

Shrinkage Incentive Methodology Statement Review

Conclusions Report

25th April 2016

Executive Summary

National Grid Gas plc's ("National Grid") Gas Transporter Licence in respect of the NTS ("the Licence") sets out obligations under Special Condition 3D to undertake a full review of the Shrinkage Incentive Methodology Statement, such that any consequential modification can be achieved prior to commencement of the Formula Year 1st April 2017.

In addition, NG NTS are required to consult with interested parties on proposed modifications to the Shrinkage Incentive Methodology Statement and provide a period of at least 28 days for written representations.

NG NTS has undertaken this review against the extent that the methodology statement meets the three key principles of:

- Cost minimisation for customers.
- Delivering appropriate cost risk management.
- Incentivising reductions in volumes where NGGT is able to influence.

As a part of the review, NG NTS attended industry forums to discuss these principles and provide an opportunity for stakeholders to discuss the review approach being taken with the review team.

On the 7th March 2016 NG NTS issued a document detailing the analysis undertaken within the review and proposed modifications to the methodology statement for stakeholder representation.

This document sets out NG NTS' conclusions against the representations received and the proposed modifications to the methodology statement.

The recommendations made as part of the review are summarised in the table below.

Component	Current Method	Options explored	Assessment of value add with recommended proposal	Proposal
CFU baseline	Ex-ante, using regression model of historical CFU and St Fergus supply	Other supply drivers, reduced historical range and sub-annual models	Low value – modest improvement in forecast error	Ex-ante regression model of historical CFU for St Fergus, Easington and Bacton supply. Reduced historic data range.
CVS baseline	Ex-ante, using network analysis of forecast supply and demand for 7 representative days	Using historical averages similar to UAG	Low value – improvement in forecast error, but small volumes	Ex-ante, using 150 day historical average. Combined UAG and CVS.
UAG baseline	Ex-ante, using 90 day historical average	Using shorter or longer term averages of historical UAG	Low value - due to nature of UAG	Ex-ante, using 150 day historical average. Combined UAG and CVS.
CFU efficiency	Ex-post, using baseline model with outturn St Fergus supply	Assessing against expected range of model	Medium/High value – mitigation of windfall cost variances, trade-off with continuous improvement	Ex-post, using revised baseline CFU model with outturn supplies. Introduction of tolerance band.
CVS efficiency	Ex-post, using network analysis of actual supply & demand for 7 representative days	Assessing against expected level or range, based on historic performance	Medium/High value – mitigation of windfall cost variances, trade-off with continuous improvement	Ex-post, using historic 3 year average CVS. Introduction of tolerance band.

Responses

In the review, consulted parties were requested to respond to a number of questions being asked by NG NTS to determine support for the proposed modifications. The full list of questions is detailed below.

Baselines:

Q1 - Do you agree with our proposal to amend the methodology for the CFU baseline?

Q2 - Do you agree with our proposal to amend the methodology for the CVS baseline?

Q3 - Do you agree with our proposal to merge the UAG and CVS baselines?

Efficiency:

Q4 - What are your views on the appropriate balance between incentivising continuous improvement and mitigating windfall costs - what do you value most?

Q5 - Do you agree with our proposal for the efficiency target and tolerance band for CFU Efficiency?

Q6 - Do you agree with our proposal for the efficiency target and tolerance band for CVS Efficiency?

During the consultation period, NG NTS received questions from 3 organisations, the questions and responses are detailed below:

Organisation	Area	Comment	NG NTS Response
Energy UK	Source Data	Requested confirmation on whether all four Future Energy Scenarios had been used in source data set for analysis.	Confirmed that the full range of scenarios had been used as reflected in the Gas 10 year statement.
EDF Energy	UAG	Requested clarity on the makeup of UAG on the NTS and an overall understanding of the methodology statement.	Clarified the main causes of NTS UAG as being due to meter or data errors. Provided a full overview of the methodology statement and referenced the UAG reports provided by NGGT on our website.
EDF Energy	Shrinkage Incentive Performance	Query on latest financial performance against the incentive.	A copy of the Gas Incentives "Supporting Information Document v7" was provided as published on the National Grid website which provides performance from 2009/10 through to 2014/15.
Power Data Associates	Measurement	Suggests measurement of Compressor fuel would aid certainty on level of energy used and ascertain true cost of own use gas.	Response confirmed that compressor fuel is already measured.
Power Data Associates	Measurement	Indicated a desire for increased accuracy of metering at offtake points. Suggests that additional obligations might be appropriate.	Whilst the overall regulatory regime was not within the scope of this review, we highlighted the current requirements on meter uncertainty defined in the OAD section D.

On completion of the consultation period NG NTS received 1 formal response to the consultation questions. The representation comments, our response and the implications to the proposals made during the review are provided below:

Organisation	Area	Comment	NG NTS Response	Change to Proposals
Energy UK	Q1 – CFU Baseline	Energy UK recognises the importance of setting suitable baseline values, and supports option 2. Removing earlier years data is appropriate as it is outside the range of more recent and expected future flows. Also limiting the regression to St Fergus flows seems reasonable given that aggregate flows for St Fergus, Bacton and Easington are outside the current data range. However we would recommend that this is re-considered in a few years' time	<p>Thank you for your support to the modification proposed.</p> <p>NG NTS fully support the requirement to review the modifications proposed in this review in future.</p> <p>Licence Condition 3D.22 sets an ongoing requirement for NGGT to review and update (as appropriate) the Shrinkage Incentive Methodology Statement each formula year.</p> <p>This annual review process would be used to review and where appropriate consult on any modifications.</p>	No change.
Energy UK	Q2 – CVS Baseline	Energy UK notes that CVS only accounts for a small proportion of shrinkage volumes. We agree that deriving a baseline for a number of discrete days data may not be ideal when flow patterns for a given demand level can vary substantially, which may lead to a large forecast error.	Thank you for your support to the modification proposed.	No change.
Energy UK	Q3 – Merger of UAG & CVS Baseline	<p>It would have been useful to have more of a breakdown of how the UAG values, especially as it's the largest share of shrinkage. NG state's that its mainly from meter errors which they have no control over as many of the meters are not NG's, however it is clear the largest meter errors are NG's responsibility, such as when orifice plates are put the wrong way round leading to massive under-readings / extra shrinkage procurement. It would be useful if NG published the exact percentage of UAG coming from such meter errors and those coming from others they do not own such as on the DNs. We believe that this data is needed to place incentives on those who can reduce these costs. If UAG volumes increase because of simple mistakes installing and re-calibrating meters then we believe NG should be exposed to a larger share of costs as an appropriate incentive to ensure UAG decreases over time.</p> <p>In terms of Grid's proposed options, we agree with merging the UAG and CVS baselines since this appears to reduce the overall forecast error. However we consider that outturn values should continue to be published separately so that any trends over time in CVS and UAG can be monitored. Separation of the baselines in the future should not be ruled out if suitable methodologies for setting the baselines can be established.</p>	<p>Thank you for your support to the modification proposed.</p> <p>Outturn values of Shrinkage will continue to be reported on our website as currently provided.</p> <p>As part of NG NTS' obligation to undertake UAG projects a number of activities are being actively progressed. These activities are defined in the UAG reports published on our website. Activities described in the report include annual meter validation witnessing, reconciliation of errors and initiatives to support further UAG analysis.</p> <p>In addition, innovative projects are being progressed to support asset owners to undertake online Meter Validation activities and in developing an independent assessment of baseline UAG levels considered inherent on the network.</p> <p>Reconciled UAG levels are reported in total within the UAG report. Information on meter errors and reconciled quantities for DN meters is separately reported via the Joint Office. The Joint Office reports also show the DN meter owners for each offtake.</p>	No change.

Organisation	Area	Comment	NG NTS Response	Change to Proposals
			<p>It should be noted that NG NTS does not own or operate any of these meters, which is also the case for the majority of directly connected sites.</p> <p>The Shrinkage Incentive structure was not reviewed as part of this exercise, but could be considered as part of any future Incentive structure.</p>	
Energy UK	Q4 – Balance between Cost Minimisation and Continuous Improvement	It is easy to say that a well-designed incentive scheme should address both these issues, but we acknowledge this is not so easy to deliver in practice. We are also mindful of windfall gains in previous years where prices have fallen or flows changed. Ultimately achieving the least cost provision of shrinkage gas, through and overall reduction in shrinkage volumes each year should be the aim as this minimises the overall cost to suppliers and customers.	Response indicates that both elements remain important.	No change.
Energy UK	Q5 – CFU Efficiency	Energy UK considers that this adds complexity to the incentive arrangements but the proposal to take account of the fit of the model and apply a discount factor seems reasonable.	Thank you for your support to the modification proposed.	No change.
Energy UK	Q6 – CVS Efficiency	Whilst recognising the value at risk is small we support option 2 using a 3 year historical average and 100% discount factor.	Thank you for your support to the modification proposed.	No change.

Summary

As no concerns have been raised by consulted parties, NG NTS have updated the formal methodology statement in accordance with the recommended proposals made within the review.

The updated statement is available at <http://www2.nationalgrid.com/uk/industry-information/gas-system-operator-incentives/nts-shrinkage/>.

The statement and this report will now be submitted for approval by the Authority to be effective for formula year 2017/18.