Scotia Gas Networks
c/o Inveralmond House
200 Dunkeld Road
Perth
PH1 3AQ

Telephone: 01738 456400
Facsimile: 01738 456415
email:

Lewis Hodgart
Policy Analyst, Gas Distribution
Office of Gas and Electricity Markets
9 Millbank
London
SW1P 3GE

Our Reference:
Your Reference:

Date: 23 June 2006

Dear Lewis

Initial thoughts on the reform of interruption arrangements on gas distribution networks

Thank you for the opportunity to comment on Ofgem's initial thoughts on the reform of interruption arrangements on gas distribution networks (GDNs).

The focus of Ofgem's paper has been to identify and seek views on: why Ofgem consider changes are required to the interruption arrangements on GDNs; the key principles that Ofgem would expect any changes to the arrangements to address; and to provide an overview of the model that has been developed so far by the GDNs. Finally, Ofgem is seeking views on the appropriate form of incentives that would apply to the interruption and National Transmission System (NTS) offtake capacity arrangements.

We have responded to each of the questions raised by Ofgem below.

Principles for reform

1. **Has Ofgem identified the key weaknesses of the current interruption arrangements for GDNs?**

Ofgem has identified a number of key weaknesses in the current interruption arrangements that it believes should be addressed going forward. These issues were first identified in March 2001 and were more recently discussed as part of the GDN sales process and, as a result, a licence obligation was placed upon all GDNs to implement revised interruption arrangements.

We understand the underlying economic rationale of Ofgem's concerns and the view that, potentially, the current arrangements have a number of weaknesses associated with them. Nevertheless, we have taken the opportunity to comment on some of the

weaknesses Ofgem has identified with a view to better understanding the extent to which these weaknesses arise.

(i) GDN's lack of control of the amount and location of interruption.

In essence, Ofgem believes that a GDN's lack of control of the amount and location of interruption leads to inefficiency and increased costs to customers, particularly since there are no specific mechanism or incentive to minimise the costs of interruption. It is suggested that, more control over the amount and location of interruption could potentially efficiency.

In considering this issue, it is important to recognise that GDNs invest in their networks to meet the 1 in 20 peak day firm demand. That is, it is assumed that all interruptible sites are off when considering the 1 in 20 requirements. Therefore, although it may be true that the GDNs have "no control" over the amount and location of interruption on their networks, it does not necessarily follow that this has resulted in significant additional costs for firm customers since interruptible sites are not considered when GDNs assess their investment costs.

The above is particularly relevant when consideration is given to interruptible sites located on areas of the network where capacity is in short supply. Ofgem has suggested that a weakness of the regime is that a GDN can require some interruptible sites on the network to have the potential to be interrupted on more than the standard 45 days i.e to become a network sensitive load (NSL) rather than investing in the network. Ofgem suggest that this arrangement is inefficient on the grounds that the DNs may under invest. Again, at a high level this may be a possibility. However, we believe that is unlikely to occur in practice since the reinforcement costs that would be incurred if these sites were to become firm would in all likelihood be greater than the sum of the discounts currently received by these customers. So, although investment bay be lower than otherwise this should be deemed as efficient. This is particularly so where only one site may be available to alleviate a capacity constraint. In this circumstance, the benefit of investment would only be received by that one site whereas the cost would be borne by all.

It is also important to note that the assessment of whether an interruptible site is a NSL is an annual and ongoing process. That is, the GDN actively considers the extent to which access to greater interruption is needed and, therefore, a site's designation as a NSL can vary from year to year. In other words, GDNs actively manage this process and therefore as far as NSLs are concerned, they do exercise a significant element of control.

(ii) Too much interruption is made available, increasing costs for customers.

Ofgem believes that since GDNs have no control over the number of sites that are interruptible, the exiting arrangements encourage large numbers of customers to be interrupted in order to avoid capacity charges when it is evident from recent years that the risk of interruption may be very low. Again, we can appreciate how this view may be reached given the low incidence of interruption in recent years.

However, the fact that these sites have never, or rarely, been interrupted is due to there not having been a 1 in 20 peak day, rather than the fact that they are not ever required. As we have identified above, GDNs do not invest to meet the needs of these interruptible sites and therefore, should a 1 in 20 peak day occur, interruption would be required.

We do recognise, however, that the number of days of interruption that is required for each site may be less than the potential 45 days available to it under the current arrangements. However, this would depend on the duration of the adverse conditions and would be likely to increase over time due to general load growth.

(iii) Lack of investment signals.

We agree that the ability of an existing site to move from being firm to interruptible annually does not provide long term investment signals for GDNs, however in reality, we believe the incidence of this occurring is low. In addition, to the extent that it is an issue a GDN's ability to contract further ahead for interruption services could, potentially, improve investment signals.

Ofgem believes that the application of a "set" price for interruption means than GDNs are unable to determine the costs of interruption compared to that associated with investment. We do not entirely support this view, but we do recognised that there may be occasions where differential charges for interruption may more accurately reflect the value of the interruption being provided. However, we also note that on a number of occasions, Ofgem suggests that there should be a clear link between what customers are paid to be interrupted and the costs they incur from being interrupted. We are unsure how this sits with the former view that prices should reflect a GDN's avoided investment and believe that if adopted, this approach would introduce considerable additional complexity.

Ofgem makes reference to the level of capital expenditure (capex) over the past price control period, stating that the total capex allowance for all the GDNs was £774m yet, in some cases, outturn capex has exceeded the allowance by a factor of two. Ofgem therefore suggests that this indicates that the scale of expenditure that would be affected by better signals about the trade-offs with interruption and buying NTS offtake capacity. We believe that the information provided by Ofgem in this context is insufficient to draw this conclusion and is based on the premise that any capex overspend is "inefficient" which is inappropriate and could, therefore, be misleading.

(iv) Poor signals about customers' costs of being interrupted and lack of product flexibility.

We agree that the current approach to interruption provides little scope for customers to indicate the full range of terms over which they would be willing to be interrupted. Ofgem believe that this may deter some sites from being interruptible. Equally though, we believe that there is a risk that a regime that allows extensive customer choice is inevitably more complex which itself could be a deterrent to customers' willingness to enter into interruptible contracts, particularly since the likelihood of interruption would increase. In other words, we believe that there is a balance to be reached between simplicity and customer participation. For example, if the future

interruption arrangements were perceived to be unduly complex or costly for customers, there would be a risk that they would be unwilling to offer interruption services to the GDNs. To the extent that this occurs, GDNs would need to invest in their networks in order to deal with any such reduction in interruption services available to them. In time this would increase prices to the generality of customers.

(v) Distributional impact of current arrangements.

Ofgem is concerned that since only firm customers pay capacity charges it is this category of customer that bear the burden of any potential inefficiencies associated with the existing regime. In other words, Ofgem is concerned that firm customers are paying for interruption. However, in our view this would only be the case where the GDN would not place any "value" on having the customer as interruptible, which as noted above is not the case. Nor do we accept that the present interruptible discount "overstates" the value of interruption on average. Clearly, to the extent that this is taking place, the effect of it would be magnified if charging arrangements were to introduce an increase in capacity/commodity split.

In summary, therefore, we believe that the concerns Ofgem has put forward to justify wholesale reform of the GDN interruption arrangements are overstated. We do not believe that the present interruptible discount has led to significant cross-subsidies across customer groups. We also do not consider that Ofgem have provided sufficient evidence to justify the assertion that there has been inefficient investment as a result of the present interruption arrangements. There is also a real risk that wholesale reform of the interruption arrangements could trigger substantial new investment on the networks. In particular, if the reforms resulted in a significant proportion of existing sites switching from being interruptible to firm, GDNs could be required to invest to secure those firm connections.

We therefore believe that any reforms to the interruption arrangements should be proportionate and should not involve wholesale change. It will also be necessary for Ofgem to allow any resultant capex requirements in the GDN price controls.

2. To what extent do interested parties consider the current arrangements have significant strengths, and if so, what are these strengths?

We note that Ofgem has reported that many shippers and large industrial and commercial customers have strongly opposed major changes to the current arrangements on the grounds that while they are not necessarily without shortcomings, they are simple, in their view cost effective and have worked well in ensuring security of supply. We would agree with this sentiment. Any significant change to a regime has the potential to introduce unforeseen consequences and cost. We therefore welcome Ofgem's commitment to undertake a full impact assessment.

3. Do you agree with Ofgem's principles of reform?

We note that Ofgem's principles of reform are based upon addressing the key weaknesses of the current arrangements that have been identified. In particular they focus upon ensuring that the GDN's receive efficient investment signals, that there is

reduced risk of undue discrimination and that, where possible, there is competition for the provision of interruption services. We agree that these are sound principles.

As Ofgem has identified, it will be clearly important to ensure that the benefits of reform of interruption should be balanced against the cost of implementing the changes and participating in the new arrangements. Likewise, we agree that it will be essential to ensure that changes to the GDN interruption arrangements take account of the NTS enduring offtake reforms where a GDN's decisions in respect of booking NTS offtake capacity will be influenced by the availability of interruption on its own network. In addition, it will be necessary to consider the effect of the reforms on GDN investment plans as part of the price control review.

Implementing Reform

4. To what extent do respondents consider that the model so far developed by the GDNs meets Ofgem's principles for reform?

Consistent with Ofgem's evaluation, we believe that the model that has been developed so far by the GDNs is consistent with Ofgem's principles of reform and is aimed at striking an appropriate balance between simplicity and customer participation. In particular, we believe that the administered, matrix approach aids simplicity when compared to a fully commercial approach, while delivering more choice when compared to the current arrangements. For example, it is proposed that shippers would have to specify the maximum number of days per annum that they would be willing to offer and their preferred split between the option and exercise fee.

Nevertheless, we recognise that at this stage the proposals are still at a relatively high level and that there are a number of aspects of the regime that need to be considered in more detail. Ofgem has highlighted some of the areas that need further development and consideration and we look forward to taking these aspects forward in the coming months. We also recognise that the charging methodology underlying the reform will be critical.

5. Has Ofgem identified all the key interactions with the enduring offtake reforms for the NTS?

We agree with Ofgem that the sequencing of the sale of interruption on the GDNs and the purchase of NTS offtake capacity by the GDNs will be critical. Since a GDN's requirements for NTS offtake capacity will be influenced by the volume and location of interruption on its own network, it will be vital that GDNs know the volumes and prices they will have to pay for interruption on their own networks before making commitments for NTS capacity at specific offtakes. However, as Ofgem has identified, to the extent that a GDN can actually arbitrage between the purchase of interruption on its own network it will need to understand the charges associated with both options to enable it to make these decisions. In other words, there are a number of key interactions that must be considered but, on balance, we believe that GDN interruption requirements should be procured first.

It is also clear that reform of the GDN interruption arrangements may result in an increase in NTS exit capacity to the extent that large numbers of customers decide to

switch from interruptible to firm loads. While recognising that this relationship is non-linear, this potential shift will need to be fully reflected in any targets set for GDNs under the offtake incentive regime.

Incentives for the GDNs in the next price control

Ofgem's initial thoughts on incentives under the enduring NTS offtake arrangements and GDN interruption reform is based on the rationale that there are immediate and clearly identified trade-offs to be made between these aspects of the regime and a GDN's own capex programme. While we agree that there are indeed interactions between these three elements, we are concerned that the physical and operational nature of the networks means that these interactions are extremely complex and are not on a like-for-like basis. Nor are the interactions the same for different parts of the network. For example, an increase/decrease in interruption on a GDN will not always result in a corresponding increase/decrease in NTS offtake capacity, it depends where in the network the increase/decrease is located. Furthermore, an increase in NTS offtake capacity does not only potentially interact with the amount of interruption. It also has an impact on the GDNs' diurnal storage capabilities within the network and, therefore, could have a knock on effect on other aspects of the regime such as the daily operation of the network and access to NTS flexibility capacity.

In other words, the interactions between: NTS offtake capacity (both flat and flexibility capacity); GDN interruption; a GDN's own diurnal storage capabilities; and a GDN's own investment decisions are very complex and interrelated to a varying degree. We would therefore be very wary of seeking to introduce separate incentive schemes on the GDNs in relation to the interruption arrangements and NTS offtake arrangements at this stage. The introduction of new industry arrangements inevitably bears the risk of unforeseen consequence. In our view, this risk would be further compounded if, simultaneously, a number of new incentive arrangements were introduced.

That said, we understand that Ofgem is keen to ensure that under the new commercial offtake and interruption arrangements, GDNs make the most efficient decisions where there are trade-offs to be made. We therefore believe that the focus of attention for the two and a half years of operation of the new commercial regime from October 2010 to April 2013 should be on understanding and reporting upon an appropriate range of outputs. Once a suitable set of data has been established, it would then be possible to identify the key interactions and set incentives that are clearly understood going forward. In our view, this approach would reduce the scope for potentially random, unforeseen outcomes that could be associated with setting incentives prior to gaining any experience of the new commercial regime. The recording of appropriate outputs in the meantime, would itself provide comfort to Ofgem that the appropriate trade-offs are being considered fully by the GDNs.

6. What is the appropriate form of an incentive on GDNs for the purchasing of interruption?

Ofgem has identified that there are a number of issues and complications associated with setting an incentive in respect of GDN interruption. As we have explained above, we believe the appropriate way forward would be to gain experience of the

new commercial regime for the two and a half years of the next price control period and, thereafter, set financial incentives. Particularly since, at this stage, the new arrangements are still at a relatively high level making the setting of targets that would be acceptable to the GDNs extremely challenging within the timeframe allowed.

However, given the uncertainties of the regime and the complex interactions of the many aspects of the enduring arrangements, initial thinking would suggest that if Ofgem were to pursue the introduction of a financial incentive for GDN interruption at this stage, an approach would be to include the interruption incentive as part of a bundle of measures associated with a wider incentive. For example, along the lines of the "IIP"-type incentive introduced for electricity distribution network operators, with limited ultimate exposure. Such an incentive could include elements in relation to quality of supply, DN interruption and NTS flat and flexibility capacity, as well as a customer satisfaction survey. Clearly, if this approach were to be adopted all aspects of interruption would need to be considered and included, such as the incidence and existing dependence on certain interruptible sites (NSLs) for location-specific constraint management purposes.

7. **Do respondents support the continuation of a similar incentive to the transitional incentive for GDNs purchasing of NTS offtake capacity?**

We would not support the continuation of a similar incentive to the transition incentive for GDNS purchasing NTS offtake capacity. As we have described in a recent letter to Ofgem, we believe that the transitional incentive has a number of key issues associated with it. For example, the GDN is exposed to a penalty the size of which is determined by many things outside its immediate control such as unforeseen yet genuine demand growth on its network; NTS capacity charges; and potential changes to calorific values. There is also no assessment of efficiency under the incentive. Therefore, if the transitional incentive were to be extended into the initial years of the enduring regime, each of these aspects would need to be addressed before it would be acceptable to us.

We therefore believe that, as stated above, the initial years of the enduring incentive regime should focus on gathering relevant, predetermined outputs. In this way, data and experience of the enduring offtake arrangements together with the interactions it has with DN interruption and the other price control incentives can be gained with a view to implementing a more specific incentive from the start of the next price control period. In this way, the key factors/behaviour that the regime is seeking to incentivise would be more clearly identified.

Failing that, we would advocate that any incentive be a component of a wider IIP-type scheme with a limited overall cap to a GDN's exposure, as described above.

Finally, Ofgem believes that there is an issue with the existing offtake capacity incentive in that it does not apply to short term purchases of NTS offtake capacity. In Ofgem's view, this distorts the GDN's decisions about whether to purchase longer or short-term capacity. While we recognise that the GDN has the ability to gain access to short term capacity, it is not guaranteed and therefore, we do not believe that it distorts a GDN's behaviour. Nevertheless, we believe it further supports our belief

that going forward, it would be appropriate to gain experience of the operation of the new commercial regime before seeking to introduce financial incentives.

Other issues

Ofgem has identified an issue associated with the potential market power of the NSLs located within the networks. We agree with Ofgem that this is an issue and there is a real risk that if, under the proposed new arrangements, these loads were to decline to offer interruptible services going forward, GNDs could be faced with delivering significant investment within the networks. In such circumstances it is possible that the GDN could be unable to deliver the required additional investment within the three year lead time envisaged under the current proposals.

Given the above, we believe that it will be necessary to include a separate arrangement for these legacy sites. That is, we firmly believe that if a legacy interruptible load that is strategically important to the operation of the network (NSLs) declined to offer interruption services, the GDN should have the ability to require these loads to be interruptible where the investment required to make the loads firm could not be delivered within the envisaged lead time or involve excessive cost.

More generally, if a large number of other (ie not NSL) sites opt to move from an interruptible to a firm connection, then it may not be possible to deliver the resultant investment within the three year time frame. The transition arrangements for interruption reform must therefore reflect this scenario. As a consequence, we believe that GDNs should retain the right to delay granting firm access rights in circumstances where the required interruption cannot physically be made in the three year window.

Impact Assessment

With the exception to the information requested under question 8, we have attached in appendix 1 to this letter our response to Ofgem's Impact Assessment information request. Our response to question 8 relating to the estimated costs of implementing the proposed reform will follow under separate cover.

Yours sincerely

Rob McDonald
Director of Regulation

Appendix 1

SGN Response to Appendix 2. Impact Assessment information request

Qu.5. Interruption for the past three years: Please see the attached spreadsheet. The total volume interrupted figures relate to an estimate of the site consumption at the time of interruption rather than the SOQ.

Qu. 6. Choice of interruption: There has been no supply/demand balance interruption within the last three years. However, in 03/04, there was an emergency NTS constraint interruption in the South Network. In that instance, the sites chosen for interruption were ascertained by a best fit of customer load sizes to required interruption volume algorithm within the DNCC Control room "SC95" database.

For constraint relief interruption, for the first occasion where there was a choice of more than one site to interrupt, the site(s) having the most beneficial effect in alleviating the constraint were interrupted. Any further interruption necessary involved interrupting the next most effective site(s), the site(s) taken off on the first day dropping to the bottom of the list. Subsequent days interruption involved the same rotating pattern, the aim being to carry out equal number of days of interruption between all sites in a group over time.

Qu.7. Number of sites and volume of interruption for this gas year: Please see the attached spreadsheet. The volumes of interruption figures relate to the total of the estimated realistic mid winter consumption rather than the contractual SOQs.

Qu. 8. Implementation costs. This information will follow under separate cover.

Qu. 9 Environmental Impact

In the event that the reform of the GDN interruption arrangements resulted in additional investment that would not otherwise have been undertaken, we believe that there would be a negative environmental impact through the manufacture of additional raw materials and the use of additional energy. In all likelihood, additional investment would also require physical excavation and disturbance of land which would also have an adverse environmental impact, the extent of which would depend upon the location and nature of investment required.

Qu. 10. Security of Supply

We believe that there is a potential tissue associated with the proposed reform of GDN interruption arrangements that could have an impact on security of supply unless addressed. This would arise if in particular legacy NSLs declined to offer interruptible services under the new arrangements and significant new investment is required by the GDN to resolve the issue but could not be delivered within the proposed lead-time.

Qu. 11. Health and Safety

We do not believe there should be would be any impact on health and safety.

Qu. 12. Distributional effects

Ofgem has identified the potential distributional effects arising from the reform, the extent of which will depend upon the annual quantities and price of interruption. However, Ofgem has not given consideration to the distributional impact on the reform that will arise from those existing interruptible sites moving to paying firm transportation capacity charges. The financial impact of such a change in charging arrangements is likely to be very high for some sites and therefore should be taken into consideration when assessing the distributional impact of the reform. We therefore believe that if significant increases in transportation charges are identified, consideration should be given to a phased implementation.

Qu. 13. Impact on small businesses

We agree with Ofgem that as proposed, reform of the GDN interruption arrangements is unlikely to have an impact on small businesses.

Qu. 14. Risks and unintended consequences

The introduction of reform always bears the risk of unintended consequences. This has been demonstrated following the introduction on NTS entry capacity reform where ongoing changes have been required to overcome unforeseen events and shortcomings of the regime. When considering reform of the GDN interruption arrangements, we believe that this risk is heightened given the complex interactions between the operation of the networks and the introduction of the enduring offtake arrangements, particularly if incentive arrangements are introduced prior to experience of operating under the new regimes. We would therefore urge Ofgem to ensure that the reform of the interruption arrangements is as simple as possible, particularly in the context of the incentive scheme to apply to the GDNs.