Modification Report
Rolling AQ
Modification Reference Number 0209
Version 1.0

This Draft Modification Report is made pursuant to Rule 9.3.1 of the Modification Rules and follows the format required under Rule 9.4.

1 The Modification Proposal

The current AQ process has been operating in much the same form and timescales since inception of code. The review was originally for large supply points (LSP) only and extended to cover small 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 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 shippers 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.

Output from review group 177 provided a straw man model for rolling AQ. This modification seeks to provide the detail required to support this straw man for implementation.

E.ON and xoserve developed a strawman that outlined how the AQ process would function on a rolling basis. This proposal has been amended and developed through the review group process as follows:

• Meter Reads

Submit meter reads.
Reject or accept 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.
These validations are set out in a proposed UNC Related

Document "AQ Validation Rules" a copy of which will be appended to the Detailed Business Rules.

Where validations fail then a rejection file will be returned to the shipper with a reason code and the current AQ will apply to the next month (m+1)

For the next month following (ie month + 2):

If the calculated AQ is an increase on the current AQ, this calculated AQ will apply unless the User confirms that this AQ is incorrect.

If the calculated AQ is a decrease on the current AQ, this calculated AQ will only apply if the User confirms this AQ is correct.

A User that anticipates the rejection of a calculated AQ, may flag acceptance of this if it reasonably considers that the calculated AQ is correct.

• Timescales

All meter readings will be processed once per month.
New AQ values go live on 1st of the following month.
There will be no amendment process or T04 file submission.

• Appealing AQ Values

Users can submit a new meter reading to bring the AQ up to date.
Users can change meter readings using a read replacement where no subsequent read has been loaded.
Users can correct erroneous asset data using RGMA flows.
A User 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.
Shipper appeal activity.
Appeals and meter read submissions increasing and decreasing AQs

Much of this will become redundant but monitoring requirements will need to be maintained.

• Implementation

E.ON sees this as a Nexus related change. Although there is benefit in this change being implemented as soon as possible, given current timings we anticipate that a scheduled release as part of Nexus would be of benefit to xoserve for management of Nexus and would help

minimise costs for the industry. We see a benefit from a phased implementation with LSPs implemented first but we would like to see SSP implemented as soon as possible after this and no more than one year later.

• Thresholds

Unless confirmed as DM by the User, the AQ of a Supply Meter Point Component will remain above the DM threshold for three months before becoming mandatory DM.

Where the AQ of a Supply Meter Point Component rises and remains above the site specific correction threshold (ie 732,000 kWh) for three months a convertor will be installed.

Where the AQ of a Supply Meter Point Component falls below the site specific correction threshold (ie 732,000 kWh) the converted reading will continue to apply.

• Consequential Adjustments

Supply Point Offtake Quantities will be revised when Annual Quantities are revised using the applicable load factor.

Annual Quantities and Supply Point Offtake Quantities will reflect any changes in Winter Annual Ratios and Seasonal Composite Weather Variables whenever the Annual Quantity is revised. At the time the Seasonal Normal Composite Weather Variable is revised all AQs will be corrected by a calculated factor on a given date.

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

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

Annual Quantities form the building block of many of the planning and system security activities of Transporters. As such, improving the accuracy of Annual Quantities will fundamentally improve the ability of Transporters to operate the pipe-line system in an efficient and economic manner.

SGN consider implementation of this Modification Proposal may further this relevant objective as more accurate Annual Quantities may improve the operation of the pipe-line system in an efficient and economic manner, although the extent to which they benefit the planning process is still not clear.

SSE do not consider updating AQ values more often would given any benefit to transporters as planning decisions are often taken years in advance and are based on actual gas throughputs and demand models, rather than being a summation of current AQ values.

NGD acknowledges that more frequent calculation of AQs may provide Transporters with a more ‘real time’ view of demands placed on their respective systems. However, the realisation of such is entirely dependant on the frequency with which Valid Meter Readings are submitted by Users which

are able to be utilised in the calculation of AQs. For peak capacity planning purposes, most decisions are made several years in advance of the actual flows (to enable system reinforcement to be undertaken if necessary) and so the provision of more frequently recalculated AQs each month is of very little, if any, benefit.

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

(i) the combined pipe-line system, and/ or

(ii) the pipe-line system of one or more other relevant gas transporters;

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

Standard Special Condition A11.1 (c): so far as is consistent with sub-paragraphs (a) and (b), the efficient discharge of the licensee's obligations under this licence;

Increased accuracy of Annual Quantities, as a result of implementation, would increase certainty of the derived peak load forecasts. This would enable improved capacity and storage planning as required under the licence. Improvements in cost targeting would also be consistent with the achievement of this objective.

SSE do not consider updating AQ values more frequently would improve forecasting of peak load demand which is required to be catered for several years in advance.

NGD consider the large majority of use of system costs relate to the provision of capacity within the system. The provision of updated AQs month-by-month is not necessarily beneficial to the estimation of peak capacity several years in advance and so the Modification Proposal does not provide any significant benefits in support of the provision of a cost-reflective transportation charging methodology.

Standard Special Condition A11.1 (d): so far as is consistent with sub-paragraphs (a) to (c) the securing of effective competition:

(i) between relevant shippers;

(ii) between relevant suppliers; and/or

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

Improvement in accuracy of Annual Quantities will ensure that energy is allocated more accurately on the original commodity invoice and minimise movement of energy between market sectors through reconciliation. This would be expected to minimise risk for RbD Shippers and reduce costs associated with reconciliation for all Shippers. It is expected that this would facilitate competition between relevant Shippers, minimise uncertainty for new entrants and increase revenue certainty for DNs. Improvement in accuracy of

AQs and consequently SOQs would improve cost targeting, although one Transporter believed this would potentially be at the expense of reduced price stability.

SGN agree with the proposer that implementation of this Modification Proposal would ensure energy is allocated more accurately on the original commodity invoice and minimise movement of energy between market sectors through reconciliation. SGN also agree that this would be expected to minimise risk for RbD Shippers and reduce costs, though they are not entirely confident that implementation would increase revenue certainty for Transporters.

SSE considers the commodity costs reflect only a very small amount of the total transportation charges incurred by shippers, and felt that any benefits due to reductions in reconciliation volumes would be very small and not something that would encourage competition amongst shippers.

NGD agrees that measures which enable costs to be apportioned based on consumption information, which is more recent, increases cost reflectivity in respect of such throughput-related costs, which may in turn facilitate competition. However, under the transportation charging arrangements, commodity-related charges, reflecting the throughput-related costs, comprise only 3.5% of the DNO transportation charge total.

NGD are not convinced that any reduced reconciliation volumes would facilitate competition as NGD felt the costs incurred by a User in validating such increase would increase in direct proportion to the value of the reconciliation.

NGD dispute this Modification Proposal would increase revenue certainty for DNOs as stated in the Draft Modification Report - there is a risk that implementation may result in *less* certainty in respect of revenue with the consequence of increased Transportation charging volatility.

Standard Special Condition A11.1 (e): so far as is consistent with sub-paragraphs (a) to (d), the provision of reasonable economic incentives for relevant suppliers to secure that the domestic customer supply security standards… are satisfied as respects the availability of gas to their domestic customers;

EDF Energy does not consider this Modification Proposal will provide any additional incentives on suppliers above those already present. However, it will ensure that more accurate AQs are registered. In general EDF Energy considers that SSP AQs are overstated, and therefore this Modification Proposal may make it easier for suppliers to meet their supply security standards.

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

NGD consider implementation would facilitate the implementation of the Uniform Network Code, specifically the AQ Review process. As such a process would be operated on an increased frequency, the likelihood of a new AQ value being calculated (as opposed to ‘rolling over’ a value calculated in a previous period) is increased. As such, there will be an increased opportunity

for Meter Readings to deliver an AQ.

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

No implications on security of supply, operation of the Total System or industry fragmentation have been identified.

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

a) Implications for operation of the System:

No implications for operation of the system have been identified.

b) Development and capital cost and operating cost implications:

Capital costs associated with the consequent UK Link Modification(s) would be incurred. If these Modifications were associated with Project Nexus these increased costs could be mitigated.

Minor reductions in operating costs due to a more even spread of workload and reductions in manual validation would be anticipated.

Improvements in SOQ determination would lead to more efficient capacity investment.

It is anticipated that system development could be in line with UKLink replacement, and may provide xoserve with a mechanism for implementing and testing a modular based replacement. This would minimise risk for all parties from the UKLink replacement activity. Timescales are expected to be in line with UKLink replacement. xoserve ROM costs estimate the change to be in the region of £990k - £1,910k based on amending the current system. EON would expect the Nexus cost to not be greater than this, as work will be taking place on the AQ system already. Running costs are expected to be £240k - £410k per annum.

SGN felt implementation should be considered as part as part of project Nexus as implementation prior to project Nexus would necessitate systems changing twice.

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

It is expected that this would form part of the User Pays' charging structures if it were implemented prior to Project Nexus. The Development Work Group consider the determination of AQ is a core service, therefore the costs of developing this proposal as part of project Nexus should be recovered through the next GDPCR (2013).

EDF Energy note that the costs for implementing this Modification Proposal provided through the ROM are based on changes to the current systems. Given that Project Nexus represents the opportunity to redesign systems and functionality they believe that the costs of implementing this proposal should

be greatly reduced.

SGN consider it to be practical for implementation to take place as part of Project Nexus. However, SGN disagree with the suggestion that the costs of developing this proposal as part of Project Nexus should be recovered through the next GDPCR (2013). Initial discussions indicate Project Nexus be funded for like-for-like purposes only. Therefore, SGN consider the introduction of this Modification Proposal does not fulfil this criterion and propose the recovery of costs be discussed further. Furthermore, the next GDPCR has not yet been set and SGN consider it inappropriate to discuss this option prior to 2013.

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

NGD advised DNOs benefit from a relative certainty of SOQs for six months of the formula year and forecast the other six months. A Rolling AQ as advocated by this Modification Proposal would lead to a rolling SOQ. Over time this may lead to improved forecasting for the October to March period at the expense of the relative certainty in SOQs from April to September. Whilst the rolling SOQ may smooth out the impact of the annual AQ review in October of each year this is dependant on a stable monthly read frequency which may not be obtained in the short to medium term pending rollout of Smart / Automated meter reading. Under the Modification Proposal there is thus an increased risk of transportation revenue under or over recovery in any particular year leading to less stable transportation charges.

5 The consequence of implementing the Modification Proposal on the level of contractual risk of each Transporter under the Code as modified by the Modification Proposal

SGN consider the implementation timetable should reflect system and process development timescales and recommended that implementation for LSPs takes place no more than twelve months prior to implementation for SSPs. In the event of direction to implement, it is recommended that the UNC Committee set up a forum of Users and Transporters to discuss implementation aspects.

6 The high level indication of the areas of the UK Link System likely to be affected, together with the development implications and other implications for the UK Link Systems and related computer systems of each Transporter and Users

There will be system impacts for Transporters and Shippers. It was the view of Shippers on the Development Work Group that benefits will outweigh costs. Some Shippers are prepared to share their view of benefits with Ofgem and consider they outweigh the system costs associated with this change.

It is anticipated that system development could be in line with UKLink replacement, and may provide xoserve with a mechanism for implementing and testing a modular based replacement. This would minimise risk for all parties from the UKLink replacement activity. Timescales are expected to be in line with UKLink replacement. xoserve ROM costs estimate the change to cost in

the region of £990k - £1,910k based on amending the current system. EON would expect the Nexus cost to not be greater than this, as work will be taking place on the AQ system already. Running costs are expected to be £240k - £410k per annum.

It is recommended that the UNC Distribution Workstream considers the implications for Transco Network Code 0640 processes.

The UK Link Committee would need to consider implications for file formats and related system impacts.

7 The implications of implementing the Modification Proposal for Users, including administrative and operational costs and level of contractual risk

Administrative and operational implications (including impact upon manual processes and procedures)

Users would receive and be able to respond to updated Annual Quantity information each month instead of in the annual process. This would improve the accuracy of NDM allocation and reduce the reconciliation quantity accordingly. Due to more frequent scrutiny of Readings, it might also improve Meter Information data quality.

Development and capital cost and operating cost implications

Costs associated with changes to Users' processes and systems are anticipated, although the majority of the Users on the Development Work Group believed there to be a net benefit.

Improvements in AQ accuracy would affect SOQ calculation on which Transportation Charges are largely based.

Consequential improvements to commodity and energy balancing invoice amounts would be expected to reduce reconciliation quantities and charges.

EDF Energy considers this Modification Proposal will not increase the operational costs faced, but may change how they work. In terms of systems costs faced by EDF Energy, this will depend on when it is implemented. If this proposal is implemented immediately then they would face significant systems costs of up to £1m – however they believe that the benefits outweigh the costs. If this proposal were to coincide with their system replacement then there would be no costs, as they would build systems to cope with this regime and not the current process.

Consequence for the level of contractual risk of Users

Potential monthly changes to NDM SOQ would reduce the current certainty but increase accuracy of invoice amounts.

More accurate daily quantities would lead to reduction of current Users' risks through reconciliation processes.

8 The implications of implementing the Modification Proposal for Terminal

Operators, Consumers, Connected System Operators, Suppliers, producers and, any Non Code Party

Consumers on direct transportation cost pass-through would see an immediate benefit to a similar extent as their shippers, whilst those on a bundled tariff would see a benefit at contract renewal or change of supplier. Where this reflects energy saving, this would be an energy efficiency incentive.

NGD added the Draft Modification Report states that "*consumers…would see an immediate benefit*". On the assumption that the benefit referred to is reduced supply charges, this statement makes the assumption that all AQs will reduce. It is worthy of note that a more frequent review of AQs would equally reflect AQ *increases* in a more timely manner and therefore there may be consumers who experience increased supply charges sooner than under prevailing terms. It is therefore perhaps appropriate to summarise that supply charges would be quicker to reflect changes in the consumer's consumption levels (both increases and decreases).

9 Consequences on the legislative and regulatory obligations and contractual relationships of each Transporter and each User and Non Code Party of implementing the Modification Proposal

No such consequences have been identified.

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

Advantages

- Improves cost targeting by increasing the accuracy of capacity charges and energy allocation.
- Potentially reduces RbD volumes by allocating energy to the correct market segment.
- Smoothes current workload associated with the annual process.
- A number of Users have identified significant cost benefits but these are subject to commercial confidentiality. Those Users are willing to share this information on a confidential basis with Ofgem.
- Offer benefits to duel fuel Shippers if they can save costs by replicating IT systems for electricity and gas.
- Improved data quality.
- Encourages more meter readings.
- Consumers should benefit from more accurate bills as when meter reading history is poor bills are estimated based on AQs. More accurate AQs should result in more accurate bills.

Disadvantages

- Costs of implementation identified in section 6 above, either before or as

part of Nexus.

- The number of appeals is unknown and may increase workload.
- There is the risk of increased price volatility as referred to in paragraph 4(d) above as a consequence of the within-year variability of the SOQ.

11 Summary of representations received (to the extent that the import of those representations are not reflected elsewhere in the Modification Report)

Representations were received from the following parties:

Organisation	Position	Implementation Preference
EDF Energy	Supports	Prior to Project Nexus
National Grid Distribution	Qualified support	With Project Nexus
RWE Npower	Comments	With Project Nexus
Scotia Gas Networks	Qualified support	With Project Nexus
Scottish and Southern Energy	Not in support	No preference stated
Shell Gas Direct	Not in support	With Project Nexus
Total Gas and Power	Supports	No preference stated

In summary, of the 7 representations received:

2 supported the Modification Proposal with 2 offering qualified support;

2 do not support the Modification Proposal;

1 offered comments;

1 preferred implementation prior to Project Nexus;

4 preferred implementation with Project Nexus.

Shell Gas Direct support many aspect of the Modification Proposal. However, the lack of sufficient detail regarding estimated costs of the potential IT and process changes has made it difficult for them to make a judgment as to whether the Modification Proposal achieves its aim. Shell Gas Direct considers it would be more appropriate to include the development and implementation of this Modification Proposal as part of Project Nexus as this would be more cost-effective and would ensure that the changes are considered in the context of wider industry change.

RWE Npower felt strongly that a detailed financial impact assessment and suitable legal text would have made it possible for them to make an informed decision on this Modification Proposal. Within their representation they suggested further clarification is needed within the Modification Report, in relation to the inconsistency between AQ Validation increases and decreases,

and site classification changes.

RWE npower also express a preference for implementation as part of Project Nexus as this should provide for a more cost effective approach for the industry as a whole.

SSE felt one of the main arguments put forward for this Modification Proposal was AQs have over the past few years been too high and that the current process is too slow to react to them. However, a large amount of this AQ overstating has been due to the fact that the composite weather variables (CWVs) used in the AQ calculation are too high and a 17 year weather model is being used, which would still overstate AQ values under a rolling AQ process. With the change in CWVs expected in 2010 and a move to a 12 or 8 year model, this upward bias on AQs is very likely to be largely eliminated.

SSE considers one of the rationales for this Modification Proposal is that the average AQ is '18 months old at the time it is used.' SSE challenge this claim, indeed the maximum period may be 18 months, but it is certainly not the average period as meter readings, could in theory be taken less than 2 months before the start of the new gas year, and as the current AQ process will, in most cases, use the most recent read the average is likely to be significantly less than half of the 18 months quoted.

SSE considers that the costs and risks involved in a rolling AQ process would outweigh the possible benefits of the process. As has been shown under the current AQ review process, a significant number of customers do not change their gas demand patterns on an annual basis and SSE felt that the changes in allocation amongst shippers under the two regimes are likely to be very small due to the timings of the updates to AQ values and the 'swings and roundabouts' nature of any AQ changes both upwards and downwards.

Total considers the impact would be that every meter read submitted would directly affect the AQ on the relating MPR. Total therefore suggest that reads from the previous 9 months and 1 day (as per the amended period for calculation) be sent with the transfer of ownership file. This would then enable in house validation to be made prior to submission of new reads, ensuring higher accuracy in read data and also helping to prevent erroneous AQ being applied even for short periods.

Total holds concerns over how DM meter points will be treated under the Modification Proposal. DM sites do not appear to be mentioned in detail. Also of note is the linkage of DM AQ changes and the ability of shippers to accurately reflect revised capacity within SOQ, SHQ and BSSOQ values. If the AQ is revised down, the SOQ, SHQ and BSSOQ could be out of line with the new AQ for up to 12 months. This Modification Proposal does not explain how it will deal with consumption during shut down periods, the management of meter asset data and reading errors not identified within the replacement window, all of which may result in incorrect AQs being applied.

Total felt there have been a number of proposals regarding the charges relating to the set up costs for Modification Proposal 0209. Currently shippers are charged for use of the xoserve speculative calculator through the User Pays system. These charges are base on a price per meter point requested. Total strongly favour the initial set up costs being charged on a meter point basis

inline with current charges on the speculative calculator.

NGD are concerned the Modification Proposal may be inconsistent with provisions contained within The Gas (Calculation of Thermal Energy) Regulations 1996 in respect of the requirement for a site specific temperature and pressure conversion factor where the Supply Point AQ is reasonably expected to exceed 732,000 kWh. NGD considers the UNC would be inconsistent with the Regulations if it stated that a convertor should only be installed where the AQ remains above 732,000kkWh for a continuous period of three months.

NGD consider that in the Modification Proposal, revised load factors would only be applied to those Supply Points where a Meter Reading has been provided and an AQ recalculated. This would lead to differences in deemed peak demands for loads with the same AQ within a load category. For example, if a User submits a Meter Reading for an Annual Read meter in August, a Supply Point Capacity (SOQ) value derived from the prevailing load factor would be calculated which would then change from the 1st October (under current arrangements) whereas if the User does not submit a new Meter Reading they would not benefit from the revised load factor. This arrangement would make the SOQ "out of sync" with the NDM profiles by almost a year in the latter case and therefore cost reflectivity would diminish relative to the current UNC rules. In addition, the fact that providing a Meter Reading leads to earlier use of any revised load factor may give rise to circumstances where Users may elect **not** to supply a Meter Reading because of the load factor, and consequential peak-related charging implications.

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

No such requirement has been identified.

13 The extent to which the implementation is required having regard to any proposed change in the methodology established under paragraph 5 of Condition A4 or the statement furnished by each Transporter under paragraph 1 of Condition 4 of the Transporter's Licence

No such requirement has been identified.

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

The main programme for works would be associated with system and process changes.

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

The implementation timetable would reflect system and process development timescales. It is recommended that implementation for LSPs takes place no more than twelve months prior to implementation for SSPs.

In the event of direction to implement, it is recommended that the UNC Committee set up a forum of Users and Transporters to discuss implementation aspects.

16 Implications of implementing this Modification Proposal upon existing Code Standards of Service

No implications of implementing this Modification Proposal upon existing Code Standards of Service have been identified.

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

18 Transporter's Proposal

19 Text

None provided.

For and on behalf of the Relevant Gas Transporters:

Tim Davis

Chief Executive, Joint Office of Gas Transporters