

National Grid Gas (NTS) System Operator Incentives

Initial Proposals Consultation Report

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Executive Summary

This Consultation Report summarises the industry responses to National Grid Gas's Initial Proposals consultation and sets out our views on the issues raised. The report should be read in conjunction with our consultation document and industry responses, which can be found on our website¹.

The key highlights are summarised in the bullets below

- Responses expressed mixed views on which of the two residual balancing schemes in Initial Proposals was preferred and therefore we recommend a scheme should be developed which contains elements from both of the previously proposed schemes;
- Responses showed general support for establishing a new longer term UAG incentive and therefore we recommend a new UAG incentive should be set up, based on reducing the gross levels of UAG over the longer term;
- Responses gave support to the shrinkage proposals and we recommend that the existing Shrinkage incentive should revert back to an annual scheme, with caps and collars as proposed in Initial Proposals;
- Responses expressed mixed views regarding moving to cost pass through for Operating Margins services for 2009/10, but were generally supportive of retaining the utilisation element. Given continued uncertainty around the outcomes of the contestable tender process in January, we propose that OM holding costs should operate on a cost pass through basis for 2009/10 and the utilisation scheme be rolled forward;
- Responses showed support for retaining the environmental incentive with the suggested improvements. We therefore recommend changing the price strength of the Environmental Incentive to include the environmental impacts of all polluting components of natural gas.
- Responses generally acknowledged the new Demand Forecasting risks highlighted and a majority of respondents supported tightening the current target from 3.5% to 3.2%.
- Based on the responses we recommend rolling over the data publication incentive to ensure the current performance standards are

¹ <http://www.nationalgrid.com/uk/Gas/soincentives/docs/>

maintained, and that the website improvement funding provisions be removed.

Section 1 Introduction

1. National Grid operates the Electricity and Gas Transmission Systems in Great Britain. We are subject to a number of financial incentive arrangements which encourage us to minimise the overall cost of balancing to consumers and to support the efficient operation of the wholesale gas and electricity markets. A number of these incentives expire on 31st March 2009.
2. This year at Ofgem's request, National Grid has again led on the development and consultation of Initial Proposals for SO Incentives. National Grid Gas's Initial Proposals consultation was issued on 12 November 2008 with responses requested by 19 December 2008.
3. 6 responses to have been received and these are published in full on our website. Overall these responses are generally supportive of the package of proposals contained in the Initial proposals document.
4. We would like to take this opportunity to thank all parties who took the time to engage in the process, either through providing comments at industry or bilateral meetings and/or via the formal responses.
5. This Consultation Report provides an overview of the questions in our Initial Proposals, the industry responses to them and sets out our views on these responses. Ofgem is also considering the consultation responses, and the contents of this report, in order to inform the development of Final Proposals for System Operator Incentives from April 2009.
6. Ofgem's Final Proposals (and the required Statutory Licence amendment notice) are expected to be published in late February in order that the potential Licence amendments can be implemented ahead of 1 April 2009.
7. We have received positive feedback on this year's consultation process with the earlier start to the process allowing a good level of debate.
8. The responses received contained some additional feedback for consideration for incentives in future years. This feedback will be input into next year's consultation process.
9. The remainder of this document is structured as follows:
 - Section 2 – Residual Balancing
 - Section 3 – Shrinkage
 - Section 4 – Operating Margins
 - Section 5 – Environmental Incentive
 - Section 6 – Demand Forecasting

- Section 7 – Data Publication

10. Copies of all consultation material and responses can be found on the SO Incentives sections of our website at the following address:

<http://www.nationalgrid.com/uk/Gas/soincentives/>

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Section 2 Residual Balancing

Context

11. In this year's consultation National Grid has invited industry views on the two components of the residual balancing incentive and whether they interact to drive the desired behaviours from the System Operator.
12. A key area was the balance between the Linepack Measure (LM) which incentivises us to keep linepack within a tight commercial tolerance, allowing for correct cost allocation between parties, and the Price Performance Measure (PPM) which incentivise us to minimise our impact on the market.
13. The Initial Proposals consultation document presented two examples for potential residual balancing schemes. Comments were invited on these schemes, the scheme parameters and the whether there was a need to annually review this incentive.

Summary of Responses

14. The responses showed a broadly equal split of preferences between the two schemes proposed in the Initial proposals document. One response stated that the need for change had not been demonstrated.
15. Supporters of both schemes expressed the view that the scheme they supported would reduce the role and impact of residual balancing.
16. All of the responses requested an annual review of the residual balancing scheme.
17. Parties welcomed National Grid's decision not to include an Intra day energy transfer product in Initial Proposals. There was however some support for further development and consideration of the concept separate from Incentive developments.

National Grid's view

18. A common thread throughout the responses was the clear objective of minimisation of the role for the residual balancer, although parties had differing views on the scheme which would best achieve this. Given the range of views National Grid recommends a scheme which comprises elements from both of the previously proposed schemes.
19. National Grid believes that the following list contains the key aspects that should be included in an incentive scheme.
 - A widening of the linepack target from 2.4 to 2.8 mcm

- Increase the focus on price performance by transferring some of the value from the LM into the PPM to strengthen the incentive to minimise residual balancing actions
- The linepack measure should remove any incentive to fine tune linepack but should penalise the carrying over of large imbalances between days.

Section 3 Shrinkage

Context

20. The most significant change proposed to the existing Shrinkage incentive is the proposal to set up a separate Unaccounted for Gas (UAG) incentive to allow an increased focus on UAG. The proposed incentive was based around the gross level of UAG with a target set based on historic average outturn which is reasonably consistent year on year. Industry feedback was invited on whether a separate UAG incentive should be introduced, whether parties supported the proposed scheme and whether there were any alternative suggestions for incentivising UAG.
21. During this year's consultation process, National Grid has reviewed the compressor fuel use (CFU) modelling approach and the potential variables that could be used as target drivers to remove the impact of external variables on the target. Initial Proposals presented National Grid's CFU forecast and proposed target driver. Industry feedback was invited on the forecast, target driver and whether the target driver should be described as a continuous function or should be banded.
22. In Final Proposals for 2008/9 the Gas Cost Reference Price (GCRP) was set until the end of the price control period. In this year's consultation proposals for setting an equivalent Electricity Cost Reference Price (ECRP) and uplifts to the GCRP and ECRP were made.
23. For the cost minimisation Shrinkage Incentive it was proposed to pass through the outturn UAG volumes² and to increase the caps and collars reflecting potential stretch performance in all areas. Feedback on these issues and whether the scheme should be set on an annual or quarterly basis were invited.

Summary of Responses

24. Responses generally showed support for setting up a separate UAG incentive based on the gross levels of UAG. There were a few comments on the scheme parameters, these are summarised in the bullets below:
 - i. Set the scheme for less than the proposed 5 year duration (3 responses)
 - ii. Set the UAG volume target on a rolling average of X years or the lowest from the last five years (2 responses)
 - iii. Include some downside risk in the scheme, possibly with a collar (2 responses)
 - iv. Price the value of the incentive on quarterly SAP prices (1 response)

² Although UAG volumes are subject to the proposed new incentive, the shrinkage provider still needs to purchase the outturn UAG volumes and it is appropriate for the procurement of these to be subject to the normal procurement efficiency incentive.

25. Responses showed support for the compressor fuel forecast and use of the St. Fergus target driver for 2009/10. There were however comments that the use of this driver may need reviewing in the future as the influence of the St. Fergus terminal on CFU may reduce. All of the responses showed support for applying the target driver on a continuous rather than banded basis.
26. There were mixed views on whether the incentive should operate on a quarterly or annual basis.
27. Responses supported the passing through of the outturn UAG volumes through the shrinkage incentive.
28. Responses showed support for reviewing the GCRP uplift although views were mixed on whether this should be done on an ex-ante (storage) basis or set ex-post. One response expressed concern that an ex-post basis would introduce volatility into commodity charges.

National Grid's view

29. Given industry support for a new way of incentivising UAG, National Grid recommends introducing a new incentive to reduce gross levels of UAG. We believe that the incentive should be set for 5 years to allow time to plan the necessary work, to carry out this work and for any benefits to be reflected in outturn UAG and hence for a return on the costs incurred to be recovered.
30. Given that any activities undertaken to reduce gross levels of UAG will be undertaken at National Grid's risk, we continue to believe that the scheme should operate on an upside only basis. We believe that the target volume should be set based on the average of the available historic data set.
31. Given the responses, National Grid recommends reverting back to an annual Shrinkage Incentive³ with the caps and collars and other elements of the scheme as contained in Initial Proposals.
32. We recommend setting the GCRP Uplift on an ex-ante basis using storage costs as a proxy for the costs of managing volatility as this is the existing basis and avoids introducing the risks of volatile prices under an ex-post model.

³ The scheme would operate on an annual basis but would consist of quarterly volume and price targets.

Section 4 Operating Margins

Context

33. At the last Transmission Price Control, National Grid accepted an obligation in Special Condition C25 of its Gas Transporter Licence, to use reasonable endeavours to promote competition in the provision of OM by 1 April 2009. National Grid has worked throughout 2008 to design a contestable framework and is running the first fully open contestable tender in January 2009.
34. With the uncertainty inherent in establishing a new market with new types of providers and uncertainty over the treatment of the currently price regulated service providers, National Grid has not been able to produce a robust forecast of costs which could be used to set an incentive target.
35. In Initial proposals, National Grid therefore proposed passing through of holding costs (subject to Ofgem scrutiny) and retention of the existing utilisation cost incentive. The questions in the Initial Proposals document invited views on these proposals and invited alternative suggestions on how OM could be incentivised for 2009/10.
36. Subsequent to Initial Proposals National Grid has written to Ofgem to seek guidance on the prices that should be assumed to apply for the LNG sites for 2009/10 onwards.

Summary of Responses

37. The responses were split between parties supporting pass through of holding costs and those supporting retention of some form of cost minimisation incentive. Concerns over a cost pass through scheme generally related to potentially increasing costs in a contestable world and the lack of control that parties had over the OM volume requirement and the associated costs of procuring this volume.
38. Although there were no alternative proposals for new incentive arrangements two responses suggested the concept of schemes which treated contestable and non contestable (i.e. LNG Storage) costs separately.
39. All of the responses supported the retention of the utilisation incentive, although one party noted that the utilisation incentive may need to be reviewed in a contestable world to ensure that the overall OM incentive structure incentivised the correct behaviour by National Grid.

National Grid's view

40. National Grid recognises the industry concerns about the unpredictable impact of the contestability on OM costs. Whilst National Grid believes that

cost minimisation remains an appropriate structure for an OM incentive going forward, given the level of uncertainty it not possible to set a reasonable target of costs to apply in the forthcoming incentive year.

41. In terms of separating the incentive for 2009/10 between contestable and non-contestable providers, National Grid had considered the potential for this but had not identified any arrangements that avoided creating perverse incentives on it regarding procurement between the two groups of providers depending on which offered the more attractive incentive arrangements.
42. Given the lack of alternative options, National Grid recommends cost pass through of holding costs, subject to regulatory oversight, and rolling forward the current utilisation incentive for 2009/10.
43. Following the introduction of contestable arrangements, National Grid believes that it would be appropriate to review the incentive arrangements for OM in light of the new providers that may have come forward. These arrangements would need to include consideration of the balance between holding and utilisation costs to ensure the arrangements provided the correct overall cost minimisation incentives.

Section 5 Environmental Incentive

Context

44. The Environmental Incentive on venting from gas driven NTS compressors was introduced by Ofgem on 9 September 2008 and was backdated to apply from 1 April 2008.
45. Given the limited period over which the incentive had operated National Grid did not propose any fundamental changes to the structure of the incentive in Initial Proposals.
46. National Grid did however propose updating the target vented volume to include the outturn from calendar year 2008 (once available) and presented two alternative approaches on how the environmental impact of any vented volumes should be calculated (one based on the methane component of natural gas and the other on all of the polluting components of natural gas).
47. Separate to the Incentives consultation process Ofgem issued a formal information request to National Grid on the steps that would be required to monitor venting from the electric drive compressors. National Grid's response has been published and is available on the National Grid website⁴.

Summary of Responses

48. Five of the responses received commented on the Environmental Incentive. All supported using historic data to set the target but there were differing views on how this should be done. Three parties supporting using an historic average (although 2 of these parties noted that an adjustment for electric drives may be required). The other two responses suggested using the lowest or second lowest value from the historical outturns as the target.
49. All of the responses that commented on whether the incentive should be set based on all components of natural gas or just the methane component supported a move to include the environmental impact of all of the components. Two parties suggested that the cost of carbon in the scheme should be based on market prices rather than Defra's shadow price of carbon.
50. There were a number of other comments/questions on the electric drive compressor installation programme, which although are not directly related to incentives issues are addressed separately at the end of this section.

⁴ <http://www.nationalgrid.com/NR/rdonlyres/98D84A03-AE6F-416D-AE5C-06FEA0360356/30883/Reportonmeasuringventingfromelectriccompressors.pdf>

National Grid's view

51. As the drivers affecting the variability observed in the previous annual vented volumes have not been identified, National Grid does not believe that it is appropriate to change the methodology for setting the target from the average to the lowest⁵ value from the last X years.
52. National Grid agrees with the industry that the value of the incentive should reflect all polluting components of natural gas and therefore recommends that the existing incentive be changed as proposed in Initial Proposals.
53. National Grid has published its response to Ofgem's information request on monitoring venting from electric drive compressors. Should Ofgem decide to extend the existing incentive to electric drive compressors, National Grid would look to work with Ofgem to determine what adjustment would be required to the existing target which has been set based on the historic venting from the gas driven compressors only.

Electric Drive Compressors

The following paragraphs have been added to clarify the drivers behind the electric drive programme and how it interacts with incentivisation of compressor venting.

54. The installation of electric drive compressors was agreed as part of the last Transmission Price Control Review and their installation is not being driven or influenced by the introduction of the environmental incentive.
55. The environmental incentive provides focus on operational decisions on whether to keep compressors on standby (and incur costs associated with running ancillary equipment) or to vent the compressors and allow these ancillary systems to be switched off. The incentive is not designed, or sufficient in magnitude, to incentivise us to consider potential CAPEX investments as alternatives to venting to atmosphere.
56. Installation of electric drive compressors does not have a detrimental impact on security of supply in the event of a power supply loss as existing gas units are being retained to ensure resilience.
57. The gas generators on a gas powered compressor combust natural gas and will therefore produce more combustion emissions than an equivalent electric drive unit. However when either type of compressor is depressurised, units of the same size will vent the same amount of pipeline natural gas, regardless of what machine is driving the compressor wheel. It is this venting that is targeted by this incentive.
58. Should the Felindre, Peterstow and Lockerley compressor sites be added into the incentive scheme there would need to be an increase in the target volume as these are not included in the historic data. Given the low relative running hours of these sites, it is expected that this adjustment would be small.

⁵ Or second lowest

Section 6 Demand Forecasting

Context

59. The data publication incentive was set up in October 2006 and incentivises National Grid on the accuracy of the 13:00 day ahead forecast of total system demand.
60. In 2007/8 the target absolute demand forecast error under the incentive scheme was 4%. This was reduced to 3.5% for 2008/9.
61. In Initial Proposals National Grid highlighted market developments in 2009/10 which would pose a significant new risk to the accuracy of our demand forecasts. These risks being the commissioning of the Aldbrough mid range storage site and flows from the LNG terminals at Milford Haven which will impact on demands for storage refill and exports via the Interconnector. Given these new risks National Grid proposed tightening the target to 3.2%.
62. National Grid asked whether parties supported the proposed scheme and whether an incentive should be set for more than a single year.

Summary of Responses

63. Five of the six responses to the Initial Proposals consultation commented on Demand Forecasting.
64. Of these five responses, three supported a target of 3.2%, one suggested that a target of 3% would be more appropriate as they did not believe that the new storage and LNG flows would affect National Grid's demand forecasting accuracy. The other response stated that a target of 3.2% would be appropriate if there was significant activity at Aldbrough and Milford Haven, but that they would suggest a target of 3% with changes to the downside sharing factor to reduce the impact on National Grid in the event of significant activity at Aldbrough and Milford Haven.
65. Of the five responses, four showed support for an annual review of this incentive. The fifth response stated that if the incentive was set for more than one year, that this should be done with a decreasing target.

National Grid's view

66. Given the support from a majority of responses and the genuine new risks that impact Demand Forecasting in 2009/10, National Grid recommends the current scheme is retained with the target tightened to 3.2% target.

Section 7 Data Publication

Context

67. The data publication incentive was established in October 2006 and successfully delivered improvements to the timeliness of publication and the availability of key data items.
68. Following industry consultation, the incentive for 2008/9 was changed to focus on maintaining the prevailing levels of performance at the time, as opposed to investing to seek further improvements.
69. In the Initial Proposals consultation document, National Grid asked whether the existing incentive arrangements, designed to maintain current levels of performance, should be rolled forward for 2009/10 or even until the end of the PCR.
70. An additional question about whether the separate funding arrangements for upgrading the website, which Ofgem had previously introduced on a one year basis, should be made enduring or should be removed was asked.

Summary of Responses

71. Of the six responses received, four indicated that there was no longer a need for an incentive on data publication. In contrast two responses showed support for rolling over these arrangements, one until the end of the PCR period and the other on a one year only basis.
72. On the issue of funding improvements to data publication, five parties commented that as National Grid had not identified any further improvements that could be made, there was not a requirement for an enduring scheme to fund these. Comments included that any further improvements were likely to be excessive and that funding issues should be dealt with under the main Price Control Review. Only one party supported making the funding arrangements enduring on the basis that National Grid should be rewarded for improvements to operational efficiency/performance.

National Grid's view

73. National Grid believes that data publication remains an important activity to the community, which is demonstrated by the level of queries received by National Grid on a daily basis. In light of the mixed views received in response to the consultation, National Grid recommends rolling forward the current performance incentive.
74. On the funding arrangements for website upgrades, National Grid would recommend the removal of this scheme as we do not believe these

arrangements represent an appropriate way to remunerate potential future information provision developments.