

Final Modification Report
Modification Reference Number 0262
Revisions to the Demand Forecasting Process

This Modification Report is made pursuant to Rule 8.9 of the Modification Rules and follows the format required under Rule 8.9.3.

1. The Modification Proposal:

Modification 0262 proposes that :

“Section HI.6 of Network Code is rewritten to increase the number of data points capture in each demand band; that the rules affecting NDMs above AQ level of 75,000 tpa are reconsidered; that the review of such data capture should be subject to an annual review; that the timetable for developing the annual updated Demand Model is reduced, to allow the possibility of necessary changes to models and/or any consequential changes to pricing to be made as of 01 October in that year. DESC will need to be charged by the Network Code Committee to deliver proposals to meet the required dates specified.”

2. Transco's opinion:

Following analysis undertaken by the Modification 0262 Development Work Group, Transco's views on the modification proposal, addressed point by point, are as follows :

i. There would not appear to be any significant benefits to model accuracy from increases in sample size. Consequently, the additional cost of a larger sample and its processing does not appear justified at this stage.

ii. Transco supports the proposal to reconsider certain rules affecting NDMs above an AQ level of 75,000 tpa, including amending references to 2,196 MWh pa, introducing nationally diversified load factors (NDLFs) for large NDM EUCs and stating minimum levels of installed NDM sample numbers for large NDM supply points. However, the potential introduction of NDLFs for large NDM EUCs should be seen in the context of Ofgem's proposal in their decision on Modification 0236/0236a for Transco to review NDLFs for small NDM EUCs with the intention of their removal.

iii. Transco agrees that the suitability of model smoothing for each year's data capture should be subject to annual review by DESC.

iv. Amendments to the annual NDM process are possible. This could be, for example, advancement of the timetable by six months. Implementation will need to take due regard of practicalities and transitional issues. A summary of the options available to changes in the timetable has been provided in the Technical Report, “Summary of Conclusions”, which was circulated with the draft Modification Report.

Some further points, related to BGT's proposals, that were included in the Terms of Reference for the Development Group were also considered. Transco's views on these aspects, together with the views of the Group are contained in the Technical Report, "Summary of Conclusions".

An option that could be progressed in the interests of consistency across all EUCs and greater transparency, is that the method of determining large NDM EUC load factors could be adopted for all EUCs, replacing the simulation based approach currently applied to small NDM EUCs.

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

The proposals aim to ensure that the level of data recorders is justified. This will avoid unnecessary expenditure within the NDM demand estimation process and contribute towards the efficient and economic operation of the System.

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

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

Transco is not aware of any such implications.

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

The different options put forward to modify the NDM process timetable would introduce additional costs of varying degree. Depending on the transitional measures adopted the option of a six month change in the timetable could require one-off costs of the order of £100k - £250k.

No increases in the NDM sample are proposed. Nevertheless, illustrative costs (both direct and indirect) of increasing the NDM sample are set out in Appendix 6 of the Technical Report.

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:**

There will be no specific charges introduced to cover any costs associated with the Modification Proposal.

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

No such consequences are envisaged.

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:**

No consequences on the level of contractual risk to Transco are envisaged.

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

No significant impacts on Transco's UK-Link systems are expected. Implications for Users' computer systems are similarly not expected to be significant.

Transco's systems used for NDM demand estimation would be significantly affected by changes to the NDM demand estimation timetable, and particularly so for the six month change in the timetable.

Any increases to the NDM sample would impact systems used for NDM demand estimation.

7. **The implications of implementing the Modification Proposal for Users:**

Consequential improvements to the stability of NDM profiles and EUC load factors may reduce commercial exposure and alleviate administrative burden. Users may consider that changes to the timings of the NDM process, if such changes were adopted, would provide shippers greater opportunity to assess and make representations on Transco's NDM demand models.

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

Transco is not aware of any such implications.

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 envisaged.

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

- Advantages :
- stabilising the data recorder sample at present levels does not preclude further assessments of the appropriateness of the current NDM sample.
 - stabilisation of EUC definitions in relation to consumption ranges and introduction of NDLF's for large NDM EUC's should provide greater stability in NDM profiles and load factors.
 - maintenance of the present levels of NDM data recorders for small sites and introduction of minimum levels of sample points for large NDM sites should avoid unnecessary cost and complexity to the NDM process
 - with the six month timetable advancement, shippers would have greater notice of changes to NDM profiles and EUC load factors, thus potentially helping to mitigate commercial exposure

- Disadvantages :
- a change in the timetable of the NDM process will necessitate changes to the systems used for NDM demand estimation
 - With a six month timetable change NDM profiles would be based on data that relates to a gas year that ended 12 months previously
 - the introduction of NDLF's for large NDM EUC's would be inconsistent with Ofgas' recently expressed view that NDLFs for small NDM EUC's should be removed.

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

One representation was received from British Gas Trading (BGT), which is summarised below. In addition, the representation can be considered in conjunction with BGT's response to Transco regarding the Development Workgroup Report, dated 1 June 1999.

Domestic Samples, sample sizes and sample distribution.

BGT accepts that there are unlikely to be significant benefits from an increase in the domestic data recorder sample. BGT suggests that Transco must install and maintain sufficient sample numbers to meet the original pre-Network Code sample installation target numbers for each LDZ and load band. These were set out in Appendix Four of the Technical Report (attached to the draft Modification Report).

NDLFs

BGT make a number of comments related to Network Code Modification 0236/236a (Nationally Diversified Load Factors) which are outside the scope of Modification 0262 but will be considered as part of a future review of NDLFs.

Model Smoothing

BGT supports the use of the model smoothing to reduce volatility in the parameters and also supports the proposal that DESC should review the nature and impact of the smoothing on an annual basis.

Amendment to the Annual NDM process.

BGT stresses that the most recent winter's data should be used by Transco in each year's annual NDM process and review of transportation charges.

BGT believes that Transco should be incentivised to maximise the time available to the Industry to debate the data each year and be required to advise how the latest winter's data could be applied to the pricing proposals for the forthcoming October.

More information is requested on why a period of seven weeks is required for the data collection process from NDM data recorders.

Confirmation is also requested of when modelling takes place for EUCs above 732 MWh pa.

Other Technical Issues : **WCFs and SFs**

BGT raises a number of concerns on issues previously discussed at recent 'Technical Fora' but which were not within the terms of reference of Modification Development Group 0262. These concerns centre on the impact of seasonal normal demand on the computation of WCFs within NDM demand attribution and on the classification of loads greater than 58,600 MWh/a as NDM sites rather than DM sites.

Other Issues

BGT expresses disappointment that details regarding the level of dataloggers required and how an amended fallback model would work, have not been reflected in the draft Report. BGT stresses that the implementation of any proposals must meet the relevant data acquisition and modelling cycles.

Transco Response:

Domestic samples, sample sizes and sample distribution.

The installation target numbers in Appendix 4 of the Technical Report (attached to the draft Modification report), relate to the work done in 1994 to install a data recorder

sample prior to the Network Code and should be viewed in this context. They have since been superseded by the aggregate numbers of NDM sample points set out in Network Code which act very much as “bottom stop” figures below which the installed sample is not be allowed to fall. This matter was discussed at the Development Workgroup and has been referred to in correspondence with BGT in connection with the Development Workgroup Reports.

Transco supports the principle of improving consistency in the level of validated data. For example, Transco now has a new data recorder service provision contract in place which addresses the need for effective data collection from the data recorder sample and the need for timely action to maintain sample numbers.

It is, however, impossible to guarantee that the sample will include the same set of validated data recorders each year. End user participation in the sample is entirely voluntary and an end user can choose to leave the sample at any time. Moreover, data validation each year must take place on a reasonably objective basis rather than being constrained to produce a predefined extent of validated data. To achieve an invariant sample by LDZ and load band would require a much larger sample to be installed and operated than is actually used, which would add unnecessary costs to the programme.

Transco agrees with the introduction of a further bottom stop figure for installed sample numbers can be agreed for the above 2196 MWh pa sample. Appendix 9 of the Technical Report (attached to the draft Modification Report) suggested a figure of 1620 supply points as an appropriate bottom stop number for supply points above 2196 MWh pa in the NDM sample and Transco proposes this as an appropriate ‘bottom-stop’ level.

NDLFs

Transco acknowledges BGT’s comments on NDLFs for large NDM EUCs and, following Ofgem’s comments on the future of NDLFs for small NDM EUCs, does not propose their introduction. Any proposal to remove NDLFs for small NDM EUCs will be discussed within the forum of the Capacity Workstream.

Model Smoothing

Transco can confirm that it is planned that the Demand Estimation Sub Committee will review how model smoothing is applied each year.

Amendment to the Annual NDM process.

Due to the timings of the NDM processes, it would be necessary to adopt one of the options for changing the timings of the annual NDM process (outlined in the draft Modification Report) to use the results from the most recent NDM analysis in the development of the initial proposals for revised annual transportation prices, which are ordinarily published for consultation in April. The implications of such a timing change are also discussed later.

Seven weeks is the minimum time period which is required for the data recorder data collection process. Transco believes this is already a challenging target. Data has to be manually collected from approximately 3550 installations in 42 days and operational experience indicates that at least fifty percent of these require a repeat visit to be made. Given the need for end users to grant access and the geographical distribution of the sample sites, this is already an extremely challenging task and cannot realistically be compressed. Along with the transmission of data from LDZs to Transco Centre, the exercise can only realistically be completed by around mid-May each year.

NDM sample data from dataloggers which are solely used for the demand models for EUCs above 732 MWh pa are being collated, validated, processed and analysed during the period from the beginning of April to mid-May and so this time is at present being fully utilised.

Appendix 8 of the draft Modification Report sets out the extent of the analytical work required to complete production and publication of the NDM proposals by the end of June each year.

Thus, contraction of the current analysis time scales to permit publication of the formal initial proposals earlier than the end of June each year is not a realistic option.

An option suggested in Appendix 8 of the draft Modification report, which could be considered is to start collecting the data recorder data two weeks earlier, although this would inevitably result in the loss of some of the winter consumption data for smaller consumption EUCs, including especially the “domestic” EUC. It must also be advised that Transco would have difficulties in advancing the commencement of the data collection process next spring because a top-up installation programme is planned to run until the end of February.

Since the single representation received stressed the importance of capturing data from all of the most recent winter and since no further representations were made on the timings of the NDM process, Transco will not be proposing such advancement to data collection at this stage.

Other Technical Issues :

WCFs and SFs Very Large NDM Loads

Transco has noted the concerns of BGT but considers that these issues are outside the scope of Modification 0262 and will be referred to the Capacity & Energy workstream and the SPA workstream respectively for development.

Other Issues

The legal text below contains the changes necessary to Section H.

An amendment has been made to Paragraph H1.9.2 which details the “fallback” model. In the event that Ofgem apply their Condition 7(4) disapproval upon request made by Shippers or Transco, then the previous year’s demand models are used. The new wording in this paragraph clarifies, however, that the profiles are re-computed for the day of the week pattern applicable to the next year rather than applying the previous years derived values directly to the next year, which is not practical.

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

Not Applicable.

13. **The extent to which the implementation is required having regard to any proposed change in the methodology established under Standard Condition 3(5) of the statement; furnished by Transco under Standard Condition 3(1) of the Licence:**

Not Applicable.

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

There are no modifications required to the UK-Link Systems and therefore a programme of works will not be required as a result of implementing the Modification Proposal.

15. **Proposed implementation timetable (inc. timetable for any necessary information systems changes):**

Subject to the outcome of the modification process and no change to the NDM timetable, and provided agreement can be reached on an approach to determining the values of NDLFs to be applied, NDLFs for large NDM loads (>2196 MWh pa) could be introduced for gas year 2000/01.

A six month change to the NDM timetable will require, for gas year 2000/01, the same underlying demand models as applied to gas year 1999/00 on a transitional basis, followed by the first autumn NDM analysis in autumn 2000 (replacing the spring NDM analysis) leading to NDM profiles for gas year 2001/02.

A two week advancement of data collection combined with corresponding advances to other dates in the NDM process time table could be implemented with effect from the Spring 2001 NDM analysis. This will, of course, mean a reduction in the extent of capture of data from the most recent winter.

16. Recommendation concerning the implementation of the Modification Proposal:

Transco supports some of the elements contained in the Modification Proposal. Transco's views on the work undertaken by the Development Group are contained within "Summary of Conclusions" of the Technical Report which accompanied the draft Modification Report.

Transco does not support the suggestions of BGT with respect to NDM sample numbers and disposition but it does support the inclusion of a "bottom stop" number of 1620 supply points for NDM sample sites above 2196 MWh pa.

Transco supports amendments to the fall-back option (Section H 1.9.2) which applies in case of disapproval of the annual NDM Proposals by Ofgem. In Transco's view, the amendment provides a more workable solution in such an event.

Also, for the reasons given in Transco's response to the representations received, Transco is of the view that it is not feasible to compress the timetable for NDM data recorder data collection and Transco's NDM analysis within the overall NDM process timings. Therefore Transco does not support such changes to the NDM process time table.

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 Director General in accordance with this report.

19. Text:

Section H Paragraph 1

Amend Paragraph 1.6.8 to read:

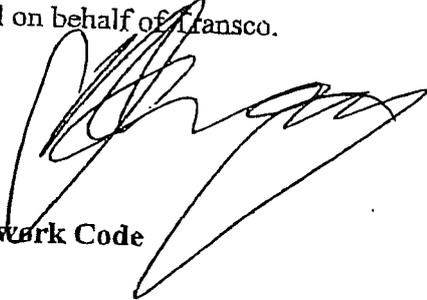
"1.6.8 For NDM . . . obtained for each Gas Year from Supply Meter Points comprised in Supply Point Components from a sample randomly selected by Transco having different Annual Quantities in the relevant LDZ; the aggregate number of such Supply Point Components for all such LDZs will be approximately 1,600 and reference to the EUC Sample shall be construed accordingly."

Amend Paragraph 1.9.2 to read:

"1.9.2 The End User . . . in which case Transco will use the End User Categories and End User Category Demand Models applying in the Preceding Year to create corresponding values of the Derived Factors and such End User Categories and Derived Factors shall then apply to the Gas Year."

Signed for and on behalf of Transco.

Signature:



 **Tim Davis**
Manager, Network Code

Date: 01/09/99

Director General of Gas Supply Response:

In accordance with Condition 7 (10) (b) of the Standard Conditions of Public Gas Transporters' Licences dated 21st February 1996 I hereby direct Transco that the above proposal (as contained in Modification Report Reference 0262, version 1.0 dated 01/09/99) be made as a modification to the Network Code.

Signed for and on behalf of the Director General of Gas Supply.

Signature:


Tahir Majid
Network Operations

Date: 25-01-00

The Network Code is hereby modified, with effect from the proposal as set out in this Modification Report, version 1.0.

, in accordance with

Signature:

Process Manager - Network Code
Transco

Date:

ANNEX

Restrictive Trade Practices Act - Suspense Clause

For the purposes of the Restrictive Trade Practices Act 1976, this document forms part of the Agreement relating to the Network Code which has been exempted from the Act pursuant to the provisions of the Restrictive Trade Practices (Gas Conveyance and Storage) Order 1996. Additional information inserted into the document since the previous version constitutes a variation of the Agreement and as such, this document must contain the following suspense clause.

1. Suspense Clause

1.1 Any provision contained in this Agreement or in any arrangement of which this Agreement forms part by virtue of which this Agreement or such arrangement is subject to registration under the Restrictive Trade Practices Act 1976 shall not come into effect:

- (i) if a copy of the Agreement is not provided to the Director General of Gas Supply (the "Director") 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 Director 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 paragraph 2(3) of the Schedule to The Restrictive Trade Practices (Gas Conveyance and Storage) Order 1996.

provided that if the Director does not so approve the Agreement then Clause 1.2 shall apply.

1.2 Any provision contained in this Agreement or in any arrangement of which this Agreement forms part by virtue of which this Agreement or such arrangement is subject to registration under the Restrictive Trade Practices Act 1976 shall not come into effect until the day following the date on which particulars of this Agreement and of any such arrangement have been furnished to the Office of Fair Trading under Section 24 of the Act (or on such later date as may be provided for in relation to any such provision) and the parties hereto agree to furnish such particulars within three months of the date of this Agreement.