V1.0

National Grid Response to Consultation Ref: 57/06

Summary

National Grid's view is that:

- Reconciliation by Difference (RbD) represents the most cost effective solution to reconciling domestic Smaller Supply Points (SSPs) as volumes for such offtakes are of low individual value and would otherwise require a disproportionate amount of resource to process.
- RbD is a robust, economic and efficient mechanism to calculate reconciliation quantities for SSPs.
- Enhancements to the regime through Network Code modification and process/systems development have been used effectively to address anomalies and incentivise appropriate behaviours.
- Feeder processes reliant on data quality such as the Annual Quantity (AQ) review and information from Connected Systems Exit Points (CSEPs) could be improved. However, issues can generally be resolved by using existing governance processes.
- The introduction of smart metering provides an opportunity for an increased likelihood of more accurate and frequent Meter Readings. Within the domestic market, this could lead to improved Annual Quantities (AQs) which facilitates a better reflection of Shipper market share. Timely reconciliation of volumes within the Industrial and Commercial (I&C) market would also be facilitated. Both of these benefits enable improved RbD performance. The use of smart metering can be kept under review through the existing governance processes.

Given the above, we agree with Ofgem's comments in Section 2.38 and believe that Individual Meter Point Reconciliation for SSPs is currently neither necessary nor cost effective.

Introduction

This response is structured in two parts: Section One summarises National Grid's views on the key issues for the consultation. Section Two provides our specific responses to the individual guestions raised within the consultation document.

National Grid Gas has a duty under Standard Special Condition A4: Charging – General, to establish the methods by which charges to Gas Shippers are determined. Standard Special Condition A5: Obligations as Regard Charging Methodology, covers modification of the charging methodology for Transportation arrangements (as established and published in compliance with Standard Special Condition A4). National Grid Gas is one of the owners of xoserve, which provide a number of services to Gas Transporters in support of their licence obligations. These services include the operation of the RbD process.

National Grid's opinion is that the current RbD regime is robust and currently the most economic and efficient means of reconciling over 20 million SSPs. We do not believe that a fundamental review of the RbD process is merited at this time for the following reasons:

- The issues highlighted by Ofgem are, in overall monetary and efficiency terms likely to have a limited impact. The costs and disadvantages of undertaking Individual Meter Point Reconciliation for SSPs would far outweigh the impact of any perceived anomalies existing within the RbD process and feeder mechanisms. However, we believe that there are opportunities to enhance the regime further, for example in the area of CSEPs where poor performance in data provision by some Smaller Transporters adversely impacts RbD. A significant number of associated modifications of the Network Codes and Uniform Network Code (UNC) have been implemented since the introduction of RbD in 1998. We believe contractual modification is the most appropriate way to progress enhancements to the RbD regime and support Ofgem's aspiration for interested parties to actively participate in this process.
- Ofgem is also consulting in the following areas and the outcome is expected to provide clarity to how the RbD process is best developed in the longer term:
 - o Gas Distribution Price Control Review (GDPCR) views have been sought on the current funding arrangements for xoserve and whether a more substantial review should be undertaken. Initial responses have been submitted but it is not yet clear whether a significant project is required to explore alternative funding arrangements such as the "user pays" principle or a separate price control/licence for xoserve. As highlighted by National Grid, refreshment of the UK-Link suite of systems will be an issue for the next GDPCR and any system refreshment should

consider any necessary enhancements to the RbD process and associated funding.

Domestic Metering Innovation – views have been sought from interested parties on the various options for implementing advanced metering technology. Smart metering could facilitate improvements in read frequency and accuracy that could improve the current reconciliation/RbD process.

Section 1. Key Issues

AQ Review Process

1.1 The AQ Review mechanism is important to the integrity of the RbD regime. National Grid has raised several Modifications of the Network Code and UNC which have been subsequently implemented to improve accountability and performance. We believe that the process is well proven and economic but note that ongoing effective monitoring and reporting of inappropriate behaviour should be maintained. While accuracy of AQ calculation is significantly affected by Shipper performance in the timely submission of Meter Readings to Transporters, we anticipate that innovative measures such as smart metering are likely to improve performance further in this area over time. National Grid's opinion is that minor enhancements to the AQ process could be warranted.

Independent Gas Transporters

1.2 National Grid is concerned that the integrity of the RbD regime is adversely affected by poor performance of some Independent Smaller Transporters in terms of furnishing Large Transporters with downstream CSEP Supply Point and reconciliation data on a timely basis. CSEP connections have increased considerably in recent years leading to increased data inaccuracies impacting on the RbD regime. We are aware that Shippers are attempting to address this matter with proposed changes to the Smaller Transporter's Network Codes and the UNC as a replacement to ineffective provisions contained within the CSEP Network Exit Agreement (NExA).

Shrinkage

1.3 National Grid believes the Shrinkage Forum is the most appropriate means of addressing Shrinkage gas issues. Whilst theft has been acknowledged as a difficult area to address, available statistics do give some assurance on proportions. In relation to leakage, which is the largest component of Shrinkage, the methodology used is robust, externally verified and accepted by the Shrinkage Forum and Ofgem as a

reasonable basis upon which to calculate the Shrinkage Factor. We believe that minor enhancements to the process may be merited.

Innovative metering

- 1.4 We recognise the potential for smart metering to significantly increase the frequency and accuracy of Meter Reading data for both I&C and domestic markets. This in turn could:
 - improve NDM reconciliation within the I&C market, through the accurate and timely calculation of metered volumes and;
 - facilitate accurate RbD market shares through timely derivation of appropriate AQs.
- 1.5 National Grid supports Ofgem's Domestic Metering innovation consultation to stimulate the debate on smart metering, as this is potentially an important element in delivering the governments energy policy objectives. We believe that to date the benefits of metering innovation are more apparent in electricity than in gas due to within day price changes. However, demand is emerging amongst I&C gas consumers and National Grid is developing an Automated Meter Reading (AMR) solution for this sector. A range of options are being considered for the implementation of smart metering in the domestic sector and we look forward to developments.

RbD Performance

1.6 National Grid has taken steps to develop the effectiveness of the RbD regime. These include two Network Code Modifications (0637 & 0640) which incentivise Shippers to promptly resolve queries concerning reconciliation quantities and encourage Shippers to ensure Supply Points are properly categorised as being Larger or Smaller.

Section 2. Responses to Individual Questions Raised

National Grid's views on the questions raised by Ofgem in its consultation document are set out below. To ensure an informed response, we have asked xoserve to undertake analysis of the RbD process and National Grid has drawn on the output of this analysis in its response.

CHAPTER One: Introduction

1. Given the original rationale and benefits of RbD, do you consider it remains valid under the current GB Gas arrangements?

1.1 Yes. At the introduction of supply competition, RbD formed the industry response to the potential system and manpower impacts of replicating Individual Meter Point Reconciliation across 21 million SSPs. Evidence from administering reconciliation for 400,000 Supply Points over the past ten years has shown significant issues, which would still support the original RbD rationale, which in our view remains a valid, economic and efficient process.

The original rationale was that the value of reconciliations for each SSP was very low, meaning that the average costs of processing Individual Meter Point Reconciliations, including failures and queries, would be disproportionately high compared to the amount of money being re-distributed.

RbD is based on the principle that the energy in an LDZ is whole. This principle remains valid due to the accuracy of LDZ entry metering and the facility to reconcile gas quantities in the event that errors occasionally arise.

2. Are the costs and benefits of the RbD process transparent to the industry, and if not what how can transparency be improved?

2.1 Since 1997 there have been a number of major initiatives that have impacted the base data used to derive RbD costs and thus reduced the transparency of costs and benefits. These include Meter Reading unbundling and the Review of Gas Metering Arrangements (RGMA). As a result an up to date estimate of the cost and benefit of RbD would prove difficult to ascertain. Although the overall benefits of administrative economies, IT cost reduction, simplification of the process and improved control are all present, costs are now distributed throughout the industry. We understand that xoserve has requested suggestions from Ofgem and industry participants on a number of occasions over how greater transparency can be achieved within an increasingly fragmented industry.

At the time RbD was implemented two of the main aims were to reduce the complexity of systems required for new entrants thus lowering market entry costs, and to simplify processes thereby lowering transaction costs. The number of Shippers has grown over the lifetime of RbD and transaction costs have reduced steadily over the same period demonstrating the successful achievement of these aims.

3. Do the various RbD related industry work groups provide sufficient governance and transparency of the RbD arrangements?

3.1 The nature and number of the workgroups do provide sufficient governance and transparency. There are a number of regular forums to discuss RbD matters, including the Billing Operations Forum, the RbD Sub Group and the RbD Audit Sub Committee. In addition RbD matters are often discussed through the AQ Sub Group and the Demand Estimation Sub Committee (DESC).

It should also be noted that given that RbD contractual provisions are established within the UNC, all contracted parties have the right to propose changes in accordance with the Licence and Modification Rules. The governance process is therefore sufficient and fully transparent.

4. Is there sufficient transparency of the data or the information xoserve provides to the industry?

4.1 Yes. We are advised that on the reconciliation invoice, Shippers have details of all their Larger Supply Point (LSP) reconciliations which have contributed to the RbD charges. Information is also given, in aggregate, of the total volume of LSP reconciliations forming the base of the charges and both the Shipper aggregate AQ and LDZ aggregate AQ for the SSP market. Thus the proportion of charges that a Shipper incurs can be validated. Individual large charges are published by xoserve on the Shipper Information Service (SIS).

Furthermore, the RbD Audit provides external assurance that confirms that aggregate energy from Individual Meter Point reconciliations flows into RbD correctly.

5. Is the scope of the current RbD Audit appropriate?

5.1 Yes. The scope of the RbD audit is defined within the UNC and is appropriate in our view. This was agreed as part of the implementation of RbD and has had an unqualified opinion every successive year. As part of the process the independent auditor outlines to the RbD Audit Sub Committee (RbDASC) the approach it will take for each audit.

6. Are there sufficient incentives on all parties to limit the size of RbD?

6.1 Yes. RbD charges currently account for less than 3% of commodity invoicing. The level of RbD charges are influenced by a number of factors that are the responsibility of the

industry in general. Meter Reading provision drives both the number of reconciliations processed and also accuracy of AQ values thus impacting initial allocation accuracy.

Timeliness of reconciliation is influenced by Meter Reading provision and User Suppressed Reconciliation Value (USRV) clearance rates. An incentive mechanism exists through USRV liability charging.

Accuracy of AQ has been subject to a number of industry initiatives over the years, the most recent being the Network Code Modification 0640 changes. These provide an incentive for Shippers to amend AQ out of the SSP market where the Supply Point consumption has increased above 73,200KWh per annum. There may still be potential for measures to further improve Shipper incentives to maintain accurate AQ values. Also, as described within Section 9.1, we believe that the potential for incentivising Smaller Transporters in submitting timely and accurate CSEP data to Larger Transporters should be explored given the impact of poor performance on Shippers having SSP portfolios.

CHAPTER Two: RbD Issues

- 7. Do you consider there is sufficient transparency in the operation and accuracy of industry processes such as the AQ review and shrinkage calculations?
- 7.1 Yes. Both processes operate to a published methodology and timeframe. In the case of AQ the definitions are specified within the UNC and an online calculator is available for Shippers to replicate exactly the calculations that are performed. In addition, the full AQ process is supported by an industry group and relies on information provided by the market participants themselves. The process is fully transparent enabling each Shipper to replicate the calculation of an AQ exactly.

A number of monitoring processes are in place, including through DESC and RbD verification, which would highlight any AQ data errors. These are shared with the industry including the data used to derive allocation parameters, allowing Shippers to build an understanding of the link between allocation and reconciliation.

LDZ Shrinkage derivation is the responsibility of each DN Transporter with Ofgem and industry support through the Shrinkage Forum. LDZ Shrinkage is based on three main elements, leakage, theft and own use (gas used for operational purposes). Leakage is by far the main component of any Shrinkage value, being over 90% of the total, and has been derived based on a national leakage survey carried out in 2002 at the request of the Shrinkage Forum. The results were externally verified and used to support the approved methodology agreed within the Shrinkage Forum.

8. Do you consider the existing governance arrangements around these processes to be appropriate?

8.1 Yes. Both the AQ review and Shrinkage are managed through transparent processes within an industry framework. In both processes, Shippers and Ofgem are involved and are able to influence the process. Indeed, on a number of occasions Shippers have rejected the Shrinkage proposals and as a consequence, Ofgem has disallowed the factors for a given year.

9. Do you consider there are appropriate incentives in place on relevant parties to ensure the timeliness and accuracy of these processes?

9.1 Yes, subject to the reservation below, both AQ and Shrinkage processes have clear timescales specified within the UNC.

Implementation of Network Code Modification 0640 provided an additional incentive on Shippers to act promptly to amend AQs for Supply Points that are likely to move from the SSP to Larger Supply Point (LSP) markets at the next review. Although this concentrated on one key aspect it is important to recognise that under RbD the impact of any AQ issue will only be felt if a Shipper has a disproportionate number of Supply Points with that specific issue.

However, we note that the performance of Smaller Transporters in terms of providing timely and accurate CSEP Supply Point data to Larger Transporters has been inconsistent. While CSEP offtakes are a small proportion of the total number of Supply Points, the market is growing significantly. Poor data quality has affected the accuracy of RbD and impacted Shippers. National Grid welcomes measures being taken by Shippers to improve the Smaller Transporters Network Codes and modify the UNC to clarify and improve contractual obligations. It is envisaged that existing provisions may then be removed from the CSEP NExA where enforcement has proven to be difficult. We look forward to further measures including the incentivisation of data provision by Smaller Transporters.

10. Do you consider that the timing and scope of the AQ review is appropriate?

10.1 Yes. We note that Ofgem raises the possibility of a mid-year review or rolling AQ calculations. The current AQ process takes four to five months to process and amend data before the AQ goes live. An AQ mid year review would require significant resources from xoserve and Shipper organisations without any obvious benefit in allocation accuracy. However, we believe that smart metering may, for example, provide

opportunities for a more flexible regime which could enable Shippers to proactively amend AQs to better reflect consumptions. Of course, contractual safeguards would be necessary to avoid any risk of inappropriate behaviour occurring.

CHAPTER: Three: Wider Considerations

11. What would the likely costs and benefits be of introducing Meter Point Reconciliation to all Supply Points?

11.1 At the time RbD was implemented, two of the main aims were to reduce the complexity of systems required for new entrants thus lowering market entry costs, and to simplify processes lowering transaction costs. The number of Shippers has grown over the lifetime of RbD and transaction costs have reduced steadily over the same period

demonstrating the successful achievement of these aims.

The original cost of implementing the RbD process was estimated at approximately £3 million. This was based on an increase of clerical staff to implement and maintain the system plus IT costs related to development of the operating mechanism. This was weighed against the perceived cost of Individual Meter Point Reconciliation including a large number of staff (700+) to manage the suppression process and the increased system costs required to cover data processing and storage. The costs of full

reconciliation were estimated at approximately four times the costs of RbD.

A major concern if Individual Meter Point Reconciliation at SSPs occurred would be the significance of timely and accurate Meter Information given the need to calculate metered

volumes.

The costs estimated from 1997 are likely to be significantly higher now. At the very least there would need to be major system enhancements to cater for universal Meter Point Reconciliation, to include large invoice files and query handling.

12. What conditions would need to be satisfied in order for individual Meter Point Reconciliation to be practicable?

12.1 Any move towards Individual Meter Point Reconciliation for SSPs would require significant investment across the industry in new systems, staff numbers and training.

(Please see Q11 response). More frequent Meter Readings would also be necessary to

improve billing timeliness.

- 13. Would it be feasible for Shippers to choose whether their Supply Point should be individually reconciled or processed through RbD?
- 13.1 No. While this may have some advantage, the cost and complexity of managing two parallel systems would increase and lead to an uneconomic outcome for consumers.

Conclusion

National Grid's opinion is that RbD represents a robust and cost effective method of levying timely and accurately reconciled Transportation charges to Shippers. We consider that the effectiveness of the 'feeder' processes such as AQ and CSEPs could be improved and are supportive of measures being taken in these areas. Our view is that the individual reconciliation of Smaller Supply Points is not justified given the very substantial investment which would be necessary for limited benefit. National Grid believes that ongoing, incremental improvements to the UNC regime as have occurred in recent years should continue through the existing governance framework. We welcome innovative measures such as the advent of smart metering which we anticipate will further enhance the efficiency of the RbD regime.