

Modification Report
Improvements to NDM Demand Determination
Modification Reference Number 0496
Version 4.0

This Modification Report is made pursuant to Rule 7.3 of the Modification Rules and follows the format required under Rule 8.9.3.

1. The Modification Proposal

The Modification Proposal was as follows

"It is proposed to change the calculation of the Weather Correction Factor (WCF). The present calculation is:

$$\text{Current WCF} = (\text{Total actual LDZ demand} - \text{Total LDZ SND}) / \text{Total LDZ SND}$$

The revised calculation would be:

$$\text{Revised WCF} = (\text{Aggregate actual NDM demand in LDZ} - \text{Aggregate NDM SND in LDZ}) / (\text{Aggregate NDM SND in LDZ})$$

The basic NDM attribution calculation defined in Section H 2.2.1 would be unchanged but the value of the Daily Adjustment Factor (DAF) would need to be adjusted to be consistent with the revised calculation of WCF."

The Justification was as follows:

"The methods currently specified in the Network Code to forecast and determine Non Daily Metered (NDM) demand assume accurate Seasonal Normal Demand (SND) forecasts, prior to the Gas Year, of total demand (i.e. NDM and DM). Transco has established that anomalous determination of NDM nominations and allocations has arisen in cases where actual DM demand differed substantially from that assumed in calculation of the relevant SND forecast. As a result of this, Transco has developed a revised methodology where NDM nominations and allocations are no longer dependent upon accurate DM forecasts. To assess the affect of this revised methodology, allocations of NDM demand for the Gas Years 1999/2000 and 2000/2001 were repeated, using both the original and revised methodology, and the results were presented to the Planning and Security (including Storage) Workstream on 11 September 2001. The results showed substantial improvements in NDM allocation consistency during summer periods for LDZs that have a high proportion of DM demand and in no LDZ was a deterioration in NDM allocation consistency observed."

2. Transco's Opinion

Transco has put this Modification Proposal forward in order to reduce the scale of the present anomalies within the daily NDM nomination and allocation processes. These anomalies are primarily caused by uncertainties

in DM demand forecasting prior to the Gas Year. This Modification Proposal removes the present dependency on accurate DM forecasting. An evaluation using the proposed allocation methods for all LDZs, over the two most recent Gas Years, has demonstrated either no deterioration or substantial improvement in NDM allocation consistency.

3. Extent to which the proposed modification would better facilitate the relevant objectives

Anomalous allocation of NDM demand can lead to inconsistent allocation between End User Categories (EUCs) such as between smaller supply points and larger supply points. This in turn can lead, on the day, to higher balancing costs for shippers that specialise in supplying gas to certain categories of end-user matched by lower costs for shippers that specialise in other EUCs. Implementation of this Modification Proposal would lead to more consistent allocation of gas on the day and hence the costs associated with that allocation. It is therefore consistent with better facilitating efficient and economic operation of Transco's pipe-line system and as it would more accurately attribute costs, implementation would also better facilitate competition.

4. The implications for Transco of implementing the Modification Proposal, including

a) implications for the operation of the System:

Day to day operations would not be affected. Revised procedures would be required for obtaining demand attribution parameters prior to the gas year.

b) development and capital cost and operating cost implications:

There would be minor cost impacts arising from system changes.

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

Transco does not consider it appropriate to recover these costs.

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

Transco is not aware of any consequence this proposal would have on price regulation.

5. The consequence of implementing the Modification Proposal on the level of contractual risk to Transco under the Network Code as modified by the Modification Proposal

Transco is not aware of any consequence that implementation of this Modification Proposal would have on the level of its contractual risk.

6. The development implications and other implications for computer systems of Transco and related computer systems of Users

Transco would need to make minor modifications to its computer systems in order to implement this Modification Proposal. It is not aware of any implications for the computer systems of Users.

7. The implications of implementing the Modification Proposal for Users

Users would in some cases benefit from more consistency in NDM allocation. No adverse affect is expected.

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

No such implications have been identified.

9. Consequences on the legislative and regulatory obligations and contractual relationships of Transco and each User and Non-Network Code Party of implementing the Modification Proposal

No such consequences are expected.

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

The advantages identified are as follows:

- Greater consistency of NDM allocation
- Better apportionment of balancing costs between Users on the day

The disadvantage identified is:

- Cost in modification of computer systems. This is considered to be minor.

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

Representations were received from British Gas Trading (BGT) and Scottish Power. Both were in support of this Modification Proposal.

BGT referred to concerns "over causes of bias in the NDM allocation methodology which tend to cause Scaling Factors to exceed 1. One of the factors relates to circumstances where major LDZ loads do not conform to assumptions on how they would contribute to LDZ Seasonal Normal demands and this causes a significant distortion in WCF and SF values." BGT then referred to Transco's revised methodology "where NDM nominations and allocations are no longer dependent upon accurate DM forecasts. We agree that Transco's analysis of the impact of that revised methodology on allocations of NDM demand for the Gas Years 1999/2000 and 2000/1 shows substantial improvements in NDM allocation consistency during summer periods for LDZs that have a high proportion of DM demand, and in no LDZ was a deterioration in NDM allocation consistency observed.

We believe that the methodology will give similar improvements in future years."

Scottish Power observed that the Modification Proposal seeks "to change the calculation of the Weather Correction Factor and seeks to improve the consistency of NDM allocations."

Transco's Response

Transco agrees with the comments made within these representations.

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

Transco is not aware of any such requirement.

13. The extent to which the implementation is required having regard to any proposed change in the methodology established under Standard Condition 4(5) or the statement furnished by Transco under Standard Condition 4(1) of the Licence

Transco is not aware of any such requirement.

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

Changes in procedures would be required in order to calculate the demand attribution parameters prior to the Gas Year. Minor changes would also be required to computer systems. A decision on implementation should be made as soon as possible to ensure that these changes are made in time for implementation on 1 October 2002.

15. Proposed implementation timetable (including timetable for any necessary information systems changes)

Transco recommends implementation on 1 October 2002.

16. Recommendation concerning the implementation of the Modification Proposal

Transco recommends implementation of this Modification Proposal.

17. Restrictive Trade Practices Act

If implemented this proposal will constitute an amendment to the Network Code. Accordingly the proposal is subject to the Suspense Clause set out in the attached Annex.

18. Transco's Proposal

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

19. Text

SECTION H: DEMAND ESTIMATION AND DEMAND FORECASTING

Amend paragraph 1.1.3 to read as follows:

"

(ii)(inclusive of LDZ shrinkage);

(iii) at the level of LDZ Aggregate NDM Points, exclusive of shrinkage."

Add new paragraph 1.1.5 to read as follows:

"1.1.5 For the purposes of the Code "LDZ Aggregate NDM Points" are in relation to an LDZ all the NDM Supply Point Components and all relevant Connected System Exit Points in the LDZ."

Amend paragraph 1.3.1 to read as follows:

"which estimates, for an LDZ, End User Category or LDZ Aggregate NDM Points, by reference to variables.....the EUC Sample or (as the case may be) LDZ Aggregate NDM Points."

Amend paragraph 1.3.2 to read as follows:

"to an LDZ, an End User Category or LDZ Aggregate NDM Points is the....End User Category or LDZ Aggregate NDM Points in accordance ..."

Amend paragraph 1.5.1 to read as follows:

"for an LDZ, EUC Sample or LDZ Aggregate NDM Points for any Day...."

Amend paragraph 1.7.1 to read as follows:

"

(c)

(ii);

(iii); and

(iv) a Demand Model for LDZ Aggregate NDM Points,

which...."

Amend paragraph 1.7.2 to read as follows:

"The relevant data is:

- (i) the demand data for each Sampled NDM Supply Point Component referred to in paragraph 1.6;
- (ii) the demand data for LDZ Aggregate NDM Points (such demand data being 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); and
- (iii) demand data and daily values...."

Amend paragraph 2.4.2 to read as follows:

"....

$$DAF_t = (WVCE_t / SNDE_t) / (WVCN_t / SNDN_t)$$

....

$WVCN_t$ in the Demand Model for the LDZ Aggregate NDM Points for the relevant LDZ;

$SNDN_t$ is the value of seasonal normal demand for LDZ Aggregate NDM Points for the relevant LDZ;"

In paragraph 2.5 delete defined term 'DMD_t' (and definition thereof) and amend paragraph to read as follows:

"....

$$SF_t = ASD_t / NDMD_t$$

$$WCF_t = (ASD_t - SNDN_t) / SNDN_t$$

....

ASD_t is:

- (i) for the purposes of Nomination Determination, Forecast LDZ Demand (at the relevant time of Nomination Determination and 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;

- (ii) 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);

$SNDN_t$ has the meaning in paragraph 2.4.2;

$NDMD_t$ is the aggregate....”

Amend paragraph 3.4.2 to read as follows:

"the value of demand for the LDZ Aggregate NDM Points determined from the Applicable...."

Amend paragraph 4.4.2(i) to read as follows:

“for the purposes of determining the values of ‘ ALP_t ’, ‘ DAF_t ’ and $SNDN_t$, Day ‘t’ is the Day of the highest seasonal normal demand under the Applicable Demand Model for the relevant LDZ Aggregate NDM Points;”

Amend paragraph 4.4.2(ii) to read as follows:

“... is the 1-in-20 peak day demand for the relevant LDZ Aggregate NDM Points ~~(including both Firm and Interruptible Supply Points)~~; and”

SECTION W: INTERPRETATION

Amend paragraph 2.6.3 to read as follows:

"....

- (i)System Exit Points or LDZ Aggregate NDM Points, are exclusive of shrinkage;

- (ii)"

Signed for and on behalf of Transco.

Signature:

Tim Davis
Head of Regulation NT&T

Date:

Gas and Electricity Markets Authority Response:

In accordance with Condition 9 of the Standard Conditions of the Gas Transporters' Licences dated 21st February 1996 I hereby direct Transco that the above proposal (as contained in Modification Report Reference **0496**, version **4.0** dated **20/02/2002**) be made as a modification to the Network Code.

Signed for and on Behalf of the Gas and Electricity Markets Authority.

Signature:

The Network Code is hereby modified with effect from, in accordance with the proposal as set out in this Modification Report, version **4.0**.

Signature:

Process Manager - Network Code
Transco

Date:

Annex

1. Any provision contained in this Agreement or in any arrangement of which this Agreement forms part by virtue of which The Restrictive Trade Practices Act 1976 ("the RTPA"), had it not been repealed, would apply to this Agreement or such arrangement shall not come into effect:
 - (i) if a copy of the Agreement is not provided to the Gas and Electricity Markets Authority ("the Authority") within 28 days of the date on which the Agreement is made; or
 - (ii) if, within 28 days of the provision of the copy, the Authority gives notice in writing, to the party providing it, that he does not approve the Agreement because it does not satisfy the criterion specified in paragraphs 1(6) or 2(3) of the Schedule to The Restrictive Trade Practices (Gas Conveyance and Storage) Order 1996 ("the Order") as appropriate

provided that if the Authority does not so approve the Agreement then Clause 3 shall apply.

2. If the Authority does so approve this Agreement in accordance with the terms of the Order (whether such approval is actual or deemed by effluxion of time) any provision contained in this Agreement or in any arrangement of which this Agreement forms part by virtue of which the RTPA, had it not been repealed, would apply this Agreement or such arrangement shall come into full force and effect on the date of such approval.
3. If the Authority does not approve this Agreement in accordance with the terms of the Order the parties agree to use their best endeavours to discuss with Ofgem any provision (or provisions) contained in this Agreement by virtue of which the RTPA, had it not been repealed, would apply to this Agreement or any arrangement of which this Agreement forms part with a view to modifying such provision (or provisions) as may be necessary to ensure that the Authority would not exercise his right to give notice pursuant to paragraph 1(5)(d)(ii) or 2(2)(b)(ii) of the Order in respect of the Agreement as amended. Such modification having been made, the parties shall provide a copy of the Agreement as modified to the Authority pursuant to Clause 1(i) above for approval in accordance with the terms of the Order.
4. For the purposes of this Clause, "Agreement" includes a variation of or an amendment to an agreement to which any provision of paragraphs 1(1) to (4) in the Schedule to the Order applies.