from the 'IGT Regulation' area of 'OFGEM'S WORK' on Ofgem's website (www.ofgem.gov.uk).
- 5 The guidance to date has resulted in the formulation and application of two reasonable profit tests. IGTs are required to submit an annual report to Ofgem demonstrating that sites which continue to charge under SLC 4 comply with the tests' conditions. The first submissions were made during 2003/4.

- 6 Paragraph 3 of Appendix 1 to the November 15 letter states that:

"The NPV test would be based on each IGT's portfolio of projects that are charged for under SLC 4 and on out-turn costs and revenues in the preceding three financial years and the current financial year, plus forecast costs and revenues for the following twenty years. Using a discount rate equal to the maximum nominal cost of capital then:

$$\text{NPV of [turnover - operating costs (excl depreciation) + terminal asset values - capital expenditure]} \leq 0."$$

- 7 By definition the rolling calculation period methodology ensures that all Capital Expenditure invested more than three years prior to the year of calculation is excluded from impacting on the NPV. (Table 1 illustrates that for 2006, expenditure prior to 2003 is excluded).
- 8 With this in mind, and with an understanding that after 2004¹ new capital expenditure on legacy sites will tend towards zero, it is observed, that as the 'current year' of the calculation moves further away from the original start year, and initial Capex inputs drop out of the equation, there will be an increased propensity for the NPV to be greater than zero and so fail the test, even where charges to customers are unchanged.
- 9 We consider that this condition represents an inappropriate limitation for a system designed to calculate reasonable profit on a portfolio of sites where returns are recovered over a significant number of years.

Proposed Changes to NPV Test Calculation Period

- 10 In respect of Paragraph 3 of Appendix 1 of the *Further Guidance on reasonable profit tests under SLC4* letter we propose the following changes to paragraph 3 of Appendix 1:

'Using the fixed inclusive calculation period 2000-2023 the NPV test would be based on each IGT's portfolio of projects that are charged for under SLC 4. For years up to and including the current financial year calculations would be based on out-turn costs and revenues, whilst for years following the current financial year, up to and including 2023, calculations would be based on forecast nominal costs and revenues. Using a discount rate equal to the maximum nominal cost of capital then:

$$\text{NPV of [turnover - operating costs (excl depreciation) + terminal asset values - capital expenditure]} \leq 0.$$

- 11 This would ensure that capital expenditure incurred in the initial years of the period would remain factored into the NPV calculation for the duration of the agreed project lifecycle. As a consequence the NPV test could not fail solely on the basis that new investment in legacy sites effectively ended at the beginning of 2004. (Table 2.)

¹ As of January 2004 all new IGT developments are subject to Relative Price Control (RPC). An IGT's portfolio of legacy sites is limited to sites developed before this date, and since capital expenditure on site development is typically concentrated in the initial project years, legacy site investment can be presumed to tail off beyond 2004.

- 12 The revision of Appendix 1 outlined above constitutes the full extent of the proposed NPV changes. No changes to the calculation methodology or accounting conventions outlined in the rest of the November 15 letter are proposed.

Analysis of ROCE Test

- 13 The fact that legacy sites are essentially not growing businesses has similar implications for the ROCE test to those outlined for the NPV test.
- 14 The ROCE test is calculated as the sum of the last three years' operating profit divided by the sum of the last three years' average regulatory net asset value. For legacy sites, where future capital expenditure is expected to be relatively small it follows that the average regulatory net asset value will decrease steadily with depreciation, but by contrast, other things being equal, revenue streams can be assumed to be relatively constant.
- 15 Over time this will lead to an ever increasing probability that the ROCE test will fail even where charges to customers remain unchanged. This probability is further compounded by the fact that capital expenditure is depreciated in real terms to zero over a twenty year period, whilst revenues are considered annually on a nominal basis.
- 16 With this in mind, and taking account of the fact that the ROCE test was first proposed before the implementation of RPC charging arrangements, we now believe that there is no longer a compelling case for retaining the ROCE test. We welcome correspondence on this issue and are open to discussing any implications not outlined in this letter.

Proposals

- 17 It is proposed that the changes to the NPV calculation period be applied to the Reasonable Profit Test submissions for 2005-06 and that the ROCE test be discontinued immediately.

If you have any questions relating to the points raised in this letter, please contact me on 020 7901 7021.

Yours sincerely

Lewis Hodgart

Gas Distribution Analyst

Table 1

NPV Test 2006 - Rolling Calculation Period Methodology

2006 Submission	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Income				128	130	133	135	139	143	148	152	157	161	166	171	176	181	187	192	198	204	210	217	223	230	237	244
CAPEX				80	65	53																					
OPEX				44	45	50	51	53	54	55	57	58	59	61	62	64	66	67	69	71	72	74	76	78	80	82	84
Nominal Cash Flow				4	20	30	84	87	89	92	95	99	102	105	109	112	116	120	124	128	132	136	141	145	150	155	160
RPI at year				2.5%	2.5%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Discount rate				1.00	0.98	0.95	0.92	0.89	0.87	0.84	0.82	0.79	0.77	0.75	0.73	0.70	0.68	0.66	0.64	0.63	0.61	0.59	0.57	0.56	0.54	0.52	0.51
Cash Flow Discounted to 2003				4	20	28	77	77	77	78	78	78	78	79	79	79	79	79	80	80	80	80	81	81	81	81	81
Projected Cost of Capital				8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%
C of C Discount Rate				0.92	0.85	0.78	0.72	0.67	0.61	0.56	0.52	0.48	0.44	0.41	0.38	0.35	0.32	0.29	0.27	0.25	0.23	0.21	0.20	0.18	0.17	0.15	0.14
C/ Flow Dicounted for C of C				4	17	22	56	51	47	44	41	38	35	32	30	27	25	23	22	20	18	17	16	15	13	12	11
NPV at 2006							636																				

Table 2

NPV Test 2006 - Fixed Calculation Period Methodology

2006 Submission	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Income	120	123	125	128	130	133	135	139	143	148	152	157	161	166	171	176	181	187	192	198	204	210	217	223
CAPEX	300	280	180	80	65	53																		
OPEX	38	39	42	44	45	50	51	53	54	55	57	58	59	61	62	64	66	67	69	71	72	74	76	78
Nominal Cash Flow	-218	-196	-97	4	20	30	84	87	89	92	95	99	102	105	109	112	116	120	124	128	132	136	141	145
RPI at year	0.0%	2.5%	2.5%	2.5%	2.5%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Discount rate	1.00	0.98	0.95	0.93	0.91	0.88	0.85	0.83	0.80	0.78	0.76	0.74	0.72	0.69	0.67	0.65	0.64	0.62	0.60	0.58	0.56	0.55	0.53	0.52
Cash Flow Discounted to 2000	-218	-191	-92	4	18	26	72	72	72	72	72	73	73	73	73	73	74	74	74	74	74	75	75	75
Projected Cost of Capital	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%
C of C Discount Rate	0.92	0.85	0.78	0.72	0.67	0.61	0.56	0.52	0.48	0.44	0.41	0.38	0.35	0.32	0.29	0.27	0.25	0.23	0.21	0.20	0.18	0.17	0.15	0.14
C/ Flow Discounted for C of C	-201	-162	-72	3	12	16	40	37	35	32	29	27	25	23	22	20	18	17	16	15	13	12	11	11
NPV at 2006							-0.4																	