

Modification proposal:	<b>Uniform Network Code (UNC) 115 and 115A: "Correct apportionment of NDM error"</b> .		
Decision:	The Authority <sup>1</sup> does not direct that either of these proposals be made <sup>2</sup>		
Target audience:	The Joint Office, Parties to the UNC and other interested parties		
Date of publication:	24 October 2007	Implementation Date:	Not Applicable

## Background to the modification proposal

Reconciliation by Difference (RbD) is the method of reconciling the difference between actual (metered) and deemed (estimated) measurements of gas. It was introduced in 1998 in order to facilitate competition in the predominantly domestic Small Supply Point (SSP) sector of the gas market, as it was not considered practicable to individually reconcile the circa 20 million additional supply points based on their actual meter readings.

In simple terms, the rationale for RbD is that gas consumed on each Local Distribution Zone (LDZ) is calculated daily by metering the gas flowing into each LDZ, adjusting for any stock change and shrinkage, then removing that consumed at Daily Metered (DM) Supply Points. The residual amount of gas is then allocated between small and large Non-Daily Metered (NDM) supply points on the basis of their Annual Quantity (AQ) and End User Categories (EUC). Together, the AQ and EUC (essentially a consumer usage profile) provide a reasonable estimate of the gas consumed.

Although they may be on NDM supply points, sites which consume more than 73,200 kWh and therefore classified as Large Supply Points (LSPs) will nonetheless have their meters read relatively frequently, either monthly or annually depending on volumes of gas consumed. When the meter readings for these larger consumers are submitted, showing the actual consumption, this is compared with the earlier deemed consumption. The difference between the two figures will lead to either a charge or refund to the invoice of the shipper supplying that consumer. This process is known as Meter Point Reconciliation.

Given the above, the costs of any shortfall in gas allocation resulting from delays in meter point reconciliation are, at least temporarily, borne by the SSP market as part of the RbD smeared charge, along with unallocated volumes resulting from theft, errors in shrinkage calculation etc.

A further explanation of the RbD arrangements and some of the issues associated with them are set out in our 2006 RbD review document<sup>3</sup>.

<sup>1</sup> The terms 'the Authority', 'Ofgem' and 'we' are used interchangeably in this document. Ofgem is the Office of the Gas and Electricity Markets Authority.

<sup>2</sup> This document is notice of the reasons for this decision as required by section 38A of the Gas Act 1986.

<sup>3</sup> Review of Reconciliation by Difference (RbD), Ofgem 57/06, March 2006:

[http://www.ofgem.gov.uk/Licensing/IndCodes/Governance/Documents1/13487-RbD\\_FinalV1.1.pdf](http://www.ofgem.gov.uk/Licensing/IndCodes/Governance/Documents1/13487-RbD_FinalV1.1.pdf)

## The modification proposals

### UNC115

The Proposer of UNC modification proposal 115 (UNC115) BGT, estimates that around 11 million TWh<sup>4</sup> of unallocated gas is currently being apportioned solely to the largely domestic SSP sector; despite issues which are also relevant to the I&C sector, such as theft of gas, contributing to this total. This proposal seeks to redistribute some of the costs of unallocated gas currently allocated solely to the SSP sector, to the LSP sector on the basis of an equivalent commodity charge.

In essence, UNC115 proposes that RbD be initially charged to the SSP market as usual (i.e. quantifying the amount to be apportioned), but then smeared across all Non-Daily Metered (NDM) supply points the following month. It is intended that this will have an equal and opposite impact upon the sectors and leave the GTs neutral. The proposer contends that this solution to charging provides consistency with the application of charges under the existing mechanism introduced by modification proposal 640<sup>5</sup>, and ensures that all market sectors receive equal treatment

The proposal does not seek to allocate any additional costs to the Daily Metered (DM) sector.

### UNC115A

This alternative to UNC115, raised by GdF, also seeks to redistribute some of the costs of unallocated gas to the LSP sector, but additionally exclude those sites which are classified as being monthly read, i.e. with an AQ of above 293,000kwh (see table below).

AQ	Category	Read Frequency
>2,196,000 KWh	DM	Daily
293,000 KWh – 2,196,000 KWh	NDM LSP	Monthly
73,2000 KWh - 293,000 KWh	NDM LSP	Annually
< 73,2000 KWh	NDM SSP	Annually

The proposer contends that un-reconciled energy should only be apportioned to sites where it is likely to have arisen, i.e. non-monthly read meters in the NDM sector. Their rationale for this is partly that this sector enjoys a relatively high read performance and should therefore be excluded on the same basis as DM sites.

UNC115A also seeks to provide an alternative basis for recovering the costs, which the proposer considers to be more reflective of the costs imposed by those sites. In particular, rather than recovering through a single commodity charge, LSPs continue to pay at their usual reduced commodity rate. The proposer considers that the exclusion of

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<sup>4</sup> The proposer refers to 540kWh per SSP MPRN, of which there are circa 21 million = 11.34 TWh.

<sup>5</sup> Network Code modification 640: 'End of Year Reconciliation of Specific Categories of Smaller Supply Points'.

monthly read sites may facilitate this, as it avoids the complexity of further banding of charges.

### **UNC Panel recommendation**

At its meeting held on 21 June 2007, the UNC modification panel separately considered the two modification proposals. 5 votes were cast in favour of implementing proposal UNC115 and 2 were in favour of implementing proposal UNC115a. Therefore the Panel did not recommend implementation of either proposal.

Additionally, the panel then voted on which of the two proposals it considered would better facilitate the relevant objectives. Again, 5 panel members voted in favour of proposal UNC115 and 2 in favour of UNC115a.

### **The Authority's decision**

The Authority has considered the issues raised by the modification proposal and the Final Modification Report (FMR) version 3.0, dated 24 August 2007. The Authority has considered and taken into account the responses to the Joint Office's consultation on the modification proposal which are attached to the FMR.

The Authority has concluded that implementation of either modification proposal would not better facilitate the achievement of the relevant objectives of the UNC.

### **Reasons for the Authority's decision**

In coming to our decision we note the varying degree of support for proposals UNC115 and UNC115a from the domestic and I&C shippers respectively. We also note that neither proposal attracted a majority recommendation to implement from the UNC modification panel.

We agree with the basic tenet of the proposals, that it is inappropriate for one sector of the gas market to bear all of the costs of unallocated gas through RbD. We therefore welcome the recognition of the problem evidenced by these proposals and in particular the support from the I&C shippers for the alternative proposal. This proposal acknowledges the problem and seeks to facilitate a contribution from LSP sites to RbD, albeit not at the levels envisaged by the original proposal. Given this near consensus to the principle behind both proposals, the crux of our decision is whether either proposal represents a better allocation of RbD costs than the current arrangements, and whether it is appropriate to exempt a further category of sites, namely those which are monthly read, in addition to DM sites.

Like the majority of respondents, we consider that it is appropriate to consider these proposals primarily against Relevant Objectives c) and d) of the UNC, as set out in Standard Special Condition A11 (1) of the Gas Transporters Licence. However, we also consider there may be an impact, albeit marginal, upon Relevant Objective a), and so will deal with that last.

***Relevant objective c) – so far as is consistent with sub-paragraphs a) and b) the efficient discharge of the licensee’s obligations under this licence***

Consideration of these proposals against this objective is primarily in the context of the requirements of Standard Special Condition A5 of the GT licence<sup>6</sup>, which requires that the GTs transportation charging methodologies are cost reflective. It also requires them to properly take into account developments in the transportation business to facilitate effective competition between gas suppliers and gas shippers.

*Charging methodology*

Transportation charges currently take into account a number of variables such as capacity, as measured by Supply Point Offtake Quantity (SOQ) and consumption as measured by their AQ, resulting in a number of charging bands. Several of the respondents, including each of the GT respondents, commented that a single transportation charge as proposed by UNC115 would be inappropriate. Specifically, three of the GTs concurred with the prevalent I&C shipper view that a single rate as proposed by UNC115 would not be cost reflective, and would therefore be detrimental to the objectives of their charging methodologies. The fourth GT respondent suggested that they would support a ‘flat’ rate being applied to all NDM supply points, but that further work, discussion and a new modification would be required to establish this.

Several respondents suggested that UNC115a would better meet the charging methodology objectives, though this seemed to be versus UNC115 rather than the existing baseline. One suggested that UNC115a removes an element of contractual risk between suppliers and customers in the I&C market, but did not elucidate.

Whilst noting the proposer’s intent that under UNC115 all energy would be charged at the same rate across all sectors, we do not accept that modification 640 sets any precedent for the treatment of reconciliation costs, or more generally. Nor do we consider that all market sectors should necessarily receive equal treatment. We consider that they should receive equivalent treatment where equivalency is due, but may be treated differently where there is a difference which is relevant.

Modification 640 addressed the specific issue of supply points which had previously been categorised as an SSP crossing the 73,200 KWh threshold to become an LSP. Any difference in the applicable commodity charge would be marginal and applicable only to the period between the threshold being crossed and the next annual AQ review. In contrast, modification proposal UNC115 seeks to apply the same SSP commodity charge to all LSPs, excluding only DM sites, on an enduring basis. We therefore do not consider these examples to be analogous.

*Commodity charges*

RbD charges are made up of two key elements, the largest being a Gas Reconciled Energy (GRE) charge for the energy itself, which is invoiced to shippers for Supply Points whose actual consumption differs from the previous estimate. The GT remains neutral in this process, so for every debit there is an equal and opposite credit to other shippers, and vice versa. There will also be a transportation charge adjustment, known as Transportation Reconciled Energy (TRE) which covers the commodity element of the

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<sup>6</sup> Standard Special Condition A5: Obligations as Regard Charging Methodology

overall transportation charge (based on volumes of gas transported) and so these revenues will flow to the GT.

Transportation Use of System charges are themselves currently made up of two elements, currently split on a 50:50 basis between capacity (based on peak day consumption) and commodity (based on annual consumption). However, a pricing consultation has recently been completed which seeks to revise this ratio, such that the charge relates 95% to capacity and 5% to commodity. The report on this consultation is available from the Joint Office website<sup>7</sup>. This proposed pricing charge has yet to be decided upon, though we are conscious that if it is accepted, there will be an impact on RbD insofar as less TRE charges will flow through it.

Whilst this outstanding charging consultation does not have a bearing on our decision on these proposals, we would be interested to understand, perhaps as part of any further RbD related modification consultations, whether such a change to the capacity-commodity split would change parties views on RbD and if so why. We would be particularly interested in any views on whether such a change would mitigate the concerns regarding cost reflectivity mentioned above.

### *Contribution*

Some respondents included estimates that based on current NDM AOs, the volume of energy which the proposer seeks to reallocate through UNC115 to LSP Users would be approximately 40% of the reconciliation volume. This is exacerbated by the proposed equal and opposite smearing, which would see LSPs charged at the same rate as SSPs for a unit of energy. I&C shippers point out that this could result in charges up to 4 times higher than their usual commodity charge and in effect reverse the subsidy between market sectors.

Particularly given the potential materiality of these proposals we consider that they would have benefited from further analysis in certain key areas. Although certain cost drivers have been identified, in some cases there has been little attempt to quantify their individual impacts, though we recognise that by their very nature this would be a difficult task. We consider three of the key areas below:

### Theft of Gas

The majority of respondents agree that to the extent there are instances of theft in the LSP sector, it is inappropriate that those costs are borne entirely by the SSP sector. Whilst the extent of theft is unknown, the FMR contains reference to samples conducted by xoserve, which suggest that around 1% of identified cases of theft are on LSPs. Whilst some respondents have suggested that this demonstrates the problem to be insignificant in that sector, the FMR also shows that volumes associated with those sites are relatively high, circa 9% of all stolen gas (3GWh of 33GWh based on the sample).

In their response, BGT referenced a study they had conducted themselves across 2 LDZs, which also found evidence of theft on LSP sites. They also emphasised that the current arrangements place a perverse incentive on shippers to deal with theft of gas issues, given that they will incur costs for dealing with a theft situation, but none if it goes

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<sup>7</sup> For further details, see the 'Distribution Networks Pricing Consultation Report on DNPC03 at: <http://www.gasgovernance.com/NR/rdonlyres/8EEEB2A2-610B-4497-B3CC-BEE022724FDC/19950/DNPC03ConsultationReport.pdf>

unchecked. However, BGT also acknowledge that the data from its study cannot reasonably be extrapolated to derive a representative value for all LDZs.

We consider that BGT's evidence, together with that provided by xoserve, does establish that theft of gas in the LSP sector is a reality. In our view it is therefore no longer appropriate for the costs of theft to be borne solely by the SSP sector, and for the perverse incentives on I&C shippers to remain. However, whilst it may be inappropriate for LSPs to contribute nothing to the costs of theft, it would also be inappropriate for them to contribute too much and we do not consider that there has been sufficient analysis of the scale of the problem to reasonably inform any revision to the charging arrangements.

The figures provided do not distinguish between categories of LSP, so we do not currently have any figures for theft at monthly read sites, but in the absence of any other discernible difference between sites (such as Automated Meter Reading (AMR) equipment installed, more regular inspections etc), we do not consider that the likelihood of theft will change significantly either side of the 293,000 kWh threshold. We are therefore not convinced that monthly read sites should be treated any differently to other LSP sites with respect to theft of gas.

#### Read performance and reconciliations

Energy costs flow into RbD from the LSP sector when there is a delay in the LSP meter point being reconciled, and therefore the gas used at those sites being accurately accounted for. Whether this is significant will depend largely on the performance of shippers in submitting reads, and the extent to which subsequent reconciliations net each other off.

The proposer of UNC115a contends that monthly read performance is consistently high (they refer to 98-99% each month) leaving an insignificant amount of energy to roll over into RbD. They go on to state that in any case, any roll over is temporary, given the must read requirement is set at four months (i.e. any unaccounted for gas should be reconciled back to the relevant supply point within four months). However, several respondents disagree with this assessment of monthly read performance, often referring back to figures presented to the RbD sub-group showing an average read period of 49 days, with a spread of up to 200 days. This would place the read performance of many monthly read sites on a par with those which, although only required to be read annually, may in fact do so more regularly.

As noted by several respondents, the exclusion of monthly read sites from RbD under proposal UNC115a would create an incentive for LSPs electing to be a monthly read. However, the proposal does nothing to promote appropriate behaviour in terms of securing accurate reads, insofar as all shippers at monthly read sites would be avoiding RbD charges, regardless of their individual read performance. It is not apparent whether either proposer considered the practicality of applying RbD charges only to those shippers who have failed to meet read standards, though we recognise that this would require a more complicated and therefore expensive systems solution.

It is proposed that under both proposals AMR sites would be included within the settlement exposure and not exempt from RbD charges; though there is no explanation as to why. This is in contrast to the position with DM sites which would remain exempt under both proposals.

On the basis that the read frequency and accuracy from annual read sites may match, or even exceed that of some monthly read sites, particularly where the annual read site has AMR equipment installed, it is not clear to us that they should be treated differently and not also have the opportunity to avoid the smeared charges through RbD. Subject to appropriate criteria, exempting the relevant shipper from RbD charges may provide a reasonable incentive to install smart metering devices. However, other methods of obtaining readings may also qualify should they prove to be robust. We consider that any exclusion should therefore be based around more objective and robust criteria, for instance related to read performance rather than simply a consumption threshold.

### Shipper-less sites

There are a number of sites which, for varying reasons, do not currently have a registered shipper and supplier associated with them. Whilst some of these sites may not be consuming gas, any that are may have a material impact upon RbD as by definition none of that gas is being accounted for.

Although GdF assert that shipper-less sites are not prevalent in the LSP sector, owing to there being more extensive processes coupled with billing checks, figures produced for the *Shipper-less and Unregistered Sites Working Group*<sup>8</sup> suggest that there were approaching 3,000 shipper-less or unregistered sites in the LSP category in June 2007. Whilst this may be a relatively small number against the circa 120,000 sites in the SSP category, as with theft, the potential scale of each site may mean they have a significant impact upon RbD. There also appeared to be a disproportionately high number of sites in this category which were considered to have shipper activity<sup>9</sup>, and therefore gas potentially being off-taken and billed to consumers, but not reconciled.

We would like to better understand the underlying reasons for active sites remaining shipper-less and the potential materiality of this issue before we can determine whether or not it is appropriate for monthly read sites to remain exempt from any contribution to these costs.

### ***Relevant objective d) - 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***

Many of the arguments that have been used by respondents in relation to relevant objective d) related to cost reflectivity and have therefore already been dealt with above.

Several of the responses concentrated on the relative merits of the proposals in relation to each other, rather than the prevailing code itself. In particular the proposer of UNC115a believes that if the original proposal was to be accepted it would introduce a manifest cross subsidy to the detriment of the LSP sector. They consider that this would be unduly onerous to suppliers and consumers in the I&C sector. As mentioned, others thought that UNC115a would present less of a contractual risk, but seemingly vis-à-vis UNC115 rather than the current arrangements.

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<sup>8</sup> For details see the Joint Office website at: <http://www.gasgovernance.com/industryinfo/UnconSites/>

<sup>9</sup> For instance, an unregistered site may have a Meter Point Reference Number created following a shipper request, but data subsequently lost or incomplete.

To the extent that either proposal would ensure that the costs associated with RbD are reflective of actual energy usage, and therefore targeted appropriately, we consider that they could further facilitate the securing of effective competition. In particular, this would go some way to ensure that different categories of shipper are charged according to their usage and do not benefit from any unintended cross-subsidy which could distort competition. However, for the reasons outlined above in the discussion of relevant objective c), we are not currently in a position to confirm this is the case, as several of the cost drivers are yet to be quantified.

### ***Relevant objective (a) - the efficient and economic operation of the pipe-line system***

To the extent that LSP sites would elect to be monthly read in order to avoid any allocation resulting from UNC115a, we consider that there may be implications for the efficiency of the pipeline system, or more particularly the GTs. We note that the appropriate level of reads has not been considered as part of these proposals and may indeed have been out of scope. However, we agree with the respondent who suggested that this proposal has the potential to increase the GT workload in processing read data and/or carrying out must read obligations beyond efficient levels, i.e. beyond the level required in order to satisfy their own functions in balancing the system and facilitating settlements. We therefore consider that this proposal could have a marginally detrimental effect on this relevant objective.

In August 2004 the Authority accepted Network Code modification 693; *Revision of the NDM 'More Frequent Reading' provisions*, which sought to ration the number of reads which could be submitted on a given day to 400,000. This was in response to concerns raised by National Grid (then Transco) that its systems would not be able to accommodate a proliferation of meter readings facilitated by AMR technology. Due to these concerns, modification 693 also imposed restrictions on the submission of meter reads over and above the levels ordinarily required by the network code<sup>10</sup>. In particular:

- in the case of a Monthly Read Meter, no more than one meter reading may be submitted within a one calendar week period.
- in the case of an Annual Read Meter, no more than one meter reading may be submitted within a two calendar week period.
- in the case of an Annual Read Meter, contained within a Smaller Supply Point, no more than one meter reading may be submitted within a nine calendar week period.

Whilst we do not consider that a widespread election of LSP sites to being monthly read would generate vast numbers of additional reads per day, we do consider that it would be useful to have xoserve confirm its ability one way or another to accommodate any such a widespread re-classification without further systems investment. It may also be appropriate to review these limitations in light of any possible exemption from RbD charges based on read performance, in order to ensure that they do not impose any undue restrictions on SSP sites benefiting.

### *Conclusion*

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<sup>10</sup> Now UNC Section M 3.7.2

Neither proposal addresses the underlying issues which are leading to a higher than acceptable RbD charge, though we accept that in some cases exposing I&C shippers to the costs of RbD may provide an appropriate incentive for them to seek improvements, for instance around LSP reconciliation periods. However, as acknowledged in BGT's extensive representation, 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. We particularly note the references to iGT reconciliations, or lack thereof, and welcome the initiatives that are being pursued elsewhere to address these issues.

We share the disappointment that GdF expressed in their response, that there has been little published evidence or analysis on this topic, though we welcome the depth that many of the respondents went into in their representations. We consider that it would be appropriate for each contributing factor to the RbD costs to be individually assessed and if possible quantified. This would appear necessary in order to appropriately inform any decision on an alternative cost recovery mechanism and highlight where greater incentives are required to address underlying issues. We would therefore expect a greater degree of analysis of these costs to be included as part of any further modification proposals on this issue. As things stand, we consider that these proposals have made a convincing case for LSP sites to make a contribution to RbD costs, but do not provide sufficient evidence as to how big that contribution should be.

We note that both BGT and GdF were mindful of likely implementation costs when developing their proposals, with the former stating that it consulted with xoserve to develop a practical and low cost solution for UNC115. This aspiration is of course laudable, particularly given the relevant objectives around efficiency. However, we consider that both UNC115 and UNC115a may as a result be too simplistic a solution to what is a complicated issue. Recognising that the GTs and their agent are neutral to the impacts of RbD, it would have been beneficial if the various options for implementing more sophisticated solutions had been set out, and the relative costs weighed against the efficiencies and other benefits which may have been delivered elsewhere.

We agree with those respondents who stated that the cost recovery method under UNC115 would not be consistent with the objectives of the GT transportation methodology, and may result in a disparity between any LSP contribution to RbD and the charges which would ordinarily have been levied to those sites under individual reconciliation. That said, we also recognise that the existing charging arrangements are themselves complicated, with multiple charging rates based on consumption bands. We therefore see the great advantage in UNC115a in excluding sites above 293,000KwH, allowing RbD to apply to just two rates. However, we do not consider that an appropriate case has yet been made for monthly read sites to be treated more favourably than those below this threshold. As mentioned above, we consider that any exclusion should appropriately be based around more objective and robust criteria than a simple consumption threshold.



**Mark Feather**

**Associate Director, Industry Codes & Licensing**

Signed on behalf of the Authority and authorised for that purpose.