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*Promoting choice and value for
all gas and electricity customers*

Direction issued to National Grid Gas Plc (NGG) by the Gas and Electricity Markets Authority pursuant to paragraph 4 of Special Condition C28 of NGG's Gas Transporter Licence.

1. Special Condition C28 of National Grid Gas Plc's Gas Transporter Licence places an obligation on National Grid Gas (NGG) to develop and undertake a Scheme of Work to facilitate the establishment of a long term external gas system operator incentive to reduce targeted greenhouse gases¹. The Authority and NGG appointed Consultants to undertake the review of the draft Scheme of Work. We received a draft Scheme of Work from NGG on 28 April 2011. Following the review of the draft Scheme of Work by Ofgem and the Consultants, NGG submitted a revised draft Scheme of Work to the Authority on 20 June 2011.
2. The revised draft Scheme of Work was reviewed by Ofgem and the Consultants. Ofgem requested NGG to provide information on emission levels arising from three categories of emissions which had not previously been estimated. This information showed that emission levels from gas actuated valves were significantly higher than expected.
3. On 30 June 2011, the Authority directed NGG to make the changes to the revised draft Scheme of Work to create the Scheme of Work and to begin the work specified in the Scheme of Work. The Authority also directed NGG to provide to it by 1 September 2011 a draft Appendix to the Scheme of Work setting out a programme of work to improve the accuracy of the calculation of the emissions arising from gas actuated valves installed on the National Transmission System (NTS) and owned and operated by NGG. On 1 July 2011 NGG submitted the projects to be undertaken under the Scheme of Work (projects 1, 2, 3 and 4), and on 31 August 2011 NGG submitted its draft Appendix to the Scheme of Work including two additional projects (projects 5a and 5b).
4. On 4 January 2012 we received a letter from NGG proposing new timeframes for the projects being undertaken under Special Condition C28. NGG set out in its letter that two of the projects (projects 3 and 4) were subject to uncertainty during the

¹ According to Paragraph 9 of Special Condition C28, the Scheme of Work should include: i) an approach, estimated costs and timetable, ii) the development of a methodology for the quantification of NGG's Greenhouse Gas Emissions, and iii) projects relating to alternatives to venting natural gas (see <http://www.ofgem.gov.uk/Markets/WhIMkts/EffSystemOps/SystOpIncent/Documents1/National%20Grid.pdf>)

competitive benchmarking process, delaying the starting dates set out in the initial Scheme of Work. NGG also mentioned a recent cost prioritisation process affected the timescales of all projects. In its January letter, NGG requested Ofgem to provide it with a Direction relating to the revised timelines, as provided for under Paragraph 4 of Special Condition C28.

5. Following several meetings between Ofgem and NGG, Ofgem understands that the proposed changes in timescales reflected delays in the starting dates of the projects. Further, that these delays were the result of processes being undertaken by NGG to ensure the most cost effective projects were taken forward. On 27 April 2012 NGG provided further clarification in respect of the timing of the projects to be undertaken. The Authority therefore directs NGG to modify the timescales of the projects undertaken under the Scheme of Work and the Appendix to the Scheme of Work as set out in the Annex to this Direction.

Dated: 11 May 2012

Martin Crouch

Partner, European Wholesale

Duly authorised on behalf of the Gas and Electricity Markets Authority

Annex
Completion dates of the projects undertaken under the Scheme of Work

Project Number	Project Description	Project Stage	Proposed Improvement	Completion date
1	Pipeline depressurisation - improve current venting calculations including compilation of asset data	Stage 1	System modifications to enable centralised data collection for pipeline depressurisation	31/10/2012
	System modification to enable centralised reporting of station vents	Stage 2	System modification to enable centralised vent reporting of station vents	
2	Enable compressor vent mass calculation to be split into those following an automatic venting trip and others	Stage 1	Survey all NTS compressor sites, except for St Fergus, Warrington and Hatton	31/10/2012
			Survey for St Fergus, Warrington and Hatton	Following Site Works
		Stage 2	Implement split of compressor venting into trip and non-trip vents for all compressor sites except for St Fergus, Warrington and Hatton	31/10/2012
			Survey for St Fergus, Warrington and Hatton	Following Site Works
Stage 3	Centralised reporting system changes if required	31/10/2012		
3 & 4	Improve the current venting calculations for compressor seal leakage venting and Introduce venting calculations for compressor unit isolation valves and unit vent valves*	Stage 1	External assessment to identify sources of leakage. Identify key leakage factors and assess leakage past isolation valves and unit vents and leakage through seals. Calculate assessment of overall leak & review to see whether to progress to stage 2	31/08/2012
		Stage 2	External analysis of a small number of site types using outputs of stage 1 to produce a best practice method for measurement of leakage	
		Stage 3	Evaluate results from stage 2 to develop and implement algorithms and systems to quantify seal and valve leakage for all sites	
5	Study to provide better understanding of gas emissions from the actuation of valves associated with the normal operation of compressors and gas emissions from the actuation of other system valves associated with valve maintenance	Stage 1	Study to provide better understanding of gas emissions from the actuation of valves associated with the normal operation of compressors	31/08/2012
		Stage 2	Study to provide better understanding of emissions from the actuation of other system valves associated with valve maintenance	
N/A	All Project Review: Cost and progress review to assess findings from early stages of projects 3, 4, and 5			31/08/2012