

## **Modification Report**

### **0258: Facilitating the Use of Remote Meter Reading Equipment for the Purposes of Demand Estimation Forecasting Techniques**

### **0258A: Facilitating the Use of Remote Meter Reading Equipment and the Procurement of Data from a Third Party for the Purposes of Demand Estimation Forecasting Techniques**

### **Modification Reference Numbers 0258 / 0258A**

### **Version 5.0**

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**

Uniform Network Code (UNC), Transportation Principle Document (TPD) Section H 1.6 specifies obligations placed on Transporters to obtain data from Supply Meter Points contained within a sample for each LDZ for the purposes of developing End User Categories and Demand Models used in the Demand Estimation process.

UNC TPD Section H sets out two distinct groups for Demand Estimation sampling; Supply Points with an Annual Quantity (AQ) greater than 2,196,000 kWh (75,000 tpa) and Supply Points with an AQ equal to or less than 2,196,000 kWh. The current arrangements for sites with an AQ equal to or less than 2,196,000 kWh fall into a further two categories. The two categories are specified in UNC TPD Section H 1.6.5 (a), which stipulates for all LDZs there should be approximately 3,900 sites data logged of which 2,700 will be subject to Section H 1.6.2 (a) and a further 1,200 which are subject to Section H 1.6.2 (b). UNC TPD Sections H 1.6.2 (a) and H 1.6.2 (b) differ in that paragraph (a) requires data recorders to be fitted and paragraph (b) requires Daily Read Equipment to be installed. UNC TPD Section H 1.6.3 (a) defines a data recorder as “a device which captures Meter Readings at the start of each Day, but is capable of being read only at the Supply Point premises”.

Currently, the Section H 1.6.3 definition of a data recorder would rule out the installation of Daily Read Equipment on the 2700 (approximate figure) sites referred to in Section H 1.6.5 (a), which are subject to paragraph 1.6.2 (a), with an  $AQ \leq 2,196,000$  kWh. The definition of Daily Read Equipment is detailed in Section M 4.1.1 of the UNC TPD and permits the capture of data remotely. The data recorder definition rules out the use of meter reading equipment which is capable of being read remotely.

There is a further definition of “Remote Meter Reading Equipment” which is defined in UNC TPD Section M 1.4.3 (j) as:

“Remote Meter Reading Equipment is equipment which enables Meter Readings to be obtained remotely at set intervals and which comprises a device for capturing from the Supply Meter and/or (where installed) a converter, data which constitutes or permits a derivation of a Meter Reading and suitable equipment as shall be required for transmitting such data.”

As the current definition of Daily Read Equipment, specified in UNC TPD

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Section M 4.1.1 is focused on the purposes of Section M the proposer suggests it would be correct to replace the use of the Daily Read Equipment definition with that of the Remote Meter Reading Equipment definition in H 1.6.2 (b), 1.6.3 (b) and 1.6.9 (b) but with the associated protection offered to Daily Read Equipment as detailed in UNC TPD Sections M4.1.9, 4.1.10, and 4.1.11 for UNC TPD Section H purposes only.

xoserve, acting on behalf of the Transporters is considering methods to improve the data quality currently captured for the group of sites with an AQ  $\leq$  2,196,000 kWh. The Transporters have historically installed data recorders at smaller sites in this category as opposed to Daily Read Equipment or Remote Meter Reading Equipment which in turn has provided data which is collated and communicated to xoserve for analysis at regular intervals. Where data recorders have malfunctioned or in instances where Supply Point premises have been vacated the subsequent data unavailability is not realised until the data recorder is visited by xoserve's contractor, sometimes months after the data stream is terminated. Reducing the level of such data losses could improve the quality of the Demand Estimation models.

It is the intention of this Modification to extend the option of installing Remote Meter Reading Equipment to all Demand Estimation sample sites with an AQ  $\leq$  2,196,000 kWh which in the proposer's view would:

- Reduce the occurrence of data loss from recorders malfunctioning.
- Improve the quantity and quality of data available for demand estimation purposes.

It is also the intention of this proposal to replace the definition of Daily Read Equipment for sites  $>2,196,000$  kWh with Remote Meter Reading Equipment in UNC TPD Section H 1.6.2 (b).

### **Alternative Modification Proposal**

This has been raised as an alternative Modification Proposal to Modification Proposal 0258. This alternative Modification Proposal incorporates all elements of Modification Proposal 0258 and includes the additional proposal that would allow DNOs to procure data from a third party for demand estimation purposes.

The Proposer is fully supportive of the intent of Modification Proposal 0258 and has incorporated all aspects of it within this alternative Modification Proposal.

In addition to the points above, this alternative Modification Proposal will allow the Transporter to procure data for demand estimation from third parties who may or may not be Users (e.g. shippers, suppliers, end consumers). This recognises that the growth of automated meter reading potentially provides a source of robust and suitable data for demand estimation which may be cheaper than Transporters fitting their own dataloggers.

In addition, having one less device attached to the meter installation will simplify administration for the MAM and reduce the complication of the

physical meter installation. The Transporter will be responsible, as it is currently under H 1.6.2 (c), for ensuring that the sample used for demand estimation is, representative of the population. The Transporter's procurement exercise will need to ensure that the data it procures is complete, stratified by AQ and geographical location, has a representative mix of premise types and does not allow one party to dominate the sample. The Transporters would also need to consider whether the fitting of automated meter reading equipment indicated that customers were changing their behaviour and whether this should be considered in sample selection. These issues are points which the Transporters have to consider when determining sites for the installation of dataloggers under current UNC arrangements and are not new issues raised by this alternative Modification Proposal.

## **2 User Pays**

### **a) Classification of the Proposal as User Pays or not and justification for classification**

Classified as **not** User Pays. Any costs associated with procuring new Remote Meter Reading Equipment for NDM sampling purposes will be met by Transporters. Transporters are obligated to carry out this service and are funded centrally. There have been no further additional costs identified with the implementation of this Modification which would justify its designation as a User Pays Modification.

### **b) Identification of Users, proposed split of the recovery between Gas Transporters and Users for User Pays costs and justification**

Not applicable.

### **c) Proposed charge(s) for application of Users Pays charges to Shippers**

Not applicable.

### **d) Proposed charge for inclusion in ACS – to be completed upon receipt of cost estimate from xoserve**

Not applicable.

## **3 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;*

By allowing transporters to procure data the alternate Modification Proposal could reduce Transporter's costs and therefore increasing their ability to operate the system in an economic and efficient manner.

*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;*

The implementation of the alternative Modification Proposal would afford the same opportunities to all DNOs and allow for the efficient and economic operation of the combined pipe-line system.

*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;*

By allowing transporters to procure data the alternate Modification Proposal could reduce Transporter's costs making the discharge of the licensee's obligations more efficient

*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;*

By allowing Remote Meter Reading Equipment to be installed on Demand Estimation sites there would be an improvement in the quality of the Demand Estimation algorithms associated with the collection of sampled demand data leading to increased accuracy in demand allocation volumes.

By allowing Remote Meter Reading Equipment to be installed on demand estimation sites, or by allowing such data to be procured from third parties, there would be an improvement in the quality of the demand estimation algorithms associated with the collection of sampled demand data leading to increased accuracy in demand allocation volumes. An increased accuracy in demand allocation should better facilitate this relevant objective (in particular (d) (i)).

*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;*

This Modification Proposal removes the definition of Daily Read Equipment from UNC TPD section “H” replacing it with Remote Meter Reading Equipment. It is the proposer’s view that confining the definition of Daily Read Equipment to UNC TPD sections “G” and “M” clarifies the specific areas within the code where the two definitions should be used.

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

This Modification Proposal would increase the optionality around how Transporters collect Supply Point data for Demand Estimation purposes. The ability to utilise Remote Meter Reading Equipment for all Demand Estimation Supply Points would further enhance the quantity and quality of data collected by allowing early recognition of faulty / **disconnected** equipment and also where Supply Point premises have become vacant **and/or ceased offtaking gas**.

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

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

None identified.

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

No additional costs associated with the implementation of this Modification Proposal have been identified.

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

No cost recovery is required as a result of this Modification Proposal.

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

None identified.

**6 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**

None identified.

**7 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**

None identified.

**8 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)*

None identified.

*Development and capital cost and operating cost implications*

The implementation of the Alternative Modification Proposal would have no cost directly related to it although it will have the potential to reduce the operating costs of the demand estimation process in future.

*Consequence for the level of contractual risk of Users*

Improved data collection methods leading to a fuller sample would lead to an overall increase in confidence in the Non Daily Metered allocation regime.

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

The Alternative Modification could result in a decrease in the number of devices attached to some meter installations, reducing administration for Meter Asset Managers and reducing the complexity of some meter installations.

**10 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**

The Alternative Modification may result in transporters having a small number of contracts for the provision of data however this is not material and does not result in fundamental changes to relationships.

**11 Analysis of any advantages or disadvantages of implementation of the Modification Proposal**

**Advantages**

The Alternative Modification anticipates increased use of automate meter reading and smart meters and can be seen as proactively preparing the industry to take advantages of these changes.

**Disadvantages**

None identified.

**12 Summary of representations received (to the extent that the import of those representations are not reflected elsewhere in the Modification**

**Report)**

<b>Organisation</b>	<b>0258</b>	<b>0258A</b>	<b>Preference</b>
British Gas	Supports	Supports	0258A
EDF Energy	Supports	Supports	0258A
E.ON UK	Supports	Supports	0258A
National Grid Distribution	Supports	Supports	0258A
RWE Npower	Supports	Supports	0258A
Scotia Gas Networks	Supports	Supports	0258A
Scottish & Southern Energy	Qualified Support	Qualified Support	-
Wales & West Utilities	Supports	Supports	0258A

Scottish and Southern Energy have some concerns around the legal drafting for Proposal 0258 and in particular the obligations placed on the Registered User in the new section (c) of the re-drafted UNC Transportation Principal Document (TPD) H 1.6.9 . They believe that the drafting is not clear: it is their belief that the section seeks to place the same obligations on the Registered Users for Remote Meter Reading Equipment and data recorders as were previously required for NDM meterpoints in the sample, where Daily Read Equipment was used. Additionally the phrase ‘The Registered User will cooperate with the Transporter:’ followed by ‘the Registered User shall adhere ...’ does not provide absolute clarity as to the obligations that would reside on Registered Users. They do not believe that the same degree of support is needed for Transporters from Registered Users in respect of meters within the demand estimation sample compared to that required for Daily Metered supply points.

EDF Energy note that both Proposals suggest that utilising remote meter reading equipment should improve data quality over data loggers as the Gas Transporters would become aware of any faults occurring in the equipment or if the equipment had been disconnected at a much earlier stage. However EDF Energy would question whether this would be achieved. In particular they note that Remote Meter reading equipment does not send daily reads, but rather requires the reads to be “collected” from the device. It would therefore appear that the equipment could malfunction or be disconnected and the Gas Transporters would only become aware of this when the reads were “collected”. It would therefore appear that the stated benefits from data quality have been overstated.

**13 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.

**14 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.

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

No programme of works would be required as a consequence of implementing the Modification Proposal.

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

Proposal could be implemented with immediate effect following direction from Ofgem.

**17 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.

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

At the Modification Panel meeting held on 15 October 2009, of the 10 Voting Members present, capable of casting 10 votes, 10 votes were cast in favour of implementing Modification Proposal 0258. Therefore the Panel recommended implementation of this Proposal. At the same meeting, 10 votes were cast in favour of implementing Alternative Proposal 0258A. Therefore the Panel recommended implementation of Alternative Proposal 0258A.

The Panel then proceeded to vote on which of the two Proposals would be expected to better facilitate achievement of the Relevant Objectives. Of the 10 Voting Members present, capable of casting 10 votes, 0 votes were cast in favour of implementing Proposal 0258 in preference to Alternative Proposal 0258A, and 9 votes were cast in favour of implementing the Alternative Proposal 0258A in preference to Proposal 0258. Therefore, the Panel determined that, of the two Proposals, Proposal 0258A would better facilitate



the achievement of the Relevant Objectives.

## 19 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.

## 20 Text

### 0258A Legal Text

#### Uniform Network Code - Transportation Principal Document

#### Section H – Demand Estimation and Demand Forecasting

1. *Replace paragraphs 1.6.2(a) and 1.6.2(b) with the following new paragraphs 1.6.2(a) and 1.6.2(b):*

“(a) the Transporter shall be entitled at its cost to:

- (i) install, operate and read data recorders or Remote Meter Reading Equipment; and
- (ii) procure Meter Readings from third parties,

in either case at NDM Supply Meter Points from time to time selected (on an ongoing basis) by the Transporter;

(b) the Transporter will designate (as sampled for such purposes) NDM Supply Meter Points at which Remote Meter Reading Equipment is installed, at which it wishes to install Remote Meter Reading Equipment or at which it has, or intends to, procure Meter Readings for;”

2. *Replace paragraph 1.6.3(b) with the following new paragraph 1.6.3(b):*

“(b) the Transporter will not select any NDM Supply Meter Point for installing a data recorder or Remote Meter Reading Equipment without the consent of the consumer.

3. *Replace paragraph 1.6.4 with the following new paragraph 1.6.4:*

“1.6.4 For each Gas Year an NDM Supply Point Component **which is for the time being** selected or designated under paragraph 1.6.2 **is a “Sampled”** NDM Supply Point Component.

4. *Replace paragraph 1.6.5(a) with the following new paragraph 1.6.5(a):*

“(a) for all LDZs will be approximately 3,900 (of which approximately 1,200 will be subject to paragraph 1.6.2(b));”

5. *Remove the following from paragraph 1.6.8:*

“... paragraphs ~~1.6.1 and~~ 1.6.7 will not apply ...”

6. *Replace paragraph 1.6.9(b) with the following new paragraph 1.6.9(b):*

“(b) in obtaining the consent (where required) of any relevant person including the consumer for the installation, operation and reading of the data recorder or Remote Meter Reading Equipment at a NDM Supply Meter Point.”

7. *Insert the following new paragraphs 1.6.10 and 1.6.11:*

“1.6.10 The Registered User of a NDM Supply Meter Point at which **Remote Meter Reading** Equipment specified in paragraph 1.6.2 is or is to be installed will, where requested to do so by the Transporter:

- (a) procure permission and access for the Transporter or the relevant third party to:
  - (i) install and make operational **Remote Meter Reading** Equipment;
  - (ii) attach the **Remote Meter Reading** Equipment to the Supply Meter Installation;
- (b) facilitate inspection and maintenance and any activity referred to in Sections M 4.1.4(a) and (b), in relation to Remote Meter Reading Equipment, by the Transporter or the relevant third party as required for the purposes of keeping such equipment operational (including any requirement for resynchronisation and/or adjustment);

- (c) procure that a suitable site including support, protection and security for the Remote Meter Reading Equipment is available at the Supply Point Premises.

1.6.11 The Registered User of a NDM Supply Meter Point at which Remote Meter Reading Equipment specified in paragraph 1.6.1 is installed shall:

- (a) where it intends, or becomes aware that the consumer or any other person intends, to undertake works on the Supply Meter Installation (or any part of it) which will or is likely to impact on the ability of the Transporter to obtain accurate and timely Meter Readings, use reasonable endeavours to notify the Transporter at least two Business Days prior to the commencement of such works of the date when disconnection of the Remote Meter Reading Equipment from such Supply Meter Installation will occur and the date on which such works will be complete such that the Remote Meter Reading Equipment may or will be reconnected;
- (b) take reasonable steps to secure that the Remote Meter Reading Equipment is not damaged or otherwise mistreated.”

### Changed Marked Legal Text for Modification Proposal 0258A

#### 1.6 NDM Sampling

1.6.1 For the purposes of development of End User Categories and Demand Models the Transporter (other than National Grid NTS) will obtain data (which may, subject to paragraph 1.6.7, include estimates of missing data) as to daily offtakes of gas at the Supply Meter Points comprised in a sample of NDM Supply Point Components in each relevant LDZ.

1.6.2 For the purposes of paragraph 1.6.1:

- (a) the Transporter shall be entitled at its cost to:
  - (i) install, operate and read data recorders or Remote Meter Reading Equipment; and
  - (ii) procure Meter Readings from third parties.

In either case at NDM Supply Meter Points from time to time selected by the

Transporter;

- (b) the Transporter will designate (as sampled for such purposes) NDM Supply Meter Points at which Remote Meter Reading Equipment ~~Daily Read Equipment~~ is installed, ~~or~~ at which it wishes to install Remote Meter Reading Equipment ~~Daily Read Equipment~~ or at which it has, or intends to, procure Meter Readings for. ~~and which are comprised in Supply Points whose Annual Quantities are not greater than 2,196,000 kWh (75,000 therms);~~
- (c) the sample will be selected by the Transporter by random sampling from NDM Supply Point Components having different Annual Quantities and geographical locations.

1.6.3 For the purposes of paragraph 1.6.2:

- (a) a data recorder is a device which captures Meter Readings at the start of each Day, but is capable of being read only at the Supply Point Premises;
- (b) the Transporter will not select any NDM Supply Meter Point for installing a data recorder or Remote Meter Reading Equipment ~~Daily Read Equipment~~ without the consent of the consumer.

1.6.4 For each Gas Year an NDM Supply Point Component at which a ~~data recorder~~ is for the time being installed selected or which is for the time being designated under paragraph 1.6.2(b) is a "Sampled" NDM Supply Point Component.

1.6.5 The aggregate number of Sampled NDM Supply Point Components:

- (a) for all LDZs will be approximately 3,900 (of which approximately ~~2,700 will be subject to paragraph 1.6.2(a)~~ and 1,200 will be subject to paragraph 1.6.2(b));
- (b) for a particular LDZ will be:
  - (i) the approximate number of Sampled NDM Supply Point Components specified by the Transporters in a document published by the Transporters for the purposes of this paragraph 1.6; and
  - (ii) comprised of NDM Supply Point Components located at

points on the LDZ of a similar geographical location within the area in which the LDZ is located as was the case at 1 March 1996

or such other number as may be established pursuant to paragraph 1.6.6.

- 1.6.6 The Transporters will consult from time to time with all Users and the Authority on whether to increase or reduce the number or materially alter the identity or location of the NDM Supply Point Components for all LDZs or a particular LDZ which are Sampled.
- 1.6.7 The data obtained by the Transporter in accordance with paragraph 1.6.1 will be subject to validation by the Transporter (by techniques which provide reasonable statistical assurance of the validity of each data set), and such of the data as is so validated will be the demand data in respect of Sampled NDM Supply Point Components for the purposes of paragraph 1.7.2.
- 1.6.8 For NDM Supply Point Components whose Annual Quantity exceeds 2,196,000 kWh (75,000 therms) paragraphs ~~1.6.1 and~~ 1.6.7 will not apply and the data used for the development of Demand Models will be data (including estimates of missing data) obtained for each Gas Year from Supply Meter Points comprised in Supply Point Components from a sample randomly selected by the Transporter 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.
- 1.6.9 The Registered User will co-operate with the Transporter:
- (a) in enabling access (where required) to Supply Meters for the purposes of establishing the NDM samples of NDM Supply Point Components and in ensuring that such samples are and will continue to fulfil the requirement to obtain the data as described in paragraphs 1.6.1 and 1.6.8;
  - (b) in obtaining the consent (where required) of any relevant person including the consumer for the installation, operation and reading of the data recorder or Remote Meter Reading Equipment ~~Daily Read Equipment~~ at a NDM Supply Meter Point.

1.6.10 The Registered User of a NDM Supply Meter Point at which Remote Meter Reading Equipment specified in paragraph 1.6.2 is or is to be installed will, where requested to do so by the Transporter:

- (a) procure permission and access for the Transporter or the relevant

- (i) install and make operational Remote Meter Reading Equipment;
- (ii) attach the Remote Meter Reading Equipment to the Supply Meter Installation;
- (b) facilitate inspection and maintenance and any activity referred to in Sections M 4.1.4(a) and (b), in relation to Remote Meter Reading Equipment, by the Transporter or the relevant third party as required for the purposes of keeping such equipment operational (including any requirement for resynchronisation and/or adjustment);
- (c) procure that a suitable site including support, protection and security for the Remote Meter Reading Equipment is available at the Supply Point Premises.

1.6.11 The Registered User of a NDM Supply Meter Point at which Remote Meter Reading Equipment specified in paragraph 1.6.1 is installed shall:

- (a) where it intends, or becomes aware that the consumer or any other person intends, to undertake works on the Supply Meter Installation (or any part of it) which will or is likely to impact on the ability of the Transporter to obtain accurate and timely Meter Readings, use reasonable endeavours to notify the Transporter at least two Business Days prior to the commencement of such works of the date when disconnection of the Remote Meter Reading Equipment from such Supply Meter Installation will occur and the date on which such works will be complete such that the Remote Meter Reading Equipment may or will be reconnected;
- (b) take reasonable steps to secure that the Remote Meter Reading Equipment is not damaged or otherwise mistreated.”

For and on behalf of the Relevant Gas Transporters:

**Tim Davis**

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