

## Stage 01: Modification

# 0421: Improve AQ Performance

What stage is this document in the process?

- 01 Modification
- 02 Workgroup Report
- 03 Draft Modification Report
- 04 Final Modification Report

This modification will introduce a requirement for Shippers to have AQ performance levels to result in at least 85% of their AQs (SSP and LSP portfolios individually) updating during the Review process. Following the completion of the AQ Review a report will be produced advising of individual Shipper AQ Performance. If 85% AQ Performance level is not achieved in the following AQ Review, Shipper Charges will be applied.



The Proposer requests ~~the Workgroup to assess~~ Panel consider this modification



High Impact:



Medium Impact:  
Shipper processes



Low Impact:  
Transporter and Xoserve processes

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## About this document:

This document is a modification, which ~~will be assessed by the Workgroup on 05 October 2012~~ was considered by Panel on 15 November 2012.



Any questions?

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# 1 Summary

## Is this a Self-Governance Modification

The Modification Panel determined that this is not Self Governance.

### Why Change?

The AQ Review process helps assign £billions of cost in the gas market and any issues or misuse of it can therefore have a material impact on the accuracy of cost allocation and therefore customer's bills. We believe that the current controls on Shipper's use of the AQ Review process are not proportionate to the potential damage that would be done to competition were the process to be misused. We believe that there should be more robust controls around the AQ Review process, not just the amendment phase, but the process overall.

#### 1. Issues with AQ Performance

AQ Review Performance levels, outlined in the Table 1 (Section 1 "Solution") , have been static over the last 4 AQ Review periods. Inaccuracy of the AQ values for the sites that are not updating:

- factor straight into Reconciliation by Difference (RbD) volumes
- is incorrectly allocating transportation cost across the market
- have financial implications to SSP Shippers and their customers
- impact a Transporters ability to accurately assess their network investment needs
- can lead to flawed assumptions on network usage
- could have an impact on security of supply

The Proposer therefore believes that the exposures of this issue needs to be addressed through an incentive to improve AQ update performance.

#### 2. Issues with Data Quality

##### AQ Warnings Reports 2011

Appendix 1 - Dataset 1A (SSP), Dataset 1B (LSP)

The original AQ Warnings Reports published by Xoserve and presented to the Industry following completion of the AQ Review 2011 displaying all non-calculating Meter Points including those which are unregistered and Shipperless. A request was made by ScottishPower to Xoserve to segment the AQ Warnings Report into Meter Points live with a Registered Shipper User, therefore excluding Shipperless and Unregistered. Therefore all base data used within the benefits case including statistics on previous AQ Performance levels quoted within the Modification have been provided or taken from previous information published by Xoserve. This data has been presented and discussed within Industry Workgroups including the AQ Operational Forum. We have used this data to estimate the potential impact to the Industry and customers of Meter Points that are included within the AQ Warnings Reports and at the time of publication of the reports were regarded as non-calculating AQ values.

Appendix 1 – Dataset 1B (SSP), Dataset 2B (LSP including DM)

In determining the potential benefits of implementing Modification 421, ScottishPower has used the information provided within the AQ Review 2011 AQ Warnings Reports

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with Registered Shipper User (RSU). This information is segmented by market sector and details the count of non-calculating Meter Points and the sum of energy associated. This dataset demonstrates that the number of Meter Points, with a Registered Shipper User (RSU) appearing within the AQ Warning Reports where an AQ did not update was 53,660 for LSP (70,418,076,291kWh) and 2,134,611 for SSP (29,107,161,337kWh).

#### Appendix 1 – Dataset 1C (SSP), Dataset 2C (LSP excluding DM)

In order to present an unbiased view, we have removed Meter Points and associated energy volumes assigned against the Warnings Category "Meter Point is owned by Transco. AQ not calculated". This Warnings category relates to Meter Points that were historically transferred into the "Transco Account". These Meter Points are no longer registered with a Shipper. We have also removed from Dataset 2C (LSP) Meter Points and associated energy relating to Daily Metered sites. On removing these categories of Warning, the following information is reported:

LSP AQ Warnings Report – 13,240,344,475kWh, 52,923 Meter Points

SSP AQ Warnings Report – 29,105,666,063kWh, 2,134,516 Meter Points

When examining Re-occurring AQ Warnings (consistently appearing for a minimum of 3 years i.e. 2009, 2010, 2011 – Table 5) with RSU there were 2,822 LSP meter points (1,744,131,248kWh) and 327,839 SSP meter points (4,221,659,127kWh).

When an AQ value remains non-calculating, the SSP market sector bears the risk of any inaccurate AQ values and it can be concluded that Transporters are using inaccurate figures to determine capacity requirements and to inform investment decisions

When calculating the benefits for this Modification the following methods have been used:

#### **Data Set 1C – AQ Review 2011 SSP AQ Warnings Report with Registered Shipper User**

- **Method 1 using Data Set 1C** – SSP using the Ofgem average domestic consumption AQ values<sup>1</sup> used for comparison purposes to establish if the average AQ values in each of the Warnings categories are under/overstated and thereafter applying a probable portfolio mix to determine the overall impact of non-calculating AQs (Appendix 1, Method 1). The Ofgem average domestic consumption values were implemented with effect from 17<sup>th</sup> February 2011.

This analysis demonstrates that with a probable customer mix that £100m is being misallocated between SSP Shippers. The misallocation of energy within the SSP market is never reconciled and therefore remains as deemed at the point of allocation. Using the same data set and methodology for calculating the potential misallocation - if 1% (21,345) of these Meter Points were to be remove from the Warnings report (an AQ is recalculated) this alone would reduced the level of estimated misallocation by £1m.

Findings - Probable error – SSP Warnings Report AQ values are 13% understated = 3.808TWh

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Value of misallocation between SSP Shippers of approx.  $\pounds 101\text{m} = \pounds 4.74$  per SSP Customer

As a confidence check against Method 1, a further 2 scenarios were run i.e.

- **Method 2 using Data Set 1C**– Comparison against AQ Review 2011 SSP Average AQ calculated against Xoserve’s Mod 81, Report 10, EUC Banding 1B (Appendix 1, Method 2) (basically the outturn values of the AQ Review by EUC Band, including the AQ Warning Report Meter Points)

Findings - Probable error – SSP Warnings Report AQ values are approx. 11.5% understated = 3.367TWh

Value of misallocation between SSP Shippers of approx.  $\pounds 89.2\text{m} = \pounds 4.19$  per SSP Customer

- **Method 3 using Data Set 1C**– Comparison to AQ Review 2011 SSP Average AQ calculated against Xoserve’s Mod 81, Report 10, EUC Banding 1B excluding the SSP AQ Warnings Meter Points and their associated energy (Appendix 1, Method 3)

Findings - Probable error – SSP Warnings Report AQ values are approx. 12.85% understated = 3.742TWh

Value of misallocation between SSP Shippers of approx.  $\pounds 99.2\text{m} = \pounds 4.66$  per SSP Customer

#### **Data Set 2B – Source Data Xoserve LSP AQ Warning Report with Registered Shipper User**

- **Method 4 using Data Set 2C** – LSP Using same methodology as SSP Method 1 (Appendix 1, Method 4). If LSP Shippers were to recalculate 1% of the Meter Points on the LSP AQ Warning Report i.e 529 Meter Points and the understatement of energy volumes was 13%, the volume of energy allocated against these Meter Points would increase by 17GWh ( $\pounds 456\text{k}$ ). However it should be noted that while reconciliation will take place when meter readings are submitted for these Meter Points. SSP Shippers, through Reconciliation by Difference, will bear the financial risk of misallocation until such times as such reconciliation takes place.

Reconciliations could result in a credit or debit being applied against the relevant LSP Shipper. Xoserve report that the large majority of reconciliations result in a credit to LSP Shippers. From a commercial perspective a Shipper is more likely to pursue the speedy resolution of reconciliation when it is of financial benefit to them (a credit) with any further outstanding reconciliations being permitted to timeout with the closure of settlement window (currently 4-5 year model). The Proposer is concerned that this is the current situation, with a prevalence of credits accruing to LSP Shippers through RbD and a large number of sites where AQs are not updating year on year.

Findings - Under deeming to LSP Shippers, with over deeming to SSP Shippers

Probable understatement of energy  $-1.721\text{TWh}$

Value of under-allocation LSP Shippers of approx.  $\pounds 45.6\text{m} = \pounds 2.14$  per SSP Customer

- **Method 5 using Data set 2C** – Applying % under/overstatement (Appendix 1, Method 5)

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Findings - Demonstrates the potential sensitivity to the SSP market from inaccuracies in the LSP site AQs

## Potential Benefit

The analysis demonstrates that for the SSP AQ Warnings Report AQ values are understated by an average 13% (Method1). Using the AUGE SAP of 2.65p/kWh this equates to approx. £101m or £4.74 per SSP customer.

As a confidence check, a further 2 scenarios were run against the SSP AQ Warnings data i.e. Methods 2 and 3 above. The results were very similar - £89.2m and £99.2m The Proposer therefore asserts that there is a potential benefit of up to £101m by getting more SSP AQs to update. Mod 421 will incentivise the update of AQs and therefore facilitate deliver of these benefits.

Taking a prudent approach a +/- 5% adjustment in energy assigned against the LSP AQ Warnings Report translates to a under/overstatement of approximately 662GWh, £17.5m or £0.82 per SSP customer (Method 5). This is over and above the SSP exposure outlined above.

It is impossible to accurately state whether AQ movements will be positive or negative. However, it is more probable that Shippers will have proactively targeted Meter Points with over-estimated AQ values in order to mitigate financial exposure and risk and maximise profit. The current gas settlements process does not audit billing volumes v settlement data and therefore there is no way of telling whether or not AQs are over or understated. However given the poor AQ update performance it is prudent to state that a large number of AQs will be based on sufficiently out of data meter reading data.

Tables 9 and 10 provide further evidence that the largest majority of failures to update AQ values relate to meter reading issues.

The Proposer therefore estimates that the benefits of Mod 421 are potentially £118.5m (SSP £101.5, LSP £17.5)~~£118.5m~~

## Remedy

MOD421 would incentivise Shippers to update their AQs more regularly, improve data quality and should realise benefit against this issue. .

## 3. Implications of Industry Settlement

The need to introduce an appropriate AQ performance target is further substantiated by information presented at the Xoserve Customer Operations Forum (6<sup>th</sup> March) on Mod 640 End of Year Reconciliations (SSP to LSP movements).

It was reported that invoice reconciliations of circa. £30m (1,537GWh) were applied in March 2012 (period from 1/10/10 – 1/10/11) (shown later in Table 8 (Section 2, “Why Change”), column 6 for 2011/12). This value has increased from £10.3m (862GWh) in 2010. It has been reported that the number of Supply Points crossing the threshold (73,200kWh) has increased substantially (approximately 42%) within the last Mod 0640 reconciliation period compared to the previous year. It is therefore evident that this issue is a substantial and increasing cost to RbD.

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While a reconciliation of energy charges (invoice code GRE) and transportation charges (invoice code TRE) is applied back to the date that the previous AQ value became effective application of LDZ Capacity Charges are not considered. Capacity Charges are applied based on the Site Offtake Quantity (SOQ) i.e. will have been set in accordance with the previously calculated AQ. No retrospective capacity adjustment is performed to account for the increased offtake quantity as calculated under the Mod 640 methodology. Therefore the SSP market sector and their customers retain a high proportion of cost in relation to delays where the Shipper has not proactively managed and adjusted AQ values. In addition the Transporters are calculating transportation charge rates, for the recovery of allowed revenue on a false expectation of demand in each sector.

### **Potential Benefit**

If MOD421 is introduced there should be an incentive on Shippers to address these Meter Points in a timely manner and therefore reduce the ongoing exposure to the SSP market in relation to gas and transportation costs. It will also ensure that Transporters have a more accurate view in order to calculate the correct recovery of transportation charges across each market sector.

In addition, the application of the Settlement Close-out date (current maximum period 5 years) will impact the re-adjustment of energy between SSP and LSP market sectors – where any period beyond this time that should have been reconciled will be lost (i.e. where the AQ has not been updated to reflect current usage within the last 5 years). If MOD421 were to be introduced there should be a lower number of sites where reconciliation “times out” (i.e. where no readings are submitted or data issues stop the AQ updating).

### **Solution**

This proposal will introduce a requirement for Shippers to have AQ Review performance levels to result in at least 85% of their AQs (SSP and LSP portfolios individually) updating during the Review process. At the commencement of the AQ Review Process, Xoserve issue files to the relevant Shipper with details of their Meter Point Portfolio and the “Transporter Provisional AQ Quantity” to apply within the forthcoming Gas Year. These files are commonly known as the T04 files. Mod 421 proposes that a Shippers AQ Review performance would include those sites, which have an updated AQ value at the ‘Notification of Revision to Meter Point AQ stage’ (T04), have been subject to successful AQ Appeal activity, and meter points where the Shipper has proposed a successful AQ amendment and that these meter points would count towards the update performance (in relation to 85%). For the avoidance of doubt the performance would take into account all meter points registered in the Shipper portfolio including dead (DE) and extinct (EX), which is explained later (Section 3, “Solution”).

If a Shipper does not achieve an 85% or more performance level on their SSP and LSP portfolios individually, the Transporters would notify the individual Shipper(s) of their performance level. The initial AQ performance measure will be calculated based on an individual Shipper AQ performance following completion of the AQ Review process for 2012. This report can be used by Shippers as a benchmark against achieving the required 85% measure. For the avoidance of doubt no Shipper charges will be applied following the AQ Review 2012.

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If implementation of this Modification is delayed, AQ Review performance reporting and Shipper Charges will commence on completion of the AQ Review 2013. Shipper Charges

Shipper Charges will not be applied against the AQ Review Performance measure following the AQ Review 2012. Irrespective of when Ofgem’s decision is given, Shipper Charges will commence from completion of the AQ Review 2013. If the Shippers performance is below the 85% level, then the Transporter would apply “Shipper Charges”. The level of “Shipper Charges” would be applied in accordance with the values contained within the Business Rules 10 (Section 3, “Solution”). Shipper Charges displayed below have been calculated using data available within the current Mod 81 Report 10. Mod 81 Reports are produced on an anonymous basis following completion of the AQ Review:

Table 1

EUC Band	AQ Banding	Count of MPRNs	Sum of AQ	Average AQ Column 4 / Column 3	Assumed Error Column 5 * 5%	Shipper Charge (£) Column 6 *2.65p/kWh	Market Sector
1	1 - 73,200	21,271,089	323,598,194,446	15,213	761	20	SSP
2	73,201 - 293,000	205,805	25,413,305,411	123,482	6,174	164	LSP
3	293,001 - 732,000	54,685	19,758,981,228	361,324	18,066	479	
4	732,001 - above	31,736	23,541,533,369	741,793	37,090	983	

Notes: Data of EUC Band 5 – 9 excluded from calculations

Total Value of Data Excluded

- Sum of Meter Points - 15,108
- Sum of Current NDM AQ - 42,379,837,075
- SSC - Dallas (Transco A/c) – Count of MPRNs 196 Sum of Current NDM AQ 7,750,240,082

Charges would be applied per meter point, where the Shipper update of AQ has been below 85%, for all meter points where the AQ has not been updated (including those with a meter point status of dead and extinct) e.g. a Shipper who achieves 84% performance in the SSP sector would pay charges based on 16% of their NDM meter point count. It is not proposed that the Supplier charges are updated annually, as continuing with the existing methodology for establishing the charge would see the requirement to wait for the publication of the Xoserve MOD81 Report 10 (which is released in November each year). This would obviously bring uncertainty to the costs that Suppliers would face in the form of the charge. The Proposer considered the risk of this uncertainty against not including a facility for changing the charge and believed that it was more beneficial to keep the charge static. That said if any Party to the UNC believes that the charge needs to be updated to be more reflective of market conditions and the risk involved, then a modification proposal will be able to be raised and considered on its merits. Indeed a modification proposal could also be raised once the scheme is underway to determine the continued appropriateness of a static charge.

#### Re-distribution of Shipper Charges

Those NDM SSP Shippers who have met the 85% performance level will receive the re-distribution of the Shipper Charges, based on their market share.

An example of how Shipper charges will be calculated and re-distributed is provided later in the Modification Proposal (Section 3, “Solution”).

### **Impacts & Costs**

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This modification would place a requirement on the Transporter to calculate AQ update performance by Shippers ID, which would be provided to the Industry on an anonymous basis as per current Mod 81 publication rules. A report would be issued with the published Mod 0081 reports with Shippers progressive performance levels. The final Mod 81 report would include Shippers final position in achievement of the AQ performance target. The Transporter shall be required to administer the collection and redistribution of 'Shipper Charges'. Administration of this service will incur a cost, which shall be borne by Shippers who fail to meet the performance level. The charges collected by Transporters shall be wholly redistributed to those NDM SSP Shippers that met the relevant performance target.

Costs would be placed on those Shippers (i.e. 'Shipper Charges'), whose performance is below 85% in each AQ Review. This would therefore provide an incentive for Shippers to invest in data quality measures and therefore drive more accurate allocation of gas and transportation costs and address the issues outlined in the Section 2, "Why Change". It would also bring parallels between gas and electricity, where performance is driven through incentives in meter reading and settlement and Supplier Charges for poor performance are also applied.

## Implementation

No implementation timescales are proposed, however implementation to allow the initial AQ Performance measure to be applied to the results of the 2012 AQ Review and therefore drive immediate improvements in data quality and allocation, is considered desirable.

## The Case for Change

We believe that the rules currently contained within the UNC around the AQ Review process do nothing to promote the update of AQ values on an annual basis, nor incentivise data quality. The poor overall industry performance is evidence of this situation (see AQ Review Performance Table 2 below). We therefore assert that an incentive is needed to assure the accurate allocation of gas and transportation costs, given the significant consequences of not updating the AQs, both in respect of accurate allocation of costs and the implications of poor decisions on network investment.

In 2009 Scotia Gas applied to Ofgem for a £28.4m re-opener for their Price Control for four areas, as they had insufficient capacity to meet new demand. In the determination Ofgem disallowed two areas and £5m, as they believed that Scotia could gain/negotiate more accurate SHQs from customers to obviate the need for the investment. Obviously accuracy of AQs and SHQs has a significant implication in such scenarios.

Given the 79% AQ performance in the LSP market it is unclear whether LSP sites are using readings to reallocate costs in time before the close out settlement period (when reallocation of costs will be lost) (See Mod 640 End of Year Reconciliation Table 5).

Appendix 1, Data Set 2C – Method 2 4 states that 13.24TWh of energy remains assigned to AQ values that have not been updated within the LSP market sector. For demonstration purposes, assuming an error of +/-5% as used when calculating Shipper Charges, there is a potential for 662GWh of misallocation. ( $13.24\text{TWh} * 5\% = 662\text{TWh}$ ). Using the AUGE Statement 1 SAP average used for calculating the value of unidentified gas 662TWh of energy is approximately £17.5m = £0.82 per SSP customer.

Against the SSP AQ Warnings Report, using Ofgem average domestic consumption AQ values used for comparison purposes to establish if average AQ values in each of the

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Warnings categories are under/overstated. Thereafter applying a probable portfolio mix to determine the overall impact of non-calculating AQs (Appendix 1, Data Set 1C – Method 1), it has been calculated that there is the potential for AQ values within the SSP Warnings Report to be understated by 13% i.e. 3.808TWh. This equates to a potential value of misallocation between SSP Shippers of £101m = £4.74 per SSP Customer

Therefore the potential benefit of implementing this Mod 421 more than exceeds the Xoserve Rough Order of Magnitude costs of £240k to 460k for implementing this Modification. It should also be noted that these RoM costs are between 1 and 2 pence per SSP customer, but could yield a benefit of up to £5 per customer in the correct allocation of costs.

Meter Reading performance suggests that meter readings are being submitted and accepted by Xoserve on behalf of Gas Transporters, however due to data anomalies the AQ value is not updating Tables 9 and 10 This results in an unquantifiable cost exposure and uncertainty for SSP Shippers and their customers. Using the AUGE System Average Gas Price for every 1TWh of energy which is misallocated this represents a financial value of approximately £26.5m (1TWh x AUGE SAP 2.65p/kWh).

## Recommendations

~~This modification should have a final assessment by Workgroup 0421 and the Workgroup report be provided to the October Panel for release to consultation. It should be noted that this modification has been in development for 17 months and we see no further benefit can be realised through additional Workgroup development~~The Proposer request Panel considers this modification and agree it should be issued to consultation.

## 2 Why Change?

The AQ Review process helps assign £billions of cost in the gas market and any issues or misuse of it can therefore have a material impact on the accuracy of cost allocation and therefore customer's bills. We believe that the current controls on Shipper's use of the AQ Review process are not proportionate to the potential damage that would be done to competition were the process to be misused. We believe that there should be more robust controls around the AQ Review process, not just the amendment phase, but the process overall.

In the Non-Daily Metered (NDM) market the allocation of gas costs are allocated based on an estimate of how much gas a site has used. These estimated costs are determined by taking the amount of gas offtaken from the network and estimating the usage by the Daily Metered (DM) Large Supply Points and assigning the rest of the volume usage to the NDM LSP and SSP meter points based on their AQs. Once a meter reading for an LSP site (DM and NDM) is received the allocation is re-evaluated and any credits and debits are applied to the SSP NDM market.

The estimate referred to above is known as the Annual Quantity (AQ) value, and it is derived from historic consumption at a Meter Point. As with any other estimate based on historic information, the AQ will never absolutely reflect future usage, which in the case of energy is influenced by consumer behaviour (including reaction to price of fuel), regional variations and weather and temperature effects.

Under the AQ Review rules, as set out in section G of the UNC (G1.6.3), the Transporter will notify the Shipper of the proposed AQ values for each site, based on the meter reading information sent to the Transporter throughout the year. The Shipper then has the right to amend the AQ, where in the case of a Smaller Supply Point it considers that the Provisional Annual Quantity should be greater or lesser than the Provisional AQ notified by the Transporter by not less than 5%. In respect of any Large Supply Point there is no such tolerance (ref UNC G1.6.4 (a)).

There are conditions as to when a Shipper is permitted to submit an amendment. These are outlined in UNC G1.6.4 (b), which states that the Shipper must reasonably consider that the Transporter's calculation of the Provision AQ is derived from either Meter Readings that are incorrect or were taken prior to Meter Readings available to the Shipper or where there are materially incorrect details used for the relevant Supply Meter Point.

In addition there is a requirement for the Shipper to have a consistent approach to submitting amendments to the Transporter.

The resultant AQs which are established during the AQ Review process are used to allocate gas and transportation costs across the industry for the next twelve months from October each year. It is therefore imperative that the AQs are accurate in particular as any inaccuracy factors costs to the SSP market through Reconciliation by Difference. Adequate controls in place to ensure that there is no "gaming" of the process for commercial advantage.

There is equal ability to manipulate AQs via the AQ appeal process throughout the year. For this reason this modification is all encompassing and considers the AQ

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Review overall and incentivises performance across all meter points in both market sectors.

The issues we see with the AQ Review Process are set out in section 1 "summary", however more detail of the issues is set out below:

### 1. Issues with AQ Performance

Over the past four years, AQ Review performance by SSP and LSP Shippers has been reported by Xoserve<sup>2</sup> as follows:

AQ Review Performance Figures (Table 2)

1	2	3	4	5	6	7	8	9
AQ Performance Year	Total Population	No. Of Meter Points Calculated	% of AQs Updated	No. Of Meter Points not calculating (LSP Warnings Report)	Total Population	No. Of Meter Points	Total Calculated	No. Of Meter Points not calculating (SSP Warnings Report)
LSP				SSP				
2008	505,113	328,746	65%	176,367	22,283,934	18,088,731	81%	4,195,203
2009	478,170	322,609	67%	155,561	22,404,699	18,373,665	82%	4,031,034
2010	453,310	302,493	67%	150,817	22,664,240	18,748,122	83%	3,916,118
2011	419,936	280,185	67%	139,751	22,631,034	19,183,868	85%	3,447,166
2011	419,936	280,185	79%	139,751	22,631,034	19,183,868	88%	3,447,166

Meter Reading Performance Levels under the UNC require that for Monthly Read Sites, 90% of meter readings should be provided within 1 month and for all Meter Points once every 4 months. For Annual Read Meter Points, 70% of readings are required within 12 months and 90% within 2 years. In addition to the above must read obligations exist within UNC and meter inspection obligations within the Supply Licence.

AQ Review Performance levels, and outlined in the above table, have been static over the last 4 AQ Review period. Inaccuracy of the AQ values for the sites that are not updating factor straight into Reconciliation by Difference (RbD) volumes and has financial implications to SSP Shippers and their customers. In addition inaccurate AQs impact a Transporters ability to accurately assess their network investment needs, can lead to flawed assumptions on network usage and subsequently could have an impact to security of supply (Transporters assuming lower network capacity requirements based on understated AQs or Transporters seeking additional investment to upgrade the networks due to overstated AQs). The Proposer therefore believes that the exposures of this issue needs to be addressed through an incentive to improve AQ update performance.

### 2. Issues with Data Quality

Columns 5 and Column 9 of the above Table 2 "AQ Review Performance Figures" represents the number of Meter Points which have been reported within the Xoserve AQ Warnings Report for each AQ Review year. These Meter Points have **not re-calculated** an AQ value during the AQ Review process. As with the AQ Review performance figures, more detailed information is provided to the Industry following completion of the AQ Review process, of Meter Points that have **failed to re-calculate** an AQ value in the period that the AQ review applies. See Appendix 1, Datasets 1A (LSP), 2A (SSP) for more detailed information of Meter Points by market sector which appear on the AQ Review Warnings Report 2011. The AQ Warning Reports have been further split by those Meter Points with a **Registered Shipper User (RSU)** (Appendix 1, Dataset 1B, 1C (SSP), Dataset 2B, 2C (LSP) which failed to re-calculate an AQ value during the AQ Review process for 2011. Meter Points with a RSU may incur Transportation and

<sup>2</sup> As per Xoserve Operational Forum Presentations following completion of AQ Review

energy charges depending on the current Meter Point Status/meter status and whether a UNC Isolation status has been applied. Xoserve produce reports split by SSP and LSP market sectors under a description of failure reason codes.

Following completion of the AQ Review for 2011, a summary of the number of Meter Points, with a **Registered Shipper User (RSU)** appearing within the AQ Warning Reports was as follows:

**Tables 3**

AQ Review 2011 - AQ Warnings Report (RSU)		
Market Sector	Count of MPRNs	Sum of AQ
LSP	53,592	49,520,537,014
SSP	2,134,516	29,105,666,063
Note: Excludes Warning Category "Meter Point is owned by Transco"		

**Table 4**

In addition to the above the No. Of "DE" and "EX" with a RSU are:

Market Sector	DE	EX
LSP	861	13
SSP	10,084	71

When examining Re-occurring AQ Warnings (consistently appearing for minimum of 3 years i.e. 2009, 2010, 2011) with RSU the following information is reported:

**Table 5**

AQ Review 2011 - Re-occurring AQ Warnings Rep		
Market Sector	Count of MPRN	Sum of AQ
LSP	2,822	1,744,131,248
SSP	327,839	4,221,659,127

Note: Re-Occurring Warnings are a subset of totals reported within Table 3 & 4

When an AQ value remains non-calculating, the SSP market sector bears the risk of any inaccurate AQ values and it is assumed that Transporters are using inaccurate figures to determine capacity requirements and make investment decisions.

When calculating the benefits for this Modification we have attempted to establish if non-calculating AQs are under/overstated. For SSP, we used the Ofgem average domestic consumption AQ values which are used for price comparison purposes. For each of the Ofgem AQ values i.e. 11,000kWh, 16,500kWh and 23,000kWh we calculated the energy variance when applied against the average AQ for each warning category multiplied by the number of Meter Points within each category. As all consumers will not reside within a single AQ boundary, we applied a probable portfolio mix to estimate the under/overstatement. Our findings reported that AQs within the SSP Warnings

Report are understated by an average 13%. Using the AUGE SAP of 2.65p/kWh this equates to £101m or £4.74 per SSP customer.

As a confidence check against Method 1, a further 2 scenarios were run i.e.

- **Method 2 using Data Set 1C**– Comparison against AQ Review 2011 SSP Average AQ calculated against Xoserve’s Mod 81, Report 10, EUC Banding 1B (Appendix 1, Method 2) (Basically the outturn values of the AQ Review by EUC Band including the AQ Warning Report Meter Points)

Findings - Probable error – SSP Warnings Report AQ values are approx. 11.5% understated = 3.366TWh

Value of misallocation between SSP Shippers of approx. £89.2m = £4.19 per SSP Customer

- **Method 3 using Data Set 1C**– Comparison to AQ Review 2011 SSP Average AQ calculated against Xoserve’s Mod 81, Report 10, EUC Banding 1B, excluding the SSP AQ Warnings (Appendix 1, Method 3)

Findings - Probable error – SSP Warnings Report AQ values are approx. 12.85% understated = 3.742TWh

Value of misallocation between SSP Shippers of approx. £99.2m = £4.66 per SSP Customer

Due to the nature and diversity of the LSP market sector, there are no Industry average consumption values available. Therefore we have attempted to calculate the potential over/understatement of AQ values by using the following methods:

- **Method 4 using Data Set 2C** – LSP Using same methodology as SSP Method 1 i.e. applying a 13% understatement (Appendix 1, Method 4)

Findings - Under deeming to LSP Shippers, with over deeming to SSP Shippers

Probable understatement of energy – 1.721TWh

Value of under-allocation LSP Shippers of approx. £45.6m = £2.14 per SSP Customer

- **Method 5 using Data set 2C** – Applying % under/overstatement (Appendix 1, Method 5)

Findings - Demonstrates the potential sensitivity to the SSP market from inaccuracies in the LSP site AQs

Taking a prudent approach a +/- 5% adjustment in energy assigned against the LSP AQ Warnings Report translates to a under/overstatement of approximately 662GWh, £17.5m or £0.82 per SSP customer. However it is impossible to accurately state whether AQ movements will be positive or negative. However, it is more probable that Shippers will have proactively targeted Meter Points with over-estimated AQ values in order to mitigate financial exposure and risk. The current gas settlements process does not audit billing volumes v settlement data.

**ScottishPower estimate that the potential benefit of this Modification could be £118.5m.**

For LSP Meter Points when a valid meter reading is accepted and processed by Xoserve reconciliation will take place and the appropriate energy adjustment made. However, SSP Shippers through RbD allocation bear the financial risk of misallocation until such

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times as such reconciliations take place. Mod 395/398 analysis provided by Xoserve demonstrated that 3.39% of energy remained un-reconciled in 2010, (Source Mod 395 Diagram). These reconciliations could result in a credit or debit being applied against the LSP Shipper whose Meter Point is subject to the reconciliation. Xoserve report that the large majority of reconciliations result in a credit to LSP Shippers. From a commercial perspective, a Shipper is more likely to pursue the speedy resolution through reconciliation when it is of financial benefit to them with other outstanding reconciliations receiving less priority with some being permitted to timeout with the closure of the Settlement Window (currently 4-5 year model).

For SSP misallocation no such reconciliation of energy and charges occurs.

**This potential benefit more that outweighs the implementation costs £240k-£460k outlined within the Xoserve Rough Order of Magnitude for MOD421.**

Meter Reading performance suggests that meter readings are indeed being submitted and accepted by Xoserve on behalf of Gas Transporters, however due to data anomalies which are not being addressed by Shippers the AQ value is not updating. This results in an unquantifiable cost exposure and uncertainty for SSP Shippers and their customers.

Analysis of the SSP AQ Warnings Report indicates that 2,052,983 Meter Points failed to re-calculate an AQ due to problems with Meter Asset/Meter Readings data. This equates to 27.96TWh (£96.3m).

Summary - Key Contributors - SSP Warnings Report	Count of MPRN	Sum of AQ	Cost per SSP Cust	Total SSP Cost (£m)
Note 1: Missing Meter Reads	674,592	9,528,103,158	£1.06	£22,609,618
Note 2: New MPRNs or period between reading i.e. 6 months and 1 day not achieved	1,135,985	14,078,028,291	£4.24	£90,196,589
Note 4: Calculated AQ value derived by Xoserve is less than the minimum AQ value of 1	242,406	4,353,034,883	-£0.78	-£16,500,197
Totals	<b>2,052,983</b>	<b>27,959,166,332</b>	<b>£4.53</b>	<b>£96,306,010</b>

**Implications of Industry Settlement**

Mod 640 – End of Year Reconciliation

The need to introduce an appropriate AQ performance target is further substantiated by information presented at the Xoserve Customer Operations Forum (6<sup>th</sup> March) on Mod 640 End of Year Reconciliations (SSP to LSP movements).

Mod 640 was implemented in 28<sup>th</sup> June 2004 to promote the prompt and timely appeal of AQ values i.e. a Meter Point AQ indicates it is no longer an SSP Meter Point, but should be an LSP Meter Point. There are 2 scenarios related to MOD640:

- Scenario 1 - If a Shipper proactively submits an AQ appeal prior notification of the Xoserve Provisional AQ value, no reconciliation charges will be incurred.
- Scenario 2 – If a Shipper reacts to the Xoserve Provisional AQ and submits a valid AQ Appeal which will take effect after the notification of the Xoserve Provisional AQ value Mod 640 End of Year Reconciliation charges will be applied.

The undernoted table sets out the value of Mod 640 End of Year Reconciliations applied over the last 3 Gas Years:

**Mod 640 End of Year Reconciliation Table 8**

1	2	3	4	5	6	7	8	9	10
Period	Billed	No of Sites	Transportation	GRE Charge	Total	Energy Volume	Avg Vol per site kWh	Avg cost per site	Total SSP customer subsidy
2009/10	March 2010	20,482	£377,404	£16,676,317	£17,053,722	1,046,227,623	51,080	£833	£0.96
2010/11	March 2011	15,148	£328,098	£10,027,422	£10,355,519	861,100,251	56,846	£684	£0.58
2011/12	March 2012	23,310	£567,710	£29,304,836	£29,872,545	1,537,340,220	65,952	£1,282	£1.68
Columns 1-7 Figures taken from Xoserve's MOD640 annual reports							Divided by 17.8m (based on Xoserve AQ Operational Stats for SSP trial calc from 2011)		
Column 8 = Column 7 divided by Column 3									
Column 9 = Column 6 divided by Column 3									
Column 10 = Column 6 divided 17.8m									

It was reported that invoice reconciliations of circa. £30m (1,537GWh) were applied in March 2012 (period from 1/10/10 – 1/10/11) (above table line 3)). This value has increased from £10.3m (862GWh) in 2010. It has been reported that the number of Supply Points crossing the threshold (73,200kWh) has increased substantially (approximately 42%) within the last Mod 0640 reconciliation period compared to the previous year. It is therefore evident that failure to submit meter readings which will permit the AQ value to re-calculate presents a substantial risk to RbD Shippers. While a reconciliation of energy charges (invoice code GRE) and transportation charges (invoice code TRE) are applied back to the date that the previous AQ value became effective the application of LDZ Capacity Charges are not considered. Capacity Charges are calculated based on the Site Offtake Quantity (SOQ) i.e. will have been set in accordance with the previously calculated AQ. No retrospective capacity adjustment is performed to account for the increased offtake quantity as calculated under the Mod 640 methodology.

Therefore the SSP market sector and their customers retain a proportion of cost in relation to delays where the Shipper has not proactively managed and adjusted AQ values. We cannot lose sight of the fact that for the period that Meter Points AQ values remain non-calculating or un-reconciled, the SSP market sector, through RbD allocation, retain the burden and risk of energy and cost misallocation.

In addition, the application of the Settlement Close date (current maximum period 5 years) will impact the re-adjustment of energy between SSP and LSP market sectors – where any period beyond this time that should have been reconciled will be lost (i.e. where the AQ has not been updated to reflect current usage within the last 5 years). Proposals to reduce the settlement close out period are being considered under Mods 395/398.

### 3 Solution

This proposal will introduce a requirement for Shippers to have AQ performance levels to result in at least 85% of their AQs (SSP and LSP portfolios individually) updating during the Review process. At the commencement of the AQ Review Process, Xoserve issue files to the relevant Shipper with details of their Meter Point Portfolio and the “Transporter Provisional AQ Quantity” to apply within the forthcoming Gas Year. These files are commonly known as the T04 files. Mod421 proposes that a Shippers AQ Review performance would include those sites which have an updated AQ value at the Notification of Revision to the Meter Point AQ stage (T04 stage), have been subject to

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successful AQ Appeal activity, and those meter points where the Shipper has proposed a successful AQ amendment and that these meter points would count towards the update performance (in relation to 85%). For the avoidance of doubt the performance would take into account all sites in the Shipper portfolio including dead (DE) and extinct (EX).

#### Definition of Dead and Extinct as provided by National Grid on 2/7/12

EX – Extinct - This applies to Meter Point Reference Numbers (MPRN's) which have never had a corresponding physical service laid. This is used when an MPRN has been created for a service which was subsequently cancelled and never installed. It is also used for duplicate MPRNs. The duplicate (therefore the service) never actually existed in reality.

DE – Dead - This is applied to Meter Point References which correspond to a physical service pipe which has been disconnected.

#### Justification for including Dead and Extinct

We have included Meter Points with a Dead and Extinct status within the AQ Performance calculation where the Meter Point remains registered within a Shipper portfolio. Meter Points with a Registered Shipper User (RSU) can be managed by the responsible Shipper via an update to the Meter Point /Meter Asset status. (An industry process exists to deal with DE and EX meter points. Assets details need to be removed and a withdrawal required. A new meter point requires to be created, registered and assets attached).

Current UNC Metering Reading performance obligations (UNC, Section M 3.4 & 3.5) require that for Monthly Read sites a meter reading must be submitted not less frequently than once every 4 calendar months. For Annual Read sites meter reading performance should not be less than 70% within 12 months and 100% within 24 months. While the AQ performance target has been set initially at 85%, we believe that the cumulative effect of meter reading submissions should have permitted a build up of meter reading history and therefore should not prevent individual Shipper from performing to this AQ target level.

If a Shipper does not achieve an 85% or more performance level for their SSP and LSP portfolios separately, the Transporter would notify the individual Shipper(s) of their performance level. The initial AQ performance measure will be calculated based on an individual Shipper AQ performance following completion of the AQ Review process for 2012. This report can be used by Shippers as a benchmark against achieving the required 85% measure. For the avoidance of doubt, Shipper Charges will not be applied following completion of the AQ Review 2012.

AQ Review performance reporting and application of Shipper Charges will commence on completion of the AQ Review 2013.

Shipper Charges will not be applied against the AQ Review Performance measure following the AQ Review 2012. Shipper Charges will commence from completion of the AQ Review 2013. If the Shippers performance was still below the 85% level, then the Transporter would apply "Shipper Charges". The level of "Shipper Charges" would be applied in accordance with the values contained within the Business Rules. Charges would be applied per meter point, where the Shipper's update of AQ has been below 85%, for all meter points where the AQ has not been updated. E.g. a Shipper who achieves 84% performance in the SSP sector would pay charges based on 16% of their NDM meter point count.

#### Re-distribution of Shipper Charges

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NDM SSP Shippers who have met the 85% performance level will receive the re-distribution of the Shipper Charges, based on their market share and performance. Although the re-distribution of these charges will not fully compensate for the loss experienced by SSP Shippers through the burden of incorrect allocation costs, they will go some way to mitigate it. For the avoidance of doubt the cost faced by the Transporter for running the scheme and creating monitoring reports would be met by those Shippers who have failed the AQ performance target (ROM – Operational Costs). Such costs will be apportioned to those Shippers based on the number of portfolio meter points failing the 85% AQ performance level. Should no Shippers fail the 85% performance level, Transporter costs will be smeared across the industry based on the number of meter points registered by a Shipper as at 1<sup>st</sup> 1/10/YY.

Table 8

Table 9A

1	2	3	4	5	6	7	8
Shipper	Count Of MPR	No. Of New Connection	No. Of MPRN Gains and Losses (Net position)	No. Of Eligible MPRNs (Count of MPRN Column (2) )– (New Connections Column (3)+ Count of Gains and Losses Column (4))	Count Of Eligible MPRN Updated	No. Of Eligible MPRN AQ Carried Forward	Performance % of eligible MPRNs calculated (i.e. Columns (6)/(5)*100
A	1000000	800	400	998800	880000	118800	88.
B	150000	100	80	149820	135000	14820	90.
C	650000	350	150	649500	535000	114500	82.
D	45000	50	20	44930	42000	2930	93.
Total SSP Shipper Charge							

Table 9B

AQ Value	Shipper charge									
73,201- 293,000	£164									
293,001- 732,000	£479									
732,001- 2,196,000	£983									
1	2	3	4	5	6	7	8	9	10	11
Shipper	Count Of MPR	No. Of New Connection	No. Of MPRN Gains and Losses (Net position)	No. Of Eligible MPRNs (Count of MPRN Column (2) )– (New Connections	Count Of Eligible MPRN Updated	No. Of Eligible MPRN AQ Carried Forward	Performance % of eligible MPRNs calculated (i.e. Columns (6)/(5)*100	Shipper Charge EUC Banding 2	Shipper Charge EUC Banding 3	Shipper Charge EUC Banding 4
		MPRNs (AQ not updated)				(i.e. Columns (5)-(6))				
E	30000	800	400	28800	24000	4800	85.59%	Nil	Nil	Nil
F	25000	100	80	24820	19400	5420	78.16%	£834,433	£143,626	£19,65
G	14000	350	150	13500	11500	2000	81.65%	£310,867	£35,907	£24,57
H	0	0	0	0	0	0	0.00%	Nil	Nil	Nil
Total LSP Shipper Charge								£1,145,300	£179,533	£44,22
Shipper F - EUC B and 2 - 5100 Meter P oints, EUC B and 3 - 300 Meter P oints, EUC band 3 - 20 Meter P oints										
Shipper G - EUC B and 2 - 1900 Meter P oints, EUC B and 3 - 75 Meter P oints, EUC band 3 - 25 Meter P oints										

Table 10

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Shipper Costs Re-Distributed to SSP only			
Total Value of Shipper Costs		SSP	2,290,000
		LSP	1,369,062
		Total	3,659,062

Shipper (1)	Count of MPR (2)	Market Share (3)	Cost Re-Distribution (4)
	Total no. of MPRNs >=85% Report 7, Column 5	Count of Eligible MPRN / Total no. of Eligible MPRNs across all Users meeting performance target =Column (2)/(Sum of Column(2))*100	Shipper Costs Re-Distributed to SSP only
A	880,000	83.25%	3,046,333.36
B	135,000	12.77%	467,335.23
D	42,000	3.97%	145,393.18
Total	1,057,000	100.00%	3,659,061.77

Xoserve has arranged an AQ Workshop scheduled for 3<sup>rd</sup> October 2012 to discuss the 2012 AQ Review and to discuss improvement in reporting and progression of AQ Warnings issues. This workshop will consider the Warnings issues and should allow Shippers a greater insight into the issues that result in Warnings and how to address them.

**Business Rules – Within these rules references have been made to date ranges to assist Xoserve in the production of the ROM, reporting requirements and mechanism for the re-distribution of Shipper Charges. (this takes the form DD/MM/YY)**

1. The calculation of AQ update performance will, subject to Business Rules 2 to 5, include all meter points in a Shipper's portfolio including those with a meter point status of Dead or Extinct, as held by the Transporter. Xoserve shall extract portfolio data as at 30/9/YY to identify Meter Points whose AQ updating during the Review Process in that year (YY). This would include those meter points, which update by the T04 stage, have been subject to successful AQ Appeal activity, and those meter points where the Shipper has proposed a successful AQ amendment. Meter Points that have been subject to any AQ Appeal activity (between 1/10/YY-1 and end of performance year YY), and as a consequence, have been successfully appealed (i.e. confirmation of AQ Appeal has been accepted) in the current Gas Year will be included within the 85% target.
2. New Connection sites established in the Gas Year in which the AQ Review is performed will be excluded from the 85% target if they fail to re-calculate. For the avoidance of doubt, if a new connection established within the Gas Year in which the AQ Review is performed does calculate it will be included in the calculation of the AQ update performance.
3. Threshold Crossers activity between 1/10/YY and the end of the performance year 30/9/YY. Threshold Crossers include AQ movements from LSP to SSP and vice versa) AQ activity will be included in the performance reports and will contribute to the market sector in which the AQ value was initially determined e.g. LSP to SSP AQ movement, will contribute to LSP performance measure. Meter points that have been gained and lost from a given shipper's portfolio following portfolio extract on 01/04/YY shall be excluded from the AQ performance calculation. i.e. Those meter points that are not common in the extract as at 01/04/YY and 30/09/YY will be excluded from the performance calculation.

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4. The performance by Shipper would be calculated on a per Shipper ID on individual SSP and LSP portfolios basis and not by Licenced entity<sup>3</sup> and is the same level, irrespective of market segment.
5. For the avoidance of doubt the assessment of Shipper performance at the end of the Review period should not be impacted by the Xoserve 5 year review of WAALP or any such similar initiatives or UNC business as usual process.
6. The initial AQ performance measure will be calculated based on an individual Shipper AQ performance following completion of the AQ Review process for 2012. This report can be used by Shippers as a benchmark against achieving the required 85% measure. AQ Review performance reporting and application of Shipper Charges will commence on completion of the AQ Review 2013.
7. New market entrants will not be subject to the scheme until after at least 12 months from the point of registering sites, as during that time the majority of their sites will be gains and they will have no meter reading history. New entrants will therefore be excluded from paying and receiving any charges in at least their first year nor shall their performance be shown in the anonymised reports provided to the industry. Once a shipper has a Live Confirmation prior to 01/10/YY-1 they shall be included in the year YY performance review. If 85% performance is achieved by the new entrant in year one, then they will be included within the re-distribution of charges together with all other Shippers who have met the target.
8. The Transporter will provide, on an anonymous basis but using the same pseudonyms as used in the Mod 81 reports, interim AQ performance reports at the same time as the issue of the published Mod 81 reports (1<sup>st</sup> July and 1<sup>st</sup> Aug) to inform Shippers of their progressive AQ amendment activity. For the avoidance of doubt Xoserve shall not be required to provide individual reports to each Shipper.
9. The Transporter would identify Shipper performance and indicate the number of Shippers where performance was below the 85% minimum standard and by how much (across their separate SSP and LSP portfolios). This report would be provided to industry on an anonymous basis, using the same pseudonyms as used in the Mod 81 reports, at the same time as the published MOD081 final report showing industry performance and would include all shippers. For the avoidance of doubt Xoserve shall not be required to provide individual reports to each Shipper.
10. "Shipper Charges" will be levied on the basis of an appropriate incentive charge in accordance with the undernoted

EUC Band	AQ Banding	Shipper Charge (£) Column 6 *2.65p/kWh
1	1 - 73,200	£20
2	73,201 - 293,000	£164
3	293,001 - 732,000	£479
4	732,001 - above	£983

11. The level of Shipper Charges will be kept under review. However any UNC Party will be entitled to raise a Modification to revise the Shipper Charges at anytime. Where a Shipper's performance is below the 85% AQ update level The "Shipper Charge" will be calculated separately by SSP and/or LSP portfolio taking into consideration the requirements of Business Rules 1-5. The charges to those Shippers who have failed to meet the performance criteria will be issued on an ad-hoc invoice as a one off charge in the next available invoice.

12. There will be a re-distribution of the "Shipper Charges" to all of those NDM SSP Shippers who have had achieved 85% and above performance. The total value of charges will be distributed to Shippers on the basis of SSP market

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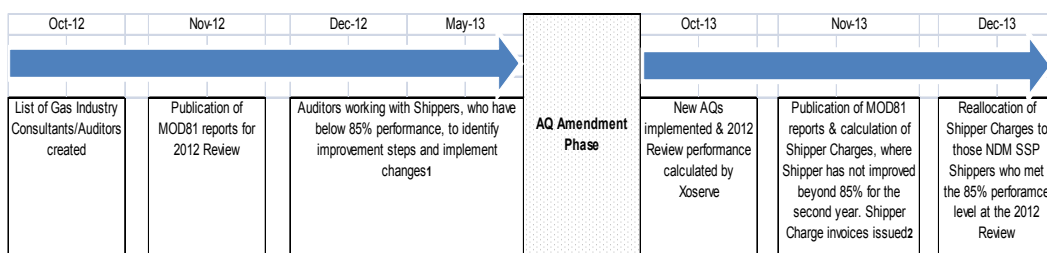
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<sup>3</sup> This mirrors the BSC electricity process around performance assurance.

share at the final portfolio extract at [30/09/YY] (based on number of eligible MPRN's), relative to all those other Shippers who have met or exceeded the 85% performance level. The SSP portfolio will be determined based upon the prevailing AQ at the start of the AQ performance year.

13. The re-distribution will take place in the next available invoice following receipt of payment of Shipper Charges.
14. Costs incurred by Transporters for administering the AQ performance scheme will be met by those Shippers who have failed the AQ performance target. The costs apportioned to failing Shippers are charged to each failing Shipper based upon each failing Shippers individual proportion of the total number of failing Shippers in each market sector as measured on 30<sup>th</sup> September after the relevant AQ review. These costs are separate to the 'Shipper Charges' i.e. the charges collected by Transporters shall be wholly redistributed to those Shippers that met the relevant performance target.
15. Where there are no Shippers who meet the 85% performance level, or all Shippers meet the 85% level, any costs incurred by the Transporter will be apportioned to Shippers based upon each Shipper's individual proportion of total number of non-daily metered supply points. This proportion is to be measured as at the 30th September after the relevant AQ review. For the avoidance of doubt in the first year of the scheme, where only monitoring takes places, any costs incurred by the Transporter will be apportioned in the same manner – i.e. to Shippers based upon each Shipper's individual proportion of total number of non-daily metered supply points. This proportion is to be measured as at the 30th September after the relevant AQ review.
16. For the avoidance of doubt Daily Metered and Unique Sites will be excluded from this process.

The process is demonstrated in the chart on the following page.



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## 4 Relevant Objectives

Implementation is expected to better facilitate the achievement of **Relevant Objectives a, d and f.**

### Proposer's view of the benefits against the Code Relevant Objectives

Description of Relevant Objective	Identified impact
a) Efficient and economic operation of the pipe-line system.	Yes, see below
b) 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.	None
c) Efficient discharge of the licensee's obligations.	Yes
d) Securing of effective competition: (i) between relevant shippers; (ii) between relevant suppliers; and/or (iii) between DN operators (who have entered into transportation arrangements with other relevant gas transporters) and relevant shippers.	Yes, see below
e) Provision of reasonable economic incentives for relevant suppliers to secure that the domestic customer supply security standards... are satisfied as respects the availability of gas to their domestic customers.	None
f) Promotion of efficiency in the implementation and administration of the Code	Yes, see below
g) Compliance with the Regulation and any relevant legally binding decisions of the European Commission and/or the Agency for the Co-operation of Energy Regulators	None

We believe that this modification facilitates the achievement of the UNC Relevant Objectives (a), (d) and (f):

a) Efficient and economic operation of the pipe-line system.

By driving more accurate AQs through incentivising update performance Transporters will have a more accurate picture of customer demand. This in turn will be able to be factored into decisions on system capacity and investment, ensure that Transporters can accurately assess and levy transportation costs to the correct market segment and bring benefits to security of supply. In addition by having more up to date and accurate AQs the Transporters may I not have to request network investment funding through the Price Control, when it may not be necessary.

c) Efficient discharge of the licensee's obligations.

All Licenced Gas Transporters have a requirement to levy transportation charges accurately. We believe that the current issues outlined in this modification, which details the issues with the current AQ Review Process, data quality and update performance and the lack of monitoring and scrutiny are hindering the Transporters

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from meeting this obligation. This modification will support the Transporters in meeting their objective therein.

d) Securing of effective competition:

(i) between relevant shippers;

(ii) between relevant suppliers; and/or

(iii) between DN operators (who have entered into transportation arrangements with other relevant gas transporters) and relevant shippers.

At the present time there is misallocation of significant sums of money in the application of transportation costs and through reconciliation by difference and it is not apparent that this is uniform across all Shippers in each market sector. This modification will address these issues, through promoting the timely update of AQ values and placing incentives on performance of AQ update. In addition Shippers will address data anomalies which stop sites with adequate meter readings from updating AQs and will encourage Shippers who are not providing sufficient meter readings to do so. This will have positive implications for customer billing and should help address the opportunity for Shippers to game the AQ Review process to their commercial advantage.

This solution also has the potential to reduce the number of sites appearing on the AQ Warning Report and may leading to more accurate billing and less issues with sites when they transfer Supplier.

f) Promotion of efficiency in the implementation and administration of the Code

In addition, we believe that this modification will provide greater transparency over the degree to which Shippers are compliant with the existing Code obligations not to misuse the AQ amendment process and the process prior to the Proposed AQ (T04) being set by the Transporter.

## 5 Impacts and Costs

### Wide Industry Impacts

There are no wider industry impacts identified.

### Costs

#### Indicative industry costs – User Pays

##### Classification of the proposal as User Pays or not and justification for classification

User Pays since the Transporter Agency will face additional costs.

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

###### Set-up costs

Shippers and Transporters will share the cost of the set up the requirements for the modification e.g. establishing reporting capability, and providing a mechanism to recover and redistribute 'Shipper Charges'. The costs of which will be split between the Transporters and Shippers on a 50:50 basis. This is because it is equally in the Transporters' interests to have accurate AQs for systems planning and efficient network investment, as it is for the Shippers to ensure fair apportionment of costs.

The data analysis presented demonstrates that data quality is a fundamental reason why AQ values may not be re-calculating. We believe that Transporters have a responsibility under the UNC and Licence to ensure accuracy of cost allocation between Shippers.

The costs apportioned to Shippers are to be charged to each Shipper based upon each Shipper's individual proportion of total number of non-daily metered supply points (based on the market sector at the period). This proportion is to be measured as at the date of implementation. Note this excludes Daily Metered and Unique Sites.

###### Operational Costs

The operational cost of the modification will however be met by those Shippers who fail to achieve the performance level of 85%. Costs incurred by Transporters for administering the AQ Performance scheme will be met by those Shippers who have failed the AQ performance target. Such costs will be apportioned to those Shippers based on the number of portfolio meter points failing the 85% AQ performance level.



Where there are no Shippers who meet the 85% performance level, or all Shippers meet the 85% level, any costs incurred by the Transporter will be smeared across the industry based upon the proportion of meter points within that Shippers portfolio as at 30/09/YY in relation to the total industry meter point portfolio. For the avoidance of doubt in the first year of the scheme, where monitoring takes places, any costs incurred by the Transporter will also be smeared to each Shipper based upon the proportion of meter points within that Shippers portfolio as at 30/09/YY in relation to the total industry meter point portfolio.

Draft ACS Service Lines are shown below.

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

TBC

Proposed charge for inclusion in ACS – to be completed upon receipt of cost estimate from the Transporter

TBC

18 Establishment of the arrangements to facilitate the AQ Audit – Modification 421 refers	Set up service	Code Service	Shippers under the UNC		The charging basis to Shippers is: The costs apportioned to Shippers are to be charged to each Shipper based upon each Shipper's individual proportion of total number of non-daily metered supply points. This proportion is to be measured as at the date of implementation. Note Excludes Daily Metered and Unique Sites.	Tbc
19 Provision of the services to facilitate the AQ Audit – Modification 421 refers. One or more shipper fail the performance standard	Analysis of shipper AQ review performance.  Note: in any one year only one of service line 19 or 20 will apply, not both.	Code Service	Shippers under the UNC who fail the performance standard	The detailed analysis of each shippers AQ review performance for each shippers smaller supply point and larger supply point portfolio, measured against the performance standard. The provision of reports to the industry and individual shippers. For shippers failing the performance standard, notification of this failure. The reasonable provision of data to Ofgem	The charging basis to failing Shippers is: For Smaller Supply Point Portfolios: The costs apportioned to failing Shippers are charged to each failing Shipper based upon each failing Shippers individual proportion of the total number of failing Shippers smaller supply point meter points as measured on 30th September after the relevant AQ review. For Larger Supply Point Portfolios: The costs apportioned to failing Shippers are charged to each failing Shipper based upon each failing Shippers individual proportion of the total number of failing Shippers larger supply point meter points as measured on 30th September after the relevant AQ review. Note Excludes Daily Metered and Unique Sites.	Tbc
20 Provision of the services to facilitate the AQ Audit – Modification 421 refers. No shipper achieves performance target or all shipper performance above target	Analysis of shipper AQ review performance. Note: in any one year only one of service line 19 or 20 will apply, not both.	Code Service	Shippers under the UNC	The detailed analysis of each shippers AQ review performance for each shippers smaller supply point and larger supply point portfolio, measured against the performance standard. The provision of reports to the industry and individual shippers.	The charging basis to Shippers is: The costs apportioned to Shippers are to be charged to each Shipper based upon each Shipper's individual proportion of total number of non-daily metered supply points. This proportion is to be measured as at the 30th September after the relevant AQ review. Note: excludes Daily Metered and Unique Sites	Tbc

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## Impacts

Impact on Transporters' Systems and Process	
Transporters' System/Process	Potential impact
UK Link	<ul style="list-style-type: none"> <li>TBC</li> </ul>
Operational Processes	<ul style="list-style-type: none"> <li>TBC</li> </ul>
User Pays implications	<ul style="list-style-type: none"> <li>TBC</li> </ul>

Impact on Users	
Area of Users' business	Potential impact
Administrative and operational	<ul style="list-style-type: none"> <li></li> </ul>
Development, capital and operating costs	<ul style="list-style-type: none"> <li>Those Shippers who failed to meet the performance level may have increased operating costs, but these would be line with the costs of those Shippers who are currently meeting the performance level and therefore will only serve to put the Shippers on an equal footing. There may be a capital investment required, but again this will be to address the Shipper's shortcomings.</li> </ul>
Contractual risks	<ul style="list-style-type: none"> <li>None</li> </ul>
Legislative, regulatory and contractual obligations and relationships	<ul style="list-style-type: none"> <li>None</li> </ul>



Impact on Transporters	
Area of Transporters' business	Potential impact
System operation	<ul style="list-style-type: none"><li>This modification will be beneficial to system operation, as it will drive more accurate and up to date AQs and will therefore ensure that the system is being balanced to an appropriate level. In addition it will ensure efficient network investment is made, as the AQs will be more reflective of actual usage.</li></ul>
Development, capital and operating costs	<ul style="list-style-type: none"><li>This modification should ensure that the network is only sized to meet the consumer demand and therefore should be beneficial in the efficient use of capital</li></ul>
Recovery of costs	<ul style="list-style-type: none"><li>This modification will ensure that recovery of costs are made at the correct level from each party, as the AQs will be more accurate and costs targeted at those Users who have greater throughput on the networks</li></ul>
Price regulation	<ul style="list-style-type: none"><li>TBC</li></ul>
Contractual risks	<ul style="list-style-type: none"><li>None</li></ul>
Legislative, regulatory and contractual obligations and relationships	<ul style="list-style-type: none"><li>None</li></ul>
Standards of service	<ul style="list-style-type: none"><li>None</li></ul>

---

**Where can I find details of the UNC Standards of Service?**

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In the Revised FMR for Transco's Network Code Modification **0565 Transco Proposal for Revision of Network Code Standards of Service** at the following location:  
<http://www.gasgovernance.co.uk/sites/default/files/0575.zip>

Impact on Code Administration	
Area of Code Administration	Potential impact
Modification Rules	<ul style="list-style-type: none"><li>None</li></ul>
UNC Committees	<ul style="list-style-type: none"><li></li></ul>
General administration	<ul style="list-style-type: none"><li>None</li></ul>

Impact on Code	
Code section	Potential impact

Impact on Code	

Impact on UNC Related Documents and Other Referenced Documents	
Related Document	Potential impact
The modification proposes a new UNC Related Document	
Network Entry Agreement (TPD I1.3)	None
Network Exit Agreement (Including Connected System Exit Points) (TPD J1.5.4)	None
Storage Connection Agreement (TPD R1.3.1)	None
UK Link Manual (TPD U1.4)	None
Network Code Operations Reporting Manual (TPD V12)	None
Network Code Validation Rules (TPD V12)	None
ECQ Methodology (TPD V12)	None
Measurement Error Notification Guidelines (TPD V12)	None
Energy Balancing Credit Rules (TPD X2.1)	None
Uniform Network Code Standards of Service (Various)	None

Impact on Core Industry Documents and other documents	
Document	Potential impact
Safety Case or other document under Gas Safety (Management) Regulations	None
Gas Transporter Licence	None

Other Impacts	
Item impacted	Potential impact
Security of Supply	This modification will have a positive impact on security of supply, as it will ensure that a greater percentage of AQRs are updated and therefore lead to more accurate view of User requirements.

Operation of the Total System	None
Industry fragmentation	None
Terminal operators, consumers, connected system operators, suppliers, producers and other non code parties	None

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## 6 Implementation

No implementation timescales are proposed, however implementation to allow the initial AQ Performance measure to be applied to the results of the 2012 AQ Review and therefore drive immediate improvements in data quality and allocation, is considered desirable.

### Summary

Initial AQ Review Reporting following completion of AQ Review 2012. AQ Review Reporting and Shipper Charges to apply following completion of AQ Review 2013

The application of Shipper Charges would not kick in until the AQ Performance measure calculated following the AQ Review in 2013.

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## 7 The Case for Change

In addition to that identified the above, the Proposer has identified the following:

### Advantages

1. Introduces the first step to a Performance Assurance Framework in the gas market.
2. Provides greater assurance over Shipper activity in relation to the whole AQ Review process, including the amendment and appeal phase.
3. Ensures that AQ update performance improves and therefore gas and transportation cost allocation is more accurate.
4. Places incentives on all Shippers to update more AQs on an annual basis.
5. Ensures that LSP Shippers submit meter readings ahead of the T04 stage and that these are used to reconcile LSP sites and credits/debits are factored through RbD in a timely manner.
6. Brings increased consistency between the electricity and gas markets in relation to performance assurance.
7. Improves network investment decisions by the Transporter, as AQ information will be more accurate and up to date.
8. Provides incentives on Shippers to address data anomalies, as set out in the AQ Warnings Report.
9. Addressing data anomalies will give the Transporters a more accurate view of the sites consuming gas on their networks and aid in understanding capacity needs.
10. Improvements in the quality and accuracy of data held on the "Supply Point Register"
11. Has corresponding benefits to security of supply by ensuring that there is a more accurate and up to view of User requirements.
12. Allows a grace period for new entrants.

### Disadvantages

None identified.

## 8 Legal Text

To be provided by the Transporters.

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## 9 Recommendation

The Proposer invites the ~~Panel~~Workgroup to:

- AGREE that Modification 0421 is sufficiently developed to proceed to consultation.

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# 10 Appendices

## Appendix 1

### Total SSP Warnings 2011 (Dataset 1A)

#### Actual Calc 2011 SSP AQ Warnings Report

Warnings Reason	SSP Calculations	
	Count Of MPRN	Sum Of AQ
AQ not calculated due to the absence of reads since the previous AQ calculation	677,387	9,564,344,571
AQ not calculated due to the application of backstop date	2	678
Calculated annual quantity is negative	242,780	4,358,574,470
Consumption gap. AQ calculated based on reduced metered period	88	1,006,474
Consumption gap. AQ not calculated	780	8,856,628
Consumption overlap. AQ calculated based on reduced metered period	103	1,618,994
Consumption overlap. AQ not calculated	5,411	83,834,605
Consumption starts more than three years before Target Opening Date	5,780	81,551,421
Insufficient Consumption Data to Calculate AQ	1,140,637	14,134,899,235
LDZ Calorific Value does not Exist	29	388,142
Meter Point is not a part of Live Confirmation. AQ not calculated	1,300,158	54,868,257,776
Meter Point is owned by Transco. AQ not calculated	153	2,471,034
Meter read request does not exist	2,061	49,530,415
Meter Reading Frequency does not exist	3	56,600
Reconnection does not exist	1	1
Reconnection Effective date is in the relevant metered period. AQ not calculated	56,362	697,481,492
Supply Point does not exist	11	176,847
Supply Point History not contiguous over whole of relevant metered period	15,420	278,998,098
	<b>3,447,166</b>	<b>84,132,047,481</b>

### Total LSP Warnings 2011 - Dataset 2A

#### Actual Calc 2011 LSP AQ Warnings Report

Warnings Reason	LSP Calculations	
	Count Of MPRN	Sum Of AQ
AQ not calculated due to the absence of reads since the previous AQ calculation	12,621	2,821,666,842
AQ not calculated due to the application of backstop date	667	35,280,840,300
Consumption gap. AQ calculated based on reduced metered period	8,831	1,207,020,634
Consumption gap. AQ not calculated	5,496	981,775,771
Consumption overlap. AQ calculated based on reduced metered period	35	59,896,160
Consumption overlap. AQ not calculated	61	22,493,836
Consumption starts before earliest possible start meter read date	4,017	825,388,419
Consumption starts more than three years before Target Opening Date	33	3,706,903
Consumptions for Meter Point are not contiguous	8	530,136,901
Insufficient Consumption Data to Calculate AQ	15,174	4,544,463,251
Meter Point is not a part of Live Confirmation. AQ not calculated	85,189	97,700,759,398
Meter Point is owned by Xoserve. AQ not calculated	79	22,260,204,993
Meter Point not DM for whole of DM AQ Calculation Period. AQ not Calculated	6	711,666,507
Negative consumption during metered period. AQ not calculated	5,057	2,240,269,317
Reconnection Effective date is in the relevant metered period. AQ not calculated	2,330	693,070,958
Supply Point History not contiguous over whole of relevant metered period	147	42,525,407
	<b>139,751</b>	<b>169,925,885,597</b>

### SSP Warnings 2011 with Exclusions (RSU) – Dataset 1B

Exclusions	Meter Point Count	Sum of AQ
Duplicate Meter Points	234	2,941,340
Meter Points with MP Status of 'DE'	661,292	16,685,948,671
Meter Points with MP Status of 'EX'	229,608	12,252,922,885
Shipperless/Unregistered Meter Points	419,476	26,059,176,818
Meter Points with MP Status of 'RE'	1,945	23,896,430
<b>TOTAL EXCLUSIONS</b>	<b>1,312,555</b>	<b>55,024,886,144</b>

\*Please note the Warning Exclusions have been removed in the order above\*

\*10,084 & 71 Meter Points removed due to having an MP status of 'DE' or 'EX' respectively are live with a registered Shipper\*

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AQ2011 SSP Warnings		
Warnings Reason	CountOfMPRN	SumOfAQ
AQ not calculated due to the absence of reads since the previous AQ calculation	674,592	9,528,103,158
AQ not calculated due to the application of backstop date	2	678
Calculated annual quantity is negative	242,406	4,353,034,883
Consumption gap. AQ calculated based on reduced metered period	25	412,924
Consumption gap. AQ not calculated	769	8,758,317
Consumption overlap. AQ calculated based on reduced metered period	49	741,874
Consumption overlap. AQ not calculated	5,402	83,697,923
Consumption starts more than three years before Target Opening Date	5,773	81,482,875
Insufficient Consumption Data to Calculate AQ	1,135,985	14,078,028,291
LDZ Calorific Value does not Exist	29	388,142
Meter Point is owned by Transco. AQ not calculated	95	1,495,274
Meter read request does not exist	2,058	49,496,694
Reconnection does not exist	1	1
Reconnection Effective date is in the relevant metered period. AQ not calculated	51,996	642,382,167
Supply Point does not exist	11	176,847
Supply Point History not contiguous over whole of relevant metered period	15,418	278,961,289
	<b>2,134,611</b>	<b>29,107,161,337</b>

### LSP Warnings 2011 with Exclusions (RSU) - Dataset 2B

Exclusions	Meter Point Count	Sum of AQ
Duplicate Meter Points	0	0
Meter Points with MP Status of 'DE'	57,006	60,098,759,669
Meter Points with MP Status of 'EX'	9,936	22,316,040,962
Shipperless/Unregistered Meter Points	19,134	17,091,208,122
Meter Points with MP Status of 'RE'	15	1,800,553
<b>TOTAL EXCLUSIONS</b>	<b>86,091</b>	<b>99,507,809,306</b>

\*Please note the Warning Exclusions have been removed in the order above\*

\*861 & 13 Meter Points removed due to having an MP status of 'DE' or 'EX' respectively are live with a registered Shipper\*

AQ2011 LSP Warnings		
Warnings Reason	CountOfMPRN	SumOfAQ
AQ not calculated due to the absence of reads since the previous AQ calculation	12,326	2,751,144,005
AQ not calculated due to the application of backstop date	664	35,066,805,561
Consumption gap. AQ calculated based on reduced metered period	8,826	1,205,763,181
Consumption gap. AQ not calculated	5,488	980,364,376
Consumption overlap. AQ calculated based on reduced metered period	35	59,896,160
Consumption overlap. AQ not calculated	60	22,070,693
Consumption starts before earliest possible start meter read date	3,968	809,874,830
Consumption starts more than three years before Target Opening Date	33	3,706,903
Consumptions for Meter Point are not contiguous	8	530,136,901
Insufficient Consumption Data to Calculate AQ	15,074	4,507,876,399
Meter Point is owned by Transco. AQ not calculated	68	20,897,539,277
Meter Point not DM for whole of DM AQ Calculation Period. AQ not Calculated	6	711,666,507
Negative consumption during metered period. AQ not calculated	5,042	2,238,176,258
Reconnection Effective date is in the relevant metered period. AQ not calculated	1,915	590,529,833
Supply Point History not contiguous over whole of relevant metered period	147	42,525,407
	<b>53,660</b>	<b>70,418,076,291</b>

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**SSP Warnings 2011 (RSU) with Exclusion of Warning Category "Meter Point is owned by Transoc. AQ not calculated – Dataset 1C**

AQ Warning Category	Count of MPRNs	Sum of AQ
AQ not calculated due to the absence of reads since previous AQ calculation	674,592	9,528,103
AQ not calculated due to the application of backstop date	2	
Calculated annual quantity is negative	242,406	4,353,034
Consumption gap. AQ calculated bases on reduced metered period	25	412
Consumption Gap AQ not calculated	769	8,758
Consumption overlap. AQ not calculated based on reduced metered period	49	74
Consumption overlap. AQ not calculated	5,402	83,697
Consumption starts more than three years before Target Opening Date	5,773	81,482
Insufficient Consumption Data to Calculate AQ	1,135,985	14,078,028
LDZ Calorific Value does not exist	29	388
Meter read request does not exist	2,058	49,496
Reconnection does not exist	1	
Reconnection effective date is in the relevant metered period. AQ not calculated	51,996	642,382
Supply Point does not exist	11	176
Supply Point History not contiguous over whole of relevant metered period	15,418	278,967
Total	2,134,516	29,105,666

**LSP Warnings 2011 (RSU) with Exclusion of Warning Category "Meter Point is owned by Transco. AQ not calculated – Dataset 2C**

AQ Warning Category	Count of MPRNs	Sum of AQ
AQ not calculated due to the absence of reads since the previous AQ calculation	12,326	2,751,144,000
AQ not calculated due to the application of backstop date	14	126,483,760
Consumption gap. AQ calculated based on reduced metered period	8,826	1,205,763,180
Consumption gap. AQ not calculated	5,488	980,364,370
Consumption overlap. AQ calculated based on reduced metered period	35	59,896,160
Consumption overlap. AQ not calculated	60	22,070,690
Consumption starts before earliest possible start meter read date.	3,968	809,874,830
Consumption starts more than three years before Target Opening Date	33	3,706,900
Insufficient consumption data to calculate AQ	15,073	4,506,961,700
Negative consumption during metered period. AQ not calculated.	5,042	2,238,176,250
Reconnection Effective date is in the relevant metered period. AQ not calculated.	1,911	493,377,190
Supply Point History not contiguous over whole of relevant metered period.	147	42,525,400
	52,923	13,240,344,470