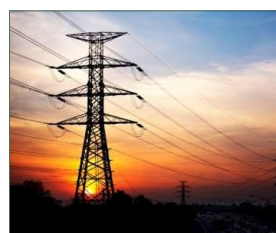


Consultation on the designation of a forecasting party within the Northern Ireland gas balancing regime

26 June 2015



About the Utility Regulator

The Utility Regulator is the independent non-ministerial government department responsible for regulating Northern Ireland's electricity, gas, water and sewerage industries, to promote the short and long-term interests of consumers.

We are not a policy-making department of government, but we make sure that the energy and water utility industries in Northern Ireland are regulated and developed within ministerial policy as set out in our statutory duties.

We are governed by a Board of Directors and are accountable to the Northern Ireland Assembly through financial and annual reporting obligations.

We are based at Queens House in the centre of Belfast. The Chief Executive leads a management team of directors representing each of the key functional areas in the organisation: Corporate Affairs; Electricity; Gas; Retail and Social; and Water. The staff team includes economists, engineers, accountants, utility specialists, legal advisors and administration professionals.

Our Mission

Value and sustainability in energy and water.

Our Vision

We will make a difference for consumers by listening, innovating and leading.

Our Values

Be a best practice regulator: transparent, consistent, proportional, accountable, and targeted.

Be a united team.

Be collaborative and co-operative.

Be professional.

Listen and explain.

Make a difference

Act with integrity.

Abstract

This paper sets out our proposals for the designation of a forecasting party within the Northern Ireland gas balancing regime. We are required to designate a forecasting party by European Regulation (EU) No 312/2014 establishing a Network Code on Gas Balancing of Transmission Networks.

Audience

This document is likely to be of interest to regulated companies in the energy industry, government and other statutory bodies and consumer groups with an interest in the gas industry.

Consumer impact

The changes are necessary to ensure compliance with the European Gas Regulation and in particular the network codes required by the Regulation.

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1. Introduction

Purpose of this paper

1.1. The European Union (EU) adopted the third legislative package in July 2009 to further the development of a Single European Gas Market. A key element of the third legislative package for gas is Regulation (EC) 715/2009 (the Gas Regulation) which mandates the development of European network codes covering areas such as capacity allocation, balancing, and tariff setting of gas transmission networks.

1.2. The implementation of the Gas Regulation and the European network codes will trigger changes to the Northern Ireland regulatory regime. In particular the network code on balancing requires the creation of a separate Northern Ireland gas market such that network users are able to trade gas at a designated Northern Ireland Balancing Point. This will permit a regime in which network users have a financial incentive to balance their inputs to and offtakes from the transmission system, with the Transmission System Operator (TSO) having only a residual role in network balancing. The objective of such a regime is to promote efficient price discovery in individual gas markets. This will promote the trading out of price differentials between markets resulting in an outcome of special equilibrium to the benefit of all European gas consumers.

1.3. Many of the provisions of Regulation (EU) No 312/2014 (the Balancing Code) are being implemented by 1 October 2015 to

coincide with the start of the new gas year. Most of the provisions will be implemented through the established code modification process and the Utility Regulator will make decisions on the required modifications as proposed by the TSOs as part of that process. However the Utility Regulator is required by the Balancing Code to make a number of additional determinations which are separate from the modifications to the network code that are required for compliance.

1.4. Amongst these additional determinations is the designation of the 'forecasting party' as required by Article 39(5). As explained further in section 2, the 'forecasting party' will be responsible for providing the TSO with estimates of each network users offtake at Non Daily Metered supply points. The TSO will aggregate these estimates with offtake values for each network users Daily Metered (DM) supply points to produce a single offtake estimate for each network user. The TSO will then pass this estimate to the network user who will use the information to balance their entry and exit nominations.

1.5. In addition the Utility Regulator must determine which of three information models set out in the Balancing Code should be implemented by the 'forecasting party'.

1.6. This consultation paper considers the policy options available to the Utility Regulator, seeks the views of respondents on these options and sets out our provisional recommendations on the designation of the 'forecasting party' and the information model to be adopted by

that party.

Structure of this paper

1.7. The paper has the following sections:

- Section 2: Summary of EU code requirements
- Section 3: Information Model
- Section 4: Forecasting Party: Option identification and appraisal
- Section 5: Next steps
- Appendix 1: List of consultation questions

Responding to this consultation

1.8. Responses to this consultation paper should be submitted by 12.00 noon on 21 August 2015. Responses should be sent to:

Graham Craig

Gas Branch

Utility Regulator

Queens House

14 Queens Street

Belfast BT1 6ER

graham.craig@uregni.gov.uk

1.9. The Utility Regulator's preference would be for responses to be submitted by e-mail.

1.10. Individual respondents may ask for their responses (in whole or in part) not to be published, or that their identity should be withheld from public disclosure. Where either of these is the case, the Utility Regulator will also ask respondents to supply the redacted version of the response that can be published.

1.11. As a public body and non-ministerial government department, the Utility Regulator is required to comply with the Freedom of Information Act (FOIA). The effect of FOIA may be that certain recorded information contained in consultation responses is required to be put into the public domain. Hence it is now possible that all responses made to consultations will be discoverable under FOIA, even if respondents ask us to treat responses as confidential. It is therefore important that respondents take account of this and in particular, if asking the Utility Regulator to treat responses as confidential, respondents should specify why they consider the information in question should be treated as such.

1.12. This paper is available in alternative formats such as audio, Braille etc. If an alternative format is required, please contact the office of the Utility Regulator, which will be happy to assist.

2. Summary of EU Code Requirement

2.1. The Balancing Code¹ requires that the Transmission System Operator (TSO) provide network users with information as to their inputs and offtakes for the gas day². And where this information cannot be derived from daily meter readings, then the TSO may provide an alternative replacement value.³

2.2. The actual obligations placed on the TSO with regard to the provision of Daily Metered (DM) information and replacement information for Non Daily Metered (NDM) offtakes are set out in Articles 35 to 38 of the Balancing Code. These obligations relate primarily to the frequency and timing with which information is provided to network users, and will be reflected in the relevant network code modifications proposed by the Northern Ireland transmission and distribution system operators.

2.3. In the case of NDM offtakes the derivation of the replacement value is generated by the application of an information model. Three variants of this information model are permitted:

- **The base case⁴** where 'the model for information provision where the information on non daily metered off-takes consists of

¹ Commission Regulation (EU) No 312/2014 of 26 March 2014

² Article 32 (3)

³ Article 33 (2)

⁴ Article 2 (19)

a day ahead and within day forecasts'

- **Variante 1**⁵ means the model for information provision where the information on non daily metered and daily metered off-takes is based on apportionment of measured flows during the gas day'
- **Variante 2**⁶ means the model for information provision where the information on non daily metered off-takes is a day ahead forecast'

2.4. In order for the TSO to meet its obligations to network users it will be reliant on information flows from all the Distribution System Operators (DSO) and or forecasting bodies operating within the balancing zone. Articles 39 to 42 set out the obligations each of the three groups of party, transmission system operator, distribution system operators and forecasting parties have towards each other.

2.5. The obligations are not defined prescriptively in terms of the specific data to be provided by each party in the chain. But rather the obligation is that the party provides the information in a timely way so that the TSO can provide network users with the required information in the manner required by Article 33(1):

- a) on the TSO's website or other system providing the information in electronic format;
- b) accessible to network users free of charge;
- c) in a user-friendly manner;

⁵ Article 2 (20)

⁶ Article 2 (21)

- d) clear, quantifiable and easily accessible;
- e) on a non-discriminatory basis;
- f) in consistent units either in kWh or kWh/d and kWh/h;
- g) in the official language(s) of the Member State and in English.

2.6. Specifically the DSO obligations to the ‘forecasting party’ are set out in Article 41. The DSO must provide sufficient and updated information for the purpose of the forecasting methodology as set out in Article 42 (2). This requires that:

‘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.’

2.7. The Utility Regulator is required to determine which of the three models set out above will be used within the Northern Ireland balancing zone.

2.8. In addition the Regulations require that the national regulatory authority shall⁷:

‘designate the forecasting party in a balancing zone after prior consultation with the transmission system operators and distribution system operators concerned.’

⁷ Article 39 (5)

2.9. This forecasting party shall:

'be responsible for forecasting a network user's non daily metered off-takes and where appropriate its subsequent allocation'

2.10. This forecasting party may be either:

'a transmission system operator, distribution system operator or a third party'

2.11. The Utility Regulator is required to designate a 'forecasting party' for the Northern Ireland balancing zone by 1 October 2015.

3. Information model to be used

Existing Arrangements

- 3.1. Network users in Northern Ireland are not currently required to make separate entry and exit nominations. They are however required to make accurate nominations, and are subject to balancing charges, with these calculated on the variance between their end of day nomination and final allocation. To assist network users in making accurate nominations they are provided with several forecasts of NDM offtake for each gas day.
- 3.2. The current arrangements for forecasting NDM offtake are set out in section F of the Phoenix Natural Gas Limited (PNGL) network code. These arrangements also apply in the firmus energy distribution network and are expected to apply in the Scotia Gas Networks distribution network when it becomes operational. These arrangements are as follows.
- 3.3. Paragraphs 3 and 4 of section F sets out that NDM offtake on any gas day will be forecast by the DSO on a number of occasions, once before the gas day, twice during the gas day and again once after the gas day. These forecasts are based on models of NDM offtake in reaction to prevailing weather conditions. These forecasts are not influenced by metered flow data at the entry points into the distribution network.
- 3.4. Forecasts are supplied directly from the DSO to the relevant network user and are not provided to network users through the TSO. If a network user has NGM supply points within each of the three separate DSOs in Northern Ireland it will receive a forecast from all three of them for NDM

offtake.

Information Model

3.5. We consider that the existing forecasting arrangements are consistent with the 'base case' information model as set out in Article 2 (19) of the Balancing Code. The current methodology and the number of forecasts, one before the gas day, two during the gas day and one after the gas day already fulfils the requirements set out in the regulations.⁸ The only change that would seem to be required to bring the current arrangements into compliance with the Regulations is to align the timings of the forecasts as set out in the DSO network codes with those set out in the Balancing code.

UR proposal for the Information Model

3.6. The Utility Regulator therefore proposes that the information model used to forecast NDM offtake should be the base case as set out in Article 2 (19) of the Regulations.

Consultation Questions

- **Question 1** – do respondents agree that the existing forecasting arrangements are consistent with the 'base case' information model as set out in Article 2 (19) of the Balancing Code.
- **Question 2** – Are respondents content with the proposal to adopt the base case information model as set out in the Balancing code?

⁸ Article 42 (2_ Article 36 Article 37

4. Forecasting Party: Option Identification and Appraisal

Forecasting Party Option Identification & Appraisal

4.1. Compliance with the Regulations and the designation of a forecasting party will require a change in the flow of information between parties. As set out above at present NDM offtake forecasts flow directly from the DSO to the network user. Compliance will require the designation of a 'forecasting party' between the DSO and the TSO with network users receiving NDM offtake estimates from the DSO.

4.2. In considering the various options for the designation of the 'forecasting party' the Utility Regulator has identified a number of criteria against which each of the options identified should be judged. These criteria are:

- Compliance with Balancing Code is the primary objective of the changes being proposed;
- Minimum cost / impact on consumer bills as a consequence of disruption to existing arrangements as certain options may require substantial investment in IT systems, that could delay implementation;
- Facilitate the effective operation of competitive wholesale and retail gas markets by providing accurate forecasts using accurate data.

4.3. Option 1 One of the existing Northern Ireland Transmission System Operators (TSO) is designated as the forecasting party. This TSO would produce the forecasts for each DSO.

Description	<ul style="list-style-type: none"> • Each DSO provides data to the TSO on an ongoing basis as to which network user is registered to each NDM MPRN (Meter Point Reference Number) • The TSO forecasts NDM offtake for each network user by applying either existing algorithms or a new Northern Ireland wide algorithm • The TSO passes forecast offtake figures to individual network users • The DSOs continue to produce NDM offtake forecasts for the purpose of raising invoices to collect revenues
Compliance	<p>We consider that this option would comply with the requirements of the gas balancing code.</p>
Cost	<ul style="list-style-type: none"> • An existing party (TSO) takes responsibility but would be required to undertake additional processes compared to the current arrangements (i.e.) receive data from multiple DSOs and apply an algorithm to generate the forecasts • Additional arrangements to be added to existing TSO – DSO agreements. • Ongoing data flows between the DSO's and TSO of MPRN registration data need to be put in place • The TSO may wish to use a single algorithm across Northern Ireland <p>There would be significant IT set up and ongoing costs as new contractual and data transfer arrangements are established, operated and maintained. As both the TSO and DSO would be forecasting NDM for different purposes there would be duplication of effort for no additional benefit to consumers.</p>

Competition	<ul style="list-style-type: none"> • The requirement to transfer MPRN registration data between the DSOs and the TSO on an ongoing basis may reduce the ability of the forecasting party to provide forecast data as near to the end of the gas day as possible. This will restrict the ability of network users to make accurate nominations. • The generation of two sets of forecasts for different purposes may cause uncertainty amongst market participants.
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4.4. Option 2 One of the existing Northern Ireland Distribution System Operators (DSOs) is designated as the forecasting party. This party would produce the forecasts for each DSO and send the data in aggregate to the TSO.

Description	<ul style="list-style-type: none"> • Each DSO provides the designated DSO data on an ongoing basis as to which network user is registered to each NDM MPRN (Meter Point Reference Number) • The DSO designated as the forecasting party forecasts NDM offtake for each network user by applying either existing algorithms or a new Northern Ireland wide algorithm • This forecast is then passed to the TSO who forwards it to the network user • Each DSO would continue to produce NDN offtake forecasts for the purpose of raising invoices to collect revenues
Compliance	We consider that this option would comply with the requirements of the gas balancing code.
Cost	<ul style="list-style-type: none"> • An existing party (DSO) who currently undertakes at least some of these processes takes responsibility. • Would require a decision as to which of the three DSO's would be chosen as the designated forecasting party. • A new inter DSO agreement on data sharing would need to

	<p>be introduced.</p> <ul style="list-style-type: none"> • Ongoing data flows between the DSO's and designated DSO of MPRN registration data needed • The designated DSO may wish to use a single algorithm across Northern Ireland <p>There would be significant IT set up and ongoing costs as new contractual and data transfer arrangements are established, operated and maintained. As both the forecasting party and DSOs would be forecasting NDM for different purposes there would be duplication of effort for no additional benefit to consumers.</p>
Competition	<ul style="list-style-type: none"> • The requirement to transfer MPRN registration data between the DSOs and the forecasting party on an ongoing basis may reduce the ability of the forecasting party to provide forecast data as near to the end of the gas day as possible. This will restrict the ability of network users to make accurate nominations. • The generation of two sets of forecasts for different purposes may cause uncertainty amongst market participants.

4.5. Option 3 One of the existing TSOs is designated as the forecasting party, but rather than applying the forecasting algorithm itself aggregates NDM offtake forecasts supplied to it by the individual DSOs.

Description	<ul style="list-style-type: none"> • Each DSO continues to forecast network user NDM offtake as is currently the case • Each DSO forwards forecasts to the TSO for aggregation into a single Northern Ireland forecast for each network user • The TSO forwards an aggregated NDM offtake forecast to
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	<p>each network user</p> <ul style="list-style-type: none"> • DSOs would use the same NDN off-take forecasts for the purpose of raising invoices to collect revenues
Compliance	<p>Our assessment is that this option would be compliant with the requirements of the Balancing Code provided that the TSO is <u>responsible</u> for forecasting a network user's NDM off-take and where appropriate subsequent allocation as required by Article 39(5). We consider that this could be achieved by contractual arrangements between the TSO and the DSOs together with new licence obligations as explained further in 2.14 to 2.20 below.</p>
Cost	<ul style="list-style-type: none"> • An existing party (TSO) takes responsibility but would be required to undertake only limited additional processes (i.e. aggregate the DSO data) • Additional arrangements to be added to existing TSO – DSO agreements. • Ongoing data flows between parties are minimal • Minimal disruption to existing arrangements at DSO level <p>As there is no requirement for large volumes of MPRN registration data to move between the parties set up and ongoing costs would be kept to a minimum</p>
Competition	<ul style="list-style-type: none"> • Removing the need for large data flows between parties will facilitate the forecasting party in providing forecast data as near to the end of the gas day as possible which will assist network users to make accurate nominations. • As only one set of forecasts is being produced there will be certainty amongst market participants.

4.6. Option 4 A third party is designated as the ‘forecasting party.’

Description	<ul style="list-style-type: none"> • Each DSO provides data to the third party on an ongoing basis as to which network user is registered to each NDM MPRN (Meter Point Reference Number) • The third party forecasts NDM offtake for each network user by applying either existing algorithms or a new Northern Ireland wide algorithm • This forecast is then passed to the TSO who forwards it to the relevant network user • DSOs would continue to produce NDN offtake forecasts for the purpose of raising invoices to collect revenues
Compliance	<p>We consider that this option would comply with the requirements of the gas balancing code.</p>
Cost	<ul style="list-style-type: none"> • Requires establishment of a new entity or the use of a tender process to award a contract bringing another party into the regulatory regime. It is not clear how this third party would be regulated by the Authority • Requires entirely new contractual arrangements between third party, DSOs and the TSO • Ongoing data flows between the DSO’s and third party of MPRN registration data needed • A mechanism would need to be established to fund the third party and control its activities. <p>There would be significant IT set up and ongoing costs as new contractual and data transfer arrangements are established, operated and maintained. These costs would without doubt be higher as a result of having to bring an entirely new entity within the regulatory regime. As both the third party and DSO would be forecasting NDM for different purposes there would be duplication of effort for no additional benefit to consumers</p>
Competition	<ul style="list-style-type: none"> • The requirement to transfer MPRN registration data between the DSOs and the forecasting party on an ongoing basis

	<p>may reduce the ability of the forecasting party to provide forecast data as near to the end of the gas day as possible. This will restrict the ability of network users to make accurate nominations.</p> <ul style="list-style-type: none"> • There may also be a negative impact on the speed with which retail consumers can switch. • The generation of two sets of forecasts for different purposes may cause uncertainty amongst market participants.
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4.7. The table below summaries our assessment of each option against the three criteria set out in paragraph 2.8 above.

Option	Assessment Criteria		
	Compliance	Cost / Impact on Consumer Bills	Effective Market Operation
1	Yes	Negative	Negative
2	Yes	Negative	Negative
3	Yes	Negligible	No Impact
4	Yes	Negative	Negative

Forecasting Party Further Considerations

4.8. This analysis strongly indicates that Option 3 should be the preferred option. Option 3 requires the minimum disruption to existing processes and is therefore when compared to current practice we regard it as having no impact or at the most a negligible impact on the effective operation of the market or costs borne by consumers. We have not attempted a detailed estimate the costs associated with the other options. However we are confident that they do not exceed the level that would trigger a

price control determination to be reopened. In that sense they are not considered to have a material impact on costs.

4.9. Option 3 however does raise some issues with regard to the contractual relations that need to be in place to ensure that it meets the 'responsibility' requirement of Article 39(5) of the Balancing Code. Ultimately irrespective of the contractual arrangements the designated forecasting party remains responsible. The issue is how this requirement can be met in circumstances where we wish to minimise disruption and duplication of existing arrangements at DSO level. We recognise that the DSOs currently undertake a number of internal processes central to their operation and which they will need to continue with and any new arrangements should not interfere with these processes.

4.10. One option which we encourage the DSOs and TSOs to consider is a form of certification arrangement whereby the TSO certifies that the DSO forecasting methodology / process meets its specifications. However, we consider that there is no definitive set of contractual arrangements that can be pointed to as being suitable in this situation and so it will be for the TSO and DSOs to find an arrangement that satisfies their requirements.

4.11. To ensure that both sets of parties put suitable contractual arrangements in place and that there is regulatory oversight, we intend to put suitable licence conditions in both the licence of the designated TSO and the individual DSOs.

4.12. A very similar arrangement already exists in the electricity industry between Northern Ireland Electricity as holder of its Transmission Licence and SONI as holder of its System Operator Licence. The Transmission Interface Agreement, Condition 17, requires both licence holders to have

an agreement in place, approved by the Authority that will ensure that each party can carry out its obligations.

4.13. We see that this use of licence conditions to give effect to the designation of the forecasting party will also ensure that the Authority has regulatory oversight of these arrangements. This in turn should give all parties confidence that the designation of a TSO as the forecasting party will not unduly impact the operation of their licensed activities.

4.14. The licence conditions will set out amongst other things, each licence holder's duties with respect to demand forecasting, the role of the Authority in the approval of relevant contracts and the role of the Authority in dispute resolution. It is envisaged that there will be a common contract between the designated TSO and the three DSOs which deals primarily with operational matters. The way in which each DSO generates NDM offtake forecasts will continue to be set out in their individual network codes.

Summary UR Forecasting Party Proposal

4.15. The Utility Regulator proposes to designate one of the existing TSOs as the forecasting party. But rather than applying the forecasting algorithm itself it will aggregate NDM offtake forecasts supplied to it by the individual DSOs once it is satisfied that the DSO forecasting methodology / process meets its specifications. The designated TSO and all the DSOs will have their licences modified to make it a duty to co –operate with the other parties to ensure that all parties meet their licence requirements.

4.16. If we go forward with option 3, we would be minded to designate PTL

as the forecasting party as they will administer the NI Balancing Point under their code from October 2015. We would welcome views on this.

Consultation Questions

- **Question 3** – Are respondents content that all the available options that have been identified?
- **Question 4** - Are respondents content that the appropriate criteria have been used to assess the options?
- **Question 5** – Are respondents content with the assessment of each option against the criteria?
- **Question 6** – We would welcome the views of respondents on our preferred option 3.
- **Question 7** – Assuming we go forward with option 3, are respondents content with the proposal to designate PTL as the forecasting party?

5. Next steps

5.1. Following the closure of this consultation process the Utility Regulator will designate a 'forecasting party' before the 1 October 2015 and confirm that the information model base case is to be adopted within the Northern Ireland balancing zone.

5.2. Although the Regulations require that the forecasting party is designated prior to 1 October 2015 it will not commence discharging its duties until a later date, once the necessary contractual and license obligations are in place. However, as noted above the existing arrangements in Northern Ireland already provide network users with NDM offtake forecasts that meet the requirements of the 'information model base case'.

5.3. On the 21 April 2015 we published our decision to apply Interim Measures⁹ to the operation of the Northern Ireland gas balancing regime. This means that there will be a five year transition period before the provisions of the Regulations are fully implemented. For these reasons we do not intend to begin the process of making licence modifications until after 1 October 2015.

5.4. We would envisage that all the necessary arrangements could be in place such that the designated forecasting party would be fully operational by 1 October 2016. We note however that the creation of a single Northern Ireland System Operator may impact on a target date of 1 October 2016.

⁹ [Interim Measures Report](#) [Letter to BGE \(NI\)](#) [Letter to PTL and BGTL](#)

Consultation Questions

- **Question 8** – What are respondent's views on the proposed implementation timetable?

Appendix 1: List of consultation questions

Q1	Do respondents agree that the existing forecasting arrangements are consistent with the 'base case' information model as set out in Article 2 (19) of the Balancing Code?
Q2	Are respondents content with the proposal that the base case information model as set out in the Regulations should be adopted?
Q3	Are respondents content that all the available options that have been identified?
Q4	Are respondents content that the appropriate criteria have been used to assess the options?
Q5	Are respondents content with the assessment of each option against the criteria?
Q6	We would welcome the views of respondents on our preferred option 3.
Q7	Assuming we go forward with option 3, are respondents content with the proposal to designate PTL as the forecasting party?
Q8	What are respondent's views on the proposed implementation timetable?