

**Gas Quality
Wet Gas Administration Scheme**

Final Proposals

December 2004 289/04

Summary

This document discusses responses to Ofgem's Initial Proposals document on wet gas administration. The current scheme adjusts consumers' bills to take account of water vapour that may, from time to time, be contained in some gas supplies being erroneously billed as hydrocarbon gas.

Ofgem received eleven responses to this consultation, copies of these can be found on the Gas Quality section of Ofgem's website at:

<http://www.ofgem.gov.uk/ofgem/work/index.jsp?section=/areasofwork/gasqualwetgas>.

Nine respondents agreed that the current wet gas administration scheme should be discontinued. Two respondents, both commercially providing gas quality measuring services, proposed that alternative schemes should be considered.

This document considers and discusses the responses and later concludes that it is appropriate for Ofgem to withdraw from the wet gas administration scheme.

Ofgem therefore intends to revoke all determinations related to wet gas administration during Q1 2005.

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1. Introduction

Outline of this document

- 1.1. This document considers responses to proposals by Ofgem to discontinue the current wet gas administration scheme. Details of the scheme are set out in the 24th September 2004 initial proposals document which can be found on the Gas Quality section of Ofgem's web site at <http://www.ofgem.gov.uk/ofgem/work/index.jsp?section=/areasofwork/gasquality>
- 1.2. Chapter 2 provides a summary of responses, chapter 3 discusses issues raised in the consultation responses and chapter 4 sets out the decision. A regulatory impact assessment is presented in Appendix 1.

2. Summary of responses

Ofgem received eleven responses to the initial consultation; these can be found in the Gas Quality section of Ofgem's website at:

<http://www.ofgem.gov.uk/ofgem/work/index.jsp?section=/areasofwork/gasqualwetgas>.

Nine respondents agreed that the current wet gas administration scheme should be discontinued. Two respondents, both commercially providing gas quality measuring services, proposed alternative schemes.

Centrica

- 2.1. Centrica supported Ofgem's proposal to remove the scheme and not to replace it with an alternative scheme. However, Centrica considered that it would be appropriate to continue monitoring at a lower level.

EDF Energy

- 2.2. EDF Energy supported Ofgem's proposal to discontinue the wet gas administration scheme. EDF Energy recommended that mechanisms and incentives be put in place to encourage Transporters to continue to perform some hygrometric testing in order to ensure that high incidence of water ingress is not left undetected.

E.ON

- 2.3. E.ON supported Ofgem's proposal to discontinue the wet gas administration scheme.

Gas Transport Company

- 2.4. Gas Transport Company supported Ofgem's proposal to discontinue the wet gas administration scheme.

National Grid Transco

- 2.5. National Grid Transco supported Ofgem's proposal to discontinue the wet gas administration scheme. National Grid Transco considered that some monitoring

capability will need to be retained in order to deal with remedial work following third party damage, etc.

npower

- 2.6. npower supported Ofgem's proposal to discontinue the wet gas administration scheme.

Scottish and Southern Energy

- 2.7. Scottish and Southern Energy supported Ofgem's proposal to discontinue the wet gas administration scheme.

Scienco

- 2.8. Scienco recommended that an alternative wet gas testing regime be developed. Scienco was created from the former British Gas Scientific Services in 1995 and currently provides gas quality monitoring services to National Grid Transco. Scienco suggested that removal of the wet gas administration scheme may take away the incentive to correct minor ingresses of water. Scienco also suggested that gas holders are a major source of water ingress. Scienco recommended a random test programme performed by an independent testing company. Scienco state that sulphidation is affected by water ingress.

Scottish Power

- 2.9. Scottish Power supported Ofgem's proposal that the wet gas administration scheme should be discontinued. Scottish Power considered that if the plan was applied in full suppliers would be faced with considerable costs that would have to be passed on to customers.

SGS UK Ltd.

- 2.10. SGS UK Ltd. currently provides metering and gas quality services to Ofgem including administration of the wet gas testing regime. Having identified shortcomings with the current wet gas administration scheme, Ofgem earlier commissioned a report from SGS UK Ltd. to investigate the possibility of improving the existing arrangements. SGS UK Ltd. made reference to this report in its response.

2.11. In its report to Ofgem, SGS UK Ltd. made a number of recommendations:

1. Transco should investigate the possibility of gaining approval of less costly equipment through a programme of field and laboratory testing;
2. The present list of official test points should be supplemented where necessary to provide a consistent sampling of the network. Test points used for other measurements should be used, where possible, to reduce installation costs;
3. Joint audit testing should continue but at a reduced frequency and within a programme based upon the activities of a Transco register of trained technicians;
4. Routine testing by Transco/sub-contractors should continue but the programme should take account of recent evidence of dry gas conveyance;
5. Compensation, by issuing a Determination, of those consumers disadvantaged by wet gas conveyance should take account of the known reduction in energy content of their gas. This could be achieved by reducing the level of the determined quantity of water to 1.25% and phasing the introduction of Determinations in relation to the measured dewpoint of the conveyed gas.

2.12. Ofgem did not concur with the analysis and findings of the report and later performed its own analysis, the results of which were published in the initial proposals consultation document.

2.13. SGS UK Ltd. noted several points in the initial proposals document that it felt were errors and misleading statements.

2.14. SGS UK Ltd. acknowledged that the existing scheme was inadequate.

2.15. SGS UK Ltd. proposed a number of changes to the current scheme that would reduce network monitoring and thus reduce costs.

2.16. SGS UK Ltd. recommended not issuing determinations where the source of water was a gas holder.

2.17. SGS UK Ltd. recommended that hygrometric testing should be part of the duties of Gas Examiners.

2.18. SGS UK Ltd. considered that Ofgem's proposal would lead to an increasing number of consumers being disadvantaged by water in their gas supplies.

2.19. SGS UK Ltd. considered that withdrawal of the scheme there will be no incentive for gas transporters to carry out remedial action except where loss of supply has occurred.

Shell Gas Direct

- 2.20. Shell Gas Direct supported Ofgem's proposal to discontinue the wet gas administration scheme.

3. Discussion

- 3.1. Centrica suggested that time be allowed to for participants to make changes to systems and supporting processes. Some companies use automated computerised systems while others rely on manual processes to adjust consumers' bills to take into account water vapour determinations. If Ofgem withdraws from the scheme, it will issue a number of revocations and cease to issue new determinations. These revocations can be handled using the existing processes. As and when systems are updated, software and processes can be re-designed without the need to consider billing corrections. Existing systems and processes can therefore remain in place, albeit unused, after the scheme is discontinued. However, if Ofgem withdraws from the scheme, there will be an unusually large number of revocations issued in a short time period and it would be unreasonable to expect companies to process these in the usual timescale. Ofgem therefore proposes a period of four months to allow companies to process the revocations.
- 3.2. A number of respondents suggested that the current scheme provides an incentive for gas transporters to maintain a dry network. It should be noted that the wet gas administration scheme that Ofgem currently operates does not provide any incentive for gas transporters to reduce levels of water ingress nor to dry or keep dry the network.
- 3.3. Some respondents considered that some monitoring capability will need to be retained in order to deal with remedial work following third party damage, etc. Ofgem concurs that some monitoring will still be required and notes that there may be some one off costs associated with cessation. One off costs will be substantially lower than costs of continuing with the current regime. Discussion with representatives of National Grid Transco suggested that levels of monitoring would probably be reduced to around 10% of current levels.
- 3.4. Scienco suggested that gas holders are a major source of water ingress. Whilst gas holders can deliver water saturated gas, they are normally operated for relatively short periods and the effect on consumer's bills is relatively small. Scienco recommended a random test programme performed by an independent testing company. Ofgem considered random testing in the initial proposals

paper and continues to believe that it would not be cost effective. At the level of tests proposed by Scienco could only cover a small proportion of consumers effectively. SGS UK Ltd. recommended that determinations should not be issued where the source of ingress was a gas holder.

- 3.5. Scienco stated that sulphidation is affected by water ingress. Ofgem has been extensively assessing the causes of sulphidation and considers that this effect is not a substantive contributor to the formation of black dust, the primary effect of sulphidation. A joint DTI/Ofgem/HSE working group on gas quality is currently investigating whether measures to reduce sulphidation should be made.
- 3.6. Some respondents considered that if the Wet Gas Administration Scheme was applied in full, suppliers would be faced with considerable additional costs that would have to be passed on to customers. Ofgem accepts that suppliers' costs may be higher than estimated in the initial proposals paper.
- 3.7. SGS UK Ltd. currently provides metering and gas quality services to Ofgem including administration of the wet gas testing regime. Having identified shortcomings with the current wet gas administration scheme, Ofgem earlier commissioned a report from SGS UK Ltd. to investigate the possibility of improving the existing arrangements. SGS UK Ltd. made reference to this report in its response.
- 3.8. Ofgem did not concur with the SGS UK Ltd. analysis and findings of the report and later performed its own analysis, the results of which were published in the initial proposals consultation document.
- 3.9. SGS UK Ltd. noted several points in the initial proposals document that it felt were errors and misleading statements. Ofgem has carefully reviewed SGS UK Ltd.'s response and considers that the analysis in the initial proposals document is materially correct.
- 3.10. SGS UK Ltd. proposed a number of changes to the current scheme that would reduce network monitoring and reduce costs. These savings would also result in reduced consumer protection. Ofgem's evaluation of the scheme suggests that it would not be cost effective if the costs were paid by the limited number of consumers protected by the scheme and it would not be in the interests of consumers as a whole to subsidise the minority who were covered.

- 3.11. SGS UK Ltd. recommended that hygrometric testing should be part of the duties of Gas Examiners. Gas Examiners are appointed by the Authority. At present all Gas Examiners are employed by SGS UK Ltd. Ofgem does not believe that employing additional Gas Examiners to perform hygrometric testing would be in the interests of consumers.

4. Decision

- 4.1. Following review and consideration of respondent's views, Ofgem concludes that it is appropriate to discontinue the wet gas administration scheme.
- 4.2. Companies will be granted a period of four months to process the revocations that will be issued by The Authority relating to determinations issued under the wet gas administration scheme.

Appendix 1 - Impact assessment

An impact assessment was included in the initial proposals document. Respondents have highlighted that there will be a requirement for some limited ongoing hygrometric testing. Respondents felt that costs associated with billing systems had been underestimated. Ofgem recognises that the full extent of the projected savings associated with testing may not be fully realised but there will be additional savings from the underestimated costs of supplier billing systems.

Ofgem considers that on balance considers cost savings presented in the initial proposals document and resulting conclusions are broadly valid. The impact assessment presented below is a revision of the original impact assessment which takes into account respondents views. Cost savings have been revised to £991,000 compared with the initially estimated £1.1 million

Objective

- 4.3. The objective of this paper is to provide information on the current wet gas scheme, to consider responses, to update the impact assessment taking into account information provided by respondents and to decide on the way forward.
- 4.4. It is necessary to determine the extent to which bills should be adjusted to take account of water vapour present in gas supplies erroneously being billed as hydrocarbon gas. The objective is to select the scheme that best protects the interests of consumers.

Overview of key issues

- 4.5. Small quantities of water vapour are sometimes present in gas supplies. Ofgem administers a scheme that is intended to adjust consumer's gas bills to take into account water vapour contained in their gas supply being registered by their gas meter. The current scheme is ineffective, as testing does not cover the vast majority of consumers and it is also not cost effective for those consumers that are covered by the scheme because the cost of administration is similar to the cost of the erroneous over billing. Where water vapour is detected, the current scheme for issuing determinations overcorrects consumers' bills to the detriment of consumers overall.

Options

- 4.6. Three options were presented in the initial consultation document, firstly to retain the current scheme, secondly to introduce a more comprehensive scheme that would protect the majority of consumers and thirdly to discontinue issuing wet gas determinations. The third option was proposed and this proposal has been selected following analysis of the responses to the consultation paper.

Risks and unintended consequences

- 4.7. No risks or unintended consequences have been identified.

Competition

- 4.8. There is no substantive impact on competition. Suppliers' administration costs and the complexity of their billing systems will be reduced, marginally reducing barriers to entry in this market.

Costs and benefits

- 4.9. When wet gas administration scheme is discontinued, based on data from tests conducted in 2003, the actual average error in the bills of consumers receiving wet gas would have been +0.16% (approximately £0.48 per annum for a typical domestic consumer with a bill of £300) if determinations had not been issued.
- 4.10. Where gas was considered to be wet, the Authority issued Determinations adjusting consumers' bills by 1.68% or £5.04 for the average consumer with a bill of £300.
- 4.11. Issuing determinations has increased the billing error (albeit in favour of these consumers) by $£5.04 - £0.48 = £4.56$. The costs of this are borne by other consumers.
- 4.12. When the wet gas administration scheme is discontinued, savings of £1.0 million per annum will be realised. These savings will be passed through to consumers by means of price control adjustments and competition in the retail market resulting in a reduction in the average consumer's bill of 4.5 pence per annum.

Environment

- 4.13. Conducting hygrometric tests requires that small quantities of gas be vented to the atmosphere. Once the activity has stopped, emissions would be reduced.

Safety

- 4.14. The industry undertakes extensive safety measures to ensure consumer safety and these will continue to be implemented. No benefits to safety from wet gas testing have been identified, other than a minor improvement to monitoring network condition upstream of the test points. However, the network downstream of these points is not covered and much of the network does not have test points at all. It would be very inappropriate for transporters to rely on data from these tests to demonstrate network integrity. All transporters are obligated to produce and comply with a Safety Case that is acceptable to HSE. The transporters' safety cases must include appropriate measures for network monitoring.
- 4.15. Conducting hygrometric tests involves operational personnel travelling and working on live gas installations often located on the public highway. Provided suitable precautions are taken, this does not generate significant safety risks but ceasing the testing reduces the degree of exposure to risk for both the personnel involved and the general public.

Security of Supply

- 4.16. The wet gas regime has no impact of security of supply.

Summary of costs and benefits

- 4.17. Reduction in consumers' bills of 4.5 pence per annum
- 4.18. Improvement in the accuracy of bills as compared to the current regime.
- 4.19. Minor improvement to safety exposure and the environment.

Distributional effects including social impacts

- 4.20. No specific distributional effects are created by the proposal, other than an improved distribution of costs from consumers currently receiving

disproportionate corrections to their bills to those consumers whose bills are currently not corrected.

- 4.21. Fuel poor and consumers in general will be equally affected.
- 4.22. The majority of fuel poor consumers will benefit if the scheme is discontinued. Typical fuel poor consumers who are being supplied with wet gas could incur bills that are 48 pence too high, based on a bill of £300. If the scheme is discontinued, fuel poor consumers will benefit from a reduction of 4.5 pence per annum, based on a typical bill of £300.
- 4.23. Large users may be affected to a larger extent in absolute terms but as a percentage of their bill, water vapour has the same proportionate effect as on other users. The current scheme is not beneficial to large users overall and it has not been possible to identify a cost effective scheme that could apply specifically to large users.

Conclusion

- 4.24. Discontinuance of wet gas administration is of benefit to consumers overall.
- 4.25. The current regime used to adjust consumers' bills does not provide any protection for the vast majority of consumers and it is not cost effective as a whole. Those consumers that are protected receive compensation which is usually excessive, which is to the detriment of other consumers.
- 4.26. It has not been possible to identify an economically viable alternative scheme that could provide appropriate levels of protection to all consumers. The cost of introducing a more comprehensive scheme would be prohibitive and totally disproportionate to the value of the issue it is trying to resolve.
- 4.27. The option to discontinue the wet gas scheme has been selected.
- 4.28. This will reduce industry costs by £1.0 million, and via cost pass through in the regulated industries and competitive market will reduce consumers' bills by 4.5 pence per annum.
- 4.29. There is a progressive move to plastic gas pipes which are less prone to water ingress. Around 50% of pipes in the current distribution network are plastic.