# Modification Report Correct Apportionment of NDM Error - Energy Modification Reference Number 0228 / 0228A Version 3.0

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 Proposals

#### Proposal 0228

#### **Introduction**

Modification Proposal 0194 was discussed at a UNC Development Workgroup which concluded in September 2008. The discussions about Modification Proposal 0194 originally covered both the **framework** for RbD allocation as well as the **levels of contribution** that each market sector should make.

Modification Proposal 0194 was amended to propose the introduction of a **framework** referred to as the "**RbD Allocation Table**" that provides for a more analytical and accurate mechanism for determining how RbD error should be allocated. This enables greater accuracy, equitability and efficiency. The RbD Allocation Table proposed by Modification Proposal 0194 was populated such that the prevailing apportionment of RbD error remained at a 100% allocation to the SSP market.

Modification proposal 0194 acts as a facilitator to the creation of a framework under which RbD can be re-allocated to create appropriate arrangements to incentivise parties in both the Small Supply Point Market and the Large Supply Point Market to address errors which contribute to RbD.

This modification proposal replicates the changes proposed under 0194 and builds upon this further by seeking to amend the levels of contribution each market sector should make and to populate the "RbD Allocation Table" accordingly.

This modification proposal had been amended following concerns that it was contingent upon Modification Proposal 0194. This proposal would have the same effect as modification proposal 0194, in that it introduces a new annex to the UNC, but in addition to Modification Proposal 0194 it changes the current levels of allocation.

We do not see any conflict between this proposal and Modification Proposal 0194 as this has additional benefits beyond those in 0194. Were 0194 to be implemented prior to this proposal, the effect of this proposal would not be to amend anything implemented in 0194 but only to add to it.

#### The current regime

Throughout the development of Modification 194 and previous discussion around Modification 115 it has been established that:

1. RbD is not solely a function of NDM Reconciliation; the majority of energy associated with RbD is caused by a number of measurement

errors.

2. It is unacceptable for one market sector to bear the entire costs of these measurement errors.

RbD has not been caused entirely by SSP meter reading or deeming shortfalls, but is largely a consequence of measurement failures that are applicable to all non-daily metered sites. These measurement errors potentially include;

- § LDZ Off take metering errors
- § Shrinkage
- § Independent Gas Transporter network reconciliation
- § Unregistered, unconfirmed and unrecorded sites
- § Supply point metering bias
- § Theft and meter bypasses

Of these errors theft is believed to be by far the biggest contributor to RbD error. Theft poses significant risks to consumers and the public in general. In addition because perpetrators are not paying for the gas they steal they are likely to use energy in a manner that is inefficient, wasteful, and damaging to the environment.

Presently RbD costs are allocated in their entirety to the Small Supply Point sector. It is unacceptable for this to continue. This fails to provide appropriate incentives around Shipper's performance and fails to accurately allocate such significant costs.

Many of the measurement errors which currently impact RbD can be reduced if Shipper's are taking appropriate actions to address the issues. The current arrangements are deficient as they do not utilise the allocation of costs generated by these errors to incentivise their resolution.

Where there are measurement errors which cannot be attributed solely to Shippers actions in a market sector, but are caused as a result of Transporter error such as with IGTs or more general market issues such as LDZ Shrinkage allocation, it is inappropriate that these costs are allocated to one market sector.

This ultimately results in the misallocation of costs arising from the current RbD cost allocation methodology placing disincentives upon the LSP sector that restrict its willingness to resolve the issues, such as for example theft, and so reduce the level of RbD error

In addition the unfair allocation of RbD error costs to the SSP sector penalises Shippers active within this market sector. This misallocation of costs adversely affects competition and results in increased prices for customers within the SSP sector.

#### This proposal

This modification proposal, would introduce an "RbD Allocation Table" into the UNC. We propose that the UNC be amended to require that RbD Energy is allocated in accordance with the percentages indicated in the RbD Allocation Table (the Business Rules included within this Proposal provide further detail of the proposed allocation process). We propose that the new table be an annex

to TPD Section E, and the appendix to this Proposal provides a draft of how we believe this table could appear in the UNC, including illustrating the initial row and column headings that we believe are required to give effect to this Proposal.

Furthermore, this modification proposal changes the levels of contribution towards RbD by Shippers through the "RbD allocations table". These figures are presented in appendix I of this proposal.

In this proposal we have identified the level of Genuine Reconciliation within RbD by looking at the differences in rate of AQ change between the LSP and the SSP sectors when compared with the overall level of AQ change in the market.

This proposal establishes a methodology for the annual calculation of the genuine reconciliation element of RbD and then uses independent analysis to identify the causes of the remaining RbD error.

#### **Benefits**

This "RbD Allocation Table" allows for an analytical and more accurate approach to the allocation of RbD error. The table sets out individual types of "measurement error" that contribute to RbD and the level of impact associated with each error.

This modification contains a calculation for the value of genuine reconciliation using data available through the AQ Review Process – Publication of Information Report established by UNC Modification 81. This calculation would be applied annually following the publication of the data, thus ensuring that the 'genuine' reconciliation element is updated with the most recent data available.

Proposals to change the figures within the "RbD Allocation Table" can be raised at any time by any code party, as new evidence about RbD error becomes available.

The allocation table then goes on to identify different market sectors, or categories, that have been identified as having differing impacts on the levels of RbD.

This proposal uses the independent analysis provided to the Modification Proposal 0194 development workgroup to inform a revised and more accurate apportionment of RbD.

#### Market sector "classifications" and exclusions

This proposal sets out the following "market sector classifications" to which NDM error might be apportioned. These are itemised in the "RbD Allocation Table"

These are;

Small supply point - Non Daily Metered

Small supply point - Advanced metering technology

Large supply point – Non Daily Metered

Large supply point – Advanced metering technology

Large supply point – Daily Metered

#### **Advanced Metering Technology**

This proposal recognises sites with advanced metering technology as a distinct and different classification within both the small and large Non Daily metered sectors.

This proposal does not allocate different levels of RbD error to advanced metered sites versus standard or 'dumb' metering in any sector. Presently there is no evidence of differing propensity to theft or other measurement errors. Advanced technology meters can still be bypassed, and can still be Shipperless. Advanced technology meters do not presently receive different treatment from an RbD allocation perspective, and our proposal does not change that.

However "The RbD Allocation Table" established by this proposal builds a foundation upon which new allocation arrangements for advanced metering may be introduced in future.

#### **Genuine Reconciliation**

It is recognised that an element of RbD can be attributed to genuine reconciliation where there is shown to be a difference between the rate of movement in AQ share between the LSP and SSP sectors.

Under the current RbD Mechanism, energy is initially allocated between the LSP and SSP based on their AQ share.

If the AQs for the SSP and LSP are equally overstated or equally understated then 'reconciliation' would be a net zero amount, as the balance between the two would still be correct.

Where the AQs in either market are more or less accurate than the other, reconciliation will result.

Therefore differences between AQ accuracy need to be considered in any allocation.

This proposal allows for the identification and correct allocation of these costs through the use of the 'Read Submission Issues' section of the RbD Allocation Table.

Our analysis of the UNC Modification 0081 data for the 2008 AQ Review has identified that, when modification 640 movements are allowed for, the LSP Sector AQ decreased at a greater rate than in the SSP.

During 2008 the LSP sector (including threshold crossers) reduced total AQ by 5.14%, whereas the SSP sector was reduced by 3.48%.

During the Gas year 1<sup>st</sup> October 2007 – 30<sup>th</sup> September 2008 the volume of energy in RbD attributable to the different rates of declining LSP and SSP usage was 1.77TWh of the total 11.8TWh of RbD or 15.000% of RbD.

This modification would allocate this 15% of RbD wholly to the SSP sector The volume of 'genuine reconciliation' has been calculated as follows –

As the volume of genuine reconciliation occurring in the market will be subject to change at each AQ review, we propose that the following methodology be established within the UNC for the value to be calculated annually.

#### Methodology for the calculation of Genuine Reconciliation Volume

The level of genuine Reconciliation can be calculated by looking at the levels of AQ movement between the LSP and the SSP sectors and comparing this to the overall level of AQ movement within the market, as below;

$$\left[\frac{\mathbf{A}\mathbf{Q}^1}{\mathsf{m}\mathbf{A}\mathbf{Q}^1} - \frac{\mathbf{A}\mathbf{Q}^2}{\mathsf{m}\mathbf{A}\mathbf{Q}^2}\right] \times \mathsf{m}\mathbf{A}\mathbf{Q}^1$$

Where;

 $AQ^1$  = Total LSP AQs in current Gas Year

 $AQ^2$  = Total LSP AQs in previous Gas Year

mAQ<sup>1</sup> = market aggregate NDM AQ in current Gas Year

mAQ<sup>2</sup> = market aggregate NDM AQ in previous Gas Year

#### It is proposed that;

- Within 15 working days of the publication of the AQ Review Process Publication of Information Report established by UNC Modification 0081, xoserve recalculate the Genuine Reconciliation Value using the above methodology.
- 2. Where the value of the Genuine Reconciliation element increases or decreases, an equal and opposite adjustment will be made to the Theft value, which is the balancing factor.
- 3. The RbD Allocation Table will be updated to reflect the revised values which will be presented to the UNCC for approval by majority vote.
- 4. Where the UNCC does not approve the amendments to the RbD Allocation Table, the prevailing values will remain in use.

#### **Levels of contribution to RbD Error**

Our proposal is that RbD should be apportioned to each market sector

"classification" in a manner consistent with the extent to which that sector causes RbD. To do this we have;

- 1. Identified each potential measurement error that can contribute to NDM error.
- 2. Used independent industry data to determine the scale of each measurement error
- 3. Expressed each measurement error as a % of NDM error.
- 4. Used independent industry data to determine the extent to which each market sector "classification" is responsible for or contributes to each individual measurement error.

We reviewed extensive detailed independent analysis as to what the known and potential measurement errors are and the differing extent to which they cause RbD error.

Further to discussions under the auspices of modification 194 development workgroup there is consensus, supported by independent analysis, that the following measurement errors exist;

Late and Unregistered Sites

Independent xoserve analysis presented to the modification 194 development work group on 11<sup>th</sup> July 2008 demonstrated that at least 2.854% of RbD was caused by the failure of Shippers to register supply points in a timely manner.

That analysis also demonstrated that those sites where attributable to individual sector "classifications" as follows;

Small supply points, 24% of volume associated with this measurement error

Large non daily metered supply points, 74 % of volume associated with this measurement error

Large daily metered supply points, 2% of volume associated with this measurement error

IGT Issues

Independent xoserve analysis presented to the modification 194 work group on 27<sup>th</sup> March 2008 demonstrated that a maximum of 5.708% of RbD could be associated with measurement errors connected with independent gas transporters' networks. This error is a result of an under allocation of energy to the IGT market, caused by deficiencies within the CSEPs creation process which have been reviewed as part of UNC Modification 157.

UNC Modification 157 review group has identified problems that are structural rather than attributable to specific Shipper performance or market sector classification characteristics. For example the connections process between the IGT and the DNO and the arrangements for acceptance of readings by the IGTs.

This demonstrates that RbD cost allocation should be driven by the level of throughput in the IGT sector, that is as follows;

Small supply points, 88% of volume associated with this measurement error

Large non daily metered supply points, 12% of volume associated with this measurement error

Large daily metered supply points, 0% of volume of volume associated with this measurement error

#### • Shrinkage Errors

It is an accepted principle that losses which occur upstream of the emergency control valve are recovered based on throughput outside of the LSP and SSP allocations. In the present regime, LDZ Shrinkage is calculated based on a set of assumptions at the beginning of the period. These assumptions are validated at the end of the period and any differences are charged solely to RbD.

Independent xoserve analysis presented to the modification 194 work group on 12<sup>th</sup> June 2008 demonstrated that 0.0004% of RbD could be associated with the difference between initial and final levels of shrinkage.

It is widely acknowledged that the costs of shrinkage should be allocated on a throughput basis, such that they are borne equally by all market sector classifications

Therefore RbD error associated with differences between initial and final shrinkage levels should be attributable to individual sector "classifications" as follows:

Small supply points, 62% of volume associated with this measurement error

Large non daily metered supply points, 24 % of volume associated with this measurement error

Large daily metered supply points, 14% of volume associated with this measurement error

#### • Supply point metering

Consensus was reached via discussions at the modification 194 development workgroup that there is **potential** for measurement errors to be caused by supply point metering;

However there was no evidence presented to demonstrate that supply point metering had an adverse impact on RbD. Nor was any evidence or rationale presented to demonstrate that any one market classification made a greater contribution to supply point metering and measurement errors than the other.

Our assumption is that supply point metering does not contribute to NDM error.

#### • LDZ off take metering

Consensus was reached via discussions at the modification 194 development group that there is **potential** for measurement errors to be caused by LDZ off-take metering;

Any error in the measurement of gas entering the system would, so long as

undiscovered, simply distort the true level of NDM error.

The costs and benefits associated with any under-statement or over statement of gas entering the system should be borne by all sectors.

However our primary assumption is that overall there is not an over or under registration of gas entering the system

Theft and Unreported open By-Pass valves

Scale of theft

Independent xoserve analysis presented to the modification 194 development workgroup on 9<sup>th</sup> June 2008 demonstrated that significant volumes of theft have been detected, even greater volumes of theft have been alleged, and that a significant number of allegations have not been investigated.

Clearly the very nature of theft is such that the absolute level cannot be quantified. It is widely accepted that the level of detected theft is not reflective of the level of actual theft.

Having considered and made an assessment of the extent of all other potential causes of RbD error it was agreed at the modification 194 development work group that, where no other explanation for RbD exists, theft was the "balancing factor". That is to say that the remaining error that cannot be attributed to other measurement errors should be attributable to theft.

Having considered all other potential measurement failures it can be concluded that 76.438% of residual error is attributable to theft.

Contribution from each market sector classification

Extensive independent xoserve analysis has been presented to the modification 194 development work group with regard to the extent to which theft is alleged and detected in various market sector classifications.

The independent xoserve data demonstrates that by volume 55.35% of theft **allegations** relate to the Large Supply Point Non Daily Metered Sector and 44.65% relate to the Small Supply Point Non Daily Metered Sector

The independent xoserve data demonstrates that by volume 7.45% of theft **detections** relate to the Large Supply Point Non Daily Metered Sector, or 3.36% when network relevant thefts are excluded, and 92.55% relate to the Small Supply Point Non Daily Metered Sector

There is no evidence of theft on daily metered sites. It is widely accepted that the propensity for theft on such sites is negligible.

It is a matter of fact that there are no incentives to detect theft on Large Supply Points. For this reason the level of alleged theft is likely to be a more reliable indicator of apportionment than the level of detected theft.

In determining a level of apportionment we considered 3 options;

#### Option 1 – Percentage of AQ of Allegations

Using the proportion of AQ for sites where there has been an allegation

of theft across sectors to determine the level of apportionment.

This approach would result in a 55.35% allocation to the SSP Sector and a 44.65% allocation to the LSP NDM Sector.

#### Option 2 – Corrected Percentage of 'valid' theft energy

*Uplift volume of detected LSP theft so as to;* 

- 1. Correct for the frequent failure of many LSP suppliers to submit the kWh volume of stolen gas to the Transporter.
- 2. Correct for the significantly lower detection rate of LSP suppliers that is a result of the lack of incentives upon them to detect theft. Using the proportion of AQ for sites based on detected theft in the LSP market, and increase the value by the same conversion rate factor between allegation and valid as exists in the SSP.

Uplifting the 3.3% detected I&C theft in this manner would result in a 7.9% allocation to the LSP sector.

However the base figure is so artificially low because of the apparent skewing effect that LSP practices have on masking true levels of theft

#### Option 3 – Simple average between allegations and detected theft

Using a simple average between the percentage of allegations and the lower (excluding network relevant theft) detections rate.

LSP = 
$$(55.35 + 3.36) / 2 = 29.35\%$$
 allocation  
SSP =  $(44.65 + 96.64) / 2 = 70.65\%$  allocation

Whilst there are arguments in support of options 1 and 2 we elected to use option 3.

In our view Option 2 is supported by strong logical arguments, however it does not fully address the distortion caused to the level of allegations arising from the lack of incentives in the LSP sector.

We also believe that there is strong justification for Option 1, however we have elected to use option 3 on the basis that this more conservative approach would removed any doubt that our proposals may result in an over allocation of cost to the LSP Sector.

This approach most likely means that a cross subsidy in favour of the LSP sector remains. However the revised allocations that we propose will reduce this cross subsidy from the prevailing level and more crucially put in place incentives to tackle theft, reducing the level of unreconciled energy, costs and risks to consumers and delivering carbon saving benefits.

The identification of theft as the 'balancing factor' is consistent with the conservative approach that we have taken above. Under this proposal we are only seeking to re-allocate 29.35% of the (76.438% of RbD) theft element. Any alternative to this would have resulted in an increased re-allocation of RbD to the LSP market in line with throughput and so would have resulted in a 38% allocation to the LSP.

We therefore propose that the RbD associated with theft should be

attributable to individual sector "classifications" as follows;

Small supply points 75.99% of volume associated with this measurement error.

Large non daily metered supply points 24.01% of volume associated with this measurement error

Large daily metered supply points 0% of volume associated with this measurement error

#### **Overall Contribution**

Further to the detailed analysis and debate undertaken in the Modification 194 development workgroup and described above we have populated the "RbD Allocation Table" and attached this as Appendix I

The total contribution that each sector makes to RbD is calculated by aggregating the assessments that have been made for that sector regarding the level of contribution and scale of each error.

The total levels of apportionment are set out in the RbD Allocations Table – Appendix I

#### **Allocation process**

The allocation process will follow the same business rules as those set out in UNC Modification proposal 0194 and are detailed below.

We are keen to ensure a clean transition from the current arrangements to those proposed within this modification proposal; however it is our intention that this proposal should not have any retrospective consequences. Therefore we propose that this new methodology is only applied to debit and credit reconciliations arising for gas days after the date of implementation. This means that any reconciliation that relates to gas days prior to implementation date will be allocated as per the arrangements that were in place on those gas days.

#### **Review process**

In this modification proposal we have outlined the methodology for the annual calculation of genuine reconciliation caused by differing rates of change between SSP and LSP AQs.

For the avoidance of doubt it is our intention that subsequent changes to either this methodology or which amend the allocation or contribution made, other than by the annual recalculation of Genuine Reconciliation, should be by way of a formal UNC Modification.

#### Other issues - Transportation charge cost reflectivity

In its decision letter Ofgem did express concerns about Transportation charge cost reflectivity

In recognition of Ofgem's concerns the proposer has elected to exclude the allocation and charging of transportation costs from this proposal. This effectively decouples the matter of transportation charging from energy allocation. Whilst there are many commonalties between the way that RbD

energy costs and RbD transportation costs can be allocated, the two need not be dependent upon each other, and so can be addressed by separate proposals and at separate times.

This is consistent with the electricity industry where the allocation of distribution costs is treated separately to the allocation of energy costs. In addition we recognise that Ofgem has recently decided to reduce the portion of commodity based transportation charges from 50% to 5%. These changes result in a 10 fold reduction in the transportation revenues associated with RbD charges.

#### **Business Rules**

Current RbD processing is unchanged, thus:

- 1. At M+1 the Aggregate Reconciliation Quantity will be calculated in respect of Month M.
- 2. At M+1 the Aggregate Reconciliation Quantity and associated charges will be apportioned to Smaller Supply Point ("SSP") Users in accordance with current UNC provisions.
- 3. At M+1 Aggregate Reconciliation Transportation Charge Adjustments and any Aggregate Reconciliation Clearing Values (excluded from the new arrangements under point 5) will be issued to SSP Users in accordance with the values established in step 2.

The new arrangements will comprise:

- 4. Under this proposal the Aggregate Reconciliation Quantity and Aggregate Reconciliation Clearing Value (excluding those items specified in point 5) from Month M will be apportioned to Supply Point ("SP") Users in accordance with the Apportionment Methodology. The following items are for consideration
- i. Timing of apportionment M+1 or M+2 etc (different to transportation invoice timings)
- ii. Frequency monthly / 6 monthly / annually etc
- iii. Variability of the proportion allocated to market sectors (point 6)
- 5. Non-standard items outside the scope of apportionment under this proposal
- i. Application of End of Year Reconciliations
- ii. Application of Large Offtake Metering Adjustment
- iii. Annual Shrinkage adjustment which will be apportioned in accordance with the prevailing terms

6. The Apportionment Methodology is that the Aggregate Reconciliation Quantity and Aggregate Reconciliation Clearing value determined pursuant to point 4 will be apportioned:

a. to SPs within the following sectors in proportion to their SP Annual Quantity ("AQ") Market Share within each sector

| i.   | SSP                                  | a % |
|------|--------------------------------------|-----|
| ii.  | SSP (with Remote Metering Equipment) | b % |
| iii. | LSP                                  | c % |
| iv.  | LSP (With Remote Metering Equipment) | d % |
| v.   | Daily Meter Sites                    | e % |

For the avoidance of doubt the sum of values a to e (above) will be 100%.

b. the AQ market share in (a) will be derived in proportion to their SP AQ Market Share in a consistent manner with existing RbD principles (i.e. excluding sites to which G3.4.3 applies).

- c. the above percentages may vary from time to time in accordance with the relevant governance rules (proposed to be pursuant to UNC Modification)
  - i. Modification Proposal 0194 advocates the values detailed in 6a as:
    - a. 100%
    - b. 0%
    - c. 0%
    - d. 0%
    - e. 0%

d. specific categories of SPs excluded from any application of the Apportionment Methodology and SP Market Shares are:

- i. NTS Supply Points
- ii. Special Metering Supply Points (DM)
- iii. DM CSEPs
- 7. Aggregate Reconciliation Quantities will be grouped into sectors and apportioned to SP market shares in accordance with the existing RbD sector principles (i.e. in accordance with the 1, 6 and 12 month apportionment rules (E7.2.1/7.2.2(f)).

Reconciliation Invoices will be issued to all Users (SSP and LSP) to reflect net liability (from Month M) as a consequence of the application of the Apportionment Methodology.

#### Proposal 0228A

#### **Introduction**

Following a development workgroup which concluded in September 2008, British Gas Trading (BGT) amended their modification proposal 0194 so that it creates a framework for the re-allocation of Reconciliation by Difference (RbD) each month between the SSP and LSP sectors.

Corona Energy subsequently raised an alternate proposal that uses the same principle of an 'Allocation table' but is based on fixed values rather than linked to RbD.

Both of these proposals do not immediately impact upon costs to industry parties as they are both facilitating modifications that create the ability within the Uniform Network Code for costs to be redistributed but leave the actual levels for subsequent modifications to determine.

BGT have since gone on to raise a further modification proposal 0228, which both established the framework as set out in 0194 and populates this using data identified through the 0194 development workgroup.

BGT's proposal 0228 replicates the changes in their modification proposal 0194, and adds to this by populating the RbD Allocation Table. In the same way, this modification proposal replicates the changes proposed by Corona Energy in their alternate 0194A and builds upon this further by seeking to;

- (i) establish the process for calculating the volume of gas to be allocated to the LSP sector, and
- (ii) populating the "Large Supply Point unidentified gas allocation table" using the same data identified through development workgroup 0194.

ScottishPower are of the opinion that the methodology proposed by BGT within Mod 228 introduces a pragmatic approach to the reapportionment of Unknown Gas to the LSP market sector and as such believe that the extension of the principles proposed within modification 194A will be enhanced by the population of the Large Supply Point unidentified gas allocation table" by applying the same methodology.

#### The current regime

Re-allocation of market error Modification Proposals 0115/0115a attempted to allocate some of these measurement errors via RbD. Ofgem gave support to the general principle of spreading the costs of unidentified gas to all market players. In its Modification Proposal 0115 decision letter dated 24th October 2007, Ofgem stated that:

"we agree with the basic tenet of the proposals, that it is inappropriate for

one sector of the gas market to bear all the costs of unallocated gas"

The decision letter went on to state that

"there are many issues which are currently contributing to the RbD charge, only some of which have been explored as part of these proposals and not all of these can necessarily be attributed to I&C shippers."

The Modification Proposal 0194 Development Work Group considered the use of RbD to allocate such energy to the LSP market. However, issues were raised by some parties with using this approach.

Further to the initial estimation of gas, the RbD mechanism adjusts the allocated consumption between SSP and LSP markets by allocating any change in the actual LSP allocation to the SSP sector by market share.

It has been agreed that at present a percentage of this RbD adjustment includes an element of unidentified gas. In addition to a percentage of genuine reconciliation caused by the movement between the LSP and SSP market, which is reflective of actual SSP consumption.

#### **Identification of Error**

We believe that for these purposes the LSP market can be divided into two sectors, namely:

- NDM (Non Daily Metered)
- DM (Daily Metered including Non-Mandatory DM)

The methodology will identify differing market activities that are contributing towards to the overall market error, namely:

- § LDZ Off take metering errors
- § Shrinkage
- § Independent Gas Transporter network reconciliation
- § Unregistered, unconfirmed and unrecorded sites
- § Supply point metering bias
- § Theft and meter bypasses

Of these errors theft is believed to be by far the biggest contributor to unidentified gas. Theft poses significant risks to consumers and the public in general. In addition because perpetrators are not paying for the gas they steal they are likely to use energy in a manner that is inefficient, wasteful, and damaging to the environment.

Presently all unidentified gas costs are allocated in their entirety to the Small Supply Point sector via RbD. It is unacceptable for this to continue. This fails to provide appropriate incentives around Shipper's performance and fails to accurately allocate such significant costs.

Many of the measurement errors can be reduced if Shipper's are taking appropriate actions to address the issues. The current arrangements are deficient as they do not utilise the allocation of costs generated by these errors to incentivise their resolution.

Where there are measurement errors that cannot be attributed solely to Shippers actions in a market sector, but are caused as a result of Transporter error such as with IGTs or more general market issues such as LDZ Shrinkage allocation, it is inappropriate that these costs are allocated to one market sector.

This ultimately results in the misallocation of costs, placing disincentives upon the LSP sector that restrict its willingness to resolve the issues, such as for example theft, and so reduce the level of error.

This misallocation of costs adversely affects competition and results in increased prices for customers within the SSP sector.

#### Our proposal

We propose that the UNC be modified to include provisions that provide for the allocation to the LSP sector of specific volumes of otherwise unidentified gas.

We propose that this could be achieved by adding an appendix to Section E, the "Large Supply Point unidentified gas allocation table", and cross referencing this Table as appropriate within the UNC.

This table could then be used to allocate unidentified gas (that would otherwise fall to RbD) attributed to individual causes to the LSP sector.

It is envisaged that the table could be introduced in the following format:

|   | Market Segment   |                 |
|---|------------------|-----------------|
| Source of Error   | LSP NDM<br>(GWh) | LSP DM<br>(GWh) |
| Late confirmation, unregistered and orphaned Sites              | 211.83           | 5.72            |
| IGT Issues (Late confirmation, unregistered and orphaned Sites) | 68.70            | 0.00            |
| Shrinkage contribution  | 0.009            | 0.005           |
| Theft and Unreported open meter by-<br>pass valves              | 2691.74          | 0.00            |

These causes are collectively referred to below as "LSP unidentified gas"

NB. For the avoidance of doubt please note that this Proposal limits itself

to the consideration of energy charges and Transportation charges are excluded.

- 1. Changes to the size of each contribution of the LSP unidentified gas, i.e. variation in the values in the table other than that proposed within the methodology to the Theft value, shall be introduced through the implementation of a Modification Proposal. It is envisaged, but not considered to require any explicit UNC reference, that a proposal to vary the values in the table should be implemented in line with the same notice period and start date as for LDZ transportation charges, as specified in GT Licences.
- 2. At M+1, the monthly NDM LSP Error Charge will be calculated for the relevant calendar month ("M").
- 3. The calculation of the monthly LSP unidentified gas cost shall be 1/12 of the overall LSP unidentified gas (as specified in the proposed table) multiplied by the rolling average 30 day SAP starting on the 1st calendar day of month M.
- 4. At M+1 the LSP unidentified gas costs will be levied on users as a proportion of their NDM LSP market share in month M. This market share will be derived from the site AQs in the shipper's ownership. For the avoidance of doubt this will include LSP AQs for sites situated on LDZ CSEPs within the relevant shipper's ownership. The transporters will raise debit invoices to all Shippers for their proportion of the unidentified gas. It is not envisaged that there will be any specific query process however standard invoice query rules would apply.
- 5. Provisions will be made for a reduction in RbD of the same value as the proposed debit invoices to the LSP sector. The reallocation of the accrued NSM LSP unidentified gas costs payments to the SSP Shippers will be made on the basis of their NDM SSP market share. Following feedback from xoserve it has been decided that this will be done following current RbD rules. It is therefore proposed that all refunds go into the one month RbD pot for calculating market share.

#### **Calculation of Unknown Gas**

In calculating the level of Unknown Gas we have used the same approach as identified by BGT in their proposal 0228 for the calculation of genuine reconciliation.

A proportion of RbD can be attributed to genuine reconciliation where there is shown to be a difference between the rate of movement in AQ

share between the LSP and SSP sectors.

Under the current RbD Mechanism, energy is initially allocated between the LSP and SSP based on their AQ share.

If the AQs for the SSP and LSP are equally overstated or equally understated then 'reconciliation' would be a net zero amount, as the balance between the two would still be correct.

Where the AQs in either market are more or less accurate than the other, reconciliation will result.

Therefore differences between AQ accuracy need to be considered in any allocation.

BGT's analysis of the UNC Modification 0081 data for the 2008 AQ Review has identified that, when modification 640 movements are allowed for, the LSP Sector AQ decreased at a greater rate than in the SSP.

During 2008 the LSP sector (including threshold crossers) reduced total AQ by 5.14%, whereas the SSP sector was reduced by 3.48%.

During the Gas year 1st October 2007 – 30th September 2008 the volume of energy in RbD attributable to the different rates of declining LSP and SSP usage was 1.77TWh of the total 11.8TWh of RbD.

Therefore the total Unknown Gas volume to be considered is 10.03TWh.

The volume of 'total Unknown Gas' has been calculated as follows -

As the volume of genuine reconciliation occurring in the market will be subject to change at each AQ review, we propose that the following methodology be established within the UNC for the value to be calculated annually.

Methodology for the calculation of Unknown Gas Volume

The level of genuine Reconciliation can be calculated by looking at the levels of AQ movement between the LSP and the SSP sectors and comparing this to the overall level of AQ movement within the market, as below;

$$\left[\frac{\mathbf{AQ^1}}{\mathsf{mAQ^1}} - \frac{\mathbf{AQ^2}}{\mathsf{mAQ^2}}\right] \times \mathsf{mAQ^1}$$

#### Where:

AQ1 = Total LSP AQs in current Gas Year

AQ2 = Total LSP AQs in previous Gas Year

mAQ1 = market aggregate NDM AQ in current Gas Year

mAQ2 = market aggregate NDM AQ in previous Gas Year

#### It is proposed that;

- 1. Within 15 working days of the publication of the AQ Review Process Publication of Information Report established by UNC Modification 0081, xoserve recalculate the Unknown Gas value using the above methodology.
- 2. Where the value of the Unknown Gas element increases or decreases, an equal and opposite adjustment will be made to the Theft value, which is the "balancing factor".
- 3. The Large Supply Point unidentified gas allocation table will be updated to reflect the revised values which will be presented to the UNCC for approval by a majority vote.
- 4. Where the UNCC does not approve the amendments to the Large Supply Point unidentified gas allocation table, the prevailing values will remain in use.

#### Level of LSP unidentified gas

Late confirmed and Unregistered Sites

Independent xoserve analysis presented to the modification 0194 development work group on 11th July 2008 demonstrated that at least 2.854% of unallocated gas - 286.26GWh was caused by the failure of Shippers to register supply points in a timely manner.

That analysis also demonstrated that those sites where attributable to individual sector "classifications" as follows:

Large non daily metered supply points,  $74\,\%$  of volume associated with this measurement error or  $211.83\,\text{GWh}$ 

Large daily metered supply points, 2% of volume associated with this measurement error or 5.72GWh

#### IGT Issues

Independent xoserve analysis presented to the modification 0194 work group on 27th March 2008 demonstrated that a maximum of 5.708% of unidentified gas i.e. 572.51GWh could be associated with measurement errors connected with independent gas transporters' networks. This error is a result of an under allocation of energy to the IGT market, caused by deficiencies within the CSEPs creation process which have been

reviewed as part of UNC Modification 157.

UNC Modification 157 review group has identified problems that are structural rather than attributable to specific Shipper performance or market sector classification characteristics. For example the connections process between the IGT and the DNO and the arrangements for acceptance of readings by the IGTs.

This demonstrates that unidentified gas allocation should be driven by the level of throughput in the IGT sector, that is as follows;

Large non daily metered supply points, 12% of the error i.e. 68.70GWh Large daily metered supply points will not incur any charges as a result of this error.

#### Shrinkage Errors

It is an accepted principle that losses which occur upstream of the emergency control valve are recovered based on throughput outside of the LSP and SSP allocations. In the present regime, LDZ Shrinkage is calculated based on a set of assumptions at the beginning of the period. These assumptions are validated at the end of the period and any differences are charged solely to RbD.

Independent xoserve analysis presented to the modification 0194 work group on 12th June 2008 demonstrated that 0.0004% of total unidentified gas i.e. 0.04GWh could be associated with the difference between initial and final levels of shrinkage.

It is widely acknowledged that the costs of shrinkage should be allocated on a throughput basis, such that they are borne equally by all market sector classifications

Therefore unidentified gas error associated with differences between initial and final shrinkage levels should be attributable to individual sector "classifications" as follows;

Large non daily metered supply points, 24 % of the error i.e. 0.009GWh Large daily metered supply points, 14% of the error i.e. 0.005GWh

• Theft and Unreported open By-Pass valves

#### Scale of theft

Independent xoserve analysis presented to the modification 0194 development workgroup on 9th June 2008 demonstrated that significant volumes of theft have been detected, even greater volumes of theft have been alleged, and that a significant number of allegations have not been investigated.

Clearly the very nature of theft is such that the absolute level cannot be quantified. It is widely accepted that the level of detected theft is not

reflective of the level of actual theft.

Having considered and made an assessment of the extent of all other potential causes of RbD error it was agreed at the modification 0194 development work group that, where no other explanation for unidentified gas exists, theft was the "balancing factor". That is to say that the remaining error that cannot be attributed to other measurement errors should be attributable to theft.

Having considered all other potential measurement failures it can be concluded that 9,171.19GWh of residual error is attributable to theft.

Contribution from each market sector classification

Extensive independent xoserve analysis has been presented to the modification 0194 development work group with regard to the extent to which theft is alleged and detected in various market sector classifications.

The independent xoserve data demonstrates that by volume 55.35% of theft allegations relate to the Large Supply Point Non Daily Metered Sector and 44.65% relate to the Small Supply Point Non Daily Metered Sector

The independent xoserve data demonstrates that by volume 7.45% of theft detections relate to the Large Supply Point Non Daily Metered Sector, or 3.36% when network relevant thefts are excluded, and 92.55% relate to the Small Supply Point Non Daily Metered Sector

There is no evidence of theft on daily metered sites. It is widely accepted that the propensity for theft on such sites is negligible.

It is a matter of fact that there are no incentives to detect theft on Large Supply Points. For this reason the level of alleged theft is likely to be a more reliable indicator of apportionment than the level of detected theft.

In determining a level of apportionment we have Used a simple average between the percentage of allegations and the lower (excluding network relevant theft) detections rate.

LSP = (55.35 + 3.36) / 2 = 29.35% allocation of the error – 2691.74GWh

This approach most likely means that a cross subsidy in favour of the LSP sector remains. However the revised allocations that we propose will reduce this cross subsidy from the prevailing level and more crucially put in place incentives to tackle theft, reducing the level of unreconciled energy, costs and risks to consumers and delivering carbon saving benefits.

#### **Review process**

In this modification proposal we have outlined the methodology for the annual calculation of genuine reconciliation caused by differing rates of change between SSP and LSP AQs.

For the avoidance of doubt it is our intention that subsequent changes to either this methodology or that amend the allocation or contribution made, other than by the annual recalculation of Genuine Reconciliation, should by way of a formal UNC Modification.

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

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

British Gas consider proposal 0228 will extend to a broader range of Shippers the incentives for identifying and resolving measurement failures that manifest as unreconciled energy and resultant charges to RbD. Such issues have been described earlier

The detection and prevention of theft is a particularly important area to which proposal 0228 will extend the incentives to. There is presently no incentive upon LSP Shippers to detect theft and this proposal addresses this.

As a result of proposal 0228 the extent to which measurement failures and theft especially persist shall be reduced, and this will enable more efficient operation of the pipeline system and ultimately reduced costs for consumers.

Scottish Power considers the detection and prevention of theft is a particularly important area and that both proposals will extend incentives to apply to all market sectors.

Others consider implementation of either of these Proposals would lead to arbitrary cost allocation to the LSP sector, leading to potential cross-subsidies of the SSP market. It will therefore not incentivise good practice and will not reduce any of the root causes relating to unallocated gas and hence would not further this relevant objective.

British Gas added Proposal 0228 provides a framework and methodology that results in a more precise and efficient mechanism to determine the apportionment of RbD costs to Shippers. As a result of this proposal, the extent to which measurement failures, and especially Theft, persist shall be reduced. A reduction in the volume of energy transported through the system and then "lost" will improve efficiency. Improved confidence in throughput data through the reduction in error will also help improve the efficient and economic operation of the pipeline system.

British Gas considers Proposal 0228A provides a framework and methodology which would result in a more precise and efficient mechanism than the current arrangements for the determination of the apportionment of RbD costs to Shippers. Although by setting fixed values rather than relating the issues to RbD throughput the incentives this proposal does not create the most responsive incentive regime, it does provide an incentive for LSP shippers to take actions to address some of the issues contributing to RbD.

Therefore, as a result of this proposal the extent to which measurement failures, and especially Theft, persist would be reduced. A reduction in the volume of energy transported through the system and then "lost" will improve efficiency. Improved confidence in throughput data through the reduction in error will also help improve the efficient and economic operation of the pipeline system.

Standard Special Condition A11.1 (b): so far as is consistent with subparagraph (a), the coordinated, efficient and economic operation of

- (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 subparagraphs (a) and (b), the efficient discharge of the licensee's obligations under this licence;

Standard Licence Condition 4D requires all of the GTs to not discriminate between market participants. The LSP Sector contributes to the volumes of unallocated energy; however all of the costs for unallocated energy are borne by the SSP Sector.

EDF consider implementation of either proposal would provide a framework which would help to ensure costs are correctly targeted and so help to facilitate Standard Licence Condition 4D. However, they note that by choosing a flat profile for the allocation of energy to the LSP sector, there is a possibility that a cross subsidy from the SSP to LSP sector would remain. In particular they note that the GDPCR appeared to recognise that theft varies with throughput and so follows a seasonal profile. There is therefore a risk that the LSP sector will be over allocated unaccounted for gas in the summer, when prices are lower, but under allocated gas in the winter when prices are historically higher. This would appear to continue with the cross subsidy, although at significantly reduced levels from what is currently present.

Standard Special Condition A11.1 (d): so far as is consistent with subparagraphs (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;

Proposal 0228 provides a framework which would make it easier for Shippers to propose different allocations, thereby potentially facilitating competition.

British Gas considers Proposal 0228 reduces the extent to which the SSP market sector, and Shippers / Suppliers operating predominately within it, cross subsidise the LSP NDM market sector, and the Shippers / Suppliers operating predominately in it.

The reduction of a cross subsidy between market sectors and individual Shippers / Suppliers operating in them, better secures effective competition between Shippers and Suppliers. It ensures better targeting of costs and broadens incentives upon all Shippers to tackle the underlying causes of RbD

(unidentified gas).

The use of Theft as the 'balancing factor' for RbD in proposal 0228 results in a lower total allocation for the LSP sector. Any alternative view on balancing factors would invariably result in an allocation close to through-put levels for the LSP market, i.e. an allocation of 38% rather than the significantly lower 29.35% proposed by 0228.

Making it easier to propose different allocations increases risk and uncertainty thereby adversely impacting competition. By introducing a framework based on allocating RbD Energy percentage shares, some Distribution Workstream Members felt that there would not be an accurate allocation between Shippers were there to be any move away from the present approach, creating perverse incentives that would adversely impact competition.

Scottish Power considers the use of Theft as the 'balancing factor' for the allocation of unidentified gas has resulted in a lower total allocation for the LSP sector, as the proposed 0228A methodology, takes a more conservative approach when interpreting the xoserve data to determine the true levels of LSP theft.

Some Shippers felt proposal 0228 would lead to a risk of incorrect apportionment of energy to the LSP market.

EDF consider a driving force behind a competitive market is to ensure that costs are correctly targeted at those who are causing them to be incurred. Implementation of either proposal would make it easier for Shippers to propose different allocation of costs, and so help to ensure that costs are correctly targeted, thereby facilitating competition.

EDF added whilst this may increase the risk that the LSP sector has to fund the gas that it is consuming, this will conversely reduce the risk for SSP suppliers that they will have to fund gas consumed in the LSP market. It would therefore appear that both proposals re-attribute risk to the appropriate market sectors, which could also be viewed as being beneficial to competition.

GDF Suez consider proposals 0228 and 0228A deal only with apportioning costs between SSP and LSP shippers and as such the only relevant objective to address under the proposals is A11.1 d "securing effective competition between relevant shippers and suppliers".

Scottish Power felt that proposal 0228 and 0228A both introduce a much-improved basis for the allocation of RbD costs across all market sectors and that it provides the appropriate incentives for all Shippers and Suppliers to proactively seek for the timely resolution of failures that contribute to RbD error. Proposal 0228 has increased benefits in that it further reduces the cross-subsidy between the LSP and SSP market sectors. New entrants will have greater certainty on costs and as a consequence competition between Shippers and Suppliers will be increased.

In their representation for 0228, British Gas consider there is a precedent that proposals which improve the accuracy of cost allocations can be regarded as better facilitating competition. Ofgem have directed a number of proposals be implemented on this basis.

Gazprom consider proposals 0228 and 0228A will allocate a large and in the

case of 0228, varying level of gas to the LSP market. Shippers with LSP portfolios will incur significant costs managing these risks. This will discourage new entrants (as start up costs will be much higher) and make smaller Shippers less competitive.

Scotia Gas Networks agree that implementation of either proposal, in principle, would help promote competition as it would introduce a framework for allocating RbD Energy costs which would lead to a more equitable sharing of costs between the SSP and the LSP markets. However the basis of the apportionment needs to be transparent and verifiable.

Standard Special Condition A11.1 (e): so far as is consistent with subparagraphs (a) to (d), the 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;

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

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

EDF felt by introducing a framework into the UNC, either proposal would make it easier to propose different allocations, thereby facilitating efficiency in the administration of the UNC.

British Gas considers Proposal 0228 does not propose any changes to the current calculation of Reconciliation as defined under section E of the UNC. Rather, it allows for a recovery of costs and redistribution at Month +1 by use of an appendix to the UNC document.

This approach for both proposals 0228 and 0228A results in minimal change to the current code rules and allows for future amendments to the level of allocation to be made to an appendix rather than requiring regular legal redrafting and associated review; thus promoting efficiency in the administration of the UNC.

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

Theft if unabated results in an inability to predict and control consumption. This has proven a significant problem in some international utility markets, where theft is on such a scale that security of supply is compromised.

Broadening incentives to LSP (all) Shippers such that theft is reduced will increase the certainty, transparency and predictability of consumer consumption levels.

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

#### a) Implications for operation of the System:

Either proposal will result in a more concerted effort by industry to tackle the systematic drivers of RbD error (unidentified gas) by broadening the coverage of incentives to include LSP Shippers.

Such focus on improved settlement data, and improved measurement accuracy should have a positive impact on the operation of the system.

British Gas added Transporters are required to carry out system monitoring and demand planning activities. Transporter demand estimations are based on data that they collect directly from end users. However, customers who are stealing gas are unlikely to use gas in the same efficient way as those who are paying for it; therefore theft will distort the actual levels of predicted demand from a network, requiring balancing activity by the Transporter.

Likewise, in the event of a system constraint, LSP customers who are engaged in theft are unlikely to comply with a firm load-shedding request.

#### b) Development and capital cost and operating cost implications:

An offline process could be used to deal with the revised arrangements set out in either proposal, without the need for significant development.

Transporters consider an on line service may cost £300,000 to develop.

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

The costs associated with either modification proposal are not significant enough to warrant special recovery mechanisms. However, some felt that this could be considered a User Pays service.

NGD advised no User Pays elements have been identified for either Proposal, consequently Transporters would be expected to bear the costs of development and operation of the new framework, including the annual review of the values. Following a request from NGD, a Rough Order of Magnitude (ROM) was undertaken by xoserve with respect to Modification Proposal 0194. Indicative implementation costs ranged from £110,000 to £360,000 dependant on the chosen solution. Similar costs could be expected should 0228/0228A require implementation.

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

No such consequence is anticipated.

## 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

These proposals do not have any affect on the Transporters' level of contractual risk.

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

Dependant upon the solution adopted changes to systems may be required.

Gazprom consider proposal 0228 will require the extension of the RbD processes to the LSP market. For both 0228 and 0228A there would be significant costs in adjusting settlement and billing systems for both Transporters and Users.

7 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)

No such implications have been identified.

Development and capital cost and operating cost implications

No such implications have been identified.

#### Consequence for the level of contractual risk of Users

Introducing either proposal would increase contractual risk for LSP Shippers in particular, and change the nature of LSP risk as a result of exposure to RBD, while reducing risk for SSP Shippers. However implementation would help to ensure that risk is re-attributed to the appropriate market sectors.

EDF considers that whilst proposal 0228A will reduce risk to SSP Shippers and increases it to LSP Shippers, this will be offset by the introduction of a flat profile for unallocated energy to LSP Shippers.

RWE NPower considers proposal 0228A, by virtue of its lessening the exposure of the LSP sector to unpredictable risk, is a more equitable solution for all parties than proposal 0228.

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

Some Shippers felt I&C consumers may be impacted to the extent that I&C contracts are modified to reflect the existence of the framework within the UNC.

British Gas considers Proposal 0228 builds further upon Modification Proposal 0194. It establishes the framework set out in that proposal and also uses available data to establish a more accurate allocation of costs to shippers. This will extend incentives to all shippers and as a result unreconciled energy and

therefore costs to consumers shall reduce.

Gazprom consider both proposals 0228 and 0228A will assign large and in the case of 0228 unpredictable costs to LSP Shippers. A significant proportion of those costs will be due to SSP consumption.

9 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

Gazprom suggested that to take account of the varying gas levels that proposal 0228 will allocate to LSP sites, all LSP site contracts will need to allocate this varying level of gas. This will add additional costs onto LSP customers.

### Analysis of any advantages or disadvantages of implementation of the Modification Proposal

#### **Advantages**

Some Shippers felt Proposal 0228 offered the following advantages:

- By addressing theft issues this proposal will result in a reduction in energy consumption, thus delivering carbon benefits. End users able to receive gas without a realistic prospect of paying for it have no incentive to use gas efficiently, extending incentives for the detection of theft to the LSP Shippers will result in a reduction in theft and so a reduction in inefficient energy use. This proposal improves the ability of Shippers to price accurately by apportioning costs more accurately to them.
- From the date of its implementation the proposal will remove the barrier to entry associated with an allocation of costs to the small supply point sector that is inequitable and inaccurate.
- Removal of an inappropriate and unacceptable cross subsidy of the predominately non domestic LSP sector by the mainly domestic SSP sector will better facilitate competition between Shippers.
- This proposal improves the ability of Shippers to price accurately by apportioning costs more accurately to them.

EDF felt proposal 0228 offers the following advantages:

- Provides a framework which simplifies subsequent change to the allocation of RbD energy.
- Re-attributes risk to the appropriate market sector.
- Facilitates Gas Transporter Standard Licence Condition 4D.

EDF felt proposal 0228A offers the following advantages:

- Does not utilise the RbD mechanism, which may appear attractive to some LSP Shippers.
- Re-attributes risks to the appropriate market sector.

Facilitates Gas Transporter Standard Licence Condition 4D.

#### **Disadvantages**

Some Shippers felt Proposal 0228 offered the following disadvantages:

- Uses the existing RbD smear as the basis for reallocation. The issues highlighted in the table are not directly proportional to the RbD smear, which through the percentage mechanism is the basis on which this modification is proposed.
- Introduces the concept of allocation by percentage market share, which does not reflect the diversity of the I&C market.
- A cross subsidy may remain, likely in the favour of I&C / LSP Shippers, however this cross subsidy will be reduced when compared to current levels.

EDF felt proposal 0228A had the following disadvantages:

- Uses a flat profile for the allocation of unaccounted for gas to the LSP market this appears to be in contradiction to Ofgem's views in the GDPCR on theft profiles.
- The use of a flat profile potentially creates a cross subsidy from SSP to LSP Shippers.
- Different treatment of shrinkage errors to the DM market, compared to the shrinkage regime.

GDF Suez felt both proposals 0228 and 0228A contained a disadvantage that many Industrial and Commercial only shippers do not currently receive RbD invoices as all their portfolio is reconciled on a meter point by meter point basis. These shippers face the costs of the individual meter point reconciliation regime, plus added costs from RbD, without the significant benefits associated with RbD gained by the SSP sector.

Gazprom considers proposal 0228 has the following disadvantages:

- The unidentified gas volume will vary on a daily basis, with no relation to gas consumption.
- The unpredictable and counter-intuitive variation in unidentified gas will crate significant costs to Shippers in contracting for such gas.

and the following disadvantages for both proposals 0228 and 0228A

- The values proposed are not robust, have no coherent supporting information and do not give any confidence that they are appropriate.
- This proposal will result in a cross-subsidy between markets.
- There is no attempt to provide a future verification process that is needed to take into account future market development.

#### 11 Summary of representations received (to the extent that the import of

### those representations are not reflected elsewhere in the Modification Report)

| PROPOSAL                        |                      |                      |                      |  |  |  |
|---------------------------------|----------------------|----------------------|----------------------|--|--|--|
| ORGANISATION                    | 0228                 | 0228A                | PREFERENCE           |  |  |  |
| British Gas                     | Supports             | Supports             | Preference for 0228  |  |  |  |
| Corona Energy                   | Not in Support       | Not in<br>Support    |                      |  |  |  |
| EDF Energy                      | Supports             | Supports             | Preference for 0228  |  |  |  |
| E.ON UK                         | Not in<br>Support    | Supports             |                      |  |  |  |
| GDF Suez                        | Not in<br>Support    | Not in<br>Support    |                      |  |  |  |
| Gazprom                         | Not in<br>Support    | Not in<br>Support    |                      |  |  |  |
| National Grid<br>Distribution   | Qualified<br>Support | Qualified<br>Support | Preference for 0228A |  |  |  |
| Northern Gas<br>Networks        | Not in Support       | Qualified<br>Support |                      |  |  |  |
| RWE Npower                      | Qualified<br>Support | Support              | Preference for 0228A |  |  |  |
| Scotia Gas<br>Networks          | Qualified<br>Support | Qualified<br>Support |                      |  |  |  |
| ScottishPower                   | Supports             | Supports             | Preference for 0228  |  |  |  |
| Scottish and<br>Southern Energy | Supports             | Not in<br>Support    |                      |  |  |  |
| Shell Gas Direct                | Not in<br>Support    | Not in<br>Support    |                      |  |  |  |
| Total Gas and<br>Power          | Not in<br>Support    | Not in<br>Support    |                      |  |  |  |

British Gas provided additional information within its representation, including a report by Cambridge Economic Policy Associates, in support of Modification Proposal 0228. British Gas considers proposal 0228A seeks to leave any risk associated with the variability of RbD with the domestic sector.

National Grid Distribution provided additional information on the suitability of

Genuine Reconciliation Principles within their representation for proposals 0228 and 0228A

A number of representations raised issues concerning the impact of implementing Proposals 0228 or 0228A on the LSP market, requesting Ofgem undertake a Regulatory Impact Assessment should they be minded to implement either proposal.

Corona considers both proposals would add around £75m annually to the costs of I&C shippers should either be implemented. Due to the nature of the charging methodology for proposal 0228, I&C shippers would find it difficult to pass-through these charges to consumers which would leave the majority of I&C shippers unprofitable.

Total suggest an independent review to establish a "best estimate" of the size of the unallocated gas issue.

Shell Gas Direct supports resolution of the issue of unidentified gas. However, the way in which this happens needs to be done in an equitable, transparent and impartial manner, thus helping to promote competition. It is for that reason that Shell has raised UNC Modification Proposal 229 - Mechanism for correct apportionment of unidentified gas, which relies on the work of an independent expert and will therefore help achieve these objectives.

A number of respondents referred to their representations for proposals 0194 and 0194A, considering issues raised in those representations being equally valid for proposals 0228 and 0228A.

EDF question proposal 0228A's treatment of shrinkage error costs that are not accounted for by the Transporters' allowance. Noting that it is currently accepted that shrinkage is recovered from all supply points based on throughput. Modification 0228A's proposal to only recover any error in shrinkage costs from the NDM market appears inconsistent with this principle, and would therefore question why they have opted for this treatment.

Northern Gas Networks consider it is important that a fair and equitable solution is implemented and have some concerns over the robustness of both the allocation percentages in modification 0228 and the kWh values used in 0228A. It has been shown during the recent workstreams and review groups that the base data used to generate these are as at a single snapshot in time, and that at a different point the results shown from analysing the same data set can provide a significantly different position. For this reason, NGN believes that both of these options still require further analysis before they would offer a viable solution.

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

Implementation is not required to enable each Transporter to facilitate compliance with safety or other legislation.

# 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.

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

No programme for works has been identified.

## Proposed implementation timetable (including timetable for any necessary information systems changes and detailing any potentially retrospective impacts)

British Gas considers proposal 0228 should not be implemented later than 1<sup>st</sup> October 2009.

### 16 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.

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

At the Modification Panel meeting held on 19 March 2009, of the eight Voting Members present, capable of casting nine votes, two votes were cast in favour of implementing Modification Proposal 0228. Therefore the Panel did not recommend implementation of this Proposal. At the same meeting, four votes were cast in favour of implementing Alternative Proposal 0228A. Therefore the Panel did not recommend implementation of Alternative Proposal 0228A.

The Panel then proceeded to vote on which of the two Proposals would be expected to better facilitate achievement of the Relevant Objectives. Of the eight Voting Members present, capable of casting nine votes, one vote was cast in favour of implementing Proposal 0228 in preference to Alternative Proposal 0228A, and five votes were cast in favour of implementing the Alternative Proposal 0228A in preference to Proposal 0228. Therefore, the Panel determined that, of the two Proposals, Proposal 0228A would better facilitate the achievement of the Relevant Objectives

#### 18 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.

#### 19 Text

Legal text for Proposals 0228 and 0228A has been published as separate documents.

For and on behalf of the Relevant Gas Transporters:

Tim Davis Chief Executive, Joint Office of Gas Transporters