

**Review Group Report**  
**Review Proposal Reference Number 0177**  
**Rolling AQ Review**  
**Version 0.2**

## **1 Introduction**

This Review Group Report is presented for the UNC Modification Panel's consideration. The consensus of attendees is that this Review Group has finished its work in accordance with its Terms of Reference.

The main elements of a potential Rolling AQ Review process have been identified together with the advantages and disadvantages of moving from the current Annual process but a full cost benefit analysis has not been conducted. If any UNC party wishes to raise a specific Proposal to move to a Rolling AQ Review further development work would be required, including fuller identification of the costs and benefits.

## **2 Review Proposal**

E.ON UK raised Review Proposal 0177, for which the Terms of Reference are included as Appendix 1.

## **3 Review Process**

In accordance with the Modification Rules, at its meeting on 18 October 2007, the Modification Panel determined that this Review Proposal should be referred to a Review Group for progression. This Review Group Report was subsequently compiled by the Joint Office of Gas Transporters, and approved by Review Group attendees.

## **4 Areas Reviewed**

The Review Group discussions focussed on the following areas:

### **a) Current AQ Processes**

On behalf of the Transporters, xoserve gave a presentation of how the current AQ process operates. This formed the basis of discussions in the Review Group under the following headings:

#### **i) Resource Usage**

Within xoserve, the annual nature of the current AQ review requires staff to be available primarily from April to September each year. Within that period there are two Appeal windows that generate additional peaks of workload. The October to March AQ workload is consequently much lower than this April to September period.

xoserve has taken steps to manage this peak activity which has mitigated the additional costs associated with workload peaks and troughs. For this reason it has not at this stage identified any substantial cost savings that would be associated with a change to a rolling process.

Users also encounter some peaks of activity associated with the current annual process but these tended to be of a lesser nature than within xoserve.

#### **ii) Numbers of Uncalculated AQs**

xoserve provide each year information on the total numbers of AQs that roll forward from year to year without recalculation. Concern was expressed by a number of Review Group members on the extent of roll forward and whether this was characteristic of an annual process.

#### **iii) Current AQ Amendment Process Outside the Annual Window.**

A process already exists for amending AQs outside the Annual Window that involves reconfirmation of the Supply Point. Amongst Review Group members there was a variety of views on how straightforward this process is in practice. Shipper members identified that this process is only used where major changes of consumption are identified.

#### **iv) Demand Step Changes 01 October Each Year**

It was recognised that changes in AQ in some cases lead to major step changes in demand. There was a variety of views expressed on the extent to which this is a problem. It was acknowledged that these changes are predictable and therefore Users can take steps to balance their entry and exit portfolios in anticipation of the change in demand.

#### **v) Risks for RbD Shippers**

A number of Review Group members believed this to be a major issue with the current annual process.

The Proposer suggested that the primary risks are from:

- (1) The initial misallocation of energy due to a difference between SSP and LSP markets; and
- (2) The delay in reconciliation.

An improvement in allocation will therefore improve risk profiles for SSP Shippers.

Current consumer consumption is decreasing. As AQ is historic, there is a lag between AQ and actual consumption. This lag is likely to be greatest in the SSP market due to changes being targeted at the more temperature sensitive domestic consumers and the lower read collection rates.

Based on an improvement to AQ leading to a 1% change in relative AQ between the SSP and LSP markets; then this will lead to:

- (1) A 0.8% increase in energy allocated to the LSP market;
- (2) A corresponding 0.3% reduction in allocation to the SSP market; and
- (3) The Scaling Factor will move 1.8% closer to 1, from its current levels.

#### **ii) Potential for Gaming**

It was recognised that tactical use of the Appeals process could reduce an individual User's transportation and gas cost exposure to the detriment of the Transporters and other Users. However, it was also acknowledged that there was little evidence of this occurring in practice.

### **b) Advantages and Disadvantages of Moving to a Rolling AQ Process**

#### **Advantages**

To a great extent the advantages of moving to a Rolling AQ Process reflect the drawbacks associated with the current annual process as expressed above. Taking the areas where most advantage might be gained:

#### **i) Reductions in Numbers of Uncalculated AQs**

Review Group members acknowledged that changing to a Rolling AQ Process would not, of itself, affect the numbers of uncalculated AQs, as a proportion of the total. However, there would be a beneficial effect in ensuring that as soon as such Supply Points were read eg as a "must read", the new AQ was reflected in UK Link. This is related to the risk faced by RbD Users.

## ii) Simplified Processing Outside AQ Window

A rolling AQ process would incorporate all such changes that currently require reconfirmation of the Supply Point and thereby overcome any complexities associated with the current Process.

## iii) Risk Reduction

The more frequently the AQ is revised, the smaller would be the risk faced by RbD Users.

Based on an improvement to AQ leading to a 1% change in relative AQ between the SSP and LSP markets; then this will lead to:

- (1) A 0.8% increase in energy allocated to the LSP market;
- (2) A corresponding 0.3% reduction in allocation to the SSP market; and
- (3) The Scaling Factor will move 1.8% closer to 1, from its current levels.

## Disadvantages

The disadvantages set-out below are associated with Systems. It is expected that costs and impacts would be reduced if changes were associated with UK Link Replacement, although this has not been assessed in detail.

### i) System Costs

After reviewing alternatives the Review Group favoured moving from an annual to a monthly review. This would permit the current system configuration whereby AQs can be calculated in a discrete part of the system. However, the "straw man" developed jointly by the Proposer and xoserve did identify some changes that would be expected to have system cost implications.

In addition, system costs would be identified with an increased level of automated validation (see iii below)

### ii) System Resilience

A certain amount of system disruption might be expected during data transfers between the AQ calculation systems and the main SPA systems. Moving to a monthly update cycle would increase the potential incidences of system disruption twelve fold, although for a shorter duration.

### iii) Validation

The current process, particularly for appeals involves both manual and semi automated validation checks. It is envisaged that this level of manual checking would not be feasible if a change was made to a rolling AQ process. To maintain a comparable level of validation an increased level of automated validation would be required in order to adequately control Transporter and Shipper risks. Costs would be involved in developing and implementing this type of system change.

## b) Practical Aspects of a Rolling AQ Process

The Proposer and xoserve developed a strawman that outlined how the AQ process would function on a rolling basis. This proposal was as follows:

- Meter Reads
  - Submit meter reads via U01.
  - Reject (U02) or accept (U10) meter read.
  - If accepted MPRN will be put forward for AQ Review.
  - USRVs will be put forward for review as per current process.

- All meter read types will be put forward for review.
  - Exception will be opening read estimate which will only be used as an opening read for any variance period.
- Validation
  - UK Link will look back at any earlier read for the MPRN targeting
    - 42 Weeks for non-monthly read sites.
    - 50 weeks for monthly read sites.
  - The system will however consider all reads between 9 months +1 day and 3 years apart.
  - Current Back Stop functionality will no longer apply.
  - xoserve will carry out a series of systematised validations to ensure AQ is correct.
  - Where validations fail then a rejection file will be returned to the shipper with a reason code and the current AQ will prevail.
  - AQ values which change by less than 0.5% will not be changed.
  - Current manual validations carried out by xoserve will be systematised.
  - Where an excessive AQ increases by 500% these will be rejected.
  - Analysis has shown that 98% of these are incorrect.
  - If a shipper believes these to be correct the read can be re-submitted and marked with a flag. The incorrect AQ will be present for no more than one month.
  - Validation for decreasing AQs may need to be considered.
  - Currently there is no validation for low AQs because of isolations.
  - There is a rejection code for negative AQs.
- Timescales
  - All meter readings will be processed on 15<sup>th</sup> of each month.
  - The calculations take place 15<sup>th</sup> to 25<sup>th</sup>.
  - NRO and NRL files sent to shippers on 25<sup>th</sup>.
  - New AQ values go live on 1<sup>st</sup> of the following month.
  - There will be no amendment process or T04 file submission.
- Appealing AQ Values
  - Shippers can submit a new meter reading to bring the AQ up to date.
  - Shippers can change meter readings using a U01 read replacement where no subsequent read has been loaded.
  - Shippers can correct erroneous asset data using RGMA flows.
  - Shipper may submit an AQ appeal where:
    - Historically incorrect data is adversely affecting the AQ on a site.
    - There is a manifest change in usage.
    - The process means AQs may be incorrect for as little as one month whereas under the current process AQs can be incorrect for up to a year.

- Monitoring
  - Currently the AQ Review is monitored by:
    - UNC Modification 081 stats.
    - Reporting stats for AQ Ops Forum.
    - Reporting pack specifically for Ofgem.
  - Much of this will become redundant. (eg Modification 081 looks in detail at activity during Amendment Window.)
  - Monitoring requirements will need to be maintained.
    - Shipper appeal activity.
    - Appeals and U01 submissions increasing and decreasing AQs.
- Implementation
  - Possible phased implementation with LSPs implemented first.
  - SSP one year later.
  - May lend itself to a modular approach for UKL replacement.
  - Consideration could also be given to I&C market first regardless of AQ.

The development of this straw man raised the following issues that would need to be resolved:

- Seasonal Normal Composite Weather Variable
  - AQs will be corrected by a calculated factor on a given date.
  - AQ will be corrected using revised WAALPs when a meter reading is received after this date.
- Winter Annual ratio Calculations
  - Under rolling AQ this will occur upon the receipt of the 1<sup>st</sup> meter read after the Winter period. (Winter period ends in March each year.)
- Load Factors
  - LF are part of SOQ calcs.
  - Updated annually during summer.
  - Change very little year on year.
  - When a meter reading is received the prevailing LF at the time will be used.
- LSP & SSP Threshold Crossers
  - Sites may toggle between LSP and SSP market. Suggest 0.5% tolerance change in AQ to prevent small scale movement.
- NDM to DM
  - Again where this occurs there may need to be UNC rule changes. A site should remain above the DM threshold for 3 months before becoming mandatory DM.
- Site Specific Correction Factors.
  - Where a site rises above this threshold and has a site specific correction factor then the site should remain with its own site specific correction factor. Even if subsequent AQs take the site back below the threshold.

- Again it may be that the site stays above the threshold for 3 consecutive months before becoming mandatory.
- Once a site has a site specific correction factor it does not revert back.
- Opportunity to review correction factor rules?

## **5 Recommendation**

The Modification Panel is invited to accept this report on the basis that this Review Group has finished its work in accordance with its Terms of Reference.

## **Appendix 1 Terms of Reference**

### **Purpose**

This review proposal seeks to establish the costs, benefits and opportunities associated with a rolling Annual Quantity (AQ) Review.

### **Background**

The current AQ process has been operating in much the same form and timescales since inception of Transco's Network Code. The AQ Review was originally instituted for Larger Supply Points (LSP) and extended to cover Smaller Supply Points (SSP) for October 2000.

The AQ value assigned to each Supply Point is a fundamental piece of information. It forms the basis of much of the day to day operation of the gas industry from capacity planning, energy balancing, charging and reconciliation. The accuracy of the information is therefore of great importance to User and Transporter alike. Under the current AQ Review process, the AQ being used as a proxy for future demand is, on average, 18 months old at the time it is used. Where consumption is changing, this provides a significant commercial risk to Users and Transporters. This has been particularly evident over the Gas Years since 2005 where reductions in domestic demand, as a reaction to high prices, are still feeding through to SSP AQ.

Current recalculation processes are limited due in part to the UK Link System that supports the process. With the UK Link System due for replacement in 2012, this provides an opportunity to review the current process and consider alternatives that may serve the industry better into the future in a cost effective manner. Potential implementation prior to UK Link Replacement is also worth consideration.

The industry is currently investigating opportunities offered by Smart Metering and Automatic Meter Reading (AMR) technology. Moves to use AMR to its full potential, or indeed any changes to current metering patterns, should provide more information on actual consumption. It would appear sensible to configure the processes supporting transportation and balancing to make optimum use of available information.

### **Scope and Deliverables**

The Group is asked to:

1. Consider the existing Annual AQ Review and the current issues associated with it.
2. Discuss putting in place a mechanism to allow rolling AQ calculation.
3. Consider other alternatives short of rolling AQ calculation that would allow more timely AQ updates.
4. Identify how a change to rolling AQ may be implemented and any potential issues that would need resolving, including any phased implementation.
5. Consider costs and benefits and changes to risk profiles from adoption of a rolling AQ Review, both before and as part of the UK Link Replacement.

6. Consider, at a suitable level of detail, changes to processes and procedures in order to evaluate the associated advantages and disadvantages.
7. Consider Independent Gas Transporters' Supply Points as part of the Review.
8. Consider alternative methodologies to re-calculate AQs on receipt of meter readings.
9. Examine similar processes in other industries, evaluating the lessons that have been learned.
10. Ensure that consideration is given to the UK Link replacement timeframe.

A Review Group Report will be produced containing the findings of the Review Group in respect of the work identified above.

### **Limits**

The Review Group will consider changes required to the following:

- Uniform Network Code
- UK Link

The Review Group in its initial phase will not concern itself with:

- Detailed changes required to processes and procedures
- Detailed changes required to existing systems
- Development of detailed business rules

Other than the details required in order to reach a conclusion on the way forward.

### **Composition**

The Review Group will comprise the following representation

<b>Name</b>	<b>Organisation</b>
John Bradley (Chair)	Joint Office
Mike Berrisford (Secretary)	Joint Office
Sallyann Blackett (Proposer)	E.ON UK
Andy Smith	RWE Npower
Chris Warner	National Grid UKD
Joanna Ferguson	Northern Gas Networks
Joel Martin	Scotia Gas Networks
Marie Clark	ScottishPower
Mark Jones	SSE
Mitch Donnelly	Centrica
Phil Broom	Gaz de France
Richard Street	StatoilHydro



Shelley Rouse	StatoilHydro
Simon Trivella	WWU
Stefan Leedham	EDF Energy
Steve Nunnington	xoserve

A Review Group meeting will be quorate provided at least 2 Transporter and 2 User representatives are present.

### **Information Sources**

- Uniform Network Code – Sections (to be identified).
- GT, Shipper and Supplier Licences.
- Gas Act.
- Various Industry legislation as appropriate – may include reference to:
  - Gas Safety (Installation & Use) Regulations.
  - Gas Safety (Management) Regulations.
  - Industry Codes of Practice as relevant.

### **Timetable**

It is proposed that a total period of 6 months be allowed to conclude this review.

- Frequency of meetings – monthly. The frequency of meetings will be subject to review and potential change by the Review Group.
- Meetings will be administered by the Joint Office and conducted in accordance with the Chairman's Guidelines.