

**MEASUREMENT ERROR
NOTIFICATION
GUIDELINES FOR NTS TO LDZ METERRED
OFFTAKES AND LDZ TO LDZ METERRED
TRANSFERS**

Document Control

Version	Date	Reason for Change
0.1	05 June 2007	Initial Draft Version prepared for Review Group 0131

Development of Rules

- 1 The requirement to publish the Meter Error Notification Guidelines is specified in Section V12.x.x. of the Transportation Principal Document (TPD) of the Uniform Network Code (UNC). This section also provides for the document to be published and revised from time to time. The provision reads :
- 2 “.....
- 3 The Rules set out below meet the Transporter's obligation to prepare Guidelines, while the Document Control Section records changes which have been made to the Guidelines. The document is published on the Joint Office of Gas transporters website, www.gasgovernance.com.
- 4 These guidelines can only be modified in accordance with the requirements set out in paragraph 12 of Section V of the UNC Transportation Principal Document, which reads as follows:

12 GENERAL PROVISIONS RELATING TO UNC RELATED DOCUMENTS

12.1 Purpose

The purpose of this Section is to establish generic governance arrangements in respect of the following UNC Related Documents (each a “Document” and collectively the “Documents”):-

- (a) Network Code Operations Reporting Manual as referenced in Section V9.4;
- (b) Network Code Validation Rules referenced in Section M1.5.3;
- (c) ECQ Methodology as referenced in Section Q6.1.1(c); and
- (d) Meter Error Notification Guidelines as referenced in Section

12.2 Publication Requirements

Each Document shall be kept up to date and published by the Transporters on the Joint Office of Gas Transporters website.

12.3 Modifications

Should a User or Transporter wish to propose modifications to any of the Documents, such proposed modifications shall be submitted to the Uniform Network Code Committee and considered by the Uniform Network Committee or any relevant sub-committee where the Uniform Network Committee so decide by majority vote.

12.4 Approved Modifications

- 12.4.1 In the event that a proposed modification is approved by a majority vote of the Uniform Network Code Committee, the modification shall be implemented. Where the Uniform Network Code Committee fails to achieve majority approval the proposed modification shall be considered in accordance with the provisions

set out in Section 7 of the Uniform Network Code Modification Rules unless the Uniform Network Code Committee determines otherwise.

12.4.2 Each revised version of a Document shall be version controlled and retained by the Transporters. It shall be made available on the Joint Office of Gas Transporters website.

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1 The Guidelines

These Meter Error Notification Guidelines (the Guidelines) set-out the means by which Measurement Equipment Error Report information is published on the Joint Office of Gas Transporters website (www.gasgovernance.com) and outlines the process to be followed where Measurement Equipment errors that exceed the 50GWh threshold, referred to as Significant Measurement Equipment Errors are notified to interested parties through the Offtake Committee.

These Guidelines are written to cover Measurement Equipment errors identified at NTS to LDZ Offtakes or inter LDZ Transfer Meters.

2 Meter Validation

Section D of the UNC Offtake Arrangements Document (OAD) sets out the validation of **Measurement Equipment** by the Distribution Networks (DNs) at Offtakes. This includes the procedures used (T/PR/ME2 Parts 1, 2 and 3 and T/PR/GQ/3, available from the Joint Office website, www.gasgovernance.com).

Routine Validation takes place at least once a year and when any new Measurement Equipment is installed. **Exceptional Validation** takes place when requested by the upstream Transporter.

The downstream Transporter prepares a **Validation Report** for the upstream Transporter within fourteen days for a Routine Validation or twelve hours for an Exceptional Validation.

In addition, the downstream Transporter will notify the upstream Transporter of any **fault** (OAD D4.1.1) found in the equipment that would be expected to lead to Measurement Equipment errors.

3 Action on Identification of an Error

For the purpose of these Guidelines, a Measurement Equipment error is deemed to be where:

- A fault is discovered in the Measurement Equipment;
- The Measurement Equipment, or a component thereof, is found to be operating outside its **Permitted Range** as defined within Annex D-1 of OAD; or
- Any other systematic measurement bias in the Measurement Equipment has been established.

Whilst there is a requirement for the Measurement Equipment to be repaired or adjusted so that it is reading correctly, there is only a requirement to correct previous readings where a systematic measurement bias results from the Measurement Equipment error.

Unless within the accuracy thresholds described in the OAD (ref to be added), and using a common proforma, the downstream Transporter will inform the Joint Office whenever a Measurement Equipment error is anticipated or established and shall include the following details.

- The date of submission
- The Measurement Equipment ID.
- The location of the Measurement Equipment.
- The LDZ whose entry flows the Measurement Equipment is measuring.
- The upstream and downstream Transporter.
- A brief description of the believed error cause and effect.

- The date when the Measurement Equipment Error was discovered.
- The date when the Measurement Equipment Error was corrected.
- The last date when the Measurement Equipment was known to be working correctly.
- The duration of the Measurement Equipment Error.
- The extent to which the Measurement Equipment or component thereof is estimated to be operating outside its Permitted Range.
- Whether the Measurement Equipment error creates systematic bias or not.
- If the Measurement Equipment error has created systematic bias, an estimate of the total energy in error and the total volume in error.
- The reason the Measurement Equipment Error was detected.
- The impact of the Measurement Equipment Error on Users within the LDZ (credit or debit).
- The average flow rates for the meter for the twelve months prior to the identification of the error
- The maximum flow rate for the meter in the twelve months prior to the identification of the error.
- Error Status
 1. Error Notified
 2. Meter Error Report in construction
 3. Significant Meter Error Report in construction
 4. Meter Error Report Published
 5. Significant Meter Error Report Published
 6. Awaiting first available Invoice
 7. Invoiced
- Anticipated MER Publication Date
- Date Error first Notified
- Latest Notification Update Date
- Contact details of the informant.

As the investigation into the Measurement Equipment error proceeds the downstream Transporter will provide updated information to the Joint Office at least once every 21 business days.

All such information shall be published by the Joint Office in a single spreadsheet, and its existence notified to Users. An example spreadsheet entry is included in Annex 1 of these Guidelines.

4 Action on Identification of an Error Less Than 50GWh

When a Transporter identifies a Measurement Equipment Error that it believes on a best endeavours basis is less than 50GWh the current processes as defined in the UNC should be followed, unless a single Transporter or 2 Shippers request to the Joint Office of Gas Transporters that the process for a Measurement Equipment Error of greater than 50GWh is followed. For clarity it is expected that Measurement Equipment Errors of less than 50GWh will only follow the process for Significant Measurement Equipment Errors

when it is believed that the Error is close to the 50GWh threshold, or could have significant implications for the industry.

5 Action on Identification of an Error Greater Than 50GWh

When a Transporter identifies a Measurement Equipment Error that it believes on a best endeavours basis is greater than 50GWh the process for Significant Measurement Equipment Errors should be followed.

6 User Notification of Significant Measurement Equipment Error

In addition to the requirement set out in section 3 above, the downstream Transporter will notify the Joint Office where the impact of any error is estimated to exceed the following threshold:

Total Energy Threshold

The Total Energy Threshold will be breached when on a best endeavours basis the relevant Transporter believes that:

The total energy in error is calculated for each Day that the Measurement Equipment was known to be in error (Daily Meter Error).

These Daily Meter Errors are then aggregated.

If the onset of the Measurement Equipment error cannot be determined the error calculation is run for each Day from when the Measurement Equipment was last known to be operating correctly and these daily results are aggregated and halved (Total Energy).

If Total Energy is less than 50 GWh, then the Total Energy Threshold has not been breached.

An affected Transporter may also notify the Joint Office when the threshold has not been, or is expected to be, breached but it wishes to meet with Users to discuss a Measurement Equipment error.

Any Shipper may notify the Joint Office if they have concerns relating to an actual or suspected Measurement Equipment error, indicating the nature of those concerns. If two or more Shippers submit a notice regarding the same error, the Joint Office will arrange for the Offtake Committee to meet as if a notification had been received from a relevant Transporter.

7 Initial Meeting of the Offtake Committee for Significant Measurement Equipment Errors

a) Notification by Joint Office

On notification under the requirements in Section 6 above, the Joint Office will call a special meeting of the Offtake Committee for the Relevant Transporter(s) to describe the results of relevant investigations.

Other than with unanimous agreement by the Uniform Network Code Committee, at least ten Business Days notice of the meeting shall be given, unless the Offtake Committee is due to meet between five and ten Business Days following receipt of the notification, in which case that meeting will be extended to cover discussion of the Measurement Equipment error.

This meeting shall take place as soon as practicable after the minimum notice time, subject to the availability of key personnel.

No later than five Business Days prior to the meeting, the Joint Office shall publish a meeting agenda and all papers and presentations submitted by the Relevant

Transporters and/or by the Shippers requesting the meeting. Subsequent papers and presentations may also be considered where the consensus among meeting attendees is that this is appropriate.

b) Appointment of an Independent Expert

The Offtake Committee will commission a Significant Meter Error Report on behalf of the Downstream Transporter for measurement errors that are expected to be greater than the 50GWh or are of interest to the community as a whole as detailed in 6 above. This Significant Meter Error Report will detail the size and cause of the error and will be accompanied by any information in support of the technical evaluation of the error. For clarity it is envisaged that the Downstream Transporter will remain responsible for covering the cost of this Significant Meter Error Report, as is currently the case.

The Offtake Committee will compile a list of experts who are suitably qualified to construct a Significant Meter Error Report, and are deemed to be suitably independent by the Offtake Committee. For clarity it is not envisaged that this list should be restricted to individuals, and it is intended that this list could also be populated with companies who are deemed to be suitably qualified and independent by the Offtake Committee. This list should be reviewed annually to ensure that it remains appropriate to avoid delays in appointing an independent expert when required.

The Offtake Committee will be responsible for appointing a suitably qualified, independent technical expert to construct the Significant Meter Error Report from the list. For clarity it is expected that were the list to be populated by experts who were employees of a Gas Transporter or Gas Shipper, then these experts could not be appointed to investigate a Measurement Equipment Error that impacted on their employer. The appointed expert should only report to the Offtake Committee, or appropriate sub-committee. The Offtake Committee or appropriate sub-committee should ensure that the expert conforms to the Terms of Reference laid down by the Offtake Committee in relation to the specific Measurement Equipment error to be investigated and to the high level Terms of Reference detailed below:

- To develop a Significant Meter Error Report using the most appropriate methodologies to ensure that as accurate and economic as possible Significant Meter Error Report is produced reflecting the size of the error.
- The Significant Meter Error Report will define the magnitude of the measurement error to be corrected for every gas day within the error period
- The Significant Meter Error Report will give the total net error magnitude as a volume and will specify if it represents a credit or debit impact to the parties in the impacted area
- The Expert is to define the data requirements for accurate evaluation of the error magnitude
- The Expert defines the evidence required to demonstrate that the original and corrected measurements are based on the best available data.
- The Expert defines the duration of the measurement error period
- The Expert is required to provide detailed data rules
- The Expert is to report directly to the Offtake Committee and any sub-committee formed.

- The Expert is to provide at least monthly updates to Offtake Committee and any sub-committee formed on proposed methodologies, issues identified and potential solutions in person.
- The appropriate group is to listen to and respond to the expert with any issues identified.
- The decision as to the most appropriate methodologies will rest solely with the expert, taking account of any issues raised at either the Offtake Committee or sub-committee.
- The decision as to when the Significant Meter Error Report is a robust technical evaluation of the magnitude of measurement error will rest solely with the expert.
- Expert to follow procedures laid down in Notification Process
- all data and evidence required by the Expert in order to compile the Significant Meter Error Report will be construed as auditable records

It is the responsibility of the Downstream Gas Transporter, or Asset Owner if this is different to:

- provide the data requested by the expert for the evaluation of the error magnitude in a timely manner
- provide the evidence the expert has requested to demonstrate that the original and corrected measurements are robust in timely manner
- answer technical questions raised by the appointed technical expert associated with the evaluation of the measurement error

In the event of a conflict between the Terms of Reference laid down by the Offtake Committee and the above Terms of Reference, the above Terms will take precedence.

This Significant Meter Error Report will be a binding technical assessment compiled by an independent agreed technical expert of the magnitude of the measurement error which is not open to dispute. This is to ensure that the process is efficient, removing the need to go to expert determination on the technical assessment.

c) Presentation at the Meeting

Whilst the Offtake Committee is discussing Measurement Equipment errors, no specific quorum shall apply.

The affected Transporters shall present to the meeting a full explanation of their understanding of the cause of the error and its impact. As a minimum, this shall include and add further details to the information submitted on the proforma.

If possible, the affected Transporters shall arrange for the person carrying out the investigation to be present and answer questions.

Once appointed the relevant expert shall outline the contents, or anticipated contents, of the Significant Meter Error Report to be submitted and the expected delivery date of this report and invite comments.

If any affected party present is not satisfied with the information presented, or its impact, the affected Transporter or expert shall be required to consider the issues raised and respond within ten Business Days. The Chairman of the Offtake Committee shall ensure that these concerns are understood by the meeting and shall establish what action the dissatisfied party expects the Transporters to take to address the concerns.

8 Further Meetings of the Offtake Committee

Once the independent technical expert has been appointed, then a further meeting of the Offtake Committee will be convened, once the independent technical expert has had sufficient time to become acquainted with the issues. At this meeting the technical expert shall outline the methodology that they propose to use, the issues that they have identified and any further information that they believe is appropriate to aid transparency. Attendees at this meeting shall respond to this presentation and raise any further issues that they believe that it is appropriate for the technical expert to consider. The technical expert will then have up to 5 business days to respond to these issues, outlining what further action, if any he intends to take and whether he believes they are relevant to the compilation of a Significant Meter Error Report or not. Further meetings will also be called at least monthly whilst the Significant Meter Error report is being completed in order to resolve any outstanding matters and update the Offtake Committee on the progress. For these meetings also, a minimum notice period of ten Business Days shall apply.

9 Convening a Sub-Committee

In instances when it is felt by either a Transporter or 2 Users that the discussions should take place outside of the Offtake Committee then a sub-committee should be formed to facilitate these discussions under the authority of the Offtake Committee. This sub-committee would be quorate when at least two Transporters and two Shippers were present. The sub-committee will be run in accordance with the Chairman's Guidelines under the UNC, and the independent technical expert should be present at these meetings once appointed.

Further meetings will be called at least monthly whilst the Significant Meter Error report is being completed in order to resolve any outstanding matters and update the sub committee on progress. For these meetings also, a minimum notice period of ten Business Days shall apply.

10 Further Processes

For information purposes the Relevant Transporter, or xoserve or the independent expert compiling the Significant Meter Error Report may call further meetings to discuss technical aspects related to the Measurement Equipment error, or may include the Measurement Equipment error as an agenda item at other meetings.

CODE MODIFICATION PROPOSAL No xxxx

Meter Error Notification Process

Version x.x

Date: XXXX

Proposed Implementation Date: 01/11/2007

Urgency: Non Urgent

1 The Modification Proposal

a) Nature and Purpose of this Proposal

It is proposed that the UNC be modified to require the production of and adherence to an ancillary document which describes a Measurement Error Notification Process whereby Transporters would be required to inform Interested Parties of the incidence and impact of actual and suspected Measurement Equipment errors at NTS to LDZ offtakes, and LDZ to LDZ Transfer Measurement Installations.

To provide appropriate governance for the development and modification of the proposed document, it is proposed that the “Measurement Error Notification Guidelines For NTS To LDZ Metered Offtakes and LDZ To LDZ Metered Transfers” be included in the list of UNC Related Documents in Section V12.1 of the UNC Transportation Principal Document. Hence it will be possible for all Users to propose changes to the guidelines, and these will be subject to approval by the UNC Committee.

As a minimum, it is recommended that, while the content of the Guidelines is beyond the scope of this Proposal, these Guidelines should include requirements for:

- Identification of thresholds that trigger a requirement for notification of Measurement Equipment errors.
- Routine tabulation of Measurement Equipment errors on a publicly accessible website (expected to be the Joint Office of Gas Transporters website in practice).
- For errors that exceed the threshold of 50GWh, a requirement for the affected Transporter(s) to provide information to Interested Parties at meetings of the Offtake Committee. Meetings will be held prior to the finalisation of the Significant Meter Error Report and give full information on the Measurement Equipment error and its estimated impact upon Users.
- For errors that exceed the threshold of 50GWh, a requirement for the Offtake Committee to appoint a suitably qualified independent technical expert to compile a Significant Meter Error Report. The expert would be solely responsible for determining the most appropriate methodologies to be employed in producing said Significant Meter Error Report and evaluating the magnitude of the measurement error.

- The introduction of a Significant Meter Error Report as a document that is compiled by an independent technical expert, which is binding on all parties and not open to further technical dispute.

Review Group 0131 approved the principles behind these minimum criteria and a copy of the Final Modification Review Group 0131 Report is attached as an appendix. It is recommended that the attached guidelines are placed before the Uniform Network Code Committee for approval in parallel with the development of this Modification Proposal.

It is further proposed that the UNC be modified to provide for the role of the Offtake Committee to be extended to provide a forum for the Relevant Transporter(s) to share relevant information with affected Users. This will include the following amendments to the UNC:

- Adding to its scope the requirement for the Offtake Committee to provide a forum for discussing Measurement Equipment errors with interested Users.
- Requiring that such meetings will operate in accordance with the Measurement Error Notification Guidelines for NTS to LDZ Metered Offtakes and LDZ to LDZ Metered Transfers.

The principles behind this Modification Proposal were developed within Review Group 0131 to establish a process within the existing UNC governance framework in order to facilitate timely technical evaluation of measurement errors where a Measurement Equipment Error is identified by the Relevant Transporter(s).

Timely and accurate allocation of energy is required because Measurement Equipment errors at LDZ Offtakes from the NTS typically cause misallocation of energy between NTS Shrinkage and the aggregate quantity allocated to Supply Points through the RbD mechanism. Whilst the former potentially affects all active Users, the latter is confined to Users that offtake gas at Smaller Supply Points. Implementation would provide Users with confidence that an appropriately governed route existed to manage Measurement Equipment errors, and would permit subsequent development of the guidelines to support both timely and accurate reallocation of energy misallocated due to the Measurement Equipment error.

The current process, known as the “643 Process”, to reflect the Transco Network Code Review Group that developed it, is informal and is triggered only when a Measurement Equipment Error Report is finalised. This informal aspect of the process would continue if this Proposal were not implemented and some Users may continue to have limited confidence in the satisfactory resolution of Measurement Equipment errors.

b) Justification for Urgency and recommendation on the procedure and timetable to be followed (if applicable)

It is not recommended that this Proposal be subject to Urgent Procedures.

- c) **Recommendation on whether this Proposal should proceed to the review procedures, the Development Phase, the Consultation Phase or be referred to a Workstream for discussion.**

This Proposal has already been considered and developed by the Distribution Workstream and the Offtake Workstream, allowing scrutiny by a wider audience than attendees at Review Group 0131 meetings. It is therefore recommended that this Proposal proceed straight to consultation

- 2 **Extent to which implementation of this Modification Proposal would better facilitate the achievement (for the purposes of each Transporter's Licence) of the Relevant Objectives**

Standard Special Condition A11.1 (d): so far as is consistent with subparagraphs (a) to (c) the securing of effective competition: between relevant shippers....;

The process to be followed when Measurement Equipment errors are discovered would become more formal should this proposal be implemented, and would also be subject to modification through an existing UNC governance route. This would provide additional certainty for Users, reducing the risk of operating in the GB gas market and thereby facilitating the securing of effective competition between relevant Shippers. In addition, by introducing the possibility of Users proposing changes to the process, subsequent development of the guidelines would be facilitated by implementation of this Proposal and these subsequent developments may help to secure effective competition between Relevant Shippers.

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

No implications in respect of security of supply and operation of the Total System have been identified. Implementation would introduce common guidelines for all DNs and National Grid NTS, which would serve to prevent industry fragmentation.

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

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

No such implications have been identified.

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

No additional costs would be incurred as a result of implementing this Modification Proposal since Guidelines which could be introduced were this Proposal to be implemented have already been written.

- c) **Whether it is appropriate to recover all or any of the costs and, if so, a proposal for the most appropriate way for these costs to be recovered:**

Cost recovery is not proposed.

d) The consequence (if any) on the level of contractual risk of each Transporter under the Uniform Network Code of the Individual Network Codes proposed to be modified by this Modification Proposal

Implementation would introduce an additional contractual obligation on the Transporters and hence increase their contractual risk.

5 The extent to which the implementation is required to enable each Transporter to facilitate compliance with a safety notice from the Health and Safety Executive pursuant to Standard Condition A11 (14) (Transporters Only)

No such requirement has been identified.

6 The development implications and other implications for the UK Link System of the Transporter, related computer systems of each Transporter and related computer systems of Users

No such implications have been identified.

7 The implications for Users of implementing the Modification Proposal, including:

a) The administrative and operational implications (including impact upon manual processes and procedures)

Additional administrative work would be required in support of the Uniform Network Code Committee as and when proposed changes to the Guidelines were put to that Committee for consideration.

b) The development and capital cost and operating cost implications

No such implications have been identified.

c) The consequence (if any) on the level of contractual risk of Users under the Uniform Network Code of the Individual Network Codes proposed to be modified by this Modification Proposal

No such consequences have been identified. Users may, however, wish to take advantage of the ability to propose changes to the Guidelines with a view to further reducing risk.

8 The implications of the implementation for other relevant persons (including, but without limitation, Users, Connected System Operators, Consumers, Terminal Operators, Storage Operators, Suppliers and producers and, to the extent not so otherwise addressed, any Non-Code Party)

No direct implications have been identified.

9 Consequences on the legislative and regulatory obligations and contractual relationships of the Transporters

No such consequences have been identified.

10 Analysis of any advantages or disadvantages of implementation of the Modification Proposal not otherwise identified in paragraphs 2 to 9 above

Advantages

- Greater assurance to Users on procedures to be followed in respect of Measurement Equipment errors.
- Facilitates development, through an existing governance route, of the procedures to be followed in respect of Measurement Equipment errors.

Disadvantages

- Minor cost increase to maintain a formal document and manage modifications which may be proposed.

11 Summary of representations received as a result of consultation by the Proposer (to the extent that the import of those representations are not reflected elsewhere in this Proposal)

None

12 Detail of all other representations received and considered by the Proposer

None

13 Any other matter the Proposer considers needs to be addressed

None

14 Recommendations on the time scale for the implementation of the whole or any part of this Modification Proposal

Following approval by the Authority, it is recommended that this Proposal be implemented at 06.00 on the following Business Day provided the UNC Committee has approved a draft of the Guidelines which would then form the initial Guidelines.

15 Comments on Suggested Text

Legal text has not been provided.

16 Suggested Text

Legal text has not been provided.

Code Concerned, sections and paragraphs

Uniform Network Code

Transportation Principal Document

Section(s)

Proposer's Representative: Stefan Leedham

Name (Organisation): EDF Energy

Proposer: Stefan Leedham

Name (Organisation): EDF Energy