

**Modification Report**  
**Amendment to the calculation of WCF**  
**Modification Reference Number 0204**  
**Version 3.0**

This 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 methodology for allocation of gas throughput post close out, and for estimation of NDM nomination values prior to and on the gas day, has been in place since work with Touche Ross during development of the network code regime.

The formula used to allocate energy between shippers is defined in section H2.2 using the familiar parameters of AQ, ALP, DAF and WCF. Demand is derived in advance of the gas day using forecast total gas demand and shared to each shipper pro-rata using the formula. Post D+5 the allocation is scaled to ensure all gas transported on the day is allocated. The scaling factor necessary to balance the calculation should be close to 1.

The NDM parameters are calculated by xoserve on behalf of the gas transporters using sample information. To enable the parameters to apply to the population the DAF and WCF are currently scaled to a forecast Seasonal Normal Demand (SND).

Historically the SND values were calculated by National Grid providing one view of the future. Since Network sale each Network has produced its own view of SND and National Grid Transmission has produced a second, sometimes different, view. The level set by the forecast SND impacts the WCF values, bias in which can feed through to the scaling factor and final allocation. This has potential to increase misallocation between market- sectors directly influencing the level of reconciliation required.

Over the past two years there have been representations through DESC (Demand Estimation Sub Committee) on the annual “NDM Profile and Capacity Estimation Parameter” proposals as per H1.8. In each of the last two years there have been questions about the appropriateness of the SND levels for the future. UNC provides no route for Shippers to question the transporters SND forecasts. While forecasts for transportation purposes are clearly a transporters issue the impact on allocation ensures that Shippers have a vested interest.

Analysis over the previous gas year has shown that SND levels have consistently produced a WCF that is highly biased. This has lead to the scaling factor having to compensate. Over the past year the scaling factor is consistently away from the expected value of 1.

The E.ON representation in July suggested that investigation take place to replace the use of SND to produce DAF and WCF variables with an alternative. This has been discussed through review group 176 and a decision on how an appropriate alternative would be derived has been determined through industry discussion involving experts from xoserve and shippers. This would allow a

replacement WCF to be derived independent of SND. This modification is a direct result of the review group recommended approach.

It is recommended that the SND values within the WCF formula be replaced with  $AQ/365 * ALP$ . That these values are calculated by EUC band using the AQ that will be live on 1<sup>st</sup> October of each gas year. The values should be reviewed quarterly and where the LDZ aggregate AQ varies by more than 1% the system be updated with the new values.

DAF will continue to be derived from the demand estimation sample data and scaled to Gemini connected load but will not use the Transporters view of future SND.

Due to timescales any implementation for October 2008 will require agreement in time to enable xoserve to calculate and load the necessary base data into Gemini during September.

### **Suggested Text**

Replace H2.5 with:

## **2.5 Weather Correction Factor and Scaling Factor**

### 2.5.1

For the purposes of paragraph 2.2 the "Weather Correction Factor" ('WCF<sub>t</sub>') and "Scaling Factor" ('SF<sub>t</sub>') in respect of an LDZ are (respectively) the factors determined as follows:

$$SF_t = ASD_t / NDMD_t$$

$$WCF_t = (ASD_t - (\Sigma AQ_{EUC}/365 * ALP_t)_{LDZ}) / (\Sigma AQ_{EUC}/365 * ALP_t)_{LDZ}$$

ASD<sub>t</sub> is:

- (a) for the purposes of Nomination Determination, Forecast LDZ Demand (at the relevant time of Nomination Determination) determined in accordance with paragraph 5.2 less the aggregate sum of DM Output Nominations (at the relevant time of Nomination Determination) at all DM Supply Point Components and relevant Connected System Exit Points in the LDZ and adjusted by deducting LDZ shrinkage;
- (b) for the purposes of Offtake Determination, that quantity comprised in the LDZ Daily Quantity Offtaken attributable to NDM Supply Point Components and relevant Connected System Exit Points (determined as the LDZ Daily Quantity Offtaken less the aggregate sum for quantities offtaken at all DM Supply Point Components and relevant Connected System Exit Points in the LDZ and adjusted by deducting LDZ shrinkage);

NDMD<sub>t</sub> is the aggregate for all NDM Supply Point Components and for any relevant Connected System Exit Point in the LDZ of the amounts determined by calculating Supply Point Demand for Day t in accordance with paragraph

2.2 with a Scaling Factor equal to one or (as the case may be) calculated in accordance with the relevant provisions of the CSEP Network Exit Provisions.

$AQ_{EUC}$  is the aggregate Annual Quantity for the End User Category, fixed at 1<sup>st</sup> October for the relevant gas year and amended subject to 2.5.2

$\Sigma_{LDZ}$  is the summation over the relevant LDZ

### 2.5.2

For the purposes of 2.5.1 the aggregate Annual Quantity for each LDZ will be reviewed quarterly in December, March and June. Where the change is more than 1% the revised  $AQ_{EUC}$  values in 2.5.1 will be used to calculate WCF from the 1<sup>st</sup> of the following month.

## 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;*

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

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

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

*Standard Special Condition A11.1 (d): so far as is consistent with subparagraphs (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 the allocation profiles will ensure that energy is allocated more accurately on the original commodity invoice and minimise movement of energy between market sectors through reconciliation.

Analysis using the data from the data recorders and data loggers used to derive

the NDM profiles shows that a reduction in variability of the WCF and a scaling factor closer to one would have produced allocation (for these sites) 32% closer to actual consumption than that actually derived during the 2006/7 gas year. This would have reduced reconciliation volumes leading to lower costs for the industry from both processing reconciliation and from reduced volumes failing the filter. This would be evident both in original commodity invoices being more accurate and in the reduction of reconciliation for the large supply point market and reduced RbD charges for the small supply point sector.

This could be expected to facilitate competition between relevant Shippers, minimise uncertainty for new entrants and increase revenue certainty for DNs.

*Standard Special Condition A11.1 (e): so far as is consistent with subparagraphs (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;*

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

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

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

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

It is not envisaged that there would be any impact.

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

**a) Implications for operation of the System:**

There are no implications for operating the Transportation system.

**b) Development and capital cost and operating cost implications:**

The only cost of implementation will be some increase in calculation required by xoserve. This is expected to be manageable within their current resource levels.

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

It is not expected that there will be any requirement to recover costs.

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

No such consequences have been identified.

**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**

This modification is not felt to materially impact the level of contractual risk of each Transporter.

**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**

The only cost of implementation will be some increase in calculation required by xoserve. This is expected to be manageable within their current resource levels. The modification will not impact User systems. The replacement base data for WCF calculations will be issued later in the annual cycle than currently (September rather than June) but this is not envisaged to cause any problems for Users.

National Grid Distribution believe that minor system and process changes will be required to facilitate implementation and Shippers who currently replicate the allocation process will have to make changes.

**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)***

There will be no impact to Users of implementing the modification.

***Development and capital cost and operating cost implications***

There are not expected to be any cost implications for Users.

***Consequence for the level of contractual risk of Users***

The level of contractual risk for Users is expected to reduce under this modification. Improved allocation should provide more certainty for Shippers in levels of commodity charges and reconciliation. Less misallocation between temperature sensitive and less temperature sensitive EUC bands will also provide greater assurance of appropriate charging. Analysis has been provided to the Review Group 176 showing the improvement to the scaling factor and reduction in variance over the difficult summer period.

**8 The implications of implementing the Modification Proposal for Terminal Operators, Consumers, Connected System Operators, Suppliers, producers and, any Non Code Party**

Improved allocation has benefits to everyone involved in the process.

**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**

- Improved allocation, as evidenced by the improvement in scaling factor. This will reduce misallocation between weather sensitive EUC bands and less weather sensitive EUC bands.
- No reliance on Transporter estimates of future demand.
- Emphasis on AQ, which is industry data and derived in a transparent, controlled manner.
- No system changes are required.

**Disadvantages**

- Places increased reliance on AQ which has known faults.

**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:

<b>Organisation</b>	<b>Position</b>
British Gas	Support
E.ON UK	Support
National Grid Distribution	Support
RWE	Support
Scotia Gas Networks	Support
Scottish And Southern	Support
Wales & West Utilities	Support

Of the seven representations received all seven supported implementation.

However four representations raised concerns in relation to the suggested Legal Text not including any reference to the DAF changes. For completeness National Grid Distribution believed the Legal text should include the changes proposed to both the WCF and DAF, they also highlighted an error made with brackets.

National Grid Distribution also believed that the Proposal should ideally be reworded to explain that it requires a two stage implementation. Wales & West Utilities were supportive of a phased implementation with the WCF element being implemented in October 2008 and the DAF October 2009.

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

Implementation is not required to enable each Transporter to facilitate compliance with safety or other legislation.

**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**

Implementation is not 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.

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

No programme of works has been identified as a consequence of implementing this Modification Proposal.

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

It is recommended that the modification be implemented in time for the Gas Year commencing 1<sup>st</sup> October 2008. However Wales & West Utilities supported of a phased implementation with the WCF element being implemented in October 2008 and the DAF October 2009.

**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**

At the Modification Panel meeting held on 17 April 2008, of the 10 Voting Members present, capable of casting 10 votes, 10 votes were cast in favour of implementing this Modification Proposal. Therefore the Panel recommend implementation of this Proposal.

## 18 Transporter's Proposal

This Modification Report contains the Transporter's proposal to modify the Code and the Transporter now seeks direction from the Gas and Electricity Markets Authority in accordance with this report.

## 19 Text

### TPD Section H

Paragraph 2.5 Weather Correction Factor and Scaling Factor

*Amend paragraph 2.5.1 to read as follows:*

“2.5.1 For the purposes of paragraph 2.2 the "Weather Correction Factor" ('WCFt') and "Scaling Factor" ('SFt') in respect of an LDZ are (respectively) the factors determined as follows:

$$SF_t = ASD_t / NDMD_t$$

$$WCF_t = (ASD_t - \Sigma((AQ_{EUC}/365) * ALP_t)_{LDZ}) / \Sigma((AQ_{EUC}/365) * ALP_t)_{LDZ}$$

ASDt is:

- (a) for the purposes of Nomination Determination, Forecast LDZ Demand (at the relevant time of Nomination Determination) determined in accordance with paragraph 5.2 less the aggregate sum of DM Output Nominations (at the relevant time of Nomination Determination) at all DM Supply Point Components and relevant Connected System Exit Points in the LDZ and adjusted by deducting LDZ shrinkage;
- (b) for the purposes of Offtake Determination, that quantity comprised in the LDZ Daily Quantity Offtaken attributable to NDM Supply Point Components and relevant Connected System Exit Points (determined as the LDZ Daily Quantity Offtaken less the aggregate sum for quantities offtaken at all DM Supply Point Components and relevant Connected System Exit Points in the LDZ and adjusted by deducting LDZ shrinkage);

NDMDt is the aggregate for all NDM Supply Point Components and for any relevant Connected System Exit Point in the LDZ of the amounts determined by calculating Supply Point Demand for Day t in accordance with paragraph 2.2 with a Scaling Factor equal to one or (as the case may be) calculated in accordance with the relevant provisions of the CSEP Network Exit Provisions.

AQEUC is the aggregate Annual Quantity for the Applicable End User Category as at 1st October, or as revised from to time pursuant to paragraph 2.5.3.”



*Add new paragraphs 2.5.2 and 2.5.3 to read as follows:*

“2.5.2 In respect of each Gas Year, the Transporters will, on a specific date (the “**designated date**”), within:

- (a) the period of 3 calendar months ending on 31 December compare the aggregate NDM Annual Quantity for each LDZ (“**aggregate NDM LDZ AQ**”) with the aggregate NDM LDZ AQ as at 1 October; and
- (b) the period of 3 calendar months ending on 31 March and 30 June compare the aggregate NDM LDZ AQ with the aggregate NDM LDZ AQ as at:
  - (i) the previous designated date at which the comparison resulted in a revision being made pursuant to paragraph 2.5.3 (b); or
  - (ii) where the comparison at the previous designated date does not result in a revision being made pursuant to paragraph 2.5.3 (b), 1 October.

2.5.3 Where the comparison made in accordance with paragraph 2.5.2 determines that the aggregate NDM LDZ AQ has increased or decreased by an amount of more than 1%, the Transporters will:

- (a) on the first day of the month following the period in which such comparison was performed, publish the revised values that will apply in respect of  $\Sigma((AQ_{EUC}/365)*ALP_i)$  for each LDZ;
- (b) apply such revised values from the date referred to in paragraph (a).

For and on behalf of the Relevant Gas Transporters:

**Tim Davis**  
**Chief Executive, Joint Office of Gas Transporters**