

Modification Report
Creation of Incentives for the Detection of Theft of Gas (Supplier Energy Theft Scheme)
Modification Reference Number 0277
Version 2.0

This Modification Report is made pursuant to Rule 9.3.1 of the Modification Rules and follows the format required under Rule 9.4.

1 The Modification Proposal

Introduction

We believe that within the gas market, theft is correlated to throughput and that a mechanism is therefore required which will ensure that the financial risk Shippers bear as a result of theft is linked to the costs which their inaction would drive in to the market. We recognise however that the precise degree to which our belief is correct will not be substantiated until the Allocation of Unidentified Gas Expert (AUGE) publishes their results in 2012. Until such time as these findings are known therefore, we believe that a mechanism should be found to incentivise Shippers to invest in an adequate Revenue Protection Unit capable of managing theft on their portfolio. For the avoidance of doubt, we intend to modify this proposed scheme following publication of the AUGE's methodology so that it is based on throughput rather than RPU cost.

There are currently no explicit obligations on Shippers or Suppliers to detect theft of gas. There is an obligation on Shippers and Suppliers to notify Transporters of the details related to detected theft, but these should not be confused with an obligation to detect the theft in the first place.

We recognise that revenue protection and brand damage do act as a small incentive, but also recognise that these have singularly failed to provide the level of investment from Suppliers to tackle theft of gas, a fact borne out by the recommendations of the two industry reviews who have looked at this issue.

The joint ENA and ERA report, "Report of the Theft of Energy Working Groups" (April 2006) it was also recognised that "*the present arrangements for electricity and gas do not provide economic reasons for optimal behaviour by industry participants*".

UNC Review Group 0245 also looked at this issue and "*considered there is merit in the development of Shipper/Supplier incentive schemes to drive an increase in the volume of theft of gas incidents detected*" and went on to recommend that "*Suppliers investigate and implement an incentive scheme that promotes the investigation of theft of gas incidents*".

The current lack of incentives to detect theft has caused a lack of investment in theft detection which in turn has allowed theft of gas to go largely unchecked¹. This is evidenced by the comparatively poor performance in detecting theft that a large number of Shippers show within the monthly xoserve Theft of Gas statistics. This in turn has given rise to three significant issues:

1. Theft of gas is dangerous and presents a real risk to both the integrity of the network and the safety of consumers. Gas metering equipment has inherent safety features within it and tampering or bypassing this equipment is inherently dangerous. At worst this can lead to loss of life to the either the person committing the theft or those living in the immediate vicinity.
2. Theft of gas currently costs all domestic consumers money. The current settlement arrangements mean that unaccounted gas, including theft, is paid for by all shippers in accordance with the rules on Reconciliation by Difference (RbD). All undetected theft which results in lower Annual Quantity values therefore becomes a cost to Suppliers, and is inevitably passed through to end users in the form of higher prices. We also note that under Modification Proposal 0229, non-domestic customers will also start to bear a share of the cost burden created by theft.
3. We also believe that where theft occurs, that gas is not used efficiently. Thieves are not influenced by price signals or carbon reduction motives, and energy is used inefficiently. This means that where theft occurs damage is being done to the long term ability of the energy industry to manage and reduce energy consumption, damaging the industry's attempts to meet our carbon reduction targets.

The Proposal

This modification proposal will introduce the Supplier Energy Theft Scheme (SETS) incentives recommended as a solution initially by the ENA and ERA in April 2006 and then again by UNC Review Group 0245 in its November 2009 report. This scheme will incentivise Suppliers, through their contractual relationship with Shippers, to detect theft by ensuring that it costs money to do nothing, introducing the principle of competition in the Revenue Protection Market and rewarding those who do most to reduce theft with financial benefits. Only those Shippers who have acceded to the Code for the full Scheme Year will be deemed to be part of the SETS. This is detailed further within the Business Rules – see Appendix One.

For the purposes of this proposal, theft is defined within Gas Transporters Standard Licence Condition 7(4) (a), (b), (c), (which includes offences under the Gas Act (1986), Schedule 2B, paragraph 10(1) and paragraph 11(2)).

¹ In 2009, xoserve “TOG Statistics” show that of the 2017 cases of theft found in the industry, British Gas detected 1675 (83%) of them. The other 342 (17%) cases were detected by the combined efforts of 37 other Shippers at an average of 9.24 detections per annum each.

This proposal is not to be confused with Modification Proposal 0274, “*Creation of a National Revenue Protection Service*”. Modification Proposal 0277 is an incentive regime and therefore entirely different from a delivery mechanism for Revenue Protection services, which whether centralised or de-centralised will still require incentives on Suppliers in order to make it effective.

This incentive scheme will mean that at the end of each Scheme Year (as defined within the accompanying Business Rules document) credits and debits for each Shipper will be calculated based on the difference between (a) their market share of supply points in scope of the scheme and (b) their share of the total theft detections made within the Scheme Year. If a Shipper has more theft detected than their market share, they will be due a credit; if they detect less than their market share they will be presented with an invoice. All credits and debits will balance throughout the industry (save for a deduction covering the reasonable costs of operating the scheme) such that money is simply redistributed from those who have performed badly to those who have performed well – rewarding good behaviour and ensuring that the costs associated with theft flow to those who cause them through inaction or poor performance.

As commercial organisations in a competitive environment, it will thus make commercial sense to invest in an RPU rather than bear the costs associated with poor performance within the SETS Scheme. This will therefore provide an incentive on Suppliers to invest in theft detection activities, leading to an increase in the amount of theft detected across the industry.

Principles and Detailed Business Rules

The principles and detailed business rules of the Scheme are defined in the accompanying Process and Business Rules, attached to this Proposal as Appendix One.

Scope

It is considered that the mandatory Daily Metered sites (where the Daily Read Requirement applies) are sufficiently scrutinised to be excluded from the SETS solution. All other supply points, including DM Elective (DME) and DM Voluntary (DMV), will be in scope for this change.

Governance

The SETS will form part of a new section within the UNC. This will aid transparency for all parties and will ensure that it is subject to the normal UNC change processes and governance.

This proposal would make the Transporter’s Agent the Administrator of this scheme. They already receive all reports of theft on behalf of all Transporters and this would therefore prevent duplication of effort. It is recognised that this role will incur a cost for the Administrator, and is therefore proposed that those costs are collected through User Pays Charges, such that it is entirely revenue neutral for the Transporter’s Agent.

In order to validate theft detections submitted to the Administrator Shippers must collect and retain sufficient evidence to demonstrate that on the balance of probabilities, an offence under the Gas Act has occurred.

Finally, we are mindful of the discussions currently underway in the Gas Forum on the potential creation of a National Revenue Protection Service (NRPS) and note that this scheme (SETS) is capable of being modified in future to take account of a future NRPS. For example it may be appropriate for users of certain NRPS services to receive aggregate incentive scheme payments based on the average NRPS performance across partaking Suppliers.

Value of the Scheme

British Gas currently employ a Revenue Protection Unit sufficiently resourced to manage any theft which is occurring on its portfolio, wherever that may be throughout the country. The funding required to do this to a satisfactory performance level is £4.417m per annum.

We believe that as our funding is sufficient to provide a comprehensive RPU service, that this funding is an appropriate basis upon which to calculate the investment proportionately required for other Shippers in the market.

In order to properly incentivise the detection of theft, the potential cost to each party must be at least the cost of providing a Revenue Protection Service. Although we recognise that this cost may differ slightly from party to party depending on their portfolio (for example, resolving theft on larger sites may be more costly than on smaller sites due to the nature of the meter work), we propose that the overall value of the scheme is £10.062m². Note that under the Windfall Avoidance measures (below), the value of the Scheme in Years 1 and 2 may be adjusted downwards to reflect the number of Shippers involved in the Scheme.

Evidence of Theft

In order to prevent gaming of the system Shippers will need to collect and retain sufficient evidence for each theft detection. Although the exact nature of evidence which must be obtained will be for each Shipper to decide on a case by case basis, sufficient evidence should be retained to prove (on the balance of probabilities) that a meter tampering offence has been committed as defined under The Gas Act (1986) Schedule 2B.

Implementation and Windfall Avoidance

Review Group 0245 recognised that some parties are more advanced in terms of theft

² Precise calculation based on annual British Gas Revenue Protection budget of £4.417m pro-rated up on the basis that British Gas has approximately 43.9% of the in scope market (source: xoserve, April 2010). Value of scheme is rounded to nearest £10k for simplicity.

of gas detection processes than others, and that consideration of this should be given within the SETS scheme in the form of “Windfall Avoidance” measures, so as to avoid any windfall payment to those advanced parties in the first two years. This will allow each Shipper to compete on a level footing throughout the scheme.

We therefore propose that any Shipper who made more than 51% of the total number of theft detections in the industry during the last full calendar year at the time of writing (2009) should be deemed to be advanced in terms of theft detection processes, and therefore be subject to Windfall Avoidance measures in the form of a delayed implementation of the SETS scheme such that they cannot compete for any of the SETS fund in the first two years. For the sake of clarity, any Shipper eligible for Windfall Avoidance measures will not have any funding requirements within Scheme Years 1 and 2 (save for any User Pays charge), but neither will they be able to take any money from the Scheme during that period.

Any Shipper eligible for Windfall Avoidance will continue to be affected by all other provisions of the SETS process in this period, including the reporting and audit aspects.

As any Shipper eligible for Windfall Avoidance measures will not be expected to fund any part of the SETS (save for any User Pays charges), the value of the Scheme within Scheme Years 1 and 2 will be effectively reduced by an amount equal to that Shipper’s market share at the start of each Scheme Year..

This ensures that any potential windfall that may have flowed to parties already with advanced theft detection capabilities under a SETS scheme without this measure will be avoided in the interests of allowing all to compete for incentive funding equally. This measure will allow all Shippers a two year period in which to make appropriate Revenue Protection arrangements for their portfolio so that they can compete on an equal footing in the third Scheme Year.

Benefits of SETS

- Provides Suppliers with an incentive to detect theft.
- Ensures proper cost allocation, by ensuring those who do nothing subsidise those who do something. This will be done in “*a transparent and easy to understand*” way³.
- Administration costs are not onerous. The data required in order to make the scheme operate is already known and operating costs would be similar to the marginal cost of the Reasonable Endeavours Scheme.⁴
- Ensure competition in the provision of theft detection, which in turn will lead to⁵

³ ENA / ERA “Report of the Theft of Energy Working Groups”, page 67.

⁴ ENA / ERA “Report of the Theft of Energy Working Groups”, page 67

⁵ As per the findings of “The Benefits from Competition: some illustrative UK cases” DTI

1. Lower prices for Suppliers using Revenue Protection (RP) services.
 2. Greater discipline on RP providers to keep costs down.
 3. Improvements in processes and techniques with positive effect on theft detection rates.
 4. A greater variety of products and services in the RP market.
 5. A faster pace of invention and innovation in theft of gas detection techniques.
 6. Improvements to the quality of service for Suppliers using RP services.
 7. Better information for Suppliers on RP services, allowing them to make more informed choices.
- The governance of the scheme is relatively easy to create and manage.
 - SETS will apply to both the domestic and non-domestic, excluding Daily Metered sites (where the Daily Read Requirement applies) sector, and the nature of the scheme is such that it could provide a future dual fuel solution.
 - SETS is self-financing; total credits will equal total benefits (less scheme administration costs).

Consequences of non-implementation

Without implementation of this proposal there will continue to be no effective incentive on gas Shippers or Suppliers to detect theft, and the current poor level of investment will continue. This will place customer safety at risk and allow the high costs associated with gas theft to continue being passed through to end users. Shippers' ability to compete fairly will also continue to be restricted as the costs associated with theft will remain socialised based on market share and not on any performance measure which assigns cost to those who cause it.

2 User Pays

a) Classification of the Proposal as User Pays or not and justification for classification

This Modification Proposal is User Pays as it will require the gas Distribution Network Operators to provide new services, for which they currently do not receive funding.

b) Identification of Users, proposed split of the recovery between Gas Transporters and Users for User Pays costs and justification

100% costs attributed to shippers based on market share of eligible SETs scheme Supply Points

c) Proposed charge(s) for application of Users Pays charges to Shippers

All indicative costs identified by the gas Distribution Network Operators as part of their Rough Order of Magnitude work www.gasgovernance.co.uk/0277

d) Proposed charge for inclusion in ACS – to be completed upon receipt of cost estimate from xoserve

3 Extent to which implementation of the proposed modification would better facilitate the relevant objectives

Standard Special Condition A11.1 (a): *the coordinated, efficient and economic operation of the pipe-line system to which this licence relates;*

Implementation would not be expected to better facilitate this relevant objective.

Standard Special Condition A11.1 (b): *so far as is consistent with sub-paragraph (a), the (i) the combined pipe-line system, and/ or (ii) the pipe-line system of one or more other relevant gas transporters;*

Implementation would not be expected to better facilitate this relevant objective.

Standard Special Condition A11.1 (c): *so far as is consistent with sub-paragraphs (a) and (b), the efficient discharge of the licensee's obligations under this licence;*

This Modification Proposal will provide Shippers with a commercial incentive to detect theft on their portfolio by linking costs and benefits to their performance. As commercial organisations these costs will be passed through to their contracted Suppliers; the parties with the ability and customer relationship necessary to make the detections. In a competitive environment such as the energy supply market the potential costs, being calculated at a sufficient level to provide for an adequate Revenue Protection service (see above), will make it commercially important to detect the theft on their portfolio, with benefits payable for results only. The consequence of this Modification Proposal therefore will be an increase in the amount of theft detected by Suppliers.

By incentivising the detection of theft of gas, and thus increasing the amount of theft detected, there should a more efficient operation of the pipe-line system through the prevention of unsafe interference in the system that all theft represents.

By placing an incentive on Shippers to invest in theft detection, and thus increasing investment in detecting theft, it would be highly probable that there would be a consequential increase in the amount of upstream theft detected and referred to the Network Owner. There are also significant costs associated with handling the fall out from downstream theft, for example but not limited to, instances where downstream theft is not detected and results in damage to the pipelines system which must be put right.

Also, if the networks have more accurate or complete information about where and how much gas is being taken, this may lead to more effective investment decisions. To the extent that downstream theft leads to inaccurate information and is by its very

nature inefficient, this Modification Proposal should increase the amount of theft detection, across the Network, more accurate demand information should be available and the margin of error should be reduced, enabling the Network Owner to better comply with their obligations.

In the course of detecting theft, suppliers should often find instances where theft has occurred upstream of the Emergency Control Valve, and is therefore “in the course of conveyance”, as referred to in paragraph 9(1), Schedule 2B of The Gas Act (1986). As this Modification Proposal should increase the volume of theft detected, and considering suppliers existing obligations to notify such theft to the Network Owner, it should also create a marginal increase in the volume of upstream theft detected by the networks, improving the efficiency with which they meet their obligations under Standard Licence Condition 7.

In particular, we note that as Shippers will not be able to distinguish between upstream and downstream theft until they are on site resolving the matter, any incentive on detecting downstream theft will have a consequential positive impact on the amount of upstream theft detected and (as per Supply Licence Condition 16) reported to the Network Owner for resolution. This will thus enable the Network Owner to better comply with their obligations.

Also, providing incentives for the detection of theft, individual instances of theft will be detected sooner than in a market with no incentives. This earlier detection of theft will avoid the potentially greater damage to the network that long term theft risks, for example through explosions. This modification will therefore also enable the Network Owner to better comply with their obligations.

Finally, theft is by its very nature inefficient and results in a lack of information flowing about where gas is being used. As this modification will increase the amount of theft detected, better information will be available and the margin of error will be reduced, increasing the efficient and economic operation of the pipeline system.

Standard Special Condition A11.1 (d): *so far as is consistent with sub-paragraphs (a) to (c) the securing of effective competition: (i) between relevant shippers; (ii) between relevant suppliers; and/or (iii) between DN operators (who have entered into transportation arrangements with other relevant gas transporters) and relevant shippers;*

This Modification Proposal will provide Shippers with a commercial incentive to detect theft on their portfolio by linking costs and benefits to their performance. As commercial organisations these costs will be passed through to their contracted Suppliers; the parties with the ability and customer relationship necessary to make the detections. In a competitive environment such as the energy supply market the potential costs, being calculated at a sufficient level to provide for an adequate Revenue Protection service (see above), will make it commercially important to detect the theft on their portfolio, with benefits payable for results only. The consequence of this modification therefore will be an increase in the amount of theft detected by Suppliers.

By reducing theft and correcting the apportionment of misallocated energy, costs should be correctly apportioned across those who drive costs into the market, therefore improving competition.

Currently the costs of theft in the market are borne solely by SSP suppliers based on their market share. This is inequitable and disadvantages those shippers in the SSP market who invest in resolving theft on their portfolio. By ensuring that the costs associated with theft are assigned to those Shippers who perform poorly in terms of theft detection, thus driving costs in to the market, costs will be more fairly assigned, and competition between shippers and Suppliers will be improved.

Some Development Group Members, including British Gas, consider by reducing theft and correcting the apportionment of misallocated energy, costs should be correctly apportioned across those who drive costs into the market, therefore improving competition.

Some Development Group Members believed that investment decisions/strategies would not lead to an increase in effective supply competition. The competitive activity relates to the detection of theft.

Currently the energy costs of theft in the market are borne by SSP shippers based on their market share. This is inequitable and disadvantages those shippers in the SSP market who invest in resolving theft on their portfolio. By ensuring that the costs associated with theft are assigned to those Shippers who perform poorly in terms of theft detection, thus driving costs in to the market, costs will be more fairly assigned, and competition between shippers and Suppliers will be improved.

Standard Special Condition A11.1 (e): so far as is consistent with sub-paragraphs (a) to (d), the provision of reasonable economic incentives for relevant suppliers to secure that the domestic customer supply security standards (within the meaning of paragraph 4 of standard condition 32A (Security of Supply – Domestic Customers) of the standard conditions of Gas Suppliers’ licences) are satisfied as respects the availability of gas to their domestic customers;

This Modification Proposal will provide Shippers with a commercial incentive to detect theft on their portfolio by linking costs and benefits to their performance. As commercial organisations these costs will be passed through to their contracted Suppliers; the parties with the ability and customer relationship necessary to make the detections. In a competitive environment such as the energy supply market the potential costs, being calculated at a sufficient level to provide for an adequate Revenue Protection service (see above), will make it commercially important to detect the theft on their portfolio, with benefits payable for results only. The consequence of this modification therefore will be an increase in the amount of theft detected by Suppliers.

To the extent that theft is one cause of unidentified gas, theft distorts the information Transporters receive on how much gas is used, how much gas is needed and where

that gas is needed. Thus theft has implications on Transporters ability to effectively plan for seasonal gas demand. Introducing UNC incentives associated with theft detection should therefore increase the number of thefts detected. An increased number of theft detections will increase the accuracy of consumption data on the network (e.g. through more reflective AQs) consequently Transporters will gain a better understanding of where gas demand is, and how much it will be, thereby increasing the licensees ability to plan for seasonal gas demand.

Standard Special Condition A11.1 (f): *so far as is consistent with sub-paragraphs (a) to (e), the promotion of efficiency in the implementation and administration of the network code and/or the uniform network code.*

The information provided by increasing the number of thefts detected will facilitate the activities of the AUGE as required by provisions of UNC Modification 0229.

4 The implications of implementing the Modification Proposal on security of supply, operation of the Total System and industry fragmentation

No implications on security of supply, operation of the Total System or industry fragmentation have been identified.

5 The implications for Transporters and each Transporter of implementing the Modification Proposal, including:

a) implications for operation of the System:

No implications for operation of the system have been identified.

b) development and capital cost and operating cost implications:

See the User Pays section of this report.

c) extent to which it is appropriate to recover the costs, and proposal for the most appropriate way to recover the costs:

See the User Pays section of this report.

d) Analysis of the consequences (if any) this proposal would have on price regulation:

No consequence for price regulation has been identified.

6 The consequence of implementing the Modification Proposal on the level of contractual risk of each Transporter under the Code as modified by the Modification Proposal

No such consequence is anticipated.

- 7 The high level indication of the areas of the UK Link System likely to be affected, together with the development implications and other implications for the UK Link Systems and related computer systems of each Transporter and Users**

Changes will be required to UK Link Systems.

- 8 The implications of implementing the Modification Proposal for Users, including administrative and operational costs and level of contractual risk**

Administrative and operational implications (including impact upon manual processes and procedures)

Investment may be required to improve theft detection activities for some Shippers.

Development and capital cost and operating cost implications

Development costs may be required to improve theft detection activities for some Shippers.

Consequence for the level of contractual risk of Users

Shippers will incur costs if their theft detection is not in proportion with their market share.

- 9 The implications of implementing the Modification Proposal for Terminal Operators, Consumers, Connected System Operators, Suppliers, producers and, any Non Code Party**

Some Shippers believe that there is a potential contractual risk between Shipper and Supplier, where the Shipper's portfolio includes one Supplier with a portfolio less than 0.00005% market share. The Shipper may not be able to recover all of its costs or alternatively the Supplier may incur costs that some competitors may not face.

- 10 Consequences on the legislative and regulatory obligations and contractual relationships of each Transporter and each User and Non Code Party of implementing the Modification Proposal**

No such consequences have been identified.

- 11 Analysis of any advantages or disadvantages of implementation of the Modification Proposal**

Advantages

The Development Group considers the Proposal offers the following advantages:

- Incentivises qualifying Shippers to become more proactive in theft detection.
- Increased theft detection will improve customer safety.
- This will potentially reduce the amount of unidentified gas and consequential improvement in the accuracy of information used in the allocation process.
- Implementation can run concurrent with the schemes first year therefore enabling prompt implementation
- Avoids a windfall in the first two years for any party with an established Revenue Protection function.
- As a consequence of increased theft detection it is likely to increase upstream theft detection.

British Gas also considered the Proposal offers the following advantages:

- This scheme ensures shippers are directly accountable for theft in their portfolio.
- The scheme rules do not discriminate between SSP/LSP markets.
- Increase in innovation and/or development of theft detection techniques resulting from the effects of competition.
- Comparatively small implementation costs compared to alternative solutions
- Simple scheme governance.
- Benefits outweigh costs.
- Solution avoids a number of significant costs other proposals currently being considered will incur.
- Provides suppliers with an incentive to detect theft.
- Ensures more accurate cost allocation, ensuring those who allow unidentified gas to be created pay more.
- **Environmental Benefits**

This Modification Proposal will provide Shippers with a commercial incentive to detect theft on their portfolio by linking costs and benefits to their performance. As commercial organisations these costs will be passed through to their contracted Suppliers; the parties with the ability and customer relationship necessary to make the detections. In a competitive environment such as the energy supply market the potential costs, being calculated at a sufficient level to provide for an adequate Revenue Protection service (see above), will make it commercially important to detect the theft on their portfolio, with benefits payable for results only. The consequence of this

modification therefore will be an increase in the amount of theft detected by Suppliers.

When theft occurs it is rarely done efficiently. Thieves are not affected by the same drivers as other customers, for example price and carbon reduction. This modification proposal will deliver an increase in the amount of theft detected, and therefore marginally reduce the amount of inefficient gas usage in the UK, with a consequential reduction in emission levels.

Furthermore, where theft occurs, Suppliers are unlikely to know how much gas is being used or who is using it. They are therefore unable to target carbon reduction communication and measures at those responsible, for example measures available under Carbon Emission Reduction Target (CERT) measures. As this modification will lead to an increase in the amount of theft detected, and therefore an improvement in the quality of information on who is using what, Suppliers will be better able to help reduce the carbon emissions of consumers.

Disadvantages

The Development Group considers the Proposal has the following disadvantages:

- SETS requires a standalone code of practice to guarantee information sharing and fair customer treatment.

Some Development Group Members consider the Proposal has the following disadvantages:

- Compared to other theft proposals, SETS does not provide an industry wide view of theft.
- SETS is not compatible with the proposal for a National Revenue Protection Service.
- SETS does not make provision for reallocation of settlement costs incurred across the industry as other proposals do.
- SETS is a commercial incentive so may not protect vulnerable customers without a code of practice.
- Customers may not be treated consistently without a code of practise.
- SETS does not take into account geographical spread
- Targets for cases of theft to be identified is based on market share, so assumes market share and instances of theft are equal
- The level of investment required under this scheme is not capped and will be borne by the Shipper and ultimately the consumer.
- Shippers may be unable to obtain enough evidence to obtain a credit from the scheme if a consumer actively switches between suppliers.

Total Gas and Power considers that following disadvantages apply

- Creates a cross-subsidy between those shippers with a low rate of theft in their portfolio and those with a high rate of theft.
- Increase the number of premature theft allegations.
- Make switching more difficult for those consumers accused of theft, without it being proven.
- Potentially damages the reputation of the industry by making theft detection a profitable activity.

12 Summary of representations received (to the extent that the import of those representations are not reflected elsewhere in the Modification Report)

Organisation	Response	Preference
British Gas	Supports	0346
EDF Energy	Not in Support	-
E.ON UK	Not in Support	-
First Utility	Not in Support	-
Gazprom	Not in Support	-
National Grid Distribution	Supports	0277
Northern Gas Networks	Supports	0277
RWE Npower	Not in Support	-
Scottish Power	Not in Support	-
SSE	Not in Support	-
Total Gas and Power	Not in Support	-
Wales & West Utilities	Supports	0346

In summary, of the twelve representations received, four supported and eight opposed implementation of the modification. Of the four representations expressing a preference between this modification and Modification 0346, two preferred 0277 and two 0346.

British Gas considers that many of the methods used to steal gas can only be proven if the culprit is caught in the act. Because of this investigative action must be carefully targeted and timed if it is to be at all successful. For the same reasons, it is easy for a Shipper to make token, less expensive, investigative actions which fail to prove an offence has occurred. Therefore an obligation to detect theft would be almost impossible to enforce and would, without accompanying incentives, continue to lead to insufficient theft detection efforts taking place where the costs associated with real action outweigh the benefits.

British Gas considers no genuine alternatives have been raised to Modification Proposals 0277 or 0346. The NRPS is at best a long way off and in reality is unworkable and ineffective in its present form. Notwithstanding this, the incentive regime proposed by Modification Proposals 0277 and 0346 can be used to support the NRPS rather than undermine it. The approval of either Modification Proposal would clearly be aligned with Ofgem's Primary Duty to protect the interests of consumers by lowering costs and improving safety.

British Gas provided additional supporting information in the appendices attached to its representation.

A number of respondents consider the proposal makes the assumption that theft occurs evenly across all shipper portfolios. They do not believe that this has been substantiated by any publicly available data and goes against the suggestion made during previous industry theft discussions that gas suppliers with a high proportion of static customers would be more likely to have a higher incidence of theft on their portfolios.

A number of respondents consider there is a risk that customers will not be treated consistently without the adoption of an industry code of practice.

EDF Energy do not believe that there is sufficient evidence to suggest that the same level of theft occurs across all supplier portfolios and are concerned that implementation of an incentive scheme that rewards those that detect theft and penalises those that don't, could result in an unfair distribution of funds.

EDF Energy's analysis has shown that where theft has occurred, customers do not tend to switch supplier whilst the theft remains unidentified and might only do so once the theft has been detected and revenue recovery work has commenced.

EDF Energy are concerned that even with the 2 year "Windfall Avoidance measures" this proposal could be construed as an opportunity for certain suppliers to reduce RBD costs whilst generating revenue from theft identified, rather than a scheme that will offer genuine benefit to the industry in the detection and prevention of theft of gas.

E.ON UK is concerned that the proposer, drawing on the work undertaken in this area previously, has overemphasised statements from the final reports of the ERA/ENA workgroup and the UNC Review Proposal 0245 to advocate the introduction of incentives on suppliers to investigate theft, however, neither the ERA/ENA work nor the UNC Modification 0245 concluded by fully endorsing the introduction of a SETS scheme.

E.ON UK is concerned that no supplier can guarantee the level of effort they put into RP services will deliver a return equivalent to their market share and therefore cannot guarantee the return their payment into the incentive fund at the end of the scheme year. The results are all relative to the performance of other suppliers and not to the companies own performance. This therefore makes the investment in RP services unpredictable, and means that suppliers may have to consider the provision of their share of the SETS fund as a total loss and account for it accordingly, whereas the costs of theft are currently socialised through the reasonable endeavours scheme and RbD and borne equally by all customers.

E.ON UK considers the assertion by the proposer that xoserve's figures bear out a claim that they are the only supplier actively detecting theft doesn't recognise the different approaches that suppliers take in responding to the xoserve reports. The xoserve statistics being used as evidence to support this proposal fail to take account of the number of instances where theft is suspected and reported to suppliers by the xoserve reports and yet is found to be something else entirely.

E.ON UK is concerned the issue of upstream theft has been skimmed over. The proposer asserts that there will be an increase in the amount of upstream theft detected but does not require the transporters to be party to any incentive scheme.

First Utility considers the proposer's argument appears to be based on the assumption that theft is directly correlated to throughput and market share, thus requiring an RPU spend by each gas supplier proportionate to the proposer's based on either the number of meter points or the volume of gas supplied by each market participant (depending on which of the two modifications is implemented). They do not consider this assumption has yet been proved to be correct although the appointment of the AUGÉ in the near future should assist in providing a clearer view of the scale of the problem.

First Utility are uncertain that a purely financial incentive, as proposed by both modifications, will actually go any way towards addressing the root of the problem as it will merely punish those suppliers whose detection of theft is not proportionate with the proposer's by either meter points or volume supplied and will not necessarily assist in establishing a view of the scale of theft at a national level. Instead it may potentially create a cross subsidy from those suppliers who have a proportionally lower level of theft to those who have a proportionally higher level of theft within their portfolios.

Gazprom considers there is a risk the proposal will create a commercial “bounty” for “finding” theft and this could lead to inappropriate and disproportional behaviour by revenue protection agents.

National Grid Distribution agrees with the proposer that it is appropriate to introduce an incentive on Shippers to detect a level of theft proportionate to its market share.

National Grid Distribution, Northern Gas Networks and Wales & West Utilities consider, implementation would better facilitate the relevant objective of the securing of effective competition between relevant shippers and relevant suppliers (Standard Special Condition A11(1)(d)) by reducing the costs of gas illegally taken which, under the prevailing arrangements, are smeared to all Shippers and are thus likely to be recovered from other consumers. Such costs are likely to be reduced on the basis that instances of theft may be detected (and actions taken to curtail the volume of gas taken in such circumstances) earlier than under prevailing arrangements. This should result in a more appropriate allocation of costs and therefore better facilitate competition.

RWE npower are concerned it will be impossible for suppliers to know what target they need to aim for under these schemes. The information about the total number of thefts will not be available until the end of the scheme year, and it is only at this point that the target numbers will be made clear. It is in their view unfair to expect suppliers to work towards an unknown target, given the financial implications of failing to detect sufficient theft under the scheme.

RWE npower consider the costs of developing the invoicing arrangements under the scheme as set out in the ROM are significant and will add a sizeable sum to the overall costs on the business of detecting and investigating theft. RWE consider this to be counter-productive

Scottish Power considers the grounding principle of this modification, that there is a direct relationship between a supplier’s market share and the level/volume of theft that occurs on their supply points, is flawed. Industry data (from xoserve) presented to the workgroup and also the ERA/ENA report 20061 confirmed that there is a geographical basis to theft of gas. Therefore, the assumption that theft is correlated to throughput is inaccurate, consequently setting targets for theft detection based on market share is not appropriate.

Scottish Power note that the SETs option was discounted in similar discussions in electricity. In electricity the two options that have been taken forward, and are currently being developed, are a National Revenue Protection Scheme and the Reasonable Endeavours Scheme.

Scottish Power considers the scheme inequitable that any Shipper should be

penalised via the SETs scheme, when they have invested both time and money in investigating theft should they have no or little theft of their portfolio. They are also concerned, the introduction of a competitive solution will result in ‘detection’ becoming more rewarding than ‘prevention’.

Scottish Power is concerned that the overall scheme value should be £10.062m for Modification 0277. These figures have been calculated from the £4.417m BGT spend to fund a ‘satisfactory performance level’ pro-rated up on the basis on the BGT market share. Again, this is making the assumption that BGT operate efficiently and effectively and that every other party can run an RPU service on the same cost base.

Scottish Power has concerns for small market players, as they may simply not be able to meet the targets they are set because there is not a sufficient concentration of theft on their portfolio. The result being these parties will be required to pay into a Scheme they cannot recoup their costs from. This could ultimately distort competition in the market, deter market entry or place an unacceptable burden on Shippers.

SSE is concerned that each supplier will be unable to predict it’s spend as it will always be dependent on the level of spend of its competitors and their success in detecting theft. This means that the investment for the industry is not capped and could spiral. These costs will eventually find their way to legitimate consumers.

SSE is concerned that this scheme may lead to perverse incentives, which could be potentially damaging to the Industry. For example with the evolution in metering technology the Industry can expect thieves to identify new mechanisms to tamper with meters. If identified by a supplier, the scheme could incentivise that supplier to retain that information rather than to share that information with competitors, likewise any innovation which leads to greater theft detection

Total Gas and Power expect a significant difference between the domestic and I&C markets. The commercial environment in which the non-domestic sector operates means that shippers can refuse to supply a customer (irrespective of the history of the site) if it believes they are a credit risk (for example if the customer has a criminal record). Domestic suppliers do not have the same ability to refuse to supply, and so bear a much greater risk of taking on a customer who will begin to steal. In addition, we would expect the likelihood of detection to differ between markets as frequency of visits to non-domestic customers is much greater than to domestic customers.

Wales & West Utilities considers that the windfall avoidance measures that are included are appropriate and necessary and, along with ongoing performance reporting, should allow Shippers sufficient time to put in place the appropriate arrangements to ‘perform’ in proportion to their own market share. They also consider that the Proposal adequately deals with small portfolio Shippers where the share of Theft of Gas may not be significantly representative.

13 The extent to which the implementation is required to enable each Transporter to facilitate compliance with safety or other legislation

No such requirement has been identified.

14 The extent to which the implementation is required having regard to any proposed change in the methodology established under paragraph 5 of Condition A4 or the statement furnished by each Transporter under paragraph 1 of Condition 4 of the Transporter's Licence

Implementation is not required having regard to any proposed change in the methodology established under paragraph 5 of Condition A4 or the statement furnished by each Transporter under paragraph 1 of Condition 4 of the Transporter's Licence.

15 Programme for works required as a consequence of implementing the Modification Proposal

System development will be required.

16 Proposed implementation timetable (including timetable for any necessary information systems changes)

Implementation could be completed promptly on receipt of a decision.

17 Implications of implementing this Modification Proposal upon existing Code Standards of Service

No implications of implementing this Modification Proposal upon existing Code Standards of Service have been identified.

18 Recommendation regarding implementation of this Modification Proposal and the number of votes of the Modification Panel

The Panel considered Modification 0277 on 20 January 2011.

The Panel Chair summarised that the modification seeks to introduce an incentive scheme that rewards Shippers who report more than the industry average rate of detected thefts per supply point served. In principle, this should incentivise Shippers to invest in theft detection up the point where the marginal cost of theft discovery equals the marginal revenue received through the incentive scheme. In the absence of other considerations, implementation of this modification might therefore be expected to change the level of investment in theft detection – to maximise profit, Shippers would be expected to increase theft detection if the expected increase in revenue from the scheme exceeded the increase in costs, but to reduce theft detection if the cost savings from doing so exceed the expected reduction in revenue from the

scheme.

Some Members considered that the level of reward proposed under the scheme was such that an increase in effort on theft detection and, consequently, a reduction in theft and unaccounted for gas should be anticipated. This would be expected to deliver benefits in terms of more accurate cost allocations, with energy being allocated directly to the appropriate Shipper rather than being allocated through the general RbD mechanism. As with other steps to improve cost allocations, this would be consistent with facilitating the achievement of effective competition.

In addition, increased theft detection efforts would be expected to identify cases where unsafe practices had been adopted, including upstream of the ECV. Implementation could therefore help to increase network safety. While this could lead to increased costs to rectify issues identified, it would also avoid the costs needed to rectify incidents arising as a result of the unsafe behaviour. Increasing the safety of the network would be consistent with facilitating compliance with Licence obligations.

Other Members were concerned that, while incentivising theft detection was to be welcomed, the scheme could create arbitrary reallocations of costs between Shippers: portfolio variations mean that the expected percentage of theft is not homogenous across Shippers; the total to be reallocated through the scheme is not demonstrably appropriate, such that it may not incentivise the appropriate level of theft detection; and the scheme creates uncertainty about the level of revenue to be received and so does not support efficient decisions being taken. Generating arbitrary changes in cost allocations would not be consistent with facilitating the achievement of effective competition.

The Consumer Representative suggested that, while supportive of the general principle of incentivising theft detection, the case had not been clearly made that implementation of this modification would ameliorate cross subsidies appropriately. Further analysis through Ofgem’s proposed impact assessment would hopefully clarify this further.

Six Members voted in favour of implementation. Therefore the Panel recommended implementation of this modification.

Panel’s view of the benefits of implementation against the Code Relevant Objectives	
Description of Relevant Objective	Identified impact
a) Efficient and economic operation of the pipe-line system.	None
b) Coordinated, efficient and economic operation of (i) the combined pipe-line system, and/	None

or (ii) the pipe-line system of one or more other relevant gas transporters.	
c) Efficient discharge of the licensee's obligations.	Supported if identification of dangerous network interference is increased.
d) Securing of effective competition: (i) between relevant shippers; (ii) between relevant suppliers; and/or (iii) between DN operators (who have entered into transportation arrangements with other relevant gas transporters) and relevant shippers.	Accurate cost allocations avoid cross subsidies and so help secure effective competition. Implementation would change cost allocations, but there was no agreement on whether this would be an improvement or deterioration.
e) Provision of reasonable economic incentives for relevant suppliers to secure that the domestic customer supply security standards... are satisfied as respects the availability of gas to their domestic customers.	None
f) Promotion of efficiency in the implementation and administration of the Code	None

19 Transporter's Proposal

This Modification Report contains the Transporter's proposal to modify the Code and the Transporter now seeks direction from the Gas and Electricity Markets Authority in accordance with this report.

20 Text

While formal legal text for this modification has not been produced, draft text has been published at www.gasgovernance.co.uk/0277.

For and on behalf of the Relevant Gas Transporters:

Tim Davis
Chief Executive, Joint Office of Gas Transporters

MOD0277 – Appendix One

Business Rules

Introduction

1. This document has been drafted to support Modification Proposal 0277. It explains in more detail the process which will be used in order to operate the Supplier Energy Theft Scheme (SETS).

Business Rules

2. The following business rules have been drafted to help set out the operation of the proposed SETS scheme.

3. Offences which are in scope for submission under the Scheme are defined within Gas Transporters Standard Licence Condition 7(4) (a), (b), (c), (which includes offences under the Gas Act (1986), Schedule 2B, paragraph 10(1) and paragraph 11(2)). As part of the scheme, Shippers will have to warrant that have they clear evidence to prove (on the balance of probabilities) that a meter tampering offence has been committed which meets the definition under this part of the Act. For the avoidance of doubt, the person guilty of an offence need not be present at a site for an offence to qualify under this Scheme.
4. For the avoidance of doubt, valid detections under this scheme are those which meet the definitions for relevant offences under Gas Transporters Standard Licence Condition 7(4) (a), (b), (c), (which includes offences under the Gas Act (1986), Schedule 2B, paragraph 10(1) and paragraph 11(2)). Shippers also need to ensure that theft detections they submit have complied with any relevant Code of Practice for handling theft, which may exist at that time.
5. The initial “Scheme Year” (the annual period within which the scheme operates) will commence at 6.00am on the first calendar day of the month immediately following the month in which Transporters implement this MOD, and end one year later. The next Scheme Year will start immediately at the end of the initial Scheme Year with subsequent Scheme Years following in the same manner.
6. From the start of the Scheme Year, Shippers may report, but subsequently withdraw, anything they detect which meets the definitions for relevant offences under the Gas Transporters Standard Licence Condition 7(4) (a), (b), (c), (which includes offences under the Gas Act (1986), Schedule 2B, paragraph 10(1) and paragraph 11(2)) to the gas Distribution Network Operators (expected to be through their agent xoserve, using the agreed communications method prevalent at that time⁶).
7. The introduction of the SETS will not change the data that must be submitted with each reported offence, nor will it introduce any obligations on the Network Owners or their agent to validate that data on receipt.
8. The Network Owners (or their agent on their behalf) will log each reported and qualifying offence against the reporting Shipper, and reported offence will be applied to each Scheme Year based on the date on which the report is closed.
9. A report will be issued out to each Shipper by the gas Distribution Network Operators (or their agent on their behalf) after the end of each month which shows the number of valid offences recorded by that Shipper and the aggregate number of valid offences recorded by all Shippers in the Scheme Year to date.

⁶ At the time of writing, this is currently done through a Conquest form.

10. Credits and debits from the Scheme Year will be calculated based on the number of offences shown in the monthly report for final month of each Scheme Year and the market share (based on number of qualifying supply points) as the end of the Scheme Year. This avoids the issue which would be created were market share figures to be taken part way through a year in which a Shipper either entered or left the market, skewing the data before the date of that entry or exit. This will be done from the following formula:

$$(X*(STD / TTD)) - (X*SMS)$$

except where SMS equals zero when calculated to four decimal places, in which case no credit or debit will be applied.

Where

X is the total value of the scheme amended in line with the percentage change in RPI⁷ between the index published for the start and the end of the Scheme Year.

STD is the number of valid offences recorded by the Shipper.

TTD is the number of valid offences recorded in the Scheme Year.

SMS is the Supply Point market share (excluding sites which are deemed out of scope by the modification proposal) of the Shipper expressed to four decimal places.

These credits and debits (the Provisional Assessment) for each Shipper will be communicated to that Shipper by the Network Owner (or their agent).

11. A “Qualifying Shipper” is a User who has been active in the market throughout the Scheme Year, i.e. excludes those Shippers who have acceded to the Code in the Scheme Year, or those who have discontinued their accession within the Scheme Year. This will ensure that those entering or leaving the market during a Scheme Year are not unfairly disadvantaged.
12. Any Shipper who found more than 51% of the total number of theft detections in the industry during the last full year (2009), according to xoserve “cleared as valid” theft of gas statistics, shall be deemed to be in the position of having advanced theft detection capabilities in relation to the market, and thus eligible for Windfall Avoidance measures.
13. Any Shipper eligible for Windfall avoidance measures will not take part in the Scheme during the first and second years as they will be deemed to be in a position which may confer a windfall upon them. The Scheme value in the first

⁷ RPI figure to be taken from the prevailing figure published by the Office for National Statistics. Link [here](#).

and second years will be reduced by the aggregate market share of supply points for all Shippers eligible for Windfall Avoidance, as measured at the start of the relevant Scheme Year.

14. For the avoidance of doubt, any Shipper eligible for Windfall Avoidance measures will still be subject to the remainder of the provisions within the Scheme, including reporting and auditing process.
15. By the third Scheme Year it is assumed that all Shippers will be in a position to compete on a level playing field, and thus that no windfalls may be gained. All Shippers will therefore be included within the Scheme at this point, and will be eligible to compete for the entire fund. A worked example of this is given below.
16. Windfall Avoidance example.
 - *During 2009, Shipper A detected 75% of all theft. They are therefore the only Shipper eligible for Windfall Avoidance measures.*
 - *The Scheme value for the entire market is £10.062m, thus the scheme value for Scheme Years 1 and 2 (the period of Windfall Avoidance measures) will be that amount adjusted such that it represents the proportion of the market qualifying for the Scheme in Scheme Years 1 and 2.*
 - *Shipper A's market share at the start of Scheme Year 1 is 50%, therefore the value of the Scheme in Year 1 will be £5.031m. Shipper A will have no funding requirements for this amount, nor will they be able to claim any credits for this amount.*
 - *At the start of Scheme Year 2, Shipper A's market share has increased to 55%, thus the Scheme value in Scheme Year 2 will be £4.528m (adjusted for inflation). Again, Shipper A will have no funding requirements for this amount, nor will they be able to claim any credits for this amount.*
 - *In Scheme Year 3, Windfall Avoidance measures end and Shipper A enters the Scheme. As the entire market is now involved in the Scheme, the Scheme value will be £10.062m (adjusted for two year's inflation).*
 - *This ensures that (a) any Shipper with advanced theft detection capabilities does not benefit from any incentive payments in the first two Scheme Years, and that (b) in the third Scheme Year, there will be no Windfall Avoidance measures.*
- Throughout the Scheme Year an ongoing audit will be completed on a sample of the theft detection claims made by each Shipper. Specifically the auditor will have the power to select a sample of theft detections that Shipper has

made during the Scheme Year, and assess in each case within the selected sample whether there is sufficient evidence held by that Shipper to demonstrate that on the balance of probabilities a relevant offence took place under the Gas Transporters Standard Licence Condition 7(4) (a), (b), (c), (which includes offences under the Gas Act (1986), Schedule 2B, paragraph 10(1) and paragraph 11(2)), and whether the Shipper in question adhered to the rules within any relevant Theft Code of Practice which may be in place at that time. The audit will be expected to be impartial and even handed at all times in its approach to Shippers. The costs of the audit must be reasonable in relation to the overall value of the scheme.

17. The gas Distribution Network Operators will provide a report of the audit's findings to Users and the Authority, including an opinion as to whether each claim within the sample audited was valid or not. An amended version of this report which contains no confidential or commercially sensitive information will be made publicly available. As a minimum it is expected that this report will contain the name of the Shipper, total detections in the scheme year and the error rate found by the auditor. The report will be final.
18. Upon receipt of the final audit reports covering all relevant Users, the gas Distribution Network Operators will recalculate each Shippers Provisional Assessment such that an amount of theft detections submitted within the Scheme Year proportional to the amount of theft detections found to have been made erroneously during the audit are discounted. This will use the following formula:

$$(X*((STD*SER) / (TTD*TER)) - (X*SMS))$$

except where SMS equals zero to four decimal places, in which case no credit or debit will be applied.

Where

X is the total value of the scheme, increased in line with the percentage change in RPI between the index published for the start and the end of the Scheme Year.

STD is the number of valid offences recorded by the Shipper.

SER is the percentage of offences for that Shipper which have been audited and found to be valid, expressed as a decimal.

TTD is the number of valid offences recorded in the Scheme Year.

TER is the percentage of offences in the whole market that Scheme Year which have been audited and found to be valid, expressed as a decimal.

SMS is the Supply Point market share (excluding sites which are deemed out of scope by the modification proposal) of the Shipper expressed to four decimal places.

19. A working example of the correction described above is given below:

- *Shipper A's total theft detections claimed within the Scheme Year = 1500.*
- *Audit sample was 100, of which 5 did not have sufficient evidence to demonstrate an offence under the Gas Transporters Standard Licence Condition 7(4) (a), (b), (c), (which includes offences under the Gas Act (1986), Schedule 2B, paragraph 10(1) and paragraph 11(2)). Failure rate of 5%.*
- *The Provisional Assessment made by the gas Distribution Network Operators or their agent should now be amended such that the total amount of theft detections claimed by Shipper A is reduced by 5%, to 1425.*
- *The figure of 1425 is then used to compare the Shipper's relative performance in relation to theft detections.*

20. Not less than one month after the recalculation described in paragraphs 2.14 and 2.15 has been completed, the gas Distribution Network Operators will calculate a final set of credits and debits for each Shipper (the Final Assessment), and issue an anonymised report to each Shipper setting out the Final Assessments. Each Shipper will be told who they are within the anonymised report and will receive an appropriate invoice or credit note.

21. It is expected that, for the ease of administering the process for issuing credits and debits, the gas Distribution Network Operators will divide up the responsibility for issuing credit notes and invoices. Credits will be issued out within three months of corresponding debits being received, such that the gas Distribution Network Operators are never faced with a deficit and Shippers are not waiting for 100% of all debits to be paid before receiving any credits. This should be done in such a way as to not discriminate between Shippers, by paying out the proportion of credits to all eligible Shippers commensurate to the proportion of debits received at that time.

22. Credits and debits under the scheme will be managed under the process set out in Section S of the UNC.

23. If a Party believes that a material event has rendered the outcome of the scheme demonstrably inequitable, such as Supplier of Last Resort being invoked for a significant portfolio towards the end of a scheme year, they may propose to the UNCC that the scheme for that year be set aside in its entirety. Any decision of

the UNCC to do so however must be both unanimous and made before the credits and debits are issued out by the gas Distribution Network Operators.

24. For the avoidance of doubt, although the settlement of credits and debits will not complete until at least one month after the end of the Scheme Year, the next Scheme Year will still commence at 06:00am the day after the Scheme Year ends, that being the anniversary of the start of the first Scheme Year. This will effectively mean that the processes for two years' Schemes will overlap slightly.



