

Modification Report
Meter Error Notification Process
Modification Reference Number 0185VV
Version 3.0

This Modification Report is made pursuant to Rule 9.3.1 of the Modification Rules and follows the format required under Rule 9.4.

1 The Modification Proposal

It is proposed that the UNC be modified to require the adherence to the suggested UNC Related Document attached whenever a Measurement Error is identified that creates systematic bias. The attached document 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.

For clarity following implementation of Modification Proposal 0152V it is expected that the 50GWh threshold is applied to the reconciled energy. Whilst we recognise that it may be difficult to identify the total volume of energy that will be reconciled at this early stage, we would expect the relevant Transporters to use their best judgement.

It is also proposed that the OAD should be modified to ensure that there are no areas of conflict between the Guidelines and the OAD. As a minimum we believe that OAD Section D 3.5, 4.2, 5.2.1, 5.2.4 and 6 will require modification. The OAD should also be changed to introduce the new concept of MER (Measurement Error Report) and SMER (Significant Measurement Error Report) and the implications that this will have on the dispute process (OAD D 6). It is intended that the existing dispute process for a MER should be maintained, however section 6 will need updating to clarify that the technical findings of a SMER is not open for dispute by either the Upstream Transporter or the Downstream Transporter or Shippers.

The principles behind this Modification Proposal were developed within Review Group 0131 (report attached for reference) 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.

Suggested Text

UNIFORM NETWORK CODE – OFFTAKE ARRANGEMENTS DOCUMENT SECTION D MEASUREMENTS

Insert at the end of paragraph 1.2.1 the following:

- “(e) "Measurement Error" means any failure or defect in the Measurement Equipment or its operation or other circumstance in or as a result of which the Measurement Equipment is reading with systematic bias.**
- “(f) "Measurement Error Report" means a report identified as such and prepared pursuant to the Guidelines.**
- “(g) "Measurement Report" means a Measurement Error Report or a Significant Measurement Error Report.**
- “(h) "Significant Measurement Error Report" means a report identified as such and prepared pursuant to the Guidelines.**
- “(i) the "Guidelines" are the guidelines set out in the document entitled "Measurement Error Notification Guidelines for NTS to LDZ and LDZ to LDZ Measurement Installations"**

Insert as a new paragraph 3.1.5 as follows:

“3.1.5 The Parties shall use reasonable endeavours to follow the Guidelines in respect of Measurement Errors.”

Amend paragraph 5.2.4 to read as follows:

“5.2.4 The downstream Party shall, ~~not later than 14 Days~~ after the carrying out of the relevant validation, provide to the upstream Party the corrected readings by way of a Measurement Report together with an explanation of the basis on which the readings were corrected and supporting information.”

Amend paragraph 6.1.1 to read as follows:

“6.1.1 Subject to paragraph 6.1.4, The the upstream Party shall be entitled to dispute the accuracy of any Validation Report or any Measurement Error Report ~~or any corrected~~ or estimated reading received pursuant to paragraphs 3.4, 5.2 and 5.3 respectively by giving notice to the

downstream Party not later than 14 days after receipt of the same.”

Insert a new paragraph 6.1.4 as follows:

“6.1.4 The results of a Significant Measurement Error Report shall be binding on the Parties as provided in the Guidelines and shall not be disputed pursuant to this paragraph 6 or otherwise.”

UNIFORM NETWORK CODE – TRANSPORTATION PRINCIPAL DOCUMENT

SECTION E - DAILY QUANTITIES, IMBALANCES AND RECONCILIATION

Insert a new paragraph 7.1.4 as follows:

“7.1.4 The results of a Significant Measurement Error Report (produced pursuant to OAD Section D) including any adjustments to the LDZ Daily Input Quantity for any LDZ shall be binding on Users and used for the purposes of Aggregate NDM Reconciliation.”

SECTION V - GENERAL UNIFORM NETWORK CODE – TRANSPORTATION PRINCIPAL DOCUMENT

SECTION V - GENERAL

Amend paragraph 12.1 to read as follows:

“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; ~~and~~
- c) ECQ Methodology as referenced in Section Q6.1.1(c); and
- d) Measurement Error Notification Guidelines for NTS to LDZ and LDZ to LDZ Measurement Installations as referenced in OAD Section D3.1.5”

2

Extent to which implementation of the proposed modification would better facilitate the relevant objectives

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;...

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 achievement of this relevant objective. 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 facilitate the achievement of 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;

Giving greater transparency to the process will reduce the potential for ambiguity and disputes which may help facilitate the achievement of this relevant objective.

3 The implications of implementing the 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 the Modification Proposal, including:

a) Implications for operation of the System:

No such implications have been identified.

b) 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, depending on the operational practices of GDNs. In general it is believed that this proposal may result in the re-allocation of costs between Transporters, as whilst some may incur additional costs to employ an independent expert, this would be offset by those who no longer have to employ additional resources to confirm the findings within a MER.

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

Cost recovery is not proposed.

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

No such consequences have been identified.

5 The consequence of implementing the Modification Proposal on the level of contractual risk of each Transporter under the Code as modified by the Modification Proposal

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

6 The high level indication of the areas of the UK Link System likely to be affected, together with the development implications and other implications for the UK Link Systems and related computer systems of each Transporter and Users

No such implications have been identified.

7 The implications of implementing the Modification Proposal for Users, including administrative and operational costs and level of contractual risk

Administrative and operational implications (including impact upon manual processes and procedures)

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.

Development and capital cost and operating cost implications

No such implications have been identified.

Consequence for the level of contractual risk of Users

Greater transparency and early notification should reduce risk to Users, who may also wish to take advantage of the ability to propose changes to the Guidelines with a view to further reducing risk.

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

No direct implications have been identified.

9 Consequences on the legislative and regulatory obligations and contractual relationships of each Transporter and each User and Non Code Party of implementing the Modification Proposal

No such consequences have been identified.

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

Advantages

- 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.

Disadvantage

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

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

British Gas Trading Limited	BGT	Support
National Grid Gas (Distribution)	NGD	Support
National Grid NTS	NGNTS	Support
National Grid NTS Shrinkage Provider	NGS	Support
Scotia Gas Networks plc	SGN	Support
Statoil (UK) Ltd	STUK	Support
Wales & West Utilities Limited	WWU	Support

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

No such requirement has been identified.

13 The extent to which the implementation is required having regard to any proposed change in the methodology established under paragraph 5 of Condition A4 or the statement furnished by each Transporter under paragraph 1 of Condition 4 of the Transporter's Licence

No such requirement has been identified.

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

No programme for works has been identified.

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

The Transporters believe that following approval by the Authority, a period of several months is required to introduce the procedures and to nominate and confirm the list of experts.

16 Implications of implementing this Modification Proposal upon existing Code Standards of Service

No such implications been identified.

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

At the Modification Panel meeting held on 15 May 2008, of the 8 Voting Members present, capable of casting 10 votes, 10 votes were cast in favour of

implementing this Modification Proposal. Therefore the Panel recommend implementation of this Proposal.

18 Transporter's Proposal

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

19 Text

UNIFORM NETWORK CODE – OFFTAKE ARRANGEMENTS DOCUMENT SECTION D MEASUREMENTS

Insert at the end of paragraph 1.2.1 the following:

- “(e) **“Measurement Error”** means any failure or defect in the Measurement Equipment or its operation or other circumstance in or as a result of which the Measurement Equipment is reading with systematic bias.
- “(f) **“Measurement Error Report”** means a report identified as such and prepared pursuant to the Guidelines.
- “(g) **“Measurement Report”** means a Measurement Error Report or a Significant Measurement Error Report.
- “(h) **“Significant Measurement Error Report”** means a report identified as such and prepared pursuant to the Guidelines.
- “(i) the **“Guidelines”** are the guidelines set out in the document entitled **“Measurement Error Notification Guidelines for NTS to LDZ and LDZ to LDZ Measurement Installations”**

Insert as a new paragraph 3.1.5 as follows:

“3.1.5 The Parties shall use reasonable endeavours to follow the Guidelines in respect of Measurement Errors.”

Amend paragraph 5.2.4 to read as follows:

“5.2.4 The downstream Party shall, ~~not later than 14 Days~~ after the carrying out of the relevant validation, provide to the upstream Party the corrected readings by way of a Measurement Report together with an explanation of the basis on which the readings were corrected and supporting information.”

Amend paragraph 6.1.1 to read as follows:

“6.1.1 Subject to paragraph 6.1.4, The~~the~~ upstream Party shall be entitled to dispute the accuracy of any Validation Report or any Measurement Error Report ~~or any corrected~~ or estimated reading received pursuant to paragraphs 3.4, 5.2 and 5.3 respectively by giving notice to the downstream Party not later than 14 days after receipt of the same.”

Insert a new paragraph 6.1.4 as follows:

“6.1.4 The results of a Significant Measurement Error Report shall be binding on the Parties as provided in the Guidelines and shall not be disputed pursuant to this paragraph 6 or otherwise.”

UNIFORM NETWORK CODE – TRANSPORTATION PRINCIPAL DOCUMENT

SECTION E DAILY QUANTITIES, IMBALANCES AND RECONCILIATION

Insert a new paragraph 7.1.4 as follows:

“7.1.4 The results of a Significant Measurement Error Report (produced pursuant to OAD Section D) including any adjustments to the LDZ Daily Input Quantity for any LDZ shall be binding on Users and used for the purposes of Aggregate NDM Reconciliation.”

SECTION V - GENERAL UNIFORM NETWORK CODE – TRANSPORTATION PRINCIPAL DOCUMENT

SECTION V GENERAL

Amend paragraph 12.1 to read as follows:

“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;
and
- c) ECQ Methodology as referenced in Section Q6.1.1(c); and
- d) Measurement Error Notification Guidelines for NTS to LDZ and LDZ to LDZ Measurement Installations as referenced in OAD

Section D3.1.5.”

For and on behalf of the Relevant Gas Transporters:

Tim Davis
Chief Executive, Joint Office of Gas Transporters

APPENDIX 1

MEASUREMENT ERROR NOTIFICATION GUIDELINES FOR NTS TO LDZ AND LDZ TO LDZ MEASUREMENT INSTALLATIONS

Document Control

Version	Date	Reason for Change
0.1	06 December 2007	Initial Draft
0.2	14 December 2007	Incorporation of comments from Offtake Arrangements Workstream
0.3	19 December 2007	Final feedback from Offtake Arrangements Workstream participants
0.4	19 December 2007	Agreed changes incorporated in document. Scotia Gas Networks requested insertion added to document and highlighted for acceptance by all parties.
0.5	24 January 2008	Acceptance of Scotia proposed paragraph and proposed changes from initial legal scrutiny
0.6	11 February 2008	Marked up proposed changes following Mod 185 and Mod 185A consultation for discussion and agreement at extra ordinary Offtake Arrangements Workstream on 14 th February.
0.7	27 March 2008	Further changes following provision of legal text form WWU and to correct errors that appeared in version 0.6.

Development of Rules

1. The requirement to publish the Measurement Error Notification Guidelines is specified in Section V12.1(d) 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 :
“Each Document shall be kept up to date and published by the Transporters on the Joint Office of Gas Transporters website.”
2. 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.
3. 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:

“UNIFORM NETWORK CODE – TRANSPORTATION PRINCIPAL DOCUMENT

SECTION V - GENERAL

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) Measurement Error Notification Guidelines for NTS to LDZ and LDZ to LDZ Measurement Installations as referenced in OAD Section D 3.1.5

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 Code 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. Definitions

Unless otherwise stated, terms in these Measurement Error Notification Guidelines (“**these Guidelines**”) shall have the meanings given to them in the Uniform Network Code. Such terms will be capitalised within quotation marks where first used in the Guidelines.

In these Guidelines:

“**Measurement Error**” – any “**Fault**” which results in a systematic bias to measured quantities.

“**Measurement Error Report**” or “**MER**” – a document compiled by the Downstream Party for Measurement Errors less than 50 GWh, detailing the nature of the Measurement Error identified, the corrected readings and the methodology used in the technical evaluation of the Measurement Error.

“**Significant Measurement Error**” - a Measurement Error that is estimated to exceed the 50 GWh threshold referred to in these Guidelines.

“**Significant Measurement Error Report**” or “**SMER**” – a document compiled by an Appointed Independent Technical Expert, detailing the nature of the Measurement Error identified, the corrected readings and the methodology used in the technical evaluation of the Measurement Error. The SMER is only compiled for Measurement Errors that are either 50 GWh or greater or where it is believed that the Measurement Error has the potential on the production of the final Measurement Error Report to be greater than the Significant Measurement Error threshold (50 GWh) or the Measurement Error could have significant implications for the industry. As the corrected readings provided within the SMER have been derived by an Appointed Independent Technical Expert in consultation with the Downstream Party, the Upstream Party and Users, they represent a final binding technical evaluation of the magnitude of Measurement Error.

“**Independent Technical Expert**” – an independent measurement expert who has been nominated by one of the Parties (Downstream Party, Upstream Party or Users) to be used in the compilation of a Significant Measurement Error Report. The Independent Technical Expert should not, at the time of endorsement of appointment, be directly employed by the Upstream Transporter, the Downstream Transporter or Users. As a consequence of appointment, the Independent Technical Expert will subsequently be in the employment of the Downstream Party by means of a contractual arrangement for the purposes of the compilation of the Significant Measurement Error Report.

“**Appointed Independent Technical Expert**” – the Independent Technical Expert proposed by the Offtake Arrangements Workstream, endorsed by the Offtake Committee and subsequently contracted by the Downstream Party to construct the SMER for the Measurement Error identified.

“**Listed Independent Technical Experts**” – an Independent Technical Expert that has been approved by the Offtake Committee and appears on the Independent Technical Expert Log.

“Generic Terms of Reference” – the standard terms of reference to be applied as the basis of the contracts between the Downstream Party and the Appointed Independent Technical Expert for the compilation of a Significant Measurement Error Report.

“Technical Measurement Issue” – any issue that may have a material impact on any critical data item connected directly to the identified Measurement Error.

2. The Guidelines

These guidelines set-out the means by which Measurement Error information is published on the Joint Office of Gas Transporters website (www.gasgovernance.com) and outline the process to be followed for all Measurement Errors associated with “**Measurement Equipment**” between the “**National Transmission System (NTS)**” and “**Local Distribution Zones LDZs**” or the Measurement Equipment between two LDZs. For Measurement Errors estimated to exceed the 50GWh threshold, referred to as Significant Measurement Errors these Guidelines detail how they should be notified to interested parties via the Offtake Arrangements Workstream or Offtake Committee.

3. Measurement Equipment Validation

Section D of the OAD sets out the responsibilities for the maintenance and “**Routine Validation**” of Measurement Equipment, at an “**Offtake**”, by the “**Downstream Party**”. The procedures for Routine Validation (T/PR/ME2 Parts 1, 2 and 3 and T/PR/GQ/3, available from the Joint Office website, (www.gasgovernance.com) are also referenced.

A Routine Validation (OAD D3.2) takes place at least once every 12 months or when the Measurement Equipment is significantly modified or replaced. The Validation is undertaken by the Downstream Party.

An “**Exceptional Validation**” (OAD D3.3) is performed at the request of the “**Upstream Party**”.

Following the completion of a Routine or Exceptional Validation the Downstream Party is required to compile a “**Validation Report**” (OAD D3.4). The Downstream Party is required to supply the Validation Report to the Upstream Party within 14 days for a Routine Validation and within twelve hours for an Exceptional Validation.

4. Action on Identification of a Measurement Error

OAD requires the Measurement Equipment to be operating within its “**Permitted Range**” (OAD D1.4) as indicated in the site specific “**Supplemental Agreement**”. If the Measurement Equipment is found to be operating outside its Permitted Range or with a systematic bias it is classed to be a Fault (OAD D4.1). Upon identification of a Fault, the Downstream Party is required to correct the Fault and notify the Upstream Party.

These Guidelines only require the notification of Faults which are likely to result in a systematic bias to the measured quantity. They do not cover Faults associated with equipment operating outside of its Permitted Range when the mis-measurement is of a random nature displaying a symmetrical statistical distribution around the actual measurement.

Systematic bias is deemed to be a bias resulting from the measurement system, leading on average to biases in measurement which result in measured values being systematically too high or too low

There are various Measurement Error trigger points within OAD activities which will link into these Guidelines which form the “**UNC Related Document**”.

Some Trigger Points identified that may lead to Measurement Errors are:-

- Daily processing of meter readings;
- Site maintenance visits;
- Routine Validation;
- Exceptional Validation;
- Site Audits
- Any other event that causes the Downstream Party directly or indirectly to carry out checks

The OAD requires that the Downstream Party supplies corrected readings to the Upstream Party only when the Fault identified is a systematic bias. These corrected readings are supplied as part of the “**Measurement Error Report (MER)**” or “**Significant Measurement Error Report (SMER)**” described in these Guidelines.

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

- A Fault is discovered in the Measurement Equipment which results in a systematic bias;

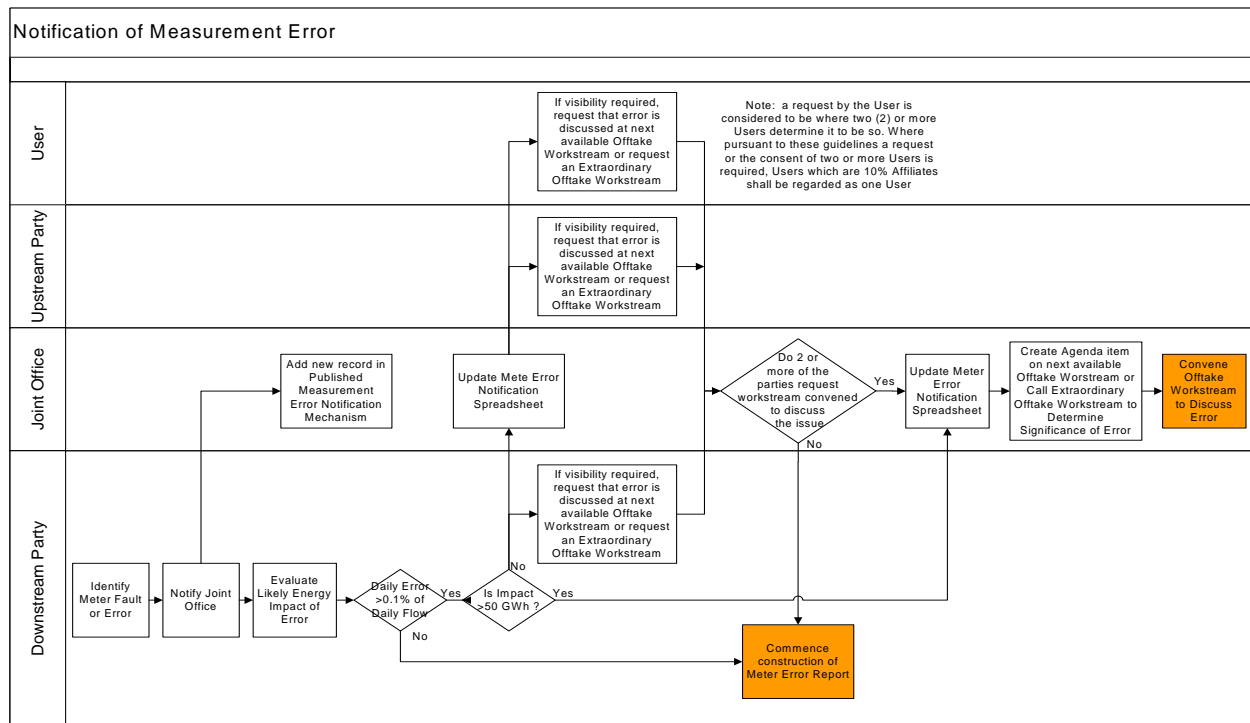
The Downstream Party will inform the Joint Office whenever a Measurement Error is identified

5. Template for “Measurement Error Notification Mechanism”

Framework for Measurement Error Notification

- Unique Reference Number;
- Date Measurement Error first notified;
- Gas Transporter (downstream and upstream);
- LDZ;
- Offtake;
- Average flow rates for the meter for the perceived duration of the Measurement error
- A brief description of the believed Measurement Error cause and effect;
- The date when the Measurement Error was discovered, started (or last good read) and corrected;
- Systematic bias? (yes or no);
- Reason Measurement Error was detected;
- Estimated Significance (Low/Medium/High);
 - (Low – 0 to less than 30 GWh, Medium - 30 to less than 50 GWh, High - Over 50 GWh);
- Assessed “**volume**” impact in MCM;
- Estimated “**quantity**” in GWh;
- Over or under read;
- Error status (one of the following);
 - Error Notified;
 - MER in compilation;
 - SMER in compilation;
 - MER published;
 - SMER published;
 - Awaiting first available invoice;
 - Invoiced;
 - Closed / no rec required;
- Anticipated MER/SMER publication date;
- Latest notification update date.

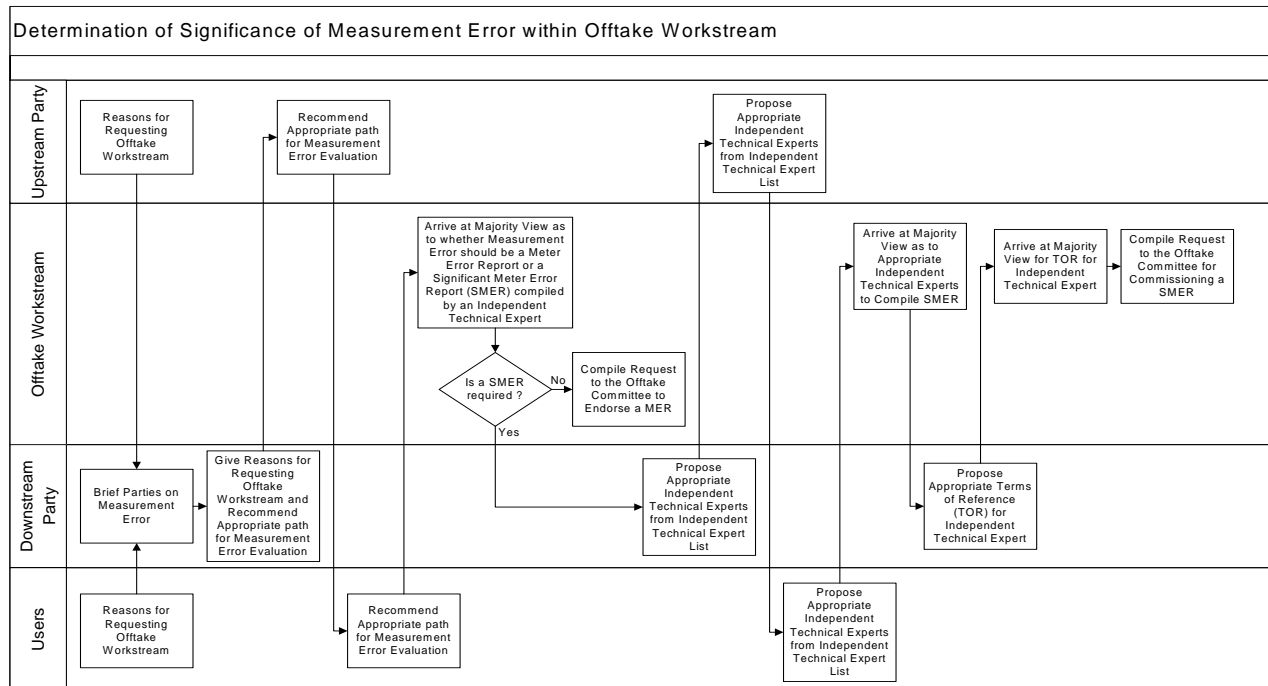
6. Identification and Notification of Potential Measurement Errors



- The Downstream Party must upon identification of a potential Measurement Error:
 - Provide details to the Joint Office for publication as part of the agreed “Measurement Error Notification Mechanism”;
 - Undertake a reasonable estimate as to the likely quantity in GWh;
 - Identify if the estimated impact exceeds 50 GWh;
 - For Measurement Errors estimated to be greater than 50 GWh, submit a request, to the Joint Office, for inclusion on the agenda of the next available Offtake Arrangements Workstream or request that an extraordinary Offtake Arrangements Workstream be convened to discuss the issue;
 - For Measurement Errors estimated to be less than 50 GWh, Determine within 21 Business Days of a material update to the Measurement Error Notification Mechanism whether it merits submitting a request to the Joint Office for inclusion on the agenda of the next available Offtake Arrangements Workstream or that an extraordinary Offtake Arrangements Workstream be convened to discuss the issue;
 - If, for every day within the identified error duration, the error represents less than 0.1% of the end of Day quantities measured at that Offtake, then no reconciliation will be made for any day within the error duration and a null report written;
 - Update the Measurement Error Notification Mechanism with the latest available information, at a frequency of at least once every 21 business days.

- The Upstream Party
 - For notified Measurement Errors estimated to be less than 50 GWh, determine within 21 Business Days of a material update to the Measurement Error Notification Mechanism whether it merits submitting a request to the Joint Office for inclusion on the agenda of the next available Offtake Arrangements Workstream or request that an extraordinary Offtake Arrangements Workstream be convened to discuss the issue.
- Users
 - For notified Measurement Errors estimated to be less than 50 GWh, Determine within 21 Business Days of a material update to the Measurement Error Notification Mechanism whether it merits submitting a request to the Joint Office for inclusion on the agenda of the next available Offtake Arrangements Workstream or request that an extraordinary Offtake Arrangements Workstream be convened to discuss the issue.
- Joint Office
 - Create a new record on the Measurement Error Notification Mechanism for any new errors identified by a Downstream Party
 - Update the Measurement Error Notification Mechanism with all updated information supplied by the relevant Downstream Party
 - Track requests for Offtake Arrangements Workstream to be convened on a specific issue and determine where a consensus for a meeting is reached.
 - Convene Offtake Arrangements Workstream meetings to discuss Measurement Error Issues identified by Upstream Party / Downstream Party / Users in accordance with the Chairman's Guidelines including
 - Notification of meetings at least ten Business Days in advance.
 - Agenda publication at least five Business Days in advance.
 - Meetings chaired by the Joint Office
 - Minutes, other relevant papers and presentations published within five Business Days of the meeting.
 - General principles of consensus.
- A request or consent from two (2) or more of the three (3) Parties (Downstream Party, Upstream Party or Users) is required for any issue estimated <50GWh to be submitted to the Joint Office for inclusion on the agenda of the next available Offtake Arrangements Workstream or request that an extraordinary Offtake Arrangements Workstream be convened to discuss the issue (where the next scheduled Offtake Arrangements Workstream is over one calendar month from the date of request).
 - For the purposes of these Guidelines, a request by the User is considered to be where two (2) or more companies who are not affiliates and who are registered as Users determine it to be so.

7. Determination of Significance of Measurement Error and Appropriate Path



In this Section the term “**majority view**” shall mean the agreement of two (2) or more of the following three (3) Parties, or constituencies of Parties.

- The Downstream Party;
- The Upstream Party;
- Two (2) or more companies who are not affiliates and who are registered as Users
- The Upstream Party or Users will:
- If convening Parties, provide an outline justification for requesting submission of potential Measurement Error that is estimated <50GWh to Offtake Arrangements Workstream
- The Downstream Party at the first meeting of Offtake Arrangements Workstream will:
 - Present a report of the Measurement Error to the Offtake Arrangements Workstream including:
 - Background to the Measurement Error;
 - Cause of the Measurement Error; and
 - Estimated impact of the Measurement Error.
 - Where estimated error <50GWh
 - Propose whether the evaluation of the Measurement Error should be undertaken by an “**Independent Technical Expert**” as a SMER or whether a MER should be compiled by the Downstream Party, giving the reasoning behind the approach.
 - Where a majority view is reached that a SMER is required:

- Nominate up to three (3) Independent Technical Experts from **“Listed Independent Technical Experts”** to Joint Office;
 - Upon receipt of the list of nominees, rank nominated Independent Technical Experts in order of preference (1 to n) 1 least favoured, n most favoured, and provide to Joint Office; and
 - Propose appropriate terms of reference (incorporating the **“Generic Terms of Reference”** contained within these Guidelines) for the **“Appointed Independent Technical Expert”** that would undertake the compilation of a SMER.
- The Users present at the first meeting of Offtake Arrangements Workstream will:
 - Where estimated error <50GWh;
 - Propose whether the evaluation of the Measurement Error should be undertaken by an Independent Technical Expert as a SMER (two (2) or more companies who are not affiliates and who are registered as Users must agree) or whether a MER should be compiled by the Downstream Party, giving the reasoning behind the approach.
 - Where the majority view is that a SMER is required;
 - Collectively nominate up to three Independent Technical Experts from Listed Independent Technical Experts to the Joint Office
 - Upon receipt of the list of nominees collectively rank nominated Independent Technical Experts in order of preference (1 to n) 1 least favoured, n most favoured, and provide to Joint Office
 - The Upstream Party at the first meeting of Offtake Arrangements Workstream will:
 - Where estimated error <50GWh:
 - Propose whether the evaluation of the Measurement Error should be undertaken by an Independent Technical Expert as a SMER or whether a MER should be compiled by the Downstream Party, giving the reasoning behind the approach.
 - Where the majority view is that a SMER is required;
 - Nominate up to three Independent Technical Experts from Listed Independent Technical Experts to Joint Office;
 - Upon receipt of the list of nominees, rank nominated Independent Technical Experts in order of preference (1 to n) 1 least favoured, n most favoured, and provide to Joint Office.
 - The Offtake Arrangements Workstream will seek to:
 - Arrive at a majority view, that the Measurement Error will be a SMER compiled by an Independent Technical Expert from the predefined approved list of Independent Technical Experts, or as a MER compiled by the relevant Downstream Party.

- As necessary, arrive at a majority view on the appropriate Independent Technical Experts that should be proposed to compile the SMER from the predefined approved list of Independent Technical Experts
 - Collate list of nominated Independent Technical Experts (n) and provide to Downstream Party, Upstream Party and Users'
 - Collate aggregated scores for nominated Independent Technical Experts and propose the highest scoring Independent Technical Expert (or in the case of a tie, all the highest scoring Independent Technical Experts) to the Offtake Committee for endorsement;
- As necessary, arrive at consensus, or failing this arrive at a majority view on the appropriate terms of reference for the Appointed Independent Technical Expert to compile the SMER.

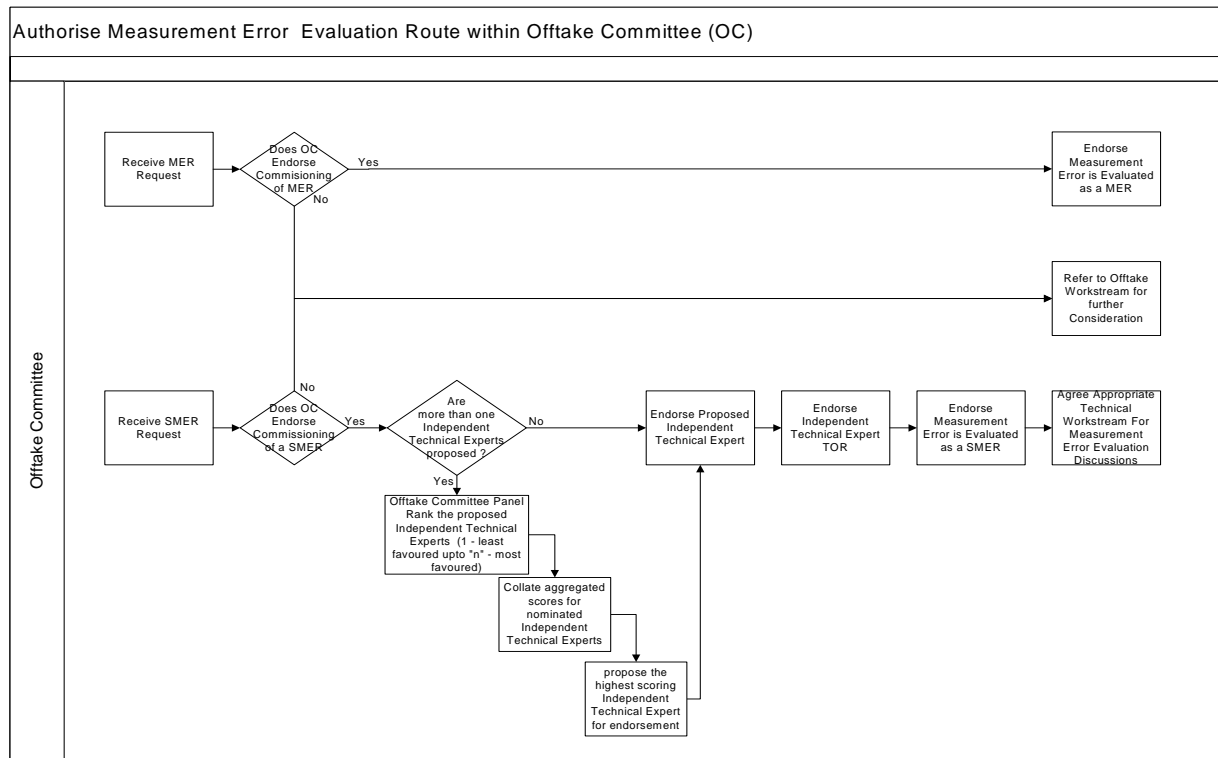
If the Offtake Arrangements Workstream is unable to reach either a consensus or majority view on the terms of reference, the Downstream Party shall submit its recommendations to the Chairman of the Offtake Arrangements Workstream for submission to the Offtake Committee for approval.

- The Chairman of the Offtake Arrangements Workstream will:
 - Make the request to the Offtake Committee to authorise the compilation of a MER; or
 - Make the request to the Offtake Committee to authorise the compilation of a SMER (Including terms of reference and proposed Independent Technical Experts)

A majority view is required for any potential Measurement Error that is estimated to be under 50GWh to be compiled by an Appointed Independent Technical Expert as a SMER.

For clarity it is expected that Measurement Errors of less than 50 GWh will only follow the process for Significant Measurement Errors when it is believed that the Error has the potential on the production of the final Measurement Error Report to be greater than the Significant Measurement Error threshold (50 GWh) or the Error could have significant implications for the industry.

8. Business Rules for the Authorisation of Significance of the Measurement Error by the Offtake Committee



Actions Associated with a Request for a SMER

- The Offtake Committee upon the receipt of a request for a SMER will:
 - Endorse the recommendation for the compilation of a SMER; or
 - Refer to the Offtake Arrangements Workstream for further consideration of the Measurement Error.
- Upon endorsement of a SMER request, the Offtake Committee will:
 - Where more than one Independent Technical Experts are proposed:
 - Rank the proposed Independent Technical Experts from 1-n (1 least favoured, n most favoured) and provide to Joint Office;
 - Collate aggregated scores for nominated Independent Technical Experts from Offtake Committee review; and
 - Propose the highest scoring Independent Technical Expert for endorsement.
 - Endorse the appropriate person as the Appointed Independent Technical Expert;
 - Review the proposed terms of reference and approve terms of reference for use in this SMER; and
 - Establish and authorise the establishment of appropriate technical workstream or sub committee for discussions of this SMER.
- The Downstream Party will:

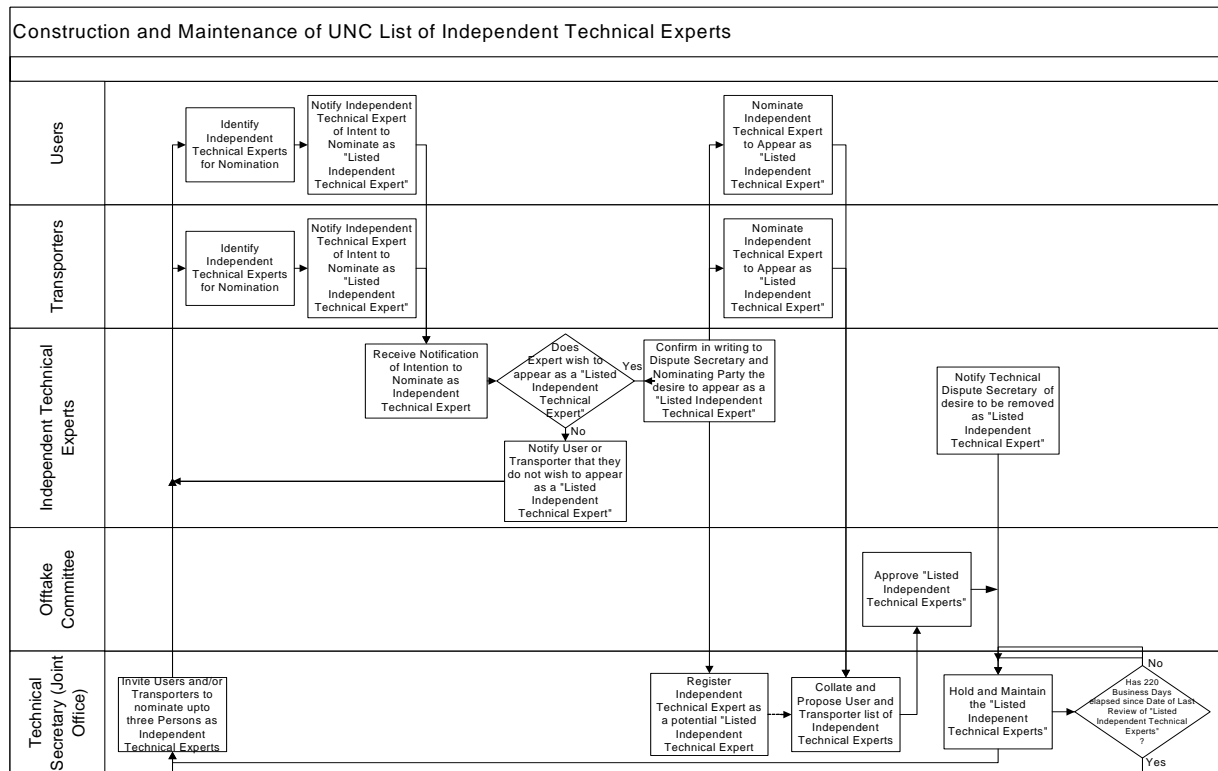
- Invite the endorsed Independent Technical Expert to take up the appointment;
- Where the favoured Independent Technical Expert does not accept the appointment, invite the next most favoured Independent Technical Experts in turn.
- Upon acceptance of appointment, establish the contract with the Independent Technical Expert, including the agreed terms of reference.
 - Upon confirmation that the Independent Technical Expert endorsed by the Offtake Committee is available, has no conflict of interest that prohibits his construction of the SMER and has contracted with the Downstream Party to undertake the construction of the SMER, he will be known as the Appointed Independent Technical Expert.
- Costs
 - Each Party shall bear its own costs including without limitation costs of providing documentation, information, data, submissions or comments, and all costs and expenses of all witnesses and other persons retained by it.
 - The Appointed Independent Technical Expert shall provide the Downstream Party with a breakdown of:
 - His fees; and
 - His reasonable expenses, including the fees of and reasonable expenses incurred by any technical or professional advisers.
 - The Appointed Independent Technical Expert's fees and expenses shall be payable by the Downstream Party
- Conflict Of Interest
 - The Independent Technical Expert shall confirm to the Downstream Party before his appointment that he does not hold any interest or duty which would or potentially would conflict with the performance of his duties under his contract with the Downstream Party.
 - If after his appointment the Appointed Independent Technical Expert becomes aware of any interest or duty which conflicts or potentially conflicts with the performance of his duties under his contract with the Downstream Party, the Appointed Independent Technical Expert shall inform the Downstream Party forthwith of such conflict giving full details thereof.
 - The Downstream Party shall forward any such information to the Joint Office who shall forward this to all Users and Offtake Committee Members as soon as reasonably practicable.
 - Any User or Offtake Committee Member may within 5 Business Days of the disclosure of any such conflict or potential conflict object to the appointment or continued appointment of an Appointed Independent Technical Expert, in which case the Appointed Independent Technical

Expert shall not be or shall cease to be appointed and a new Independent Technical Expert shall be selected and appointed by the Offtake Committee.

Actions Associated with a Request for a MER

- The Offtake Committee, upon the receipt of a request for a MER will:
 - Endorse the recommendation for the compilation of a MER; or
 - Refer to the Offtake Arrangements Workstream for further consideration of the Measurement Error.

9. Framework for Approved List of Independent Technical Experts



- The Joint Office will:
 - Invite all **“Shipper Users”** and **“Transporters”** to nominate up to three (3) persons per meter technology existing on NTS/LDZ or LDZ/LDZ boundaries to act as Independent Technical Experts.
 - Upon receipt in writing of desire of the nominee to appear as a listed Independent Technical Expert, add to register as a proposed listed Independent Technical Expert.
 - Collate the Shipper User and Transporter list of proposed Independent Technical Experts and forward to the Offtake Committee for approval
 - Upon receipt of approved Listed Independent Technical Experts from the Offtake Committee hold and maintain the register of Listed Independent Technical Experts.
 - Undertake review of the Listed Independent Technical Experts register at least annually
- Offtake Committee
 - Upon receipt of proposed list of Independent Technical Experts
 - Endorse, or decline to endorse, appropriateness of expertise; and
 - Agree register of Listed Independent Technical Experts
- Independent Technical Experts

- Confirm in writing to the Joint Office and nominating party the desire to be registered as a Listed Independent Technical Expert, or not;
- Upon desire to withdraw as a Listed Independent Technical Expert, notify the Joint Office of wish to be removed from list.
- Transporters
 - Nominate up to three (3) Independent Technical Experts per meter technology existing on NTS/LDZ or LDZ/LDZ boundaries to appear as a Listed Independent Technical Expert and notify the Joint Office.
- Shipper Users
 - Nominate up to three Independent Technical Experts per meter technology existing on NTS/LDZ or LDZ/LDZ boundaries to appear as a Listed Independent Technical Expert and notify the Joint Office.

Independent Technical Expert List Framework

- Name of Independent Technical Expert;
- Expert organisation;
- Area of expertise (e.g. OPM - Orifice Plate Meters, TM - Turbine Meters, USM - Ultrasonic Meters, Coriolis Meters – CoM, C - Chromatographs);
- Date of first registration;
- Date of last review;
- Renewal date:
 - Auto-populated based 1 Calendar Year from “date of last review”; and
- Associated business rules:
 - List must contain more than one Independent Technical Expert for each area of expertise.

10. Generic Terms of Reference for Appointed Independent Technical Expert

- Compile a SMER using the most appropriate data and methodologies to ensure that as accurate an error assessment of the “**Measured Data**” can be made in an economic and efficient manner reflecting the size of the error.
- The Appointed Independent Technical Expert shall be expected to comply with the terms of reference defined for the Specific Measurement Error.
- The Appointed Independent Technical Expert shall be expected to provide at least monthly updates to the technical workstream or sub committee, authorised to discuss the relevant Measurement Error. This update will include a summary of developing methodologies, technical issues identified (all received within five (5) Business Days of the meeting to be reviewed), relevant queries raised, data requests submitted and evidence requested.
- The Appointed Independent Technical Expert will determine and consider which, if any, “**Technical Measurement Issues**” submitted will have a material effect on any critical data item connected with the identified Measurement Error. For all such issues, the Appointed Independent Technical Expert will evaluate their contributions to the determination of the magnitude of error in the Measured Data.
- The decision as to the most appropriate methodologies and data will rest solely with the Appointed Independent Technical Expert taking account of any Technical Measurement Issues raised during the development and compilation of the SMER.
- The decision as to when the SMER is a robust technical evaluation of the magnitude of error in Measured Data will rest solely with the Appointed Independent Technical Expert
- The Appointed Independent Technical Expert will present, in draft form, to the authorised technical workstream or sub committee the SMER and will review all the Technical Measurement Issues identified.
- The Appointed Independent Technical Expert will determine what data is required from the relevant Transporters in order to ensure appropriate data supports the evaluation of the error in the Measured Data.
- The Appointed Independent Technical Expert will determine what supporting evidence is required from the relevant Transporters in order to support the appropriate methodologies and data in the evaluation of the error in Measured Data.
- The Appointed Independent Technical Expert will determine what relevant questions should be submitted to the relevant Transporters in order to ensure appropriate methodologies and data are used in the evaluation of error in Measured Data.

- The Appointed Independent Technical Expert will provide the final SMER to the Downstream Party in the following template for publication.
 - Executive Summary;
 - Site name;
 - DNO;
 - LDZ;
 - Error start date;
 - Error corrected date;
 - Size of error (over or under read);
 - Error description;
 - Meter type.
 - MER/SMER Unique Reference Number;
 - Compiled by;
 - Error Description;
 - Methodology; and
 - Error quantification

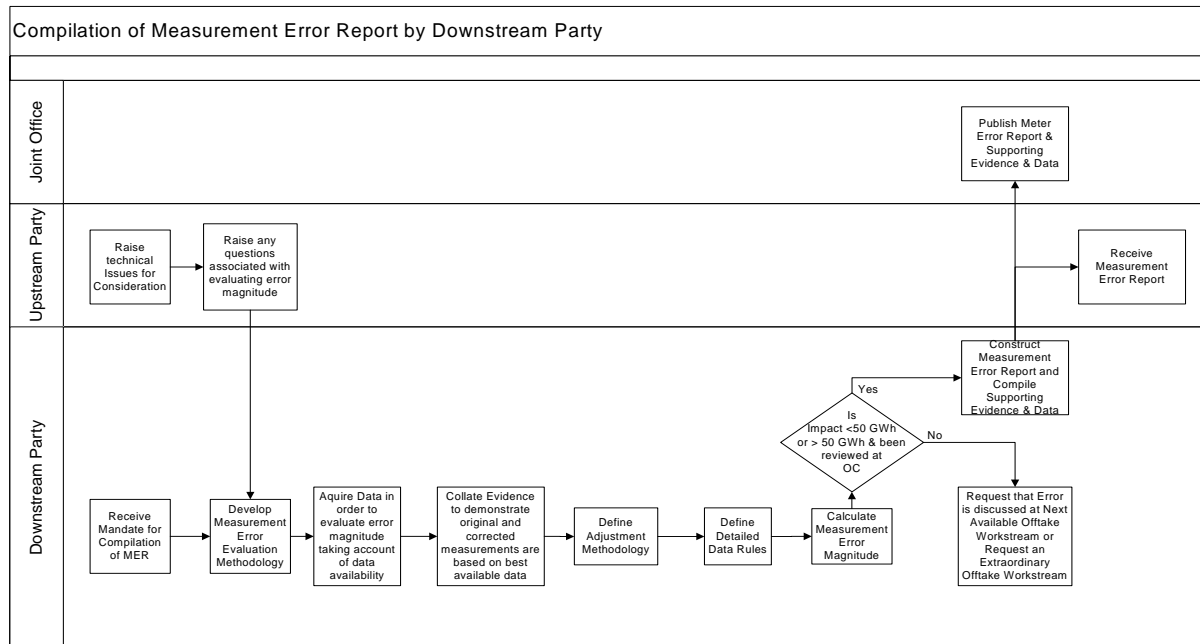
11. Framework for the Technical Workstream or Sub Committee Meeting

- Appointed Independent Technical Expert
Provide update on measurement issue;
Review Technical Measurement Issues raised up to five Business Days prior to the Technical Workstream or Sub Committee Meeting on the “**Technical Measurement Issues Log (TMIL)**” in the meeting; and
Make decision on requirement for further meeting prior to producing SMER.
- Users
 - Submit Technical Measurement Issues to the Joint Office that may impact a critical data item impacted by the identified Measurement Error.
- Transporters
 - Submit Technical Measurement Issues to the Joint Office that may impact a critical data item impacted by the identified Measurement Error.
- Joint Office
 - Capture Technical Measurement Issues on the TMIL

12. Framework for Final Meeting where Appointed Independent Technical Expert in Conjunction with the Downstream Party Presents Methodology and Data Employed in SMER

1. Provide overview of methodology used in calculation of revised measurements;
2. Present data rules employed in calculation of revised measurements;
3. Review all items on TMIL and reasons for accounting for / discounting; and
4. Present corrected readings.

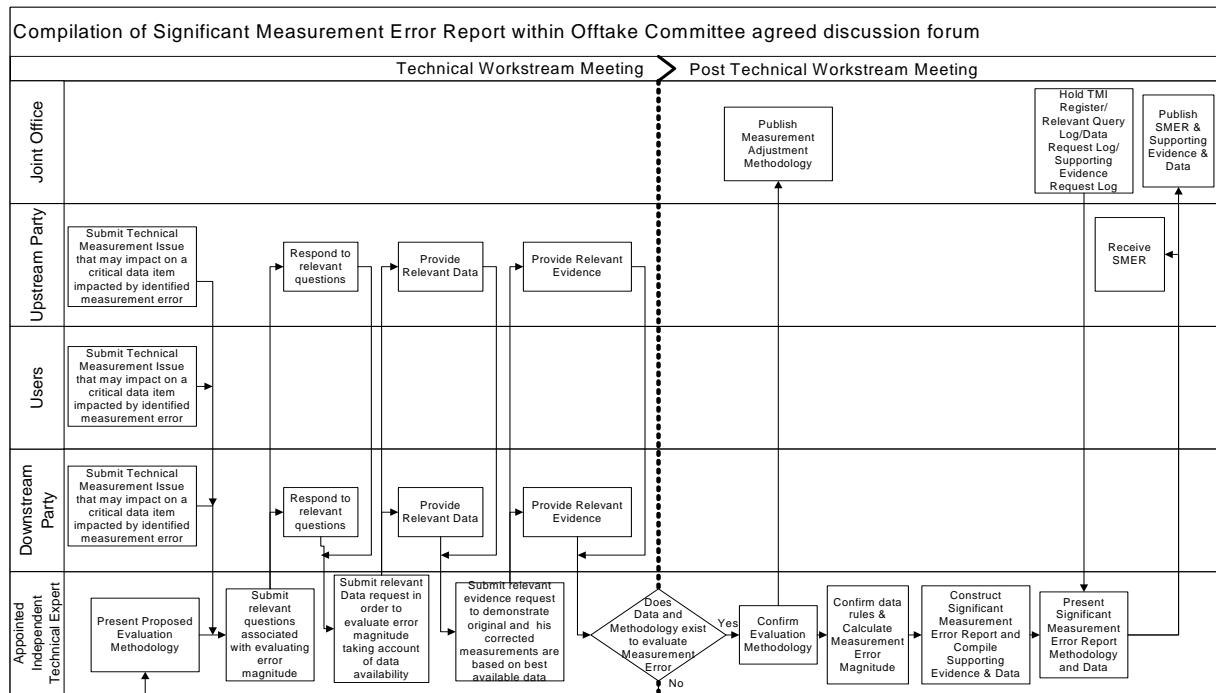
13. Business Rules for the Compilation of a MER



- The MER
 - Is compiled by the Downstream Party;
 - All data and evidence gathered in order to compile the MER will be construed to be auditable records;
 - Will define the magnitude of the Measurement Error for every Day within the error period; and
 - Will give the total net error magnitude as a volume and will specify if it represents an over or under registration.
- The Downstream Party will:
 - Define the technical methodology to derive a robust evaluation of the magnitude of Measurement Error that is economic and efficient;
 - Be responsible for undertaking the calculation of the Measurement Error in accordance with the technical methodology, to the appropriate tolerances and in accordance with the defined data rules;
 - Define the data requirements for accurate evaluation of the error magnitude;
 - Define the evidence required to demonstrate that the original and corrected measurements are based on the best available data;
 - Define the duration of the Measurement Error period;
 - Be required to provide detailed data rules;
 - Be responsible for acquiring the data for the evaluation of the error magnitude in a timely manner
 - is required to acquire the evidence to demonstrate that the original and corrected measurements are robust in a timely manner; and

- Provide the Joint Office of Gas Transporters with the completed MER
- The Upstream Party will:
 - Be required to notify to the Downstream Party of any technical issues that may impact upon the methodology or data to be employed in the evaluation of the error, in a timely manner;
 - Be required to provide the Downstream Party with any reasonable data required in order to evaluate the Measurement Error; and
 - Receive the Measurement Error Report.
- The Joint Office will:
 - Be required to publish Measurement Error Reports notified to them by the Downstream Party.

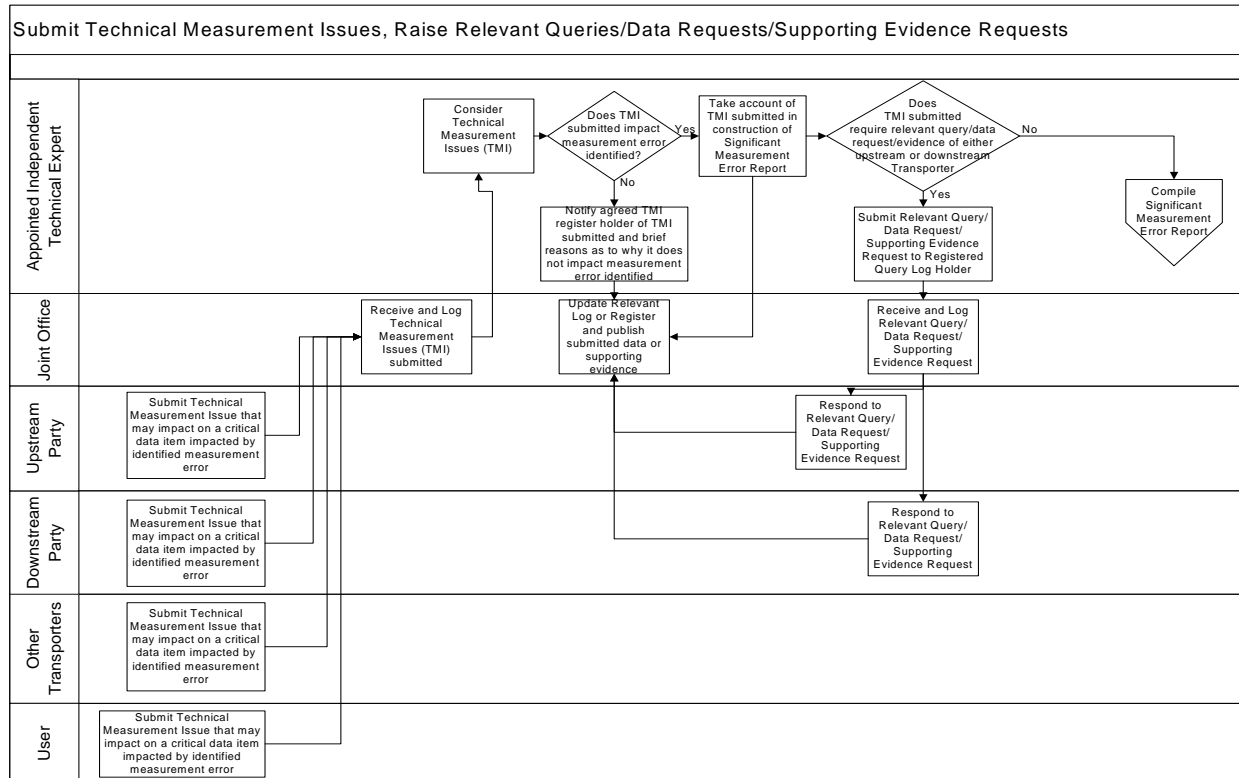
14. Business Rules for the Compilation of a SMER



- The SMER:
 - Is compiled by the Appointed Independent Technical Expert approved by the Offtake Committee;
 - All data and evidence required by the Appointed Independent Technical Expert in order to compile the SMER will be construed to be auditable records;
 - Will define the magnitude of the Measurement Error for every Day within the Measurement Error period; and
 - Will give the total net Measurement Error magnitude as a volume and will specify if it represents an over or under registration.
- Effect of Determination:
 - The Appointed Independent Technical Expert's final determination shall (unless given after the appointment of another expert) be final and binding on the Parties except in the event of fraud or where the Offtake Committee considers it is so clearly erroneous on its face that it would be unconscionable for it to stand, in which case another Independent Technical Expert may be appointed.
 - Except as provided in the paragraph above, no Party shall commence proceedings in respect of or refer to any court any finding by the Appointed Independent Technical Expert, whether made at any time after his appointment or in his determination
- The Appointed Independent Technical Expert will:

- Define the technical methodology to derive a robust evaluation of the magnitude of Measurement Error that is economic and efficient;
- Define the data requirements for accurate evaluation of the Measurement Error magnitude;
- Be required to provide detailed data rules;
- Define the evidence required to demonstrate that the original and corrected measurements are based on the best available data;
- Define the duration of the Measurement Error period;
- Be responsible for applying the defined methodology and data rules to quantify the Measurement Error;
- Present proposed evaluation methodology to the technical workstream or sub committee authorised by the Offtake Committee; and
- Review all technical measurement issues raised.
- The Downstream Party will be:
 - Responsible for providing the data requested by the Appointed Independent Technical Expert for the evaluation of the Measurement Error magnitude in a timely manner;
 - Required to provide the evidence the Appointed Independent Technical Expert has requested to demonstrate that the original and corrected measurements are robust in timely manner; and
 - Required to answer technical questions raised by the Appointed Independent Technical Expert associated with the evaluation of the Measurement Error.
- The Upstream Party will be:
 - Required to notify the Appointed Independent Technical Expert of any technical issues that may impact upon the methodology or data to be employed in the evaluation of the Measurement Error in a timely manner;
 - Responsible for providing the data requested by the Appointed Independent Technical Expert for the evaluation of the Measurement Error magnitude in a timely manner; and
 - Required to answer technical questions raised by the Appointed Independent Technical Expert associated with the evaluation of the Measurement Error.
- Users will be:
 - Required to notify the Appointed Independent Technical Expert of any technical issues that may impact upon the methodology or data to be employed in the evaluation of the Measurement Error in a timely manner.
- The Joint Office will be:
 - Required to publish evaluation methodologies and SMERs sent to them by the Appointed Independent Technical Expert.

15. Framework for Technical Issues, Relevant Queries, Data Requests and Supporting Evidence Requests



Technical Measurement Issue Framework

- Submitting Party;
- Submitting Party contact details;
 - Name;
 - Business number;
 - Mobile number;
 - Email address; and
 - Fax number.
- Technical measurement issue description;
- Anticipated impact on critical data item used in evaluation of Measurement Error magnitude; and
- Date of submission

Technical Measurement Issue Log

- Unique “Query Issue ID”;
- Submitting Party;
- Submitting Party contact details;
 - Name;
 - Business number;

- Mobile number;
- Email address; and
- Fax number.
- Technical Measurement Issue description;
- Anticipated Impact on critical data item used in evaluation of Measurement Error magnitude;
- Date of submission;
- Technical Measurement Issue status (accepted by Appointed Independent Technical Expert, rejected by Appointed Independent Technical Expert);
- Rejection Reason (brief narrative of reason why submitted Technical Measurement Issue would not materially impact the error assessment); and
- Date of Rejection.

Appointed Independent Technical Expert Relevant Query Framework

- Date query submitted;
- Linkage to previous queries raised;
- Target Party for query (Upstream Party and/or Downstream Party); and
- Nature of query (a technical measurement question associated with the Measurement Error identified at the relevant measurement station which may impact the evaluation of Measurement Error).

Appointed Independent Technical Expert Relevant Query Log

- Unique “**Query ID**”;
- Date query submitted;
- Linked Query IDs;
- Target Party for query (Upstream Party and/or Downstream Party);
- Nature of query;
- Query Response;
- Query status (query submitted, awaiting response, responded); and
- Date of query response.

Appointed Independent Technical Expert Data Request Framework

- Date data request submitted;
- Linkage to previous data requests raised;
- Target Party for data request (Upstream Party and/or Downstream Party);
- Data requested (technical measurement data associated with the Measurement Error identified at the relevant measurement station which may impact the evaluation of Measurement Error); and
- Required data format.

Appointed Independent Technical Expert Relevant Data Request Log

- Unique “**Data Request ID**”;
- Date data request submitted;
- Linked Data Request IDs;
- Target Party for the data request (Upstream Party and/or Downstream Party);
- Data requested;
- Data request status (data request submitted, awaiting response, retrieving data, data supplied and published, data unavailable);
- Anticipated data acquisition date (for data request status ‘retrieving data’ only);
- Data availability reason (for data request status ‘retrieving data’ and ‘data unavailable’); and
- Date of data supply.

Appointed Independent Technical Expert Supporting Evidence Request Framework

- Date supporting evidence request submitted;
- Linkage to previous supporting evidence requests raised;
- Target Party for supporting evidence request (Upstream Party and/or Downstream Party); and
- Supporting evidence requested (technical supporting evidence which supports the evaluation of the Measurement Error)

Appointed Independent Technical Expert Supporting Evidence Request Log

- Unique “**Supporting Evidence Request ID**”;
- Date supporting evidence request submitted;
- Linked Supporting Evidence Request IDs;
- Target Party for the supporting evidence request (Upstream Party and/or Downstream Party);
- Supporting evidence requested;

- Supporting evidence request status (supporting evidence request submitted, awaiting response, supporting evidence supplied and published, supporting evidence unavailable);
- Supporting evidence unavailable reason; and
- Date of supporting evidence supply.

16. Publication of Evaluation Methodology for SMER

- The Appointed Independent Technical Expert will:
 - Provide the evaluation methodology for a SMER for publication.
- The Joint Office will:
 - Publish the evaluation methodology for a SMER on the Joint Office website.

17. Publishing SMERs

- The Appointed Independent Technical Expert will:
 - Provide the SMER for publication in the appropriate template in accordance with the terms of reference.
- The Downstream Party will:
 - Ensure the publication of the SMER.
- The Joint Office will:
 - Publish the SMER on the Joint Office website.

18. Publishing MERs

- The Downstream Party will:
 - Provide the MER for publication.
- The Joint Office will:
 - Publish the MER on the Joint Office website.

Appendix 2

Review Group Report **Review Proposal Reference Number 0131** **LDZ RbD Reconciliation Notification Process** **Version 1.0**

This Review Group Report is presented for the UNC Modification Panel's consideration. The consensus of attendees at the Review Group was that the UNC should be modified to introduce a new UNC Related Document, which would be subject to the governance provisions set out in Section V.12 of the Transportation Principal Document. This document would set-out the processes for notification to Users of "faults" or "Measurement Errors" identified in Measurement Equipment. In addition, the UNC should be modified to adjust the role of the Offtake Committee, so that it provides authority to the forum where the Relevant Transporter(s) discuss Measurement Equipment Errors with Users prior to the finalisation of Significant Measurement Error Evaluations. 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 Users were present. The Review Group discussions centred around the concept of a "Significant Meter Error Report" for measurement errors from systematic biases over 50 GWh. It was agreed that this would be a binding technical assessment, compiled by an agreed independent technical expert, of the magnitude of the measurement error which would not be open to dispute. This was to ensure that the process was efficient, removing the need to go to expert determination on the technical assessment.

1 Review Proposal

EDF Energy raised Review Proposal 0131, for which the Terms of Reference are in Appendix 1.

2 Review Process

In accordance with the Modification Rules, at its meeting on 15 February 2007, the Modification Panel determined that this Review Proposal should be referred to a Review Group for progression. This Review Report was subsequently compiled by the Joint Office of Gas Transporters, and approved by Review Group attendees.

3 Areas Reviewed

The Review Group discussions focussed on the following areas:

a) Governance of the Notification Process

i) Current 0643 Process

Currently the process followed is known as the "LDZ RbD Reconciliation Notification Process". This was the output from the Transco Network Code Review Group 0643 *"To Review the Network Code rule on withholding of Energy payments under dispute and to consider circumstances where Withholding of Energy Charge is appropriate."* Whilst no Code Modification resulted from this Review, an agreed procedure was established for identification and reporting of Measurement Equipment errors and for consultation with RbD Shippers, when specific thresholds were crossed.

The forum for discussion was the Billing Operations Forum, which despite DN Sales, still exists, but is now chaired by xoserve on behalf of the Transporters. As there is no reference to this process within the UNC it can be thought of as informal but the original commitment by National Grid Transco to operate the process has been adopted by the current UNC Transporters.

One weakness of this process identified by the Review Group is that it is initiated by the publication of a final Meter Error Report – it was agreed that discussions on specific Measurement Equipment errors prior to completion of the Meter Error Report would be valuable. It was also agreed that for Measurement Errors that were defined as significant this Meter Error Report should be compiled by an independent technical expert to provide assurance to the industry of the accuracy of this Meter Error Report.

ii) Principles of Governance

The Review Group agreed that the 0643 process should be replaced with a more transparent process facilitating greater discussion prior to the completion of the Meter Error Report. This would initially revolve around transparency of all measurement errors and extend to the processes to be adopted when a significant measurement error greater than the threshold value of 50GWh was identified. The principles underlying these stages would be:

- Under UNC Governance
- Written guidelines.
- The Significant Meter Error Report to be compiled by an independent expert selected by the Offtake Committee
- Consultation with affected Users prior to the finalisation of the Significant Meter Error Report
- Routine reporting of Measurement Equipment errors at NTS to LDZ Offtakes and at LDZ to LDZ Transfer Meters
- Defined thresholds for initiating Significant Meter Error Reports
- Rights of Transporters and affected Users to initiate/request consultation of Significant Measurement Errors

iii) Governance

The Review Group considered two means by which the agreed principles could be codified as guidelines and integrated into the UNC.

(1) Incorporating guidelines into the UNC. The guidelines would form part of the legal text of a Modification Proposal, which would be subject to the usual consultation process under the Modification Rules prior to implementation and consequent incorporation of the guidelines into the UNC. Subsequent amendments would require implementation of separate UNC Modification Proposals.

(2) Draw up guidelines as a UNC Related Document. This would involve a much simpler UNC Modification Proposal seeking to require the production and publication of an ancillary document which would contain the guidelines. As for other documents, the UNC Committee would be responsible for

agreeing any amendments to the guidelines which may be proposed by Users or Transporters.

The Review Group agreed that option (2) provided appropriate governance.

It was recognised that a number of Measurement Equipment errors should not trigger formal consultation and this principle lay behind the thresholds that had been set as part of the 0643 considerations. However, Group Members saw the value of the Transporters instituting a summary spreadsheet for all Measurement Equipment errors to be located on the Joint Office of Transporters website. This would give details of location, estimated duration of the error, brief description of error cause, key dates and estimated impacts. This was agreed in principle by the Transporter Members.

The Review Group agreed that a committee constituted under the UNC would be the appropriate forum for the Transporters to discuss, with affected Users who may be interested, Measurement Equipment errors with a greater impact than the agreed threshold. As the Offtake Committee is already constituted under UNC and has a responsibility for approving the Validation Procedures, it was agreed that this Committee be approached to ask whether it would take on this role.

The Joint Office convened a meeting of the Offtake Arrangements Workstream to discuss this aspect and, after discussion, agreed to recommend this extension of the Offtake Committee role. This was subsequently agreed by the Offtake Committee that met immediately afterwards and a verbal report to this effect was given to the May 2007 Uniform Network Code Committee.

Transporter members of the Review Group emphasised that, under the UNC, the membership of the Offtake Committee is limited to the five Transporters but in practice the Offtake Workstream which is governed by the Modification Panel has met openly. It was agreed that, as the purpose of any meetings would be information sharing with Users, there was no need to modify the rules of membership. It was also agreed that whilst the meeting would formally be under the governance of the Offtake Committee, a sub-committee meeting of relevant experts would often be the best way of progressing matters. It was agreed that a sub-committee would only be quorate where at least two Transporters (one upstream and one downstream) and two Shippers were present.

The Review Group agreed that the current Chairman's Guidelines operated by the Joint Office would provide sufficient governance for the meetings themselves including:

- Notification of meetings at least ten Business Days in advance.
- Agenda publication at least five Business Days in advance.
- Meetings chaired by the Joint Office
- Minutes, other relevant papers and presentations published within five Business Days of the meeting.
- General principles of consensus.

The Review Group agreed that for measurement errors over the agreed threshold and hence deemed as "Significant", an independent technical expert should be employed to calculate the Significant Meter Error Report upon which the reconciliation would be based. It was agreed that this could simplify the process of

compiling a Significant Meter Error Report and avoid the requirement for expert determination on this report, thereby reducing costs for Transporters. It was also agreed that to ensure the independence of the technical expert and so the Significant Meter Error Report, the Offtake Committee should be responsible for compiling a list of appropriate independent technical experts, and should also be responsible for appointing the expert to conduct the Significant Meter Error Report.

b) Trigger Values

Transporter Members outlined to the Review Group the potential difficulties of adopting a strict trigger for the Notification Process. Precise financial impacts are not known until the Meter Error Report has been finalised and the RbD process run.

Shipper members of the Review Group explained that they would be prepared to accept the principle of convening a meeting of the Offtake Committee if Transporters' estimates indicated that the energy threshold was likely to be approached or crossed. On the basis of these assurances, the Transporters agreed to this principle.

The original notification of the Measurement Equipment Error to the Joint Office will occur as soon as a Transporter becomes aware that corrected meter readings may be required. The Significant Measurement Equipment Error notification process would commence as soon as a Transporter believed that in their opinion the 50GWh threshold would be breached.

In addition, it was recognised that there could be circumstances where a meeting should take place even where the threshold was not approached. It was therefore agreed that one or more of the relevant Transporters, or two or more affected Shippers, could request that a meeting takes place.

4 Implementation

- The Review Group considers that, on the basis of the consensus already achieved, the Transporters can implement the publication of a Measurement Error spreadsheet on the Joint Office website without the need of a Modification Proposal

In terms of the UNC process, the Transporters wished for the Business Rules to be approved by the Offtake Workstream prior to raising the Modification Proposal however Shippers were concerned and requested that this must be completed by 15 November 2007. Shippers reminded the workgroup that a Shipper Modification Proposal could be raised for the November Panel Meeting.

A draft of potential guidelines and process flow diagrams as developed so far and available on the Joint Office Website to aid the development of the Business Rules).

5 Recommendations

The Modification Panel is invited to accept this report and the recommendations that:

1. No further work is required in respect of the Review Proposal
2. A Modification Proposal should be raised to institute "Meter Error Notification Guidelines" as a UNC Related Document and to adjust the role of the Offtake Committee so that it can oversee the operation of these guidelines. The guidelines will form part of the Modification Proposal Consultation Process.
3. It is also recommended that the UNC Committee be asked to consider and approve the Guidelines which would form the UNC Related Document. Formal

implementation of the Proposal could then be either immediately following direction by the Authority if the guidelines had been agreed at the UNC Committee, or immediately after the date of a subsequent UNC Committee meeting at which the document was approved.

Appendix 1 Terms of Reference

Purpose

A Uniform Network Code Review Group is required to review the current UNC arrangements in respect of the LDZ RbD Reconciliation Notification Process.

Background

There has been a number of very large adjustments applied through LDZ Reconciliation in recent years. The notification process for large reconciliations has been followed on at least two occasions and a review is proposed to consider if this process could be more equitable and flexible.

Under the current arrangements when an LDZ RbD Reconciliation is proposed that is the greater of 50 GWh or £1m then the LDZ RbD Reconciliation Notification Process identified in the Transco Network Code Modification Proposal 0643 is followed. However this process was not incorporated into either Transco's Network Code or the Uniform Network Code, and so therefore has no legal authority or requirements. Further the process has not been updated to reflect the industry post DN sales, and so there is no concept of Transporters other than National Grid Transco.

It is further clear from recent experiences that the notification process is designed for specific circumstances and provides no flexibility to accommodate complex issues that require significant amounts of analysis and appraisal. It is therefore proposed that the Review identifies the appropriateness of this notification process, the issues that need resolving and the appropriate Governance arrangements for the notification process. It is envisaged that the results of the Review should be to identify a notification process that is acceptable to all of the industry.

Scope

Identifying and considering high level options for regime change which could better meet the aspirations of the industry.

Deliverables

The Group is asked to consider:

1. What the Governance of any notification process should be.
2. What the trigger for the start of the notification process should be, including what event should start the notification process and what the threshold for the notification process should be.
3. Who the participants in a notification process should be, and what their rights/obligations should be.
4. Who should be responsible for facilitating and co-ordinating the notification process.
5. What form the notification process should take including duration, information provision, discussion and resolution.
6. Any other issues not identified that relate directly to the LDZ RbD Notification Process.

A Review Group Report will be produced containing the findings of the Review Group in respect of the work identified above.

Limits

The Review Group will consider potential changes to the Uniform Network Code. The Review Group will not concern itself with:

- Detailed changes required to processes and procedures
- Detailed changes required to existing systems
- Development of detailed business rules

Composition

The Review Group will comprise the following representation

Name	Organisation
Julian Majdanski (Chair)	Joint Office
Helen Cuin (Secretary)	Joint Office
Stefan Leedham (Proposer)	EDF Energy
Alan Raper	National Grid Distribution
Alex Travell	E.ON UK
Alison Jennings	National Grid Distribution
Brian Durber (alternate to Alex Travell)	E.ON UK
Christian Hill	RWE npower
Claire Thorneywork	National Grid NTS
Denis Aitchison	Scotia Gas Networks
Graham Wood	British Gas Trading
Joel Martin	Scotia Gas Networks
Jon Dixon (alternate to Ndidi Njoku)	Ofgem
Marie Clark	Scottish Power
Ndidi Njoku	Ofgem
Richard Wilson	NTS Shrinkage Provider
Rob Cameron-Higgs	Northern Gas Networks
Simon Trivella	Wales & West Utilities
Steve Pownall	National Grid Transmission
Tim Davis	Joint Office

A Review Group meeting will be quorate provided at least 2 Transporter and 2 User representatives are present.

Timetable

It is proposed that a total period of 6 months be allowed to conclude this review.

Note:

- Frequency of meetings – monthly. The frequency of meetings will be subject to review and potential change by the Review Group.
- Meetings will be administered by the Joint Office and conducted in accordance with the Chairman's Guidelines.