

Stage 03: Draft Modification Report

0489:

EU Gas Balancing Code - Information Provision changes required to align the UNC with the EU Code

At what stage is this document in the process?



This modification seeks to facilitate compliance with European legislative changes via:

- a) implementation of an additional Non Daily Metered Allocation (NDMA) forecast at 12:00
- b) introducing the production of an accuracy report in relation to NDMA forecasts
- c) amending the timing of the provision of Initial Allocation Data to D+1



Panel consideration is due on 21 August 2014



Low Impact: Shippers, DNOs, Xoserve, National Grid NTS

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About this document:

This Final Modification Report will be presented to the Panel on 21 August 2014.

The Authority will consider the Panel's recommendation and decide whether or not this change should be made.



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1 Summary

Is this a Self-Governance Modification?

The Modification Panel determined that Self-Governance was not appropriate as a consequence of implementation there is likely to be a material impact from the proposal on commercial contracts relating to the shipping and transportation of gas and the proposed information provision model completed by these changes has to be approved by the National Regulatory Authority (NRA).

Why Change?

The Commission Regulation (EU) No 312/2014 - Network Code on Gas Balancing of Transmission Networks (the "Balancing Code") sets out the information to be provided by Transmission System Operators (TSOs) to Users and the corresponding requirements of the TSO, distribution system operator (DSO) and forecasting party. Most of the articles within the information provision chapter of the EU Code have no impact on the GB regime, however there are a few minor changes required.

There is a requirement for National Grid Transmission (as the TSO) to provide Shippers with: a forecast of their non daily metered offtakes for gas day D-1 no later than 12:00; a report on the accuracy of the non daily metered forecasts which shall be published at least every two (2) years. (Article 42); and to provide allocation data to Users before the end of the 1st day after the gas day (D+1).

Solution

It is proposed that:

- An additional NDMA forecast is created for publication by D-1 12:00.
- A requirement is created for National Grid Transmission to provide an NDMA Accuracy Report.
- The timing stated in UNC section E1.6.2 is changed to provide the initial allocation data before the end of the 1st day after the gas day (it should be noted that the allocation data is already provided to Users by the end of the 1st day after the gas day even though the UNC currently states the 2nd day).

Relevant Objectives

g) Compliance with the Regulation and any relevant legally binding decisions of the European Commission and/or the Agency for the Co-operation of Energy Regulators

This modification will facilitate compliance with European legislative requirements contained within the Balancing Code, Chapter VIII Information Provision.

Implementation

No implementation timescales are proposed, however the Balancing Code will apply from 1st of October 2015 and therefore it is proposed these changes need to be implemented by this date.

2 Why Change?

The Balancing Code sets out the information to be provided by TSOs to Users and the corresponding requirements of the TSO, DSO and Forecasting Party. In the context of the GB regime Distribution Network Operators (DNOs) are the DSOs and National Grid Transmission performs the role of the forecasting party but discharges its obligations via its Agent (Xoserve).

It is its view that National Grid Transmission provides most of the information required by the European code (base case model) and in some areas National Grid Transmission provides information beyond that required to assist Users in balancing their portfolio. As a result the GB regime is already compliant with the majority of the articles within the information provision chapter of the Balancing Code; however there are a few minor changes required.

A copy of Chapter VIII Information Provision of the Balancing Code can be found in Appendix 1.

2.1 Non daily metered forecasts

In order to become compliant with the requirements of the Balancing Code, there is the requirement for National Grid Transmission (as the TSO) to provide Users:

- with a forecast of their non daily metered offtakes for gas Day D-1 no later than 12:00; and
- provide a minimum of two updates during the gas Day D, which we already comply with.

Whilst the non daily metered derived forecast is not defined in the Balancing Code, Article 36 states that the “methodology for the forecast of a network user’s non daily metered off-takes shall be based on a statistical demand model, with each non daily metered off-take assigned with a load profile, consisting of a formula of the variation in gas demand versus variables such as temperature, day of week, customer type and holiday seasons”.

Within UNC the equivalent of a non daily metered forecast is the Non Daily Metered Allocation (NDMA) and the corresponding information is set out as follows:

- *H 5.2.2 A "Short Term Demand Model" is a mathematical model established by the Transporters on the basis of historic demand and other data, which estimates (at a given time) for an LDZ and the Total System and for any Day demand, by reference to data including:*
 - (a) forecasts of temperature and wind speeds for the Gas Flow Day or the remainder thereof;*
 - (b) recorded temperature and wind speeds for the Preceding Day and (where relevant) the Gas Flow Day up to the time of forecasting; and*
 - (c) actual demand (assessed by reference to gas flows at NTS/LDZ Offtakes adjusted for estimated changes in LDZ stock) for the Preceding Day and (where relevant) the Gas Flow Day up to the time of forecasting.*
- *H 5.2.3 The Transporter will notify demand under paragraph 5.2.1 after receipt of weather data under paragraph 5.1.1 not later than the following times: 14:00, 18:00 hours, and 02:00 hours on the Preceding Day and 12:00 hours, 15:00 hours, 18:00 hours, 21:30 hours and 02:00 hours on the Gas Flow Day.*

The table below compares the current NDMA publication and system run times against the requirements specified in the Balancing Code.

UNC NDMA times (required by time)	Current NDMA Run Time	Balancing Code Time	Compliant
D-1: 14:00	D-1: 13:05	D-1: 12:00	No
D-1: 18:00	D-1: 16:00		
D-1: 02:00	D-1: 00:00		
D: 12:00	D: 10:00	D: 13:00 (Latest)	Yes
D: 15:00	D: 13:00	2 nd to be agreed with NRA	Yes
D: 18:00	D: 16:00		Yes
D: 21:30	D: 20:45		Yes
D: 02:00	D: 00:00		Yes

The table above confirms that a NDMA is not currently provided by D-1 12:00 and will need to be added to achieve compliance. However, sufficient updates are provided within the gas day to satisfy the remaining EU requirements in this area. It should be noted that under the Balancing Code the Nominations process at Interconnection Points (IPs) will commence at D-1 13:00 and this is a key driver for the additional forecast at 12:00.

It should also be noted that the Balancing Code places an obligation on the distribution system operators and forecasting party(-ies) to provide the necessary data to enable the forecast to be published by the TSO. However, the current solution being proposed does not require any additional data to be provided by the DSOs.

Before raising this proposal National Grid considered the following options;

- **Option 1** – Keeping the existing UNC D-1 14:00 publication time AS IS and adding an additional NDMA publication time at D-1 12:00.
- **Option 2** – Moving the existing UNC D-1 14:00 NDMA publication time to 12:00 hours.
- **Option 3** - Moving all NDMA publication times with the first one starting at D-1 12:00 hours

Having considered the pros and cons of these options (which were shared at the December Transmission Workgroup) the proposer believes Option 1 is the solution which offers the least impact on systems.

2.2 NDMA Accuracy Report

The Balancing Code also places an obligation on National Grid Transmission to produce a report on the accuracy of the forecast of a network user’s non daily metered offtakes, which shall be published at least every two (2) years (Article 42.3).

National Grid Transmission suggested the report obligation is intended to cover the accuracy of all Network Users non daily metered off-takes and that the report would be more beneficial if it is published at a more regular frequency rather than every 2 years.

2.3 Initial Allocation

The Balancing Code requires that “no later than the end of gas day D+1, the TSO shall provide each network user with an initial allocation for it’s inputs and off-takes on day D and an initial daily imbalance quantity”.

As a result a change is required to the timing stated in E1.6.2 to provide the allocation data before the end of the 1st day after the gas day rather than the 2nd day after the gas day as currently stated in the UNC. It is not believed that any system changes are required as this information is already provided in line with Balancing Code timings.

3 Solution

In summary it is proposed that:

- An additional NDMA forecast is published by D-1 12:00, we propose that a default NDMA forecast methodology is also defined and utilised in the event that the current or any future methodology is unable to produce the forecast due to missing data items, etc.
- A requirement is created for National Grid Transmission to provide an NDMA Accuracy Report.
- The timing stated in E1.6.2 is changed to provide the initial allocation data before the end of the 1st day after the gas day,

See below for further details of the exact proposal.

3.1 Non daily metered forecasts

It is proposed that an additional NDMA forecast is published by D-1 12:00.

With Project Nexus implementation in mind, it is not proposed that any of the existing NDMA linked processes are required to provide data earlier than currently being provided. We propose that a default NDMA forecast methodology is defined and utilised in the event that the current or any future methodology is unable to produce the forecast due to missing data items, etc.

Default NDMA forecast methodology – use best available data to replace any missing data items.

3.2 NDMA Accuracy report

In relation to the NDMA Accuracy Report National Grid Transmission proposes the following:

- An NDMA Accuracy Report should be published annually for each Gas Year and consist of the following:
 - 12-months of total system data showing a daily comparison of NDMA forecasts to the D+1 and D+5 (final) allocations
 - The NDMA forecasts to be compared are those published by D-1 14:00, D 12:00 and D 18:00
 - A high level commentary of the relevant information
- It is proposed that the NDMA Accuracy Report is published by National Grid Transmission within 3 months after the end of each Gas Year

3.3 Initial Allocation

It is proposed that the timing stated in E1.6.2 is changed to provide the initial allocation data before the end of the 1st day after the gas day.

User Pays
Classification of the modification as User Pays, or not, and the justification for such classification.
This modification is not user Pays as no service is created or amended.
Identification of Users of the service, the proposed split of the recovery between Gas Transporters and Users for User Pays costs and the justification for such view.
Not applicable
Proposed charge(s) for application of User Pays charges to Shippers.
Not applicable
Proposed charge for inclusion in the Agency Charging Statement (ACS) – to be completed upon receipt of a cost estimate from Xoserve.
Not applicable

This modification seeks to amend the UNC to comply with the Commission Regulation (EU) 312/2014 delivery into the GB gas regime. It is part of a wider suite of UNC changes that will be proposed to achieve compliance with the European Network Codes. National Grid Transmission has been allocated some funding through the RII0-T1 price control process for EU market facilitation. National Grid expects to be able to utilise this funding to meet the costs of this EU-related change and where this proves insufficient it anticipates using the mid-point review as the mechanism to address any funding gaps. Therefore, no User Pays charges will be raised in relation to this Modification Proposal.

4 Relevant Objectives

Impact of the modification on the Relevant Objectives:	
Relevant Objective	Identified impact
a) Efficient and economic operation of the pipe-line system.	None
b) Coordinated, efficient and economic operation of (i) the combined pipe-line system, and/ or (ii) the pipe-line system of one or more other relevant gas transporters.	None
c) Efficient discharge of the licensee's obligations.	None
d) Securing of effective competition: (i) between relevant shippers; (ii) between relevant suppliers; and/or (iii) between DN operators (who have entered into transportation arrangements with other relevant gas transporters) and relevant shippers.	None
e) Provision of reasonable economic incentives for relevant suppliers to secure that the domestic customer supply security standards... are satisfied as respects the availability of gas to their domestic customers.	None
f) Promotion of efficiency in the implementation and administration of the Code.	None
g) Compliance with the Regulation and any relevant legally binding decisions of the European Commission and/or the Agency for the Co-operation of Energy Regulators.	Positive

g) Compliance with the Regulation and any relevant legally binding decisions of the European Commission and/or the Agency for the Co-operation of Energy Regulators.

This modification will facilitate compliance with European legislative requirements contained within the Commission Regulation (EU) 312/2014 - Network Code on Gas Balancing of Transmission Networks, Chapter VIII Information Provision.

5 Implementation

No implementation timescales are proposed, however the Commission Regulation (EU) 312/2014 - Network Code on Gas Balancing of Transmission Networks will apply from 1st of October 2015 and therefore it is proposed these changes need to be implemented by this date.

6 Legal Text

Text

The following Text has been prepared by National Grid NTS. The Workgroup has reviewed this text and is satisfied that it achieves the intent of the modification.

This Text was confirmed as final Text at the UNC Modification Panel meeting 19 June 2014.

It should be read in conjunction with the text from approved Modification 0432 – Project Nexus - Gas Demand, Estimation, Allocation, Settlement and Reconciliation Reform in order for parties to understand the text that will exist once both proposals have been implemented.

Amend post-Modification 0432 TPD Section E1.6.2 as follows:

1.6.2 The first information Day is:

- (a) for the purposes of paragraph 1.6.1(a) and (b), the Day following the Gas Flow Day;
- (b) for the purposes of paragraph ~~1.6.1(b), and~~ 1.6.1(c) the 2nd Day following the Gas Flow Day.

Amend post-Modification 0432 TPD Section H5.2.1 as follows:

5.2.1 Subject to paragraph 5.2.6, ~~t~~he Transporter will (during the Preceding Day and the Gas Flow Day in accordance with paragraph 5.2.3) forecast and notify to Users:

- (a) in the case of a DN Operator, demand in each relevant LDZ;
- (b) in the case of National Grid NTS, demand for the Total System

for the Gas Flow Day, using Short Term Demand Models, on the basis of the weather data most recently obtained in accordance with paragraph 5.1 (in the case of LDZ demand, for the weather station(s) located in or closest to the relevant LDZ).

Amend post-Modification 0432 TPD Section H5.2.3 as follows:

5.2.3 The Transporter will notify demand under paragraph 5.2.1 after receipt of weather data under paragraph 5.1.1 not later than the following times: 12:00, 14:00, 18:00 hours, and 02:00 hours on the Preceding Day and 12:00 hours, 15:00 hours, 18:00 hours, 21:30 hours and 02:00 hours on the Gas Flow Day.

Insert new TPD Section H5.2.6 as follows and re-number existing Sections H5.2.6 and 5.2.7:

5.2.6 Where any of the data items referenced in the Short Term Demand Model is unavailable to National Grid NTS at the time that it notifies demand under paragraph 5.2.3, National Grid NTS shall utilise the best available data (as it

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reasonably considers) in substitution for such unavailable data items in forecasting demand for the Total System pursuant to paragraph 5.2.1.

5.2.7 For the purposes of the Code:

- (a) “**Forecast LDZ Demand**” means aggregate demand for the Gas Flow Day in an LDZ, forecast in accordance with this paragraph 5;
- (b) “**Forecast Total System Demand**” means aggregate demand for the Gas Flow Day on the Total System, forecast in accordance with this paragraph 5;
- (c) “**Demand Forecast Time**” means any time at which (in accordance with paragraph 5.2.3 or 5.2.4) the Transporter notifies Forecast LDZ Demand under paragraph 5.2.1.

5.2.8 In forecasting demand under this paragraph 5, the Transporter will act in good faith and will exercise reasonable skill and care, but the Transporter will not be liable (as to any loss or liability incurred by a User or otherwise) to any User in respect of or in consequence of anything done or omitted to be done by the Transporter under this paragraph 5.

Insert new TPD Section H5.3 as follows:

5.3 NDMA Accuracy Report

5.3.1 National Grid NTS shall publish by no later than 1 January in each Gas Year a report containing a comparison between (i) the NDMA forecast for each Gas Flow Day during the preceding Gas Year as published at 14:00 hours on the relevant Preceding Day and 12:00 and 18:00 hours on the relevant Gas Flow Day in accordance with paragraph 5.2.3 and (ii) the aggregate UDQO for all NDM Supply Meter Points on the Total System in respect of each Gas Flow Day during the preceding Gas Year as published on the first information Day in accordance with Section E1.6.2(a) and on the Exit Close-Out Date in accordance with Section E1.6.3(b), together with a high level commentary in respect of the same.

7 Consultation Responses

Of the 4 representations received 3 supported implementation and 1 provided comments.

Representations were received from the following parties:

Organisation	Response	Relevant Objectives	Key Points
British Gas	Support	g - positive	<ul style="list-style-type: none">• agrees that this modification is consistent with the need to comply with European legislative changes.

EDF Energy	Support	g - positive	<ul style="list-style-type: none"> The extra NDM forecast at the 12:00 day ahead stage will allow suppliers to be able to better predict the final consumption of their NDM customers. NDMA accuracy report will also be helpful in understanding accuracy of demand forecasts vs outturn. This modification should be implemented as soon as practically possible to benefit Users prior to October 2015 The D+1 allocation data requirement is already provided to Users one day after the gas day but the UNC needs to be changed as the current obligation states "1.6.2 (b) by the second day (D+2)" It would be more useful if additional information related to accuracy, particularly standardised information about high level metering feeds into the forecasts that may have been based on estimated rather than actual readings, and any other standard explanatory data that affect National Grid forecast accuracy could be published in a report on an annual basis.
National Grid NTS	Support	g - positive	<ul style="list-style-type: none"> Implementation of this Proposal would satisfy the requirements to provide shippers with a forecast of non daily metered offtakes for gas day D-1 by 12:00, a report on the accuracy of the non daily metered forecasts and amends the timing of the provision of allocation data to Users before the end of the 1st day after the gas day (D+1). Considers implementation of the modification would achieve legal compliance with the EU Regulation at minimal change and cost.
Scotia Gas Networks	Comments	g - positive	<ul style="list-style-type: none"> Notes the requirement of this change is due to European Code development. However, any changes to their forecasting systems and processes will come at a cost to implement.

Representations are published alongside the Final Modification Report.

8 Panel Discussions

9 Recommendation

Panel Recommendation

Having considered the Modification Report, the Panel recommends [determined]:

- that proposed Modification 0489 [should/should not] be made.

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10 Appendix

Appendix 1

Below is the related text from Commission Regulation (EU) No 312/2014 - Chapter VIII Information Provision of the European Network Code on Gas Balancing of Transmission Networks (as of 26th March 2014).

Article 36

Non daily metered off-takes

1. Where the information model base case is applied:
 - (a) on gas day D-1, the transmission system operator shall provide network users with a forecast of their non daily metered off-takes for gas day D no later than 12:00 UTC (winter time) or 11:00 UTC (daylight saving);
 - (b) on gas day D, the transmission system operator shall provide network users with a minimum of two updates of the forecast of their non daily metered off-takes.
2. The first update shall be provided no later than 13:00 UTC (winter time) or 12:00 UTC (daylight saving).
3. The time of the second update provision shall be defined upon approval by the national regulatory authority and published by the transmission system operator. This shall take into consideration the following:
 - (c) access to short term standardised products on a trading platform;
 - (d) accuracy of the forecast of a network users non daily off-takes as compared to the time of its provision;
 - (e) time when the re-nomination period ends, as provided in Article 15(1);
 - (f) time of the first update of the forecast for a network user's non daily metered off-takes.
4. Where the information model variant 1 is applied, on gas day D, the transmission system operator shall provide network users with a minimum of two updates of their apportionment of measured flows for at least the aggregate non daily metered off-takes as referred to in Article 35.
5. Where the information model variant 2 is applied, on gas day D-1, the transmission system operator shall provide network users with a forecast of their non daily metered off-takes for gas day D as referred to in paragraph 1(a).

Article 39

Information obligations of distribution system operator(s) and forecasting party (-ies) towards the transmission system operator

6. Each distribution system operator associated to a balancing zone and each forecasting party shall provide the transmission system operator in the respective balancing zone with the information necessary for information provision to the network users under this Regulation. This shall include inputs and off-takes on the distribution system regardless whether that system is a part of the balancing zone or not.

7. The information, its format and the procedure for its provision shall be defined in cooperation between the transmission system operator, the distribution system operator and the forecasting party, as relevant, to ensure the due provision of information by the transmission system operator to the network users under this Chapter and in particular the criteria set out in Article 33(1).
8. This information shall be provided to the transmission system operator in the same format as defined under the applicable national rules and shall be consistent with the format used by the transmission system operator to provide the information to the network users.
9. The national regulatory authority may ask the transmission system operator, the distribution system operator and the forecasting party, to propose an incentive mechanism regarding the provision of an accurate forecast for a network user's non daily metered off-takes which shall meet the criteria set out for the transmission system operator in Article 11(4).
10. The national regulatory authority shall designate the forecasting party in a balancing zone after prior consultation with the transmission system operators and distribution system operators concerned. The forecasting party shall be responsible for forecasting a network user's non daily metered off-takes and where appropriate its subsequent allocation. It may be a transmission system operator, distribution system operator or a third party.

Article 40

Information obligations of the distribution system operator(s) towards the transmission system operator

The distribution system operator shall provide the transmission system operator with information on the intraday and daily metered inputs and off-takes on the distribution system consistent with the information requirements set out in Articles 34(2) to (6), 35 and 37. This information shall be provided to the transmission system operator within the time sufficient for the transmission system operator to provide the information to network users.

Article 41

Information obligations of the distribution system operator(s) towards the forecasting party

11. Distribution system operators are responsible for providing the forecasting party with sufficient and updated information for the purpose of the methodology for the forecast of a network user's non daily metered off-takes application as set out in Article 42(2). This information shall be provided in a timely manner in accordance with the timelines defined by the forecasting party to be consistent with its needs.
12. Paragraph 1 shall apply, *mutatis mutandis*, to variant 1.

Article 42

Information obligations of the forecasting party towards the transmission system operator

13. The forecasting party shall provide the transmission system operator with forecasts of network user's non daily metered off-takes and subsequent allocations consistent with the information requirements set out in Articles 36 and 37. This information shall be provided to the transmission system operator within the time sufficient for the transmission system operator to provide the information to network users and for day ahead and within day forecasts of a network user's non daily metered off-takes no later than one hour before the deadlines referred to in Article 36(1)(a) and (b), unless a later

time sufficient for the transmission system operator to provide this information to the network users is agreed by the transmission system operator and the forecasting party.

14. The methodology for the forecast of a network user's non daily metered off-takes shall be based on a statistical demand model, with each non daily metered off-take assigned with a load profile, consisting of a formula of the variation in gas demand versus variables such as temperature, day of week, customer type and holiday seasons. The methodology shall be subject to consultation before its adoption.
15. A report on the accuracy of the forecast of a network user's non daily metered off-takes shall be published by the forecasting party at least every two years.
16. Where relevant, transmission system operators shall provide the data regarding gas flows within the time sufficient for the forecasting party to comply with its obligations under this Article.
17. Paragraphs 2 to 4 shall, *mutatis mutandis*, apply to variant 1.