



*taking care of the essentials*

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Dear Mark and Duncan,

**RE: National Grid Gas and Electricity System Operator Incentives: Initial Proposals Consultation**

Centrica welcomes the opportunity to comment on the issues raised in the consultation on the Gas and Electricity System Operator Incentives. This response is on behalf of the Centrica Group excluding Centrica Storage Ltd. There is no confidential information contained within this response. We attempt to answer each of the questions posed in the consultation document where appropriate, although there are some areas of overlap and so some of the questions may not be individually addressed.

**Chapter 2 – Electricity System Operation Incentives**

**1. Do you agree with the assumptions used to forecast the various elements that make up underlying balancing costs?**

For the most part, we agree that the assumptions used are reasonable. We do have some specific comments, which are addressed in the responses to the individual questions below.

**2. In particular, do you have any comments on views on NG's forecast assumptions for cost drivers:**

- i. The behaviour of NIV during 2008-09 can be expected to be broadly in line with that seen during the current year;**
- ii. That the forward price is the most appropriate figure to represent the likely outturn wholesale price during 2008-09;**
- iii. That wholesale power prices either directly drive or act as an appropriate proxy to index certain balancing costs.**

i) From our perspective the overall level of NIV remains relatively uncertain, given the range of possible reasons for the apparent trend towards a shorter/less long market. It is possible that the limited running of opted-out LCPD plant in some periods (e.g. over the weekend, as seen so far in 2008) will reinforce this tendency towards a shorter market, and so we would assume that NIV will either remain in line with current levels or become shorter overall. We recognise that there is a possibility of changes to the cashout regime later in 2008, although we would not expect this to have a significant effect on NIV worthy of adjusting the forecast assumptions for this year's target.

ii) Given that an assumption has to be made about power prices, the forward price is the most appropriate figure to use – we would expect that the forecasts are revised as close as possible to the start of the scheme year so that the latest forward price can be applied.

iii) We would expect that wholesale power prices have a direct or indirect impact on most areas of the IBC. We have seen in the last few years, however, that costs seem to track wholesale prices quite closely when they are rising; conversely when power prices are softening BSUoS costs do not seem to come down at the same rate.

**3. Do you agree with the assumptions used to forecast Cheviot and Scottish constraint costs, and the costs associated with the forecast rise in Wind output in 2008-09?**

Events in 2007 have reinforced the need for the upgrade work on the Cheviot boundary, and we recognise that there should be longer-term benefits following the reinforcement work. We are comfortable with the estimate of Cheviot & Scottish constraint costs relating to export constraints – however, we are very surprised to see no mention of costs relating to an import constraint. We saw such an event in Sept/Oct 2007 and the high costs it imposed on the industry. While we agree that export constraints are the primary driver, import constraints cannot be ruled out. This is particularly the case over the summer when wind output is reduced and the bulk of the planned outage is likely to take place. We see the spectre of an IAE to address the additional potential NGET costs if any significant Scottish import constraints occur, and take the view that IAE's should be avoided if at all possible.

**4. Do you have any comments on our initial analysis of the likely impact of the introduction of the LCPD, in particular on the likely operation of opted-out plant?**

We have already seen in 2008 that some opted-out plant is following the pattern of reducing its output over weekends, increasing its Bid/Offer prices and targeting peak periods. We would expect this behaviour to continue for the time being, although as the post-LCPD market evolves, and affected parties learn from their own and others' behaviour, this may well change. We agree with NGET that there is considerable uncertainty around this issue (particularly as we do not own any opted-out plant). The mid-range estimate seems appropriate for the time being. It should be noted that as well as the opted-out stations, there are a number of opted-in stations that have not yet completed upgrade work, and so will be exacerbating the issues imposed by the opted-out plant for some time.

**5. Do you have any comments on the forecast range of incentivised balancing costs and BSUoS costs for 2008-09?**

We have seen from previous years that outturn costs can deviate from initial estimates based on a number of factors. The assumptions used in the forecasts, for the most part, do seem to be reasonable based on the changes and uncertainties identified. We would note that the increased wind and constraint costs will continue to be a problem in coming years, and that they perhaps give an insight into what the consequences of a 'Connect & Manage' charging environment might be. An increase in wind output, as shown in the NGET forecasts, is likely to push costs up in any case, and this would be greatly exacerbated if the wind output also necessitated a large volume of constraint management action by NGET.

**6. Do you agree with the main areas for efficiency identified by NG?**

It appears that the only main area for efficiency identified is in the area of frequency response, resulting from the implementation of 'efficiency measures' and improved algorithms. Without further detail on this it is difficult to agree or disagree with the extent and quality of the measures. We are also surprised that there are not further suggestions for efficiency measures, given that a greater focus on efficiency savings – for example a focus on examining options for differently managing the network - might be able to offset the unavoidable increases in other areas.

**7. Do you agree with the range of proposed scheme options? Are there alternative scheme structures that should be considered for 2008-09?**

We are comfortable with the structures presented.

**8. Do you support the use of indexes for the 2008-09 incentive scheme:**

We are comfortable with the general principle of indexation for those costs out of NGET's direct ability to control. We do have some specific comments and concerns as follows:

**- Do you agree with the proposed level of scheme target indexation for wholesale power price?**

Given that power prices are probably the key driver of overall BSUoS costs, we consider that an index is reasonable. Any indexing scheme is going to have an element of estimation associated with it, and the proposed £2m/£1/MWh index is a reasonable means of target adjustment. As indicated above, we believe that the index starting point should be rebased as close as possible to the start of the scheme year, rather than just using £48/MWh as a base, which is already out of date.

**- Do you prefer wholesale power price index option (a) or (b)?**

See above.

**- Do you agree with the proposed level of scheme target indexation for Cheviot outage weeks?**

We believe that the proposed index for the Cheviot outage is not appropriate. The work is forecast to last 30 weeks in 2008-09, and so to use the 2006-07 outage plan of 8 weeks as a base is rather strange. We would like to see an index based on the 30 weeks actually forecast, in the same way that the forward price is expected to reflect the outturn wholesale price of electricity. In the proposed indexation based on 8 weeks, there is only upside for NGET and we consider this to be inappropriate. We would also question whether there should be a different target adjustment for >30 weeks and <30 weeks, as the costs of overrun are potentially more significant.

**9. Which is/are your preferred scheme(s)? If 3 or 4, do you consider these should have a target indexed to power price and/or Scottish outage weeks or not?**

Our primary driver is reduction in or minimized increase in BSUoS costs – the smearback effect from the incentive scheme is a second-order consideration. With this in mind, we would be most amenable to the scheme with the tightest target – Option 1. However, we would amend the Cheviot indexation as discussed in Q8 above. We believe that risk to NGET should be on the higher side, in order to incentivise reduction in BSUoS costs as far as possible.

**10. Do you agree that longer-term development of systems that will reduce the cost and carbon impact of operating the system be supported? Which manner of funding do you consider to be the most appropriate?**

It is in Centrica's and UKplc's interests to develop such technologies. However, we do not consider that the costs of such development should be recovered through BSUoS, which is specifically designed to recover costs of proven technologies relating to system operation. Options 2 or 3 are more appropriate, and we would expect specific industry consultation and robust quantified cost/benefit analysis on each instance of funding being requested.

**11. Did you find the level of information within this consultation, and associated documentation and workshop, on our balancing and BSUoS costs forecasts for the current year and 2008-09 informative? What additional information should NG provide to explain better the costs and drivers?**

We were promised spreadsheets containing additional detail - to be published on the NGET website - and have not found these to be forthcoming. Otherwise the level of detail has been sufficient. A lot of the information in the appendix was repeated in the main document, and the two could have been amalgamated. We welcomed the bilateral discussions, and hope to be able to continue the working relationships going forward.

**12. Do you have any further comments on the analysis and information provided within the appendixes to this consultation or in the further documentation available on our website?**

See response to Q11 above

### **13. Do you have any further comments on any aspect of this consultation in relation to the Electricity SO?**

Centrica believes that there may be merit for future years in exploring the possibility of fixing the BSUoS £/MWh charge on an annual basis, based on NGET's forecast expenditure for the year. Any over- or under-recovery would be captured in the following scheme year via an adjustment to that subsequent year's tariff. NGET could then be incentivised on the (absolute or percentage) size of the adjustment factor required. This would remove some uncertainty from BSUoS charging, although would remove short-term cost reflectivity. We would recommend that this possibility is taken up in the BSSG CUSC sub-group, or another appropriate forum for discussion.

### **Chapter 3 – Gas System Operation Incentives**

As a general point we would be particularly concerned at any developments in Gas System Operation Incentives which reduce National Grid's exposure to risk given that the cost of capital has been fixed until 2012. National Grid has in a number of instances proposed measures which increase their reward and reduce their risk exposure through more of an increase in caps than collars, widening of the existing differentials between upside and downside sharing factors, or proposed leaving incentives alone when a tightening would seem more appropriate but has only in very few instances made proposals which increase risk exposure. We would want to see proof that some of the payments from past or current incentives have been invested to produce further improvements rather than being passed directly to shareholders before even maintaining rewards at their current level.

While it may be appropriate in some cases to reduce risk exposure the overall package should result in broadly the same risk exposure which is consistent with the cost of capital which has been set. This is one of the reasons why Centrica prefers longer duration incentives where it is possible to set these for the duration of a price control but believes that National Grid's initial proposals raise a number of important issues. We therefore suggest a fundamental review of not only the details but also the basic principles of System Operator incentives to be required before committing to this.

Work on this review should start immediately the current consultation is completed, beginning with a clear statement of the relationship between the cost of capital set in the TO price control and the overall level of risk which is implied for the SO incentives. Once this has been established there should be adequate time allowed for detailed analysis before setting the SO incentives for 2009 onwards in order to ensure that these encourage and reward appropriate behaviours and transparency by the System Operator to the benefit of all stakeholders.

Centrica believes that the System Operation Incentives should only be for those activities which create benefit for consumers or shippers in terms of reduced costs or are associated with a level of transparency which enables forecasting of future costs with a reasonable degree of accuracy. In most cases additional benefits such as moving nearer to absolute certainty of future costs or better sharing of risks and rewards between stakeholders are of secondary importance or should be left until the next price control is determined. As such appropriate incentives are those

- 1) which are designed to encourage behaviour in National Grid and/or market participants which minimises both those costs which are passed through to shippers and those which shippers bear as a result of their use of the system
- 2) where the target has been set such that the outcome generally lies within the range of the cap and collar.

For a fundamental review of System Operator incentives we would in particular be concerned regarding all three elements of shrinkage gas (compression, CV shrinkage and un-accounted for gas), residual balancing and demand forecasting but there are also issues with operating margins and information provision which need to be addressed. Having said this we do think that it is appropriate to set incentives

for 2008/09 such that the overall level of risk and reward is broadly similar to that for 2007/08 and suggest some incremental changes which could be made.

Centrica would also generally prefer to see a move towards symmetric caps/collars and sharing factors, this symmetry should normally be achieved through widening collars and increasing downside sharing factors rather than reducing upside sharing factors. There are, however, a few specific cases such as operating margins where it is entirely appropriate that a unilateral incentive is applied or the price incentive for residual balancing where sharing factors are asymmetric because the real costs incurred by shippers are not linearly related to the price which Grid sets in the market.

In principle we would also support and wish to propose measures which increase information transparency, both to allow market participants better visibility of performance and to improve our ability to respond to future consultations of this type. We would suggest that a monthly or quarterly reporting cycle should be introduced together with daily reporting of shrinkage and linepack information.

Centrica is aware of the response which is being submitted by the Gas Forum and is in general agreement with the contents of that response. The comments below are intended to highlight areas which are of particular concern to Centrica and, in a very small number of cases, indicate where Centrica would reach a different conclusion from that of the Gas Forum.

**Q13. Do you agree with the approaches used in forecasting the various elements that make up NTS shrinkage?**

Compression Energy – Centrica is not convinced that past history is a good predictor of future requirements for compression and would refer to work which has been done by Gas Forum. Centrica is also unconvinced of the linear relationship, asserting that proportionately more compression energy is required when St. Fergus flows are high and agreeing that there is a high degree of uncertainty over the extent to which new supplies will produce a much lower requirement for compression both for St. Fergus itself and to generally move gas around the system going forward. With regard to volume the total used for compression energy in April to December 2007 was over 20% lower than in the same period in 2006, although detail for each compressor station has not been published we suggest that target volumes for 2007/08 were set too high and 2008/09 is likely to see a further reduction in requirement. See the appendix to this response for more detail on this. There is also a possibility that there is a perverse implication of the capacity and linepack incentives which encourage higher levels of compressor usage than would otherwise be required.

CV Shrinkage – Centrica understands the issues involved with this and agrees with the Gas Forum response.

UAG – Centrica is very concerned that the underlying causes of the recent increases in UAG do not seem to be understood. Firstly this is an increasing cost for shippers and secondly when the causes do become known there is a risk for RbD shippers of exposure to previously unknown costs. Ideally the form of incentive here should encourage further work and sharing of results from existing work with shippers at an early stage. This could be done through a volume target which is a percentage of total system throughput, the percentage would reduce annually unless National Grid provided a satisfactory explanation of at least one of the causes of UAG and could justify a new percentage to be set.

**Q14. Do you support the continued linking of shrinkage target volume with flows at the St. Fergus entry point, and do you support the move to an increased number of bands?**

With regard to the link with St. Fergus Centrica believes that with St. Fergus playing a less significant role in the overall system the shrinkage volume target should be based on a weighted average of flows at St. Fergus and Easington although further statistical analysis is required to see if more terminals should be included. The reductions in OUG requirements in recent years show the effect of a more diverse supply pattern (although we would like to see individual compressor station data for 2007/08 to date in order to confirm this). The diversity is likely to increase in future years as supply at Isle of Grain and Milford

Haven increases and the effect of this is likely to be further reductions in OUG requirements but the actual level is difficult to predict. Centrica does, however, support the move to an increased number of bands.

**Q15. Do you agree that the SO should not be incentivised on CV shrinkage that is outside of its control? Please comment on whether you believe it is necessary for Ofgem and BERR to review the continuing appropriateness of the CV capping rules in the gas (Calculation of Thermal Energy) Regulations?**

Centrica understands the issues involved with this and agrees with the Gas Forum response.

**Q16. Do you have an objection to the proposed interim GCRP and ECRP methodologies for 2008/09? If so please explain why and outline your suggested alternative.**

Yes, Centrica does object to the proposed interim GCRP and ECRP. Centrica believes that National Grid has been able to deliver significant savings against the current reference prices and that as such the reference prices should be tightened. Therefore Centrica considers that this is an area where an increase in risk exposure for National Grid may be appropriate, provided that there is a commensurate increase in potential reward, and a methodology for GCRP based on a mixture of prices nearer to the time of delivery should be adopted. We agree with the Gas Forum's suggestion of 75% forwards, 25% [seasonal average] prompt in order to make the incentive more challenging.

The above suggested methodology is clearly defined and would move the target closer to the likely range of outcomes hence the result is more likely to be between the cap and collar, thus providing National Grid with a real incentive to reduce costs. The level of predictability would remain roughly the same and regular, timely information could be provided which would increase transparency, giving both National Grid and shippers the ability to take a view of their exposure and manage the risk.

We are not yet convinced regarding ECRP, especially with regard to the £8.50/MWh uplift. Otherwise we agree with Gas Forum comments.

**Q17. Do you support the proposal to establish the proposed enduring GCRP and ECRP methodology arrangements into the National Grid's GT Licence for an extended period, (to avoid the need for interim arrangements in the future) regardless of the duration of any incentive scheme?**

In view of the statements that National Grid was 'unable' to buy gas for April 2008 onwards until January 2008 Centrica does support the principle of establishing enduring GCRP and ECRP methodologies. Centrica does not, however, believe that the current GCRP methodology is appropriate and also considers that it is too early to establish an ECRP methodology and that it may take a few years for this to be the case.

**Q18. Which of the scheme options do you believe provides the most appropriate incentive arrangements for the management of NTS Shrinkage?**

Centrica would prefer a common structure for the price incentive to apply in parallel with the duration of a transmission price control. Within this time period, however, there would need to be room for annual variation in the volume target. Hence Centrica would normally favour options D and E over the other three options. At the present time, however, Centrica favours options A and B as these allow for more appropriate incentive arrangements for the management of NTS Shrinkage to apply from April 2009.

Secondly, however, Centrica believes that a more aggressive incentive is appropriate and that there are benefits for all stakeholders in reducing shrinkage costs, therefore Centrica believes that a modified form of option A, with more symmetry in the sharing factors, provides the most appropriate price incentive for 2008/09, pending the more fundamental review of shrinkage. We are concerned that the present form of target allows for a situation in which the volume target could be exceeded but the price of the gas is favourable such that the reward cap is still reached. This does not seem correct and there should be an emphasis on energy efficiency such that there is a need for room for reduction in the volume targets from

year to year and this should be possible depending on the outcome and pace of change in the gas regime in relation to such factors as utilisation of new infrastructure/supplies and exit reform.

**Q19. Do you agree that the incentive cost target should be constructed in the way proposed in this consultation?**

Centrica believes that there is a need for a separate Operating Margins (system reserve) incentive and the proposed cap and floor may be appropriate. The proposed form of incentive with 100% sharing factors is no longer appropriate and should only apply to regulated LNG costs where the floored market-related price requires the use of 100% sharing factors. Where OM services are provided on a competitive basis lower sharing factors which recognise this form of service provision should be introduced from April 2008. Centrica does agree that all appropriate physical locations should be able to compete for this on equal terms.

**Q20. Which of the scheme options do you believe is the most appropriate way to incentivise the costs of utilising OM?**

Centrica prefers option A as this is expected to minimize the cost to shippers, although this has a risk of higher costs as it will vary with actual utilisation of OM.

**Q21. Do you agree that a one year scheme is appropriate pending a potentially more fundamental review of the residual balancing incentive going forward?**

Centrica would have preferred some alternatives to have been proposed as part of this review. It appears that a one year scheme is the only option available.

**Q22. Which of the scheme options do you believe provides the most appropriate incentive arrangements for the residual balancing activity for 2008/09, and what are your views on the potential removal of the linepack element of the incentive?**

Centrica believes that the linepack incentive in its present form should be removed pending the outcome of a more fundamental review of the residual balancing activity.

The linepack incentive is very difficult to achieve at the present time and the tolerance band needs to be widened or else this part of the incentive should be removed. It was introduced at a time when most variations in linepack resulted from upstream failure and was an attempt to stop such failures from impacting marginal prices on more than one gas day. Variations in linepack now result not only from upstream failure but also from a number of other causes which produce a need for action by NG within a gas day. We believe that the simple payment for the day for keeping linepack change within limits is crude and has little impact on NG's behaviour although sometimes NG could incur costs to preserve the incentive which it then passes on to Users/Consumers by setting prices. Operationally NG has minimum and maximum linepack values which it must work within and a single end-of-day figure is inappropriate for a complex system. Greater visibility of NG actions in this area could be more valuable than paying them the incentive to act appropriately. The money spent on the Linepack Incentive would be better spent on the price incentive, thus better targeting NG's efforts for a similar cost to Customers.

Hence Centrica favours scheme B (but with different caps, collars and sharing factors) although we would like to see more visibility on the management of daily linepack, in terms of both the profile of total system linepack within day and details of zonal linepack. However both the caps and collars in scheme B should be tightened to reflect the greater scope which NG would have to manage costs without a linepack incentive and this is an instance where asymmetric caps and collars are required. An example of an alternative price incentive scheme is:

Daily Cap £8.5k  
PIR 7%  
Daily Collar £40k

There should also be a move away from symmetric annual caps and collars, with a reduction in the annual cap to reflect the reduction in daily total cap from £10k to £8.5k but an increase in annual collar to reflect the greater daily collar than cap. The suggested annual cap is £2.9m and annual collar is £4m.

**Q23. Do you agree that the current Demand Forecasting incentive should roll forward to 2008/09 pending a more fundamental review of the residual balancing incentive going forward?**

Centrica believes that the current Demand Forecasting incentive should be tightened for 2008/09 whether or not there is a more fundamental review of the residual balancing incentive and demand forecasting incentives going forward. We suggest that an immediate reduction of the demand forecasting bandwidth to +/- 3% would be appropriate with a view to splitting the incentive in future years between demand which is mainly sensitive to weather (NDM) and that which is more sensitive to price or other economic factors.

**Q24. Do you think it is appropriate to widen the data items that are subject to incentivisation to include the additional data items outlined in the proposal?**

Centrica does not believe that there is a need to incentivise the SO to provide accurate information. There is a built-in natural incentive already – the better the information that the SO publishes, the more appropriate the behaviour of market participants. It is already in the SO's best interests to publish accurate and timely data and we do not see the need for a formalised incentive. We also do not see why the benefit levels of twice and three times the investment cost should be perpetuated.

**Q25. Do you agree with the proposed scheme design in terms of timeliness and availability elements, and the provisions for planned upgrades / monthly measurement intervals?**

As for question 24 Centrica does not believe that there is a need to incentivise the SO to provide accurate information. There is a built-in incentive already – the better the information that the SO publishes, the more appropriate the behaviour of market participants. It is already in the SO's best interests to publish accurate and timely data and we do not see the need for a formalised incentive.

**Q26. Which of the proposed performance improvements and associated incentive schemes do you believe is most appropriate?**

Centrica does not believe that either option is appropriate and so considers that option A is preferable as a one year scheme allows for the possibility for review of this incentive sooner.

**Q27. Are there any other points that you would like to raise in relation to the setting of the Gas SO incentives from April 2008?**

Centrica believes that the SO is currently more focused on the residual balancing incentives themselves rather than efficient and economic operation of the system. Therefore provided the information which the SO uses in order to make decisions is also made available to shippers, the SO should be given more freedom to act as they see fit. If shippers then believed that the actions taken by the SO were not efficient and economic they could make representations to Ofgem in order to force investigation afterwards.

Centrica welcomes the change in process for the setting of the Gas SO incentives from April 2008. Market participants should also be able to propose modifications as well as engaging in constructive reviews of the incentives themselves. In order to do so, however, the level of information transparency needs to be increased.

If you have any queries in relation to this response, please do not hesitate to contact us.

Best regards,

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## Appendix: Analysis of National Compressor Fuel Usage data

### **St. Fergus supply vs. National Compressor Fuel Usage**

The data supplied by NG as part of this review suggests that NCFU increases with St. Fergus supply, which is hardly surprising, and further that this relationship is linear. Firstly use of a linear relationship implies that NCFU would be zero at about 600 GWh of supply from St. Fergus, which is clearly not the case and a power, polynomial or exponential relationship generally gives a better fit (in terms of R-squared) and residual at extreme values of St. Fergus supply.

Secondly, in order to assess the impact of the introduction of supplies from Langedale and BBL the data series has been split at 1<sup>st</sup> October 2006. The results show that in the normal range of St. Fergus supply (700 – 1300 GWh/day) more compressor fuel has been required at the same level of St. Fergus supply since 1/10/06 than before that date. However the average level of St. Fergus supply has fallen from 1,217 GWh/d in gas year 2005/06 to 1,068 GWh/d in gas year 2006/07, implying an average reduction in compressor fuel usage of 3.277 GWh/d if this is dependent on St. Fergus supply alone.

Note that the data contains 4 outlier points where St. Fergus supply has fallen below 600 GWh, the results are similar but stronger if those points are omitted from the analysis.