Northern Gas Networks Limited
Registered in England & Wales No 5167070
Registered Office
1100 Century Way Colton
Leeds LS15 8TU

29 April 2008

Paul Branston
Gas Distribution
Ofgem
9 Millbank
London
SW1P 3GE

Dear Paul

NG Proposal to commence generating electricity at Gas Distribution pressure reduction sites

Thank you for the opportunity to comment on the above proposal. Whilst this consultation concerns National Grid (NG) it should be noted that NGN is in the early stages of planning a similar project at one of our pressure reduction sites. Ofgem should therefore consider the generic issues associated with any gas distribution network undertaking such a project separately from any specific issues associated with NG. It is important that this distinction is made so that decisions on this proposal are not distorted by NG specific factors (e.g. its ownership of both the gas and electricity transmission networks) which are not relevant to the other gas distribution companies.

This is unproven technology in the UK and requires a significant level of investment. Any introduction of regulatory risk will significantly reduce or eliminate the prospect of this technology being developed. Regulatory risk would arise from imposing additional controls or restrictions on how the plant could be operated or seeking to take significant benefits for gas network customers from these proposals. Ofgem's focus therefore should be to minimise any risk to network customers whilst facilitating an environment where investment in new generation technology can be made.

Our responses to your detailed questions are contained in the attached appendix. If you need any further information or wish to discuss any of the points raised in this letter please do not hesitate to give me a call on 07883 099609.

Yours sincerely

Stephen Parker
Regulation Manager

Annex 1

Responses to Questions

Do respondents agree with NG's proposed environmental benefits associated with this technology?

Yes. In principle, expander/CHP schemes operate at very high electrical generation efficiency and displace existing power generated from less efficient fossil fuel sources Where heat is displaced, savings should be also measured against existing, often inefficient water bath heaters compared to high efficiency CHP derived heat (and power) in future.

The technology has the potential to deliver significant carbon savings.

Are there any potential benefits, costs or risks to consumers that have not been considered in this letter?

The letter identifies the major benefits, costs and risks. Risks associated with operation of the NTS are not relevant where the plant is installed on a non-NG distribution network.

Are there any other licence conditions that could be affected by NGG's proposal?

Whilst we do not have the precise detail of how NG proposes to operate the plant NGN does not agree with the statement that installation of this equipment alongside the network will result in relinquishment of operational control over a transportation asset. The generating plant will not be a transportation asset and control of the flow of gas to the plant will be under the operational control of the licensee. The licensee will at all times be able to maintain the flow of gas through the offtake using its own equipment.

Should this kind of arrangement be ruled out as it has the potential to dilute the incentive on NG to operate either the transmission or distribution networks efficiently?

No. Under the existing network price controls there are strong incentives to operate the network efficiently backed up by the licence requirement to operate an efficient network. Any company which sought to operate its network less efficiently would be taking significant regulatory risks.

Should NGG be looking at the opportunities to reduce pressures on the National Transmission System to prevent the need for excessive pressure reduction at these sites?

NGG already have obligations under the SO incentive to minimise the cost of shrinkage gas and we believe these are sufficient.

The risk of NTS increasing pressures to maximise pressure reduction on AGI's is we believe minimal. The NTS system is designed for steady state use and the dynamics of applying pressure management would out way any perceived power generation benefits.

Given that NG also owns the England and Wales electricity transmission network, and is therefore not allowed to generate electricity itself, are there any concerns regarding this proposal from this perspective?

We have no concerns from this perspective.

Are there any other issues Ofgem should be considering in reviewing NGG's proposal?

We have some concern over the availability of detailed information on gas pressures at various offtakes from the NTS and the potential for NTS to vary pressures between different offtakes attached to different distribution networks. To design a project efficiently a detailed pressure profile data / predictions is required to efficiently design and size turbo expander equipment. Traditionally the NTS have been reluctant to provide such detailed data. Under the non-discrimination conditions in their licence we assume that as such data has must have been used by National Grid Distribution it would be made available to any DN.

Should Ofgem be considering the proposal to reduce own use gas for pre-heat using biomass generators separately from the proposal to convert the energy lost in depressurisation into electricity using turbo-expanders?

Yes because there are alternatives which would use conventional gas CHP units for pre-heating rather than biomass units. This would still result in a reduction in own use gas as the plant would be required to pay for any gas used by the CHP.

Are there any modifications to NGG's gas transportation licences that would be appropriate to safeguard consumers if the Authority grants the relevant consents?

We feel the existing licence obligations on NGG are sufficient and will ensure that National Grid businesses treat all similar schemes in the same way, whether developed by Blue NG for the National Grid DNs or independently by the IDNs.