

Our Ref: CG/CM/AW/JW/  
ORG13-A1846

Your Ref: -

28 April 2006

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Dear Mr Hull

### **TRANSMISSION PRICE CONTROL REVIEW 2007-2012: THIRD CONSULTATION**

Thank you for providing the Scottish Environment Protection Agency (SEPA) with the opportunity to comment on the above consultation document. Our general comments are set out below, with some more specific comments in Annex 1 to this letter.

In this instance, SEPA will limit its comments to the issue of the availability, via Ofgem, of the necessary capital within the Transmission Price Control Review (TPCR) required for investment by National Grid Gas plc (NGG) to upgrade their gas turbine fleet. SEPA wants to ensure that the appropriate capital allowances are included in NGG's next five year operating programme from 2007-12. SEPA welcomes the highlighting of the required capital expenditure in this TPCR (Chapter 6, paragraph 6.9).

SEPA has already held discussions on this issue, but extending and maintaining the dialogue between SEPA and Ofgem is considered important and should aid in the delivery of Ofgem's environment related duties highlighted in Chapter 2, paragraph 2.38.

From early 2006, the operators of compressor stations within the National Gas Transmission System are required to make an application for a permit under the Pollution Prevention and Control (PPC) Regulations. Such permit applications are determined by SEPA for Scottish sites or the Environment Agency for England & Wales (the Agencies). In order to obtain a PPC permit, an operator must demonstrate in their application that the Best Available Techniques (BAT) to prevent or minimise pollution will be adopted.

The environmental performance of the National Grid Gas plc (NGG) turbine fleet, with the older turbine technology currently installed at a number of sites, is significantly compromised. Fuel and performance efficiencies also lie well below that which can be achieved with newer techniques. Therefore, under the terms of BAT, significant investment is likely to be required at the compressor stations operating older gas fired turbines in order to reduce emissions of key pollutants, notably nitrogen oxides (NOx) and carbon dioxide, and to improve operating efficiencies.

Given the large capital sums that such upgrades will require, the Agencies have been in consultation with NGG regarding the level of investment required to improve the overall environmental performance of the NGG gas-fired turbine fleet at acceptable cost. This work has been in development since 1999 and is referred to as the "Network Review". The Network Review effectively looks holistically at all the investments that may be required under PPC and defines BAT for each individual turbine/installation.

NGG inform us that the overall conclusions of the Network Review, in terms of the precise location of investment, are not sensitive to the uncertainties in gas demand/supply forecasts. Consequently, it is understood that the required investment proposals identified for environmental improvements (for all but one or two sites) remain valid for a wide range of forecasted supply/demand scenarios as well as for the predicted changes to gas supply infrastructures.

The upgrading required to address environmental concerns at individual sites identified by the Network Review does not just address emissions of NO<sub>x</sub>; other important considerations such as local air quality, fuel efficiency and reliability and maintenance issues have also been addressed.

The Network Review concludes that in order to achieve the best environmental outcome, NGG should progress investment at a small number of compressor sites by the installation of new electric drive systems.

The investment identified by the Network Review would deliver a 90% reduction in the total mass emissions of NO<sub>x</sub> and significant energy efficiency improvements. This could be achieved with a capital investment of up to £200 million. Once the Network Review has been accepted and agreed by the Agencies, the requirement for site specific improvements will be placed on NGG via conditions in the PPC permits for each installation. Those individual turbines not identified for upgrading are likely to have other operating restrictions placed upon them via PPC permit conditions that reflect the Network Review conclusions on the extent of operation at such sites.

The requirement for investment at specific installations (and the associated capex requirement) will form a statutory obligation on NGG. The Agencies wish to ensure that the required upgrading for environmental improvements is agreed with NGG (and Ofgem) prior to permit issue. In view of this, the provision of the required capex identified by NGG in the Network Review could be viewed as an integral part of the environmental duties and obligations placed upon Ofgem as noted in Appendix 5, paragraph 1.13, and throughout the consultation. SEPA believes that the outcome of the NGG Network review articulated by permit condition will represent a statutory environmental obligation that can be efficiently conducted (as per the requirement highlighted in the summary of the Ofgem approach to Financial Issues noted in Chapter 8). Indeed, the issues addressed by Appendix 9 (Environmental Considerations) may benefit from further discussion of the NGG Network Review programme.

As a public body committed to openness and transparency, SEPA feels it is appropriate that this response be placed on the public record. If you require further clarification on any aspect of this correspondence, please do not hesitate to contact me or Andy Witty, Principal Policy Officer (Air), at the address shown on this letter.

Yours sincerely

Campbell Gemmell  
Chief Executive

## Annex 1

1. There does seem to be a degree of inconsistency in the way that capex is quantified. We note that different numerical data is presented in Chapter 1 Table 1.1, Chapter 6 Figure 6.1 and Appendix 14 paragraph 1.8. SEPA is also aware that providing further detail of proposed capex for environmental improvements (on a site specific basis) may prejudice the ability of NGG to deliver the identified environmental improvements within the capex budget specified. SEPA would therefore suggest that capex assessments are presented consistently but only at the higher aggregate levels presented in this TPCR consultation.
2. One of the key issues surrounding the timing and ultimate location of the required capex for environmental improvements relates to the extent of flexibility that NGG can accommodate in their capex plans. Ofgem's desire to accommodate such flexibility without direct intervention (except in exceptional circumstances), as noted in the summary Chapter, are therefore welcomed. The comments raised within the TPCR consultation regarding the over reward for inflated capex bids are also noted (Chapter 2, paragraph 2.16 to 2.20). In the case of the NGG Network Review, we maintain that the identified capex remains consistent with the predicted environmental gains.
3. It is noted that Ofgem propose a further consultation on system operator incentive schemes for NGG in due course (Chapter 2 paragraph 2.34). Deeper incentives for the NGG that target environmental benefits would be welcomed (noting the specific mention of compressor fuel use). It should be noted that, in certain situations, such incentives can compromise environmental performance (e.g. increasing fuel efficiencies by load control at individual sites can sometimes adversely effect emissions of NOx and carbon monoxide). Consequently, SEPA would welcome the opportunity to comment and liaise with Ofgem on the detail and extent of future incentives for NGG.