Stakeholder consultation: Gas System Operator incentives

National Grid

Gas Transmission

Target audience

All stakeholders

About this document

This document sets out our initial thoughts, along with a number of questions for stakeholders regarding the gas System Operator (SO) incentives which will operate from April 2013. We would welcome your views in order to help us develop our SO incentives submission which will be submitted at the end of May. This consultation will be open until 5pm on Wednesday 9th May 2012.

Contents

Introduction

National Grid Gas (NGG), in its capacity as System Operator (SO), operates the high pressure gas National Transmission System (NTS) in Great Britain. As we move from stable supply and demand patterns that were relatively straightforward to predict, to a situation where flows from day-to-day, and increasingly within-day, are changing, operating the system is becoming more challenging. Over the current price control period, we have managed the increasingly changeable locations and unpredictable behaviours of gas inputs to, and outputs from, the system, delivering good performance in this area, which ultimately provides value to the gas industry and to the end consumer. These challenges are set to increase going forwards as gas demand and supply patterns continue to evolve. Other external drivers such as European legislation are also expected to impact on how we will operate into the future.

We are currently developing our SO external incentives business plan, detailing how we will continue to deliver a service which is both valuable and provides wider benefits to the industry and end consumers through developments of existing and new incentive schemes as User requirements change. These incentives are linked to key outputs we believe are highly valued by our customers and are designed to incentivise the optimum delivery of these outputs. This submission will be closely linked with the RIIO-T1 business plan submitted to Ofgem in March 2012[1], in order to ensure the greatest benefit to consumers is realised.

To ensure that any new incentives or revised schemes are appropriate, we will need to ensure that any proposals are fully developed with industry in advance of implementation.

This consultation is split into sections that align to different aspects of our SO role as shown in the diagram below. A summary of many of the current SO incentives is available from www.nationalgrid.com/uk/gas/soincentives/supportinginfo

System Operation	Timely Connections	Market Facilitation	Potential New Incentives
Residual Balancing	Connection Offers	Demand Forecasting	Maintenance
NTS Shrinkage & Unaccounted for Gas	Capacity Delivery		Capacity Scaleback
Operating Margins procurement	Constraint Management	Information Provision	Provision of enhanced services for NTS users
Greenhouse Gas Emissions (Venting)			SO innovation

Throughout the current price control and our RIIO-T1 activities we have engaged regularly with our stakeholders regarding the development of the SO incentives. This

[1] Please refer to our Talking Networks website for information on our TO business plan http://www.talkingnetworkstx.com/gastransmissionplan/our-business-plan.aspx

has enabled us to understand your views on what you are seeking from the incentives and establish how you would like to see them develop. The purpose of this document is to seek your views on our initial thoughts and proposals for the gas SO incentives which will operate from April 2013.

In developing our SO external incentives business plan, we will seek to ensure that the proposals we put forward are consistent with a number of over-arching principles including:

Realising Benefits:

- Incentives should be linked to our ability to **deliver improvements** to key outputs that are valued by customers;

Duration of Schemes:

- Where possible, we will seek to identify an 8 year incentive framework which promotes **alignment and co-operation between SO and TO** activities to deliver the most optimal outcome for customers in the longer-term.
- Variable scheme durations may be required where there are, for example, issues regarding the **predictability of costs and outputs** or **confidence in data and modelling**. Shorter term schemes may also be appropriate following the introduction of **new schemes** to ensure they remain fit for purpose as they develop;
- Each incentive should **operate annually** within each pre-defined incentive framework. Methodologies/models should be used to set **annual targets** over the duration of the scheme;

Managing Uncertainty and Change:

- We will seek to **limit windfall gains or losses** through the use of **uncertainty mechanisms** to mitigate against market factors outside our control, with such mechanisms being **reviewed periodically** within the RIIO-T1 period;
- Re-openers to deal with **game changers**, for example Electricity Market Review, Significant Code Review, and European Union driven reforms will be included in our proposals. We will seek to maintain the concept of **Income Adjusting Events** to ensure appropriate funding can be provided for significant changes to costs which were not envisaged as part of the RIIO SO settlement;

SO Exposure to Risk:

- To the extent that we bear risks on behalf of consumers that we cannot fully control, we will seek appropriate funding for this via a **risk premium** within the package of incentives;
- We will seek to ensure the SO is able to earn a fair return on its investments in order to maintain the **financial viability of the SO**; and
- We will seek to ensure the SO is **not exposed to unreasonable risk** in circumstances that it is unable to control or reasonably forecast in respect of delivery.

Workshops are being held in early May to provide you with the opportunity to discuss these thoughts and proposals, prior to submitting your views in response to this consultation.

The workshop on 1st May is intended to cover the capacity and connections incentive proposals which we have included under 'Timely Connections' and 'Potential New Incentives' in the table above. This will take place at the forthcoming Transmission Workgroup issues meeting arranged through the Joint Office. An invite to the 1st May workshop is included in Appendix A.

The workshop on 3rd May will focus on the 'System Operation' and 'Market Facilitation' aspects. An invite to the 3rd May workshop is included in Appendix B.

Please provide your response to this consultation by **5pm on Wednesday 9th May 2012** to soincentives@nationalgrid.com**;** a response template has been provided for you to use. When responding please provide us with your name, contact details, the organisation you represent and whether your response is confidential.

If you have any queries please email soincentives@nationalgrid.com, or call Juliana Urdal on 01926 656195 or Phil Lucas on 01926 653546.

System Operation

Residual Balancing

NGG performs the role of residual balancer for the NTS, which involves buying or selling gas to keep the NTS in balance. The purpose of the current Residual Balancing incentive is to encourage the daily balancing of supply and demand whilst taking into account the impact of our balancing actions on market prices and promoting the appropriate allocation of balancing costs. The incentive contains two elements based upon the Price Performance Measure (PPM) and the Linepack Performance Measure (LPM). Please refer to the supporting information document that is available at www.nationalgrid.com/uk/gas/soincentives/supportinginfo for more information on the current scheme.

Ofgem has suggested it may be appropriate to evolve the residual balancing incentive to ensure the SO is appropriately incentivised as gas demand becomes more volatile. Ofgem has asked us to consider whether a cost minimisation incentive would be appropriate for the RIIO-T1 period.

Stakeholder views

The Residual Balancing incentive has been widely debated in the industry over a number of years. Many stakeholders have been supportive of the ongoing reviews of the PPM target. Mixed views have been expressed on whether the LPM is needed. Stakeholders' responses to Ofgem's recent consultation were mixed, with some asking for greater clarity regarding Ofgem's new proposal, others supporting a cost incentive and some stating that the current incentive is appropriate.

Our initial thoughts and proposals

We do not believe that a cost minimisation incentive would drive appropriate Residual Balancing behaviour. For example, under an incentive to minimise net costs of balancing, the incentive could drive the SO to adopt different trading strategies. For example. the SO could pursue an asymmetric trading strategy to minimise net energy balancing costs; when the system is short buying through the On-the-day Commodity Market offer stack to set 'System Marginal Price Buy' prices when the opportunity arose to reduce the cost of resolving a short imbalance position; when the system is long, selling a large volume over a day when possible to maximise revenues from balancing trades. Another example strategy could be to buy at higher prices than necessary in order to create extra linepack that could be sold on a subsequent day.

Analysis of the current incentive year shows that, although the volume effect on linepack of SO trades is variable, on average there is a larger change in linepack per volume of trade following a buy than a sell. A net cost incentive could, therefore, encourage linepack 'churn' as it increases revenue opportunities through trading activities.

Considering the potential issues identified above, we therefore propose that the style of the incentive is similar to the current Residual Balancing incentive for the RIIO-T1 period with an annual cap and collar whereby a performance measure scheme, based on daily linepack change and daily price spread, represents a proxy for a market cost minimisation outcome. Such a scheme focuses on encouraging the trading behaviours of NGG to resolve any imbalance, whilst taking into account the impact of trades on the market. The elements of the scheme we propose are:

- **The daily linepack target is calculated on prevailing levels of shipper imbalance**, as the levels of linepack change are inherently linked to the level of shipper imbalance.

- **The daily price target is linked to recent market price volatility in the form of a pence per therm daily target which we propose is recalculated annually unless it is below the prevailing default cashout margin**. We believe that the current mechanism of a percentage of SAP target may not be suitable in the longer term as the balancing conditions on any given day are not directly linked to actual SAP and are more a function of market volatility.

- **In relation to the risk and reward value of the total scheme we propose a maximum daily value of about £9240**. This value would represent the maximum daily revenue that we could earn by minimising linepack changes and maintaining an appropriate impact on the market. We consider that the maximum value we add to industry for performing the Residual Balancing role is to reduce the daily level of imbalance down from the average total shipper imbalance (4.7mcm/day[2]) to the linepack tolerance (currently ±1.5mcm/day). Using the prevailing default cashout differential, a proxy for the value of linepack means a daily value of £9240[3].

The above proposals maintain the structure and aims of the current residual balancing incentive, with an annual recalculation of the targets to maintain its link to market behaviours of the time. We propose that the targets and incentive value would be fixed for each incentive year following the annual recalculation.

The incentive would divide the daily value between the linepack and price components. If a greater value was allocated to the linepack component compared to the price component, this would encourage a greater emphasis on the principle of "polluter pays" through the linepack element of the incentive rather than "minimal effect on market" through the price element and vice versa.

[2] Our estimate for the average shipper imbalance volume is based on incentive year 2011/12 to February 2012 and assumes a 1:1 volume relationship between NGG trades and their impact on shipper imbalance.

[3] The calculation uses the difference between average shipper imbalance (4.7mcm/day) and the current linepack tolerance within the incentive (1.5mcm/day) multiplied by the default cashout differential (0.77p/th).

Questions

Q1. Do you agree with our proposal to maintain the current Residual Balancing incentive structure of linepack and price performance measures in preference to a cost minimisation scheme?

Q2. Do you support the proposed change to link price and linepack targets to market volatility and imbalance? If not, how do you consider a performance measure should be set?

Q3. Does our proposal of a daily maximum value (£9240) represent a suitable potential reward for our residual balancing performance? If not, what value do you attribute to the Residual Balancing role?

NTS Shrinkage & Unaccounted for Gas

NTS Shrinkage comprises:

- the gas and electrical energy which is used in operating NTS compressors (own use gas); and

- the gas that cannot be accounted for and is billed via the measurement and allocation process
    - Calorific Value (CV) Shrinkage
    - Unaccounted for Gas (UAG).

The current incentive aims to minimise the overall cost of shrinkage through efficient system operation (minimisation of volume) and energy procurement against benchmark prices. The UAG element of the NTS Shrinkage incentive focuses only on the efficient procurement of the net outturn volume of UAG. This is complementary to the UAG licence condition which requires the SO to undertake certain projects to investigate the causes of UAG. Please refer to the supporting information document that is available at www.nationalgrid.com/uk/gas/soincentives/supportinginfo for more information on the current NTS Shrinkage incentive scheme.

Stakeholder views

Our stakeholders have recognised the net value that has been created for consumers through our good performance in recent years against shrinkage targets, with this largely related to focused management of energy procurement, and continue to support cost minimisation incentives for Shrinkage. Stakeholders highlighted that UAG has come to dominate the Shrinkage incentive in volumetric terms and raised concerns about the impact of UAG including that from recent meter errors.

Our initial thoughts and proposals

We propose that the scope of the NTS Shrinkage incentive should broadly remain unchanged with UAG remaining included and the SO incentivised to minimise overall costs through a bundled cost minimisation target. We propose changes to certain elements in order to seek to address stakeholder concerns and reduce the potential for windfall gains / losses, such that the SO is rewarded / penalised for costs that are manageable and is neutral to those costs over which the SO can exert limited or no control. Our proposed changes can be summarised as:

- **Shrinkage volume target is split into two parts. Firstly a baseline volume set using the best available forecast and second part of the target would cover any outturn variations from the baseline forecast.** The fixed baseline volume would be set ahead of time at a forward reference price. The variable part would cover volume changes from the baseline set at a prompt reference price (i.e. daily SAP). When volumes change significantly from forecast, this would reduce the potential for windfall losses and gains and reflects an appropriate trading strategy.

- **Move the energy reference prices to quarterly reference prices based upon a 9 month rolling period to month ahead of the delivery quarter**. The reference price sets a benchmark price for energy procurement. This would align the electricity and gas price reference periods. Utilising a price reference period closer to delivery reduces the potential for windfall gains and losses, reflects where there is increased market liquidity and applies a consistent approach for each quarter.

- **Single environmental performance measure based on Traded Price of Carbon.** A range of environmental schemes are in place that change over time and can lead to inappropriate incentives where emissions prices are different for gas and electricity use. Simplification of the impact of these schemes will ensure consistent incentivisation throughout the RIIO-T1 period using the government's Traded Price of Carbon as a basis for an environmental adjustment based on National Grid's performance. We propose that performance associated with the Carbon Reduction Commitment Energy Efficiency Scheme (CRCEES) and EU Emissions Trading Scheme (EU ETS) is excluded from the incentive performance.

- **In relation to UAG we propose that the licence condition is retained which encourages projects to identify the causes of UAG.** In recent years the main contributors to the volume of UAG have been meter errors and inherent meter tolerances. Whilst National Grid has a meter assurance role the NTS connected meter assets are predominately owned by Distribution Networks, Terminal Operators and / or large industrial End Consumers. We propose to continue to investigate the causes of UAG through activities including meter validation witnessing and data investigations subject to appropriate funding arrangements.

Questions

Q4. Do you feel it is appropriate to separate the baseline procurement of shrinkage from prompt purchases for changes to forecast levels?

Q5. Do you consider a rolling 9 month price reference period to month ahead of the delivery quarter sets a fair benchmark price for shrinkage energy procurement performance assessment?

Q6. Do you consider the Traded Price of Carbon Adjustment alone provides an appropriate mechanism to incentivise the proper consideration of environmental impacts of compressor use?

Q7. Are there suitable incentives to reduce UAG on all the appropriate industry parties?

Operating Margins

Operating Margins (OM) gas is used to maintain NTS pressures in the immediate period following operational stresses but before market balancing measures become effective. Such stresses may result from supply failure, unanticipated demand changes or failure of an NTS pipeline or associated equipment. A quantity of OM gas is also procured to manage the orderly run-down of the System in the event of a Network Gas Supply Emergency whilst firm load shedding takes place. Operating Margins gas may be provided from gas held in storage facilities and LNG importation facilities, offtake reduction and supply increase services. Please refer to the supporting information document that is available at www.nationalgrid.com/uk/gas/soincentives/supportinginfo for more information on the current scheme.

Stakeholder views

When the current OM incentive was proposed in 2010, stakeholders were supportive of an incentive provided it ensured the most economic option was taken to protect the network. We note however that stakeholders have also previously supported the pass-through of the cost of holding OM when changes to the procurement of OM services were in progress.

Our initial thoughts and proposals

We are currently undertaking a review of OM, which is a key tool in the prevention and management of a Network Gas Supply Emergency, to ensure that the definitions and calculation methodology remain fit for purpose for the RIIO-T1 period.

We believe that the different categories of OM could be procured in different ways and will explore how this could be done most efficiently in consultation with the industry. The review will progress in a timely way that allows us to demonstrate to ourselves and to the HSE that any changes are aligned with our safety obligations.

Clearly, it is appropriate that OM services are efficiently procured. However it is not appropriate to have financial incentives which encourage reduction of volumes both geographically and nationally below a level that is deemed to be safe.

The review will not be concluded prior to the May 2012 SO external incentives submission and we therefore propose that there should be no financial incentive for OM in the first year of the RIIO-T1 period (i.e. cost pass-through). Arrangements, including the option of introducing a financial incentive for the remainder of the RIIO-T1 period, should be discussed further in summer 2013 when the review outcome is more certain.

Questions

Q8. Do you agree with our proposal to reconsider OM incentivisation following the OM services review?

Greenhouse Gas Emissions (Venting)

A number of activities associated with the commissioning, operation, maintenance and decommissioning of assets on the NTS result in the release of natural gas into the atmosphere (venting). The current Greenhouse Gas Emissions Incentive encourages the consideration we give to the environment when venting natural gas during the day to day operation of NTS compressors. For more information on the current scheme, please refer to the supporting information document that is available at www.nationalgrid.com/uk/gas/soincentives/supportinginfo.

Stakeholder views

When the topic of greenhouse gas emissions (venting) has been previously discussed as part of the SO incentive engagement, a number of the stakeholders have pointed to our stated public objective to reduce greenhouse gases by 80% by 2050 and therefore questioned whether an incentive is also required. In discussion regarding appropriate targets, stakeholders suggested moving towards a 5 year rolling average target as further venting data becomes available.

Our initial thoughts and proposals

We believe an environmental incentive should be retained for venting sources not covered by existing schemes in legislation such as the EU Emissions Trading Scheme (EU ETS). It should ensure we take into account the cost of controllable emissions by differentiating between venting driven by obligations and those driven by operational needs.

The venting driven by obligations is linked to work undertaken to ensure the safe and compliant operation of the NTS. For venting relating to operational activities we have some degree of choice in its operating strategy for a given operational scenario. We propose that venting driven by obligations should be excluded from the incentive but that other venting where we can exert a reasonable level of control should be reflected in the incentive.

Questions

Q9. Do you support our approach for the greenhouse gas emissions incentive and what value would you place on a greenhouse gas emissions scheme?

Timely Connections

Connection Offers

We are committed to delivering connections and capacity to meet our customers' needs. We have been fully engaged in the development of UNC Modification Proposal 0373 and welcome the positive development this will provide in terms of providing a transparent and certain timeline in relation to connections to the NTS. The timelines included in Modification Proposal 0373 are a result of discussions between National Grid and stakeholders and are a reflection of our current ability to deliver connection offers. Ofgem has stated in their RIIO-T1 strategy documents that it may be appropriate to introduce an incentive relating to the delivery of connection offers.

Stakeholder views

Stakeholders have told us through the RIIO-T1 Talking Networks process that they wish to see an improvement in our connections service. As a priority they want to have a transparent and timely connections offer process in place and for us to improve our level of communications and service to customers. Stakeholders also wish to see greater alignment between the gas connections and gas capacity processes. In the recent Ofgem SO consultation some stakeholders questioned whether an incentive is required, given that timescales will be placed into the UNC if Modification 0373 is implemented.

Our initial thoughts

The timescales included in UNC Modification Proposal 0373 are based on our current ability to deliver connection offers. There could be innovative developments in the future that allow us to deliver certain offers in a shorter timescale and therefore we propose that we are incentivised to find innovative approaches and potentially shorten these timescales in the future. An incentive framework could be based on a calculation of total number of offers delivered early divided by total number of offers delivered and then multiplied by a financial amount. We do not believe it is necessary to include a downside incentive for the late delivery of connection offers as this would constitute a breach of our UNC obligations (if Modification Proposal 0373 is implemented) and thus a breach of our licence, attracting an appropriate penalty.

Questions

Q10. Do you agree or disagree that we should be incentivised to find new and innovative ways of delivering connection offers quicker than the timescales stated in the UNC?

Capacity Delivery

In our RIIO-T1 business plan we have proposed a number of changes to the regulatory framework in order to deal with;

- Stakeholder views that the connections and capacity processes should be aligned;
- The effects of The Planning Act (2008); and
- Our requirement to receive funding aligned to the timing of capital expenditure

The Planning Act (2008) requires that a number of steps are undertaken prior to an application for a Development Consent Order being submitted. We have previously presented to industry our understanding of the timescales associated with these process steps. Stakeholders have asked whether the timelines associated with these activities can be optimised. The timeline presented represents our current understanding of the Planning Act requirements. We are proposing that we publish information relating to our performance in this area.

In our RIIO-T1 business plan, we have proposed that both parties work together throughout the process to ensure understanding of requirements and our default obligated lead times are reduced to 24 months from an October capacity allocation, where a bi-lateral contract has already been signed, with an incentive in place relating to early or late delivery of capacity.

With the major capital expenditure we are forecasting for the RIIO-T1 period, in order to finance our business we require the associated allowed revenue in time to fund the capital intensive expenditure. For the appropriate adjustment to be included within the allowed revenue for the following formula year for incremental capacity signals, it needs to be included within the annual calculation via Ofgem's iteration of its Price Control Financial Model in November. This would mean that a capacity signal would need to be provided by September and the capacity allocated in October. It may be the case that activities undertaken prior to a formal capacity application being received, such as submitting an application for a Development Consent Order, mean that a capacity signal is received after September. We have proposed in our RIIO-T1 business plan that in this situation the default obligated lead time would apply from the following October.

Stakeholder views

Stakeholders recognised that The Planning Act (2008) increases certainty in the infrastructure delivery process but also lengthens timescales. Stakeholders questioned whether any of our activities could be run concurrently in order to shorten the process. In relation to the overall process, stakeholders want it to be transparent and to progress in a timely manner and do not want to lose the flexibility provided for by current processes.

Our initial thoughts and proposals

Our RIIO-T1 business plan reflects our understanding of The Planning Act (2008) requirements and we welcome the certainty that the legislation provides to the process. We also recognise, however, that stakeholders wish to see the overall timeline optimised and shortened where possible. We therefore propose two incentives:

- **A licence obligation is introduced which obliges us to publish information** on the time taken to progress through the steps required to be undertaken prior to the submission of an application for a Development Consent Order under The Planning Act (2008).

- **A financial incentive is introduced to incentivise early delivery and penalise late delivery of capacity.** This would ensure flexibility for users, particularly where they have already received planning consent and so may have already started construction prior to submitting a formal capacity application, or where a capacity signal is received later than September and the user wants capacity quicker than 24 months from the following October. Due to the constraints we face in relation to financeability, a financial incentive would need to be of sufficient value to cover the costs of accelerating construction and finance the capital required until the annual run of the Price Control Financial Model allows appropriate revenue streams. We propose that the scheme is symmetrical and an equivalent penalty applies where capacity is delivered later than the user's signalled requirements.

Questions

Q11. Do you agree or disagree that a reputational incentive is appropriate to encourage National Grid to optimise the activities from signature of a bi-lateral contract to capacity application readiness, where applicable?

Q12. Do you agree or disagree that a financial incentive should be introduced to provide flexibility to adjust obligated lead times where there is a user requirement?

Constraint Management

There are currently three schemes that relate to constraint management on the NTS.

- **Operational Entry Buyback Scheme**: This incentivises us to minimise any operational costs associated with NTS Entry Capacity constraint management actions.

- **Incremental Entry Buyback Scheme:** This incentivises the timely delivery of new NTS Entry Capacity obligations. This incentive recognises that investment lead times should be achieved but that where they are not, any constraint management costs associated with the late delivery of the increased obligation should not be included in the operational buyback incentive.

- **Incremental Exit Buyback Scheme:** This incentivises the timely delivery of new NTS Exit Capacity obligations. This incentive recognises that investment lead times should be achieved but that where they are not, the constraint management costs of late delivery are separately identified.

The above schemes have parameters that reflect the balance of risk and encourage efficient behaviour. We are currently 100% exposed to costs in relation to operational exit buybacks[4].

Stakeholder views

During our RIIO-T1 discussions with stakeholders there was general agreement that we are best placed to determine the appropriate trade offs between commercial solutions and investment to meet capacity needs. All agreed they wish to have the same level of system reliability as today.

Our initial thoughts and proposals

We propose that entry and exit capacity constraint management actions are incentivised through a single incentive scheme based on the form of the current entry operational buyback scheme as set out in our RIIO-T1 Business Plan[5].

The inherent capacity risk in the NTS will be used to set a baseline level of buybacks throughout the period to generate a target cost against which our performance is assessed.

This target cost will then be adjusted as the inherent level of risk is altered by factors such as system outages associated with work to comply with the Industrial Emissions Directive, the release of incremental capacity and new products and services being offered on the NTS. The triggering of any TO uncertainty mechanisms, as proposed in our RIIO-T1 business plan, or interactions with SO incentive schemes would also be considered and an appropriate adjustment made to the cost target for the change in risk profile.

Our analysis is based on a 50:50 split between buyback actions and locational actions. The costs assumed in the RIIO-T1 business plan have been based on analysis of previous actions, such that we have assumed 1p/kWh for buyback actions and 0.7p/kWh for a locational sell and 1.6p/kWh for a locational buy.

Questions

Q13. Do you support the principle that SO incentive targets will need to change to reflect the application of the TO uncertainty mechanisms?

Q14. Do you have a view about what the relevant constraint management action price assumed within our modelling?

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[4] Following the implementation of UNC mod 195AV, the licence was amended to allow certain types of exit costs to be passed through to charges – for details see Ofgem's informal consultation on 10 February 2009.

[5] http://www.nationalgrid.com/NR/rdonlyres/99622FDF-8B76-4388-BAA1-4AD17B8B50D5/52239/2012_NGG_managing_risk_and_uncertainty_redactedsecure.pdf

Market Facilitation

Demand Forecasting

We publish national gas demand forecasts over a range of timescales. The accuracy of the gas day demand forecast published day-ahead at 13:00 is currently incentivised. Please refer to the supporting information document that is available at www.nationalgrid.com/uk/gas/soincentives/supportinginfo for more information on the current scheme.

Stakeholder views

Whilst many stakeholders have reiterated that the accuracy of the day-ahead (D-1) 13:00 demand forecast is most important to them, some stakeholders have suggested that earlier demand forecasts should be considered for incentivisation and may be of more value if their accuracy was improved. The accuracy of the Non Daily Metered (NDM) demand forecast has been mentioned as an area where improvements could be sought.

Our initial thoughts and proposals

We believe we may be able to deliver more value to stakeholders if the incentive was expanded to include more of our published demand forecasts, and would appreciate views on which forecasts are most valued. We consider that the current method of measuring forecasting performance, as a percentage of demand, is susceptible to the windfall impacts of unseasonably high or low demand, and therefore propose to measure performance in RIIO-T1 by the absolute (mcm) daily error, potentially having different targets for different times of year.

We expect that a number of factors (such as a continued increase in the number of fast cycle storage sites, and CCGTs acting as the balancer for variations in wind generation) will make demand forecasting more challenging in the future, and therefore propose that an uncertainty mechanism is applied to adjust the incentive target to reflect actual demand volatility.

NDM forecasts are currently produced in accordance with processes set out in the UNC that utilise aggregate information provided by Users rather than forecast by National Grid using a range of techniques and information available.

Questions

Q15. What aspects of demand forecasting do you use in your decision making and value the most (e.g. forecast times, components of demand etc) and how do you expect your requirements to change over the RIIO-T1 period?

Q16. Do you agree or disagree that the absolute forecast error is a more appropriate way to measure forecasting performance than the error as a percentage of demand?

Q17. Do you agree or disagree that the incentive target should reflect the level of demand volatility in the market?

Information Provision

We provide operational information to the market both in the form of data available through our website to inform the market (e.g. current flows onto the NTS) and information on the overall market and how it may develop into the future through industry consultation processes that lead to production of the Ten Year Statement (TYS). We are currently incentivised to publish specific operational information on the National Grid website. Please refer to the supporting information document that is available at www.nationalgrid.com/uk/gas/soincentives/supportinginfo for more information on the current scheme.

Stakeholder views

Stakeholders wish to have quick and easy access to reliable data which is of value to them. A number have commented that our data provision has improved over recent years. Many stakeholders felt information provision should be a routine requirement rather than an action to be incentivised.

Our initial thoughts and proposals

The existing financial incentive has worked effectively to improve performance in this area over the last 6 years to a level where feedback suggests that customers are broadly happy with the level of service that they are currently receiving. We therefore believe that it would be appropriate to remove the financial incentive with respect to the availability and timeliness of the critical market data that we publish on our website, and for this to be replaced with a licence condition to periodically report on our website performance as a reputational incentive. This will allow market participants to monitor and review our performance in this area to ensure no deterioration from the high levels of performance that are currently being achieved.

We do, however, recognise that this is an important issue for customers, particularly at a time of significant change to data provision requirements driven by both EU legislation and the evolving operational challenges on the NTS. At the same time we have also seen a significant increase in utilisation of market data over the period of the existing incentive, with the numbers of data requests from customers growing by at least 10 fold over the period (more than 1 billion hits per annum).

We are therefore proposing to engage with the industry later this year to review requirements for website data provision to better understand any changing requirements from customers related to, for example, system performance, data requirements, website design, data provision processes (use of new media, APIs etc), and interaction with other platforms (e.g. the EU transparency platform).

Based on feedback from this engagement process we would then expect to propose a strategy to the industry in this area which reflects their requirements, and if necessary seek appropriate funding to develop our processes and systems to achieve their requirements. It may also be appropriate at this time to review the need for an incentive in this area.

Questions

Q18. Do you agree that it is appropriate to replace the current financial incentive scheme with a reputational incentive?

Q19. Are there areas where we could provide more information that would contribute to the efficient operation of the market, bring benefits to stakeholders' businesses and the value they provide to their customers?

Q20. Do you agree with our current approach to review information provision requirements with industry before seeking appropriate funding if necessary?

Other New Incentives

In developing our SO External incentive submission, we will also highlight some additional areas that we believe may be suitable for incentivisation. The areas identified below set out some of our initial thoughts of additional System Operator activities which we believe it may be appropriate to incentivise during the RIIO-T1 period.

Maintenance

Maintenance is an essential undertaking in National Grid's role to keep the network safe, fit for purpose and operating in an efficient and economic manner, in line with our various obligations.

Maintenance in relation to both entry and exit is primarily driven by statutory requirements. Historically at entry there were generally multiple parties at any one Aggregate System Entry Point and therefore competition. Exit sites on the other hand tended to be single shipper sites with no competition. Historically, therefore, maintenance has been dealt with differently within the two regimes with the existence of maintenance days on exit being a reflection of the lack of competition reducing the likelihood of competitive buyback prices being put forward. The situation on entry is now changing, however, with the reliance on a number of key entry points and reduction in number of shippers at those sites.

We publish information about our maintenance programmes twice a year and provide details of the work to be undertaken in the forthcoming months. Where relevant, we also provide information on the effect that this maintenance will have on entry and exit capacity capability. Whilst we work closely with our customers to ensure (with reasonable endeavours) that our maintenance programme has a minimum impact on entry and exit obligations and that we coordinate with users when arranging outages, the absence under the current arrangements of "maintenance days" at entry mean there is a risk that significant levels of cost could be incurred if gas flows at entry and exit are not as expected.

Stakeholder views

Stakeholders have told us that they value the flexibility in the NTS maintenance schedule. However, some have said they would welcome an incentive which improves the communication and clarity around scheduled maintenance and encourages National Grid to co-ordinate its maintenance programmes with customers.

Our initial thoughts

We have proposed in our RIIO-T1 business plan that the concept of "maintenance days" should be extended to cover both entry and exit. This would provide a better reflection of the ability we have to control these outages and could be linked to an incentive (on both ourselves and others) regarding the scheduling of maintenance.

In order to ensure an appropriate number of “maintenance days” are set, we are considering an incentive surrounding the use of maintenance days at both entry and exit covering both the use of such days and the re-scheduling of any maintenance programmes.

Questions

Q21. Do you agree or disagree that the concept of maintenance days should apply at entry points?

Q22. How much notice do you require of maintenance scheduling changes?

Q23. Do you support the introduction of a financial incentive scheme relating to the scheduling of maintenance? What value would you place on such an incentive?

Capacity Scaleback

We currently have obligations under the UNC to release non-firm capacity, but there is no incentive scheme under the licence to encourage us to restore any curtailed rights at the earliest opportunity. The introduction of an incentive in this area may change the risk / reward balance of restoring those capacity rights versus increasing the constraint risk on the system and thus lead to the optimised availability of, and increase the relative value of, non-firm capacity to the market.

Stakeholder views

Stakeholders have not been engaged on this topic previously.

Our initial thoughts

We believe that an incentive in this area may lead to non-firm products being valued more highly by the market due to, ultimately, an incentive on NGG to ensure the decision to scale back and restore non-firm rights is appropriately balanced. Changing the risk / reward balance associated with curtailed capacity may increase the value of the capacity rights held by the user. We are considering the appropriateness of a financial incentive linked to the volume of capacity scaled back as a proportion of the capacity released. The financial parameters could be based upon the modelling utilised for the capacity buyback scheme.

Questions

Q24. Do you agree or disagree that an incentive relating to the restoration of scaled back capacity would maximise the level of non-firm capacity made available to the market?

Q25. Do you agree or disagree that linking the financial parameters to buyback cost assumptions is appropriate?

Provision of enhanced services for NTS users

Currently we accept requests for additional services where we can accommodate them whilst maintaining the safe and efficient operation of the network, for example by facilitating higher ramp rates or accepting shorter notice periods than provided for by existing contractual provisions. As user requirements for such enhanced services continue to evolve and grow and system operation therefore becomes increasingly challenging, it is likely that our ability to accommodate these requests will reduce, and this could therefore lead to Users valuing these benefits as services they are willing to pay for.

We have already been approached by customers in relation to additional services and products that could be offered, and that they would be willing to pay for, in order to meet their future needs in this area. As user requirements change, and the products are developed to support them, it would seem sensible to review the need for new incentives that better align the needs of system users for such operational flexibility and the ability of the system operator to make appropriate risk based decisions to accommodate them.

Stakeholder views

Some stakeholders are supportive of developments of new products in this area, wanting certainty of a flexible service from the NTS. When discussed at the UNC Transmission Workgroup meeting, however, many stakeholders were concerned about the practicalities of product developments and others questioned whether or not there is a genuine need. Stakeholders have not been asked about potential incentives in this area.

Our initial thoughts

We are mindful of the interaction between an incentive in this area and the network flexibility uncertainty mechanism included in our RIIO-T1 business plan. If industry supports changes to the existing framework, such as through the network flexibility uncertainty mechanism, any solutions may use new or existing Rules, Tools and Assets as outlined in the 'Managing Risk and Uncertainty' Annex to the March RIIO-T1 Business Plan[6] .

For Rules and Tools solutions, it may be appropriate to consider introducing products and/or financial incentives for these types of services, such as shorter notice periods and higher ramp rates, as and when they are valued by customers.

Questions

Q26. Do you agree or disagree that an incentive relating to the development of new services such as shorter notice periods or higher ramp rates may be appropriate in future?

Q27. What are you views on the potential interactions between an incentive and the network flexibility uncertainty mechanism?

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[6] The Managing Risk and Uncertainty Annexe is available at http://www.nationalgrid.com/NR/rdonlyres/99622FDF-8B76-4388-BAA1-4AD17B8B50D5/52239/2012_NGG_managing_risk_and_uncertainty_redactedsecure.pdf

SO innovation

Innovation, along with incentives and outputs, is at the heart of the new RIIO regulatory framework. In order to meet the challenges we face in operating a system that is becoming more dynamic and diverse, we will need to find innovative solutions that allow us to improve the delivery of the required outputs, whilst simultaneously driving efficiencies.

In our March 2012 RIIO-T1 submission we submitted an innovation strategy that outlined how we intend to utilise the TO innovation funding incentives[7] to drive improvements in our business and address the fundamental issues that our stakeholders have identified as areas where innovation could have the greatest positive impact. Whilst traditional technology based innovation has a major part to play in delivery, our plan recognises that innovative changes to commercial regimes, operations and processes have an equal part to play in delivering the right solution to the challenges that the next decade brings.

To find out more about our innovation strategy please follow this link - http://www.nationalgrid.com/NR/rdonlyres/FA3DDA80-660A-4D08-A976-A8C8FA297308/52221/2012_NGG_Innovation_strategy_v1Fullyredacted.pdf

Stakeholder views

Throughout our RIIO-T1 discussions stakeholders have told us how important innovative solutions, whether commercial, operational or assets, will be in meeting the challenges of the future in an efficient and affordable manner.

Our initial thoughts

We believe that funding should be available to the SO, as it is to the TO, through the new mechanisms introduced by RIIO-T1. Therefore our initial view is that the SO should be able to participate in the Network Innovation Allowance (NIA) and Network Innovation Competition (NIC).

Questions

Q28. Do you agree or disagree that the SO should have access to innovation funding or should it be considered under the TO scheme?

[7] Within the RIIO-T1 framework funding will be available under the Network Innovation Allowance ((NIA) up to 1% of TO revenues per annum) and the Network Innovation Competition (NIC).

Appendix A: Invitation to 1st May Workgroup

From: Joint Office [mailto:enquiries@gasgovernance.co.uk]

Sent: 13 April 2012 08:52

Subject: 01 May 2012 Transmission Workgroup (Issues) Agenda

Dear Colleague,

Workgroup Agenda: Transmission Workgroup (Issues)

Documentation at: www.gasgovernance.co.uk/tx/010512

Please note that we have published on our website the agenda for the Transmission Workgroup (Issues) meeting due to be held at 31 Homer Road, Solihull B91 3LT on Tuesday 01 May 2012, starting at 10:30. Any additional items for inclusion on the agenda should be provided to the Joint Office by 17:00 on Friday 20 April 2012. If further papers become available, these will also be published on our website.

If you are planning to attend this meeting and require lunch, please let us know (by reply to this email at enquiries@gasgovernance.co.uk) by 17:00 on Wednesday 25 April 2012.

It will also be possible to join the meeting by teleconference; if any requests are made for this facility, access will be by dialling 0207 950 1251 followed by 21870295#.

This is a secure location and registering in advance is strongly encouraged in order to facilitate access to the building.

Regards,

Lorna Dupont

Joint Office of Gas Transporters

Tel: 0121 623 2115

UNC related documents can be accessed via our website:
www.gasgovernance.co.uk

Appendix B: Invitation to 3rd May Workshop

Louise Wilks

SO Incentives Development Manager

2nd April 2012

Dear Colleague

Stakeholder consultation Gas Transmission: your views on System Operator (SO) Incentives to apply from April 2013 to March 2021

National Grid is developing the gas SO incentive schemes for the period April 2013 to March 2021 under the new RIIO (Revenue = Incentives + Innovation + Outputs) regulatory framework following Ofgem's consultation on SO incentives from 2013[8]. As part of this SO incentive development process, we wish to hear your views regarding the incentives to help us shape our SO incentive submission to Ofgem at the end of May.

We are planning to publish a written consultation in mid April inviting stakeholders to comment on our proposals. To support this written consultation, we will be holding a stakeholder engagement workshop which will take place after the Transmission Workgroup meeting being held on Thursday 3rd May at Elexon's offices in London. I anticipate that the workshop will begin at 2pm and run though to 4:30pm. At the workshop we will discuss the SO incentive principles and the Residual Balancing and Shrinkage incentive schemes (including Unaccounted for Gas). There will also be a questions and answers session on the following incentives schemes – Demand Forecasting, Operating Margins, Green House Gas Emissions for Compressors (Venting) and NTS Data Publication.

We will publish further details regarding the 3rd May workshop on the gas SO incentives area of the National Grid website ahead of the meeting. This will include the agenda and supporting material for your consideration and we will notify you via e-mail when the material has been published. Following the workshop, a summary report will also be published on the National Grid website at:

Gas: http://www.nationalgrid.com/uk/gas/soincentives/IndustryWork/

[8]Ofgem published a consultation on its proposed objectives, policies and principles for the regulation of the gas and electricity SOs on 31st January at http://www.ofgem.gov.uk/MARKETS/WHLMKTS/EFFSYSTEMOPS/SYSTOPINCENT/Documents1/SO%20incentives%202013%20appendices.pdf

Event registration

If you would like to attend the workshop on the afternoon of Thursday 3rd May please confirm your attendance via e-mail to SOIncentives@uk.ngrid.com by Monday 23rd April 2012. If you have any special requirements, please indicate these in your e-mail.

We intend to seek stakeholders' views on the capacity and connections incentive proposals at the forthcoming Transmission Workgroup issues meeting which has been scheduled for Tuesday 1st May in Solihull. This meeting is being arranged through the Joint Office and confirmation regarding that meeting is expected during the 5th April Transmission Workgroup meeting.

If you would like to discuss any of the above please do not hesitate to get in contact with myself or use the contact details below.

Yours sincerely

Louise Wilks

SO Incentives Development Manager

01926 653872

Louise.wilks@nationalgrid.com