

Northern Ireland Authority for Utility Regulation

# Phoenix Natural Gas Licence Further Restructuring; Proposed Licence Modifications to Replace the Volume Revenue Driver with a Fixed Revenue Control

# A CONSULTATION PAPER

(Incorporating Statutory Consultation Notices)

April 2009

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## Introduction, Background and Context

- 1. The Northern Ireland Authority for Utility Regulation ("The Authority") proposes to make modifications to the license granted to Phoenix Natural Gas Ltd ("The Licensee",) namely Part 2 Condition 2.3: Conveyance Charges, Other Terms for the Conveyance of Gas and the provision of Conveyance Services.
- 2. The Belfast gas market has grown to over 122,000 connections in a 12 year period. Although the penetration rate in the domestic owner-occupied sector currently sits at approximately 30% and at 50% in the small I&C sector, further significant levels of connections are required in future years in order to reach the ultimate penetration levels.
- 3. The Authority is keen to ensure Phoenix Natural Gas Ltd. (PNG) is adequately incentivised to maximise connections to its network in future. This has long term benefits for all customers in reducing average network costs and furthers our objective to promote development of the gas industry.
- 4. In April 2007 the Authority consulted on proposed modifications to the price control conditions to give effect to the fundamentals of the licence restructuring agreement between the Authority and PNG reached in November 2006 as it applies to the distribution network; <a href="http://www.niaur.gov.uk/uploads/publications/Phoenix\_Gas\_price\_control\_condit\_ions\_consultation\_April\_07.pdf">http://www.niaur.gov.uk/uploads/publications/Phoenix\_Gas\_price\_control\_condit\_ions\_consultation\_April\_07.pdf</a>
- 5. Subsequently the third conveyance price control review set allowed costs for the period 2007-2011. A public information document was issued in February 2008 setting out the results of the review; http://www.niaur.gov.uk/uploads/publications/PNG\_-\_Public\_Determination.pdf
- 6. During the price control review, PNG proposed a move from the current mechanism whereby it is incentivised to maximize volumes in order to maximize distribution revenues ("weighted average revenue yield) to one where allowed distribution revenues are capped and a correction mechanism to reconcile revenues as a result of differences between actual and forecast volumes ("fixed revenue control") is introduced<sup>1</sup>.
- 7. In the previous price control period throughput fluctuated around forecasts in response to weather and wholesale gas prices both of which are outside the control of the PNG.

<sup>&</sup>lt;sup>1</sup> Over-recoveries of revenue will be rolled forward and returned to customers at the 7.5% rate of return currently specified within the PNG licence. Under-recoveries will be rolled forward at the base rate plus 1.5%.

- 8. The Authority considers that a volume revenue driver in the distribution business is not appropriate and does not necessarily deliver the optimum outcome for customers.
- 9. The Authority also considers that a connections driver in the sectors where further significant levels of connections are required to reach the ultimate forecast penetration levels is more appropriate in developing the market with benefits for customers via a larger customer base.
- 10. In designing the connections incentive mechanism, the determined forecast connections as well as marketing and incentives allowances have be taken into consideration.

## **Connections Incentive**

- 11. The connections incentive scheme will operate as set out below.
- 12. The agreed methodology is an incentive scheme that considers the benefits in the context of revenue cap control methodology. The revenue generated by additional connections (or foregone due to a shortfall in new connections relative to forecast) would pass directly to customers in reduced/increased distribution charges in following years, all else being equal.
- 13. Customers will benefit if total cumulative connections at the end of the final year of the control period is greater than forecast.
- 14. We have determined that a scheme design based on the additional or shortfall revenue generated by a variance in forecast connections in the sectors included in the scheme is appropriate for PNG.

## Scheme Design

15. We have included the following sectors in the incentive mechanism as we believe PNG has some control in maximising connections in these sectors.

Owner Occupier - defined in the PNG licence as the group of customers within Conveyance Category *i*=1, Conveyance Subcategory *j*=1. Tariff I&C <2,500 - defined in the PNG licence as the group of customers within Conveyance Category *i*=1, Conveyance Subcategory *j*=4.

16. The scheme is designed to "share" the additional/shortfall revenue per connection between PNG and customers up to a maximum of 100%. We determine the revenue per connection over the control period based on forecast average

consumption and determined distribution charges for each of the sectors included in the scheme. This will mean that for any given outcome in new connections the value of the incentive is pre-determined. The incentive value will increase (linearly) with additions/shortfalls in any year accepting increasing marginal effort in achieving additions and decreasing marginal effort in shortfalls.

- 17. The design assumes that PNG can control the level of new connections to a degree. The degree of control is assumed greater for shortfalls than for additions. Further, there is a floor of zero to the level of shortfall whereas there is, theoretically no limit to the upside. For this reason we consider that an asymmetry in the penalty for shortfalls and the reward for additions to baseline is appropriate. That is, the penalty for shortfalls relative to baseline is larger than the reward for additions to baseline for a given number of connections. We have enshrined the principle that the penalty for falling below baseline should be relatively small, and similar in magnitude to the reward, close to the baseline but rise the further it gets from baseline.
- 18. The incentive shall apply to new connections only and not to re-connections.
- 19. Condition 2.3.8 of the proposed licence conditions at Annexe 1 includes the connections formulae.

## **APPENDIX 1 – LICENCE MODIFICATIONS**

#### NEW LICENCE TEXT IS SET OUT IN ITALICS AND RED FONT

#### DELETIONS OF ORIGINAL TEXT ARE ALSO SET OUT OR REFERRED TO

**Modification to Condition 2.3** 

# <u>Condition 2.3: Conveyance Charges, Other Terms for the Conveyance of</u> <u>Gas and the provision of Conveyance services</u>

#### 2.3.8 Charging methodology for the conveyance of gas

The Licensee shall in setting its charges for the conveyance of gas in the Network use reasonable endeavours to ensure that in each Formula Year *t* commencing Formula Year 2007, the *averageamount it recovers under its* conveyance revenue per *thermcharging methodology for the use* of *the Network by* gas conveyed<u>suppliers</u> shall not exceed the maximum allowed average conveyance revenue per therm<u>amount</u> calculated in accordance with the following formula:

 $M_t = P_t (RPI_{F,t} / RPI_E) - K_t$ 

$$\underline{M}_{t} = (\underline{R}_{E,t} + \underline{G}_{F,t})(\underline{RPI}_{F,t}/\underline{RPI}_{E}) - \underline{K}_{t}$$

where

- $M_t$  = the maximum allowed *average*<u>amount recoverable under the</u> <u>Licensee's</u> conveyance revenue per therm for conveying <u>gascharging methodology</u> in that Formula Year t;
- $RPI_{F,t}$  = the absolute value of the Retail <u>Price</u><u>Prices</u> Index for Formula Year t defined as the absolute value of the Retail <u>Price</u><u>Prices</u> Index published for September of Formula Year t;

 $RPI_E$  = the Designated Parameter of that name established at the most recent Review (as the base reference point for the Retail Prices Index for September);

$$P_T \underline{R_{E,t}} = a \text{ value} = the Determined Total Conveyance}$$
  
Revenue for that Formula Year t calculated in accordance with the following formula:

$$\underline{\qquad} R_{E,t} = \sum_{i} P_{E,i,t} V_{E,i,t}$$

where

- $\sum_{i}$  = the summation across all four <u>conveyance categories</u><u>Conveyance</u> <u>Categories</u> where *i* is representative of a Conveyance Category;
- $P_{E,i,t}$  = the Determined Revenue Per Therm in respect of Conveyance Category *i* for Formula Year *t*;
- $V_{E,i,t} =$  a weighting for <u>in respect of</u> each of the <u>four</u> Conveyance Categories <u>the determined number of therms of gas conveyed in</u> <u>that Formula Year t, in respect of that Conveyance Category i;</u>

 $\underline{G_{F,t}}$  = the Total Connections Incentive Revenue for Formula Year t calculated in accordance with the following formula:

$$G_{F,t} = \sum_{i,j} (N_{F,i,j,t} - N_{E,i,j,t}) H_{E,i,j,t}$$

## where

I

$$\Sigma_{i,j} = \underbrace{\text{the summation across all Conveyance Categories and}}_{Conveyance Subcategories where i is representative of a}$$

$$\frac{N_{F,i,j,t}}{N_{F,i,j,t}} = \frac{\text{the actual number of New Connections in respect of }}{Conveyance Category i and Conveyance Subcategory j for }}$$

$$\frac{N_{E,i,j,t}}{E_{E,i,j,t}} = \frac{\text{the Determined number of New Connections in respect of}}{Conveyance Category i and Conveyance Subcategory j for}$$

$$\frac{Formula Year t;}{E_{E,i,j,t}}$$

For the avoidance of doubt, the Connections Incentive shall apply from Formula Year 2008.

 $K_t$  = a value representing a correction factor as set out in Condition 2.3.9.

For the avoidance of doubt, the Licensee shall forecast values of  $RPI_{F,t}$ ,  $V_{F,i,t^{\perp}}$ .  $\underline{N}_{F,i,j,t_{2}}$  and  $K_{t}$  (to the extent that the values are not known by 1st October of the Formula Year *t*-1), so as by its reasonable endeavours it makes a best estimate of them.

### 2.3.9 <u>Correction Factor</u>

For the purposes of Condition 2.3.8  $K_t$  shall be calculated in accordance with the following formulae:

either 
$$K_t = Z_{F,t-1} \ 1 + I_{F,t} / 100$$

if 
$$Z_{F,t-1}$$
 is greater than  $-0.1 M_{t-1}$ 

or  $K_t = -0.1 \ M_{t-1} \ 1 + I_{F,t} / 100$ 

if 
$$Z_{F,t-1}$$
 is less than or equal to  $-0.1 M_{t-1}$ 

where

 $M_{F,t}$  = the Licensee's Total Conveyance Revenue<u>actual amount recovered</u> by the Licensee under its conveyance charging methodology for the use of the Network by gas suppliers in Formula Year t;

 $I_{F,t}$  = the percentage interest rate in Formula Year t, which shall be:

where  $K_t$  (taking no account of  $I_{F,t}$  for this purpose) has a positive value, the Average Specified Rate in Formula Year t plus three percentage points;  $r_t$  or

where  $K_t$  (taking no account of  $I_{F,t}$  for this purpose) has a negative value, the Average Specified Rate in Formula Year t<u>plus one and</u> <u>a half percentage points</u>.

#### 2.3.10 Review Process & Disapplication Notices

Conditions 2.3.10 to 2.3.13 set out the process by which the core terms of the price control will be established by the Authority from time to time.

## 2.3.11 <u>The Review</u>

The Designated Parameters and the Determination Values applying in respect of each Formula Year t will be established in accordance with the process set out below (a "Review").

A Review will take place at scheduled intervals by reference to the end of Formula Year t=n.

## 2.3.12 Terms Relevant to Reviews

In respect of each Review:

- (a) *m*, *n* and *q* are those Designated Parameters set out in Condition 2.3.212.3.22 as established at the preceding Review; and
- (b) a is, in respect of any quantifiable term, the most recent Formula Year in respect of which the Licensee has submitted an Actual Value for such a term for the purposes of Conditions 2.3.14 to 2.3.19.

#### 2.3.13 <u>Reviews Generally</u>

In respect of each Review:

- (a) the Licensee shall provide to the Authority the Best Available Values required in accordance with Conditions 2.3.14 to 2.3.19, together with the Licensee's proposed Designated Parameters for that Review, by the date occurring 15 months prior to the end of each Formula Year t = n.
- (b) the Authority will determine the Determination Values and the Designated Parameters that apply in those Formula Years t occurring during the period t = n+1 to t = q (inclusive) and in doing so:
  - the Authority shall have due consideration for the Best Available
     Values and proposed Designated Parameters submitted by the
     Licensee; and
  - (ii) base its determination of the Determined Revenue Per Therm for each Conveyance Category <u>and Determined Total Conveyance</u> <u>Revenue</u> on the underlying calculations contained in Conditions 2.3.14 to 2.3.19;
- (c) the Authority shall, following its determination, give notice in writing to the Licensee of the Determination Values and the Designated Parameters that it proposes to apply in those Formula Years t=n+1 to t=q inclusive (a "Determination Notice");
- (d) where the Licensee considers that the Authority's proposals in a Determination Notice would not be acceptable:
  - (i) the Licensee may within 28 days of the date of the Determination Notice request the Authority by notice (a "Review Disapplication Notice") not to establish the Determination Values and Designated Parameters set out in the Determination Notice and where such notice is given the Determination Values and Designated Parameters established by the preceding Review shall continue to apply;

- (ii) where following the giving of a Review Disapplication Notice the Authority does not by the date falling 56 days after the date of the Review Disapplication Notice make a reference to the Competition Commission under Article 15 of the Order relating in whole or in part to a modification of this Condition 2.3.8, the Determination Notice shall have no effect and the Determination Values and Designated Parameters established at the preceding Review shall continue to apply; and
- (iii) in the event of such a reference to the Competition Commission under (ii) above, this Condition 2.3 may be modified in accordance with the Order and in the manner specified in the report of the Competition Commission;
- (e) without prejudice to paragraph (d) and to Article 14 of the Order, with effect from the first day of the Formula Year t=n+1 the effect of a Determination Notice given under paragraph (c) shall be such that:
  - (i) the Determination Values set out in the Determination Notice shall apply for the purposes of and operation of this Condition 2.3 in relation to Formula Years t=n+1 to t=q;
  - (ii) Condition <u>2.3.21</u><u>2.3.22</u> shall be modified to include the Designated Parameters contained in the Determination Notice

in each case in substitution for and instead of the Determination Values and Designated Parameters established by the preceding Review.

#### 2.3.14 Establishing the Best Available Values

For the purposes of Condition 2.3.8 the following Best Available Values shall be submitted by the Licensee, in respect of each Formula Year *t* from t=a submitted at the preceding Review up to and including t=q for the current Review. These Best Available Values shall comprise Actual Values in respect of the Formula

Years up to t=a for the current Review, and the Licensee's best estimate or forecast in respect of the Formula Years from t=a+1 to t=q (inclusive).

The Best Available Values are:

$$V_{B,i,t}$$
 — Best Available Volume in Formula Year *t* for Conveyance Category *i*;

 $C_{B,t}$  Best Available Capital Expenditure <u>before adjustments for</u> movements in Capital Creditors in Formula Year t;

CC<sub>B.t</sub>\_\_\_\_\_Best Available Capital Creditors in Formula Year t;

- $O_{B,t}$  Best Available Operating Expenditure in Formula Year t;
- $D_{B,t}$  Best Available Annual Depreciation in Formula Year t;
- $Q_{B,t}$  Best Available Working Capital for Formula Year t; and
- N<sub>B,i,j,t</sub> Best Available number of New Connections in respect of Conveyance Category i and Conveyance Subcategory j for Formula Year t;
- $\begin{array}{cccc} H_{B,i,j,t} & \underline{Best \ Available \ Average \ Incentive \ Value \ in \ respect \ of \ Conveyance} \\ & \underline{Category \ i \ and \ Conveyance \ Subcategory \ j \ and \ value} \\ & \underline{of} \ N_{F,i,j,t} N_{E,i,j,t} \ \underline{for \ Formula \ Year \ t; \ and} \end{array}$

 $RPI_{B,t}$  Best Available Value of the Retail Prices Index for September of that Formula Year.

To the extent the Best Available Values comprise monetary amounts, the Licensee shall express each such value in constant price terms (calculated in accordance with this Condition 2.3.14). For each of the Best Available Values submitted in respect of Formula Years t=a+1 to t=q (inclusive), constant price terms shall mean that such forecasted values are all stated in the same money of the day terms as at the time they are all forecasted. For each of the Best Available Values submitted in respect of Formula Years up to t=a, constant price terms shall mean that such Actual Values are all converted to the same money of the day terms by multiplying the Actual Value by the following ratio:

$$\frac{RPI_{B}}{RPI_{B,t}}$$

Where  $RPI_B$  is the Licensee's proposed value for the Designated Parameter, to apply to each of the Formula Years that are the subject of the current Review. It is the base reference point for the Retail Prices Index and will reflect the money of the day terms in which those Best Available Values that are forecasts were forecasted.

In complying with this obligation under Conditions 2.3.14 to 2.3.19 the Licensee shall submit full workings of the calculations and figures upon which its values and calculations are based.

2.3.15 Establishing Best Available Revenue Per Therm and Total Conveyance Revenue In addition to the Best Available Values referred to in Condition 2.3.14, the Licensee shall, at each Review, also submit Best Available Revenue Per Therm values for each Formula Year t that is to occur during the period t=n+1 to t=q(inclusive) for that Review. The Licensee shall provide Best Available Revenue Per Therm values for each Conveyance Category and for each such Formula Year  $\langle e_{B,i,t} \rangle$ . The Licensee shall provide Best Available Total Conveyance Revenue for each Conveyance Category  $R_{B,i,t}$  and for each such Formula

<u>Year</u>  $R_{B,t}$  <u>where</u>

$$\frac{R_{B,i,t} = P_{B,i,t} \cdot V_{B,i,t}}{R_{B,t} = \sum_{i} R_{B,i,t}}$$

<u>Conditions</u> 2.3.15 to 2.3.19 set out the Best Available Value categories and the underlying calculations upon which the Licensee should base its values of  $P_{B,i,t}$ .

The Licensee shall estimate values for the Best Available Revenue Per Therm  $\left( e_{B,i,t} \right)$  so that:

(a) such values comply with the requirements set out in this Condition2.3.15;

(b) the value for each Conveyance Category *i* will not, unless otherwise agreed with the Authority, differ between Formula Years *t*.

Each value of  $P_{B,i,t}$  shall be set so that the cash flow (adjusted to reflect the allowed rate of return) over the Formula Years in question is equal to the difference between the Total Regulatory Value at the end of Formula Year *n* and the Depreciated Asset Value-and-, Working Capital *and Capital Creditors* at the end of Formula Year *q*. This will be shown to be the case where the values of  $P_{B,i,t}$  secure the following net present value result:

$$\sum_{t=n+1}^{q} \left( \frac{F_{B,t}}{(1+r_B)^{t-n}} \right) - TRV_{B,n} + \frac{DAV_{B,q} + Q_{B,q} + CC_{B,q}}{(1+r_B)^{q-n}} = 0$$

For the purposes of Condition 2.3.15, the following terms shall have the following meanings:

*n*, *q* are Formula Years as defined in Condition 2.3.12. As the value of the Designated Parameter *q* for that Review is also being established as part of

that Review, it will necessarily be the Licensee's proposed value of that Designated Parameter;

- $\sum_{t=n+1}^{q}$  is the summation of data in respect of all Formula Years *t* from t=n+1 to t=q inclusive;
- $F_{B,t}$  is the Best Available Cash Flow for Formula Year *t*, (being a sum calculated in accordance with Condition 2.3.16);
- $r_B$  is the Licensee's proposed value of the Designated Parameter for rate of return to apply to each of the Formula Years within the relevant period. Provided that, where the Licensee does not propose the same value for each of the relevant Formula Years,  $(1+r_B)^{t-n}$  shall be replaced with  $(1+r_{B,n+1}) \cdot (1+r_{B,n+2}) \dots (1+r_{B,t})$ and  $(1+r_B)^{q-n}$  shall be treated accordingly;
- $DAV_{B,t}$  is the Best Available Depreciated Asset Value for Formula Year t (being a sum calculated in accordance with Condition 2.3.17); and
- *TRV*<sub>*B,n*</sub> is, the Best Available Total Regulatory Value at the end of Formula Year t=n (being a sum calculated in accordance with Condition 2.3.18).

2.3.16 <u>Calculating</u>  $F_{B,t}$  (Cash Flow)

 $F_{B,t}$  is an amount equal to the sum of the Best Available <u>Total</u> Conveyance Revenues for all of the Conveyance Categories and<u>Revenue for</u> the relevant Formula Year, less the Best Available Capital Expenditure <u>for that Formula</u> <u>Year, adjusted (where applicable) for the Best Available Movement in Capital</u> <u>Creditors</u> for that Formula Year, less the Best Available Operating Expenditure for that Formula Year, adjusted (where applicable) for the Best Available Movement in Working Capital for that Formula Year, which shall be calculated as follows:

$$F_{B,t} = \sum_{i} \Phi_{B,i,t} \cdot V_{B,i,t} - C_{B,t} - C_{B,t} - O_{B,t} - Q_{B,t}$$

where  $Q_{B,t}$  is the difference between the Best Available Working Capital for Formula Year *t* and the Best Available Working Capital for Formula Year *t*-1, which shall be calculated as follows:

$$Q_{B,t} = Q_{B,t} - Q_{B,t-1}$$

and  $CC_{B,t}$  is the difference between the Best Available Capital Creditors for Formula Year t and the Best Available Capital Creditors for Formula Year t–1, which shall be calculated as follows:

$$\_CC_{B,t} = CC_{B,t} - CC_{B,t-1}$$

## 2.3.17 <u>Calculating</u> DAV<sub>B,t</sub> (Depreciated Asset Value)

 $DAV_{B,t}$  is an amount equal to the indexed, depreciated, rolled forward value of the Depreciated Asset Value to date, measured at the end of each Formula Year-In respect of Formula Year t=2006,  $DAV_{F,t}=\pm316.3$ m. In respect of Formula Year t from 2007, it shall be the value of such amount applying to Formula Year t-1, plus the Best Available Capital Expenditure in Formula Year t, less the Best Available Annual Depreciation in Formula Year t, which shall be calculated as follows:

$$DAV_{B,t} = DAV_{B,t-1} + C_{B,t} - D_{B,t}$$

The Depreciated Asset Value at the end of Formula Year t = n shall be subject to any direction that is set out in the Determination Notice for the preceding Review that relates to the treatment of the difference between the Actual Value of Capital Expenditure and the Determined Value of Capital Expenditure.

#### 2.3.18 <u>Calculating</u> $TRV_{B,n}$ (Total Regulatory Value)

 $TRV_{B,n}$  is the Best Available Total Regulatory Value at the end of Formula Year t = n. It is the sum of the Best Available Depreciated Asset Value for Formula Year t = n (or in other words the opening position at the beginning of Formula Year t = n+1), plus the Best Available Working Capital for Formula Year t = n (or in other words the opening position at the beginning of Formula Year t = n+1), plus the Best Available <u>Capital Creditors for Formula Year t = n (or in other words the opening position at the beginning of Formula Year t = n + 1), plus the Best Available <u>Capital Creditors for Formula Year t = n + 1</u>, plus the Best Available <u>Profile Adjustment as follows:</u></u>

 $TRV_{B,n} = DAV_{B,n} + Q_{B,n} + PA_{B,n}$ 

$$\underline{TRV}_{\underline{B},\underline{n}} = \underline{DAV}_{\underline{B},\underline{n}} + \underline{Q}_{\underline{B},\underline{n}} + \underline{CC}_{\underline{B},\underline{n}} + \underline{PA}_{\underline{B},\underline{n}}$$

Where:

 $PA_{B,n}$  is the Profile Adjustment (being an adjustment calculated in accordance with Condition 2.3.19), and

 $Q_{B,t}$  is <u>and  $CC_{B,t}$  are</u> treated as a pass-through and is<u>are</u> corrected to actuals at the end of each Review Period <u>as described in condition 2.3.23</u>.

In respect of Formula Year t=2006,  $TRV_{F,t} = \pm 312.8$ m.

#### 2.3.19 Calculating the Profile Adjustment

The Profile Adjustment is an adjustment to reflect the long-term nature of the price control set out in this Condition 2.3. The Determined Revenue Per Therm

values are established at each Review by reference to the period to Formula Year t=q and not by reference to the period to Formula Year t=n. At each Review therefore, it is necessary to recognise the financial impact of having set a deferred recovery profile at the previous Reviews, by allowing the value that has been deferred at the preceding Reviews to be included as part of the Total Regulatory Value within the current Review.

The Best Available Profile Adjustment for each Review shall be calculated as follows:

$$PA_{B,n} = PA_{E,m} \cdot \frac{RPI_B}{RPI_F}$$

where  $PA_{E,m}$  will have been Determined by the Authority at the preceding Review.

 $PA_{E,m}$  will have been calculated by the Authority as follows:

$$PA_{E,m} = \frac{\left(\sum_{t=m+1}^{n} F_{E,t} \cdot (1+r_{E})^{n-t}\right)^{n-t}}{\left(\frac{TRV_{E,m} \cdot (1+r_{E})^{n-m}}{+DAV_{E,n} + Q_{E,n}}\right)}$$

$$PA_{E,m} = -\left(\sum_{t=m+1}^{n} F_{E,t} (1+r_{E})^{n-t} - TRV_{E,m} (1+r_{E})^{n-m} + DAV_{E,n} + CC_{E,n} + Q_{E,n}\right)$$

Where:

1

*m*, *n* are Formula Years as defined in Condition 2.3.12;

 $\sum_{t=m+1}^{n}$  is the summation of data in respect of all Formula Years from m+1 to n (inclusive);

 $F_{E,t}$ ,  $r_{E,t}$ ,  $TRV_{E,m}$ ,  $DAV_{E,n}$ ,  $CC_{E,n}$ ,  $Q_{E,n}$  are Determination Values and Designated Parameters established by the Authority at the previous Review in respect of Formula Years *t*, *m* or *n* (respectively);

 $r_E$  is the Designated Parameter for rate of return that applies to each of the Formula Years within the relevant period. Provided that, where the Authority did not establish the same value for each of the relevant Formula Years,  $(1+r_E)^{n-t}$  shall be replaced with  $(1+r_{E,t+1})\cdot(1+r_{E,t+2})...(1+r_{E,n})$  and  $(1+r_E)^{n-m}$  shall be treated accordingly.

### 2.3.20 Closing Regulatory Value

If  $DAV_{E,t=q} > 0$ , this value shall be returned to the Licensee in those Formula Years following t = q, in accordance with the principles determined by the Authority at that time, such principles to provide (inter alia) for an allowed rate of return and depreciation rate.

### 2.3.21 New Connections

The Licensee shall, at each Review, submit Best Available Values for the number of New Connections it expects in each Conveyance Category i and Conveyance Subcategory j in the period t=n+1 to t=q.

## 2.3.212.3.22 Current Designated Parameters

The Designated Parameters to apply in the first Formula Year and in each subsequent Formula Year up to and including Formula Year 2011 shall be:

Designated Parameter	Value
r <sub>t</sub>	0.075
m	2006
n	2011
q	2046
RPI	200.1

# 2.3.2222.3.23 Definitions and Interpretation

In this Condition 2.3, the following terms and expressions shall have the meanings attributed to them below:

"Actual" used as an adjective in relation to another defined word or phrase, means the Actual Value to be attributed to it; "Actual Value" means, in relation to any quantifiable term and in respect of any Formula Year *t*, a value that is established as the accurate value to be attributed to that term at the end of that Formula Year by reference to verifiable data in the possession of the Licensee. An Actual Value is denoted in the terms of formulae in this Condition 2.3 by the use

"Average ConveyancemeansTotalConveyanceRevenue in a Formula YearRevenue per therm"divided by the Total Volume in that Formula Year;"Average Specified Rate"means, in respect of a Formula Year, the average of the

daily base rates of Northern Bank plc expressed as a

of an F subscript;

percentage (or if such a rate ceases to be published, such other comparable rate as the Authority may specify)

"Allowed Revenue" means, in respect of Conveyance Category *i* in Formula Year *t*, the Determined Revenue Per Unit multiplied by the Actual Volume in respect of that Conveyance Category in that year;

"Annual Depreciation" means the annual depreciation of those assets included within the Depreciated Asset Value, allocated on a systematic basis over the useful lives of such assets, using policies and asset life assumptions approved by the Authority. The Depreciated Asset Value for 2006 shall be depreciated on a straight-line basis using a 40 year asset life;

"Best Available" used as an adjective in relation to another defined word or phrase, means the Best Available Value to be attributed to it;

"Best Available Value" means, in relation to any quantifiable term, a value for which the Licensee is required to provide best available information in accordance with Condition 2.3.14 or 2.3.15 and which, in respect of past Formula Years and to the extent possible, is based on Actual Values, and otherwise is a forecast best estimate. A Best Available Value is denoted in the terms of formulae in this Condition 2.3 by the use of a *B* subscript;

"<u>Capital Creditors</u>" means, in respect of each Formula Year and to the extent that they relate to the Controlled Charges:

- (i) Any monies due from the Licensee, relating to Capital Expenditure, at the end of that Formula Year; plus
- (*ii*) Any payments due from the Licensee, relating to Capital Expenditure, that, at the end of that Formula Year, constitute accruals.

"Capital Expenditure" means that capital expenditure in Formula Year t before adjustments for Movements in Capital Creditors for the development, construction, maintenance and operation of the Network in order to provide conveyance services in an economically efficient and safe manner given forecast development, including but not limited to the capital costs of standard credit and prepayment gas meters which the Licensee may be required to provide under Condition 2.6.1 and payments which may be made by the Licensee under Conditions 2.6.2(a)(ii) and 2.6.3(a)(ii) and expenditure on capital works by the Licensee undertaken by affiliates or related undertakings, but excluding costs which may be recoverable by the Conditions 2.4, 2.6.2(a)(i)Licensee under and 2.6.3(a)(i);

<u>"Conveyance Category"</u> <u>and "Conveyance</u> <u>Subcategory"</u> means a particular group of customers defined for the purposes of calculating the maximum conveyance revenue and applying a connections incentive, the four Conveyance Categories i, and their Conveyance Subcategories j (where applicable) being:

i = 1 firm gas demand of less than 2,500 therms per

annum which uses distribution pipe-line for conveyance;

Subcategories j:

j = 1 domestic owner occupied;

j = 2 domestic new build;

<u>j = 3 domestic N.I.H.E;</u>

j = 4 industrial and commercial

- <u>i = 2</u> small and medium industrial and commercial -<u>firm gas demand of 2,500 - 25,000 therms per</u> <u>annum which uses distribution pipe-line for</u> <u>conveyance;</u>
- <u>*i* = 3</u> large industrial and commercial firm gas <u>demand of over 25,000 therms per annum which</u> <u>uses distribution pipe-line for conveyance;</u>

1) Subcategories j:

4)

 $\frac{j}{j} = 2 \quad firm \quad gas$   $\frac{demand \ of \ over \ 75,000 \ therms \ per \ annum.}{}$ 

i = 4 interruptible -

gas demand which can be interrupted under the terms of the supply contract and which uses distribution pipe-line for conveyance;

"Designated Parameters"	means those parameters set out in Condition 2.3.26, the
	applicable values from time to time for which are set out
	in Condition 2.3.22; and those parameters that have been
	established (subject to any restrictions imposed under
	Condition 2.3.26) as such by the Authority in accordance
	with Conditions 2.3.11 to 2.3.13 (highlighted by use of
	the E subscript); and, in respect of Best Available Values,
	the Licensee's proposed values for those parameters
	(highlighted by use of the <i>B</i> subscript). The Designated
	Parameters set at one Review will apply unless and until
	revised at the next Review. Unless a Designated
	Parameter has a $t$ subscript, the value set at a Review
	must be the same for each Formula Year in the period
	t=n+1 to $t=q$ ;
"Determined"	used as an adjective in relation to another defined word
	or phrase, means the Determination Value to be
	attributed to it;
"Determination Notice"	means a notice given in accordance with Condition
	2.3.13 (c);

"Determination Value" means, in respect of each Formula Year *t*, a value that has been determined by the Authority to apply in respect of that Formula Year in accordance with Condition 2.3.13. A Determination Value is denoted in the terms of formulae in this Condition 2.3 by the use of an E subscript;

"Formula Year" means a year commencing on 1 January;

"New Connection" means a first time connection of a premises or site to the Network in Formula Year t and thus is one which has not previously contributed to the revenue of the Licensee for the conveyance of gas;

"Operating Expenditure" means that operating expenditure for the development, construction, maintenance and operation of the Network to provide conveyance services in an economically efficient and safe manner given forecast development and throughput, including but not limited to the charge for commissioning gas, such commissioning gas to be purchased on a economic basis, and including but not limited to the installation and operating costs of standard credit and pre-payment gas meters which the Licensee may be required to provide under Condition 2.6.1, and payments which may be made by the Licence Licensee under Conditions 2.6.2(ii) and 2.6.3(ii) and the charges for services to the Licensee by affiliates or related undertakings of the Licensee, but excluding costs which may be recoverable by the Licensee under Conditions 2.4, 2.6.2(i) and 2.6.3(i). For the avoidance of doubt, allowed operating expenditure shall include but not be limited to the charge for gas purchased from companies affiliated to the Licensee for the purpose of operating the

	Network, such purchases to be on an economic basis;
"Retail Prices Index" or " <i>RPI</i> "	means the General Index of Retail Prices published by the Office of National Statistics each month in respect of all items; or
	(a) if the Index for the specified month in any year shall not have been published on or before the last day of the

	not have been published on or before the last day of the
	sixth month after the specified month, such index for
	such month or months as the Authority may after
	consultation with the Licensee determine to be
	appropriate in the circumstances; or
	b) if there is a material change in the basis of the Index,
	such other index as the Authority may after consultation
	with the Licensee determine to be appropriate in the
	circumstances;
"Revenue Per Therm"	means, in respect of any Formula Year t, the Total
	Conveyance Revenue for that Formula Year divided by
	the Total Volume for that Formula Year;
"Review"	has the meaning attributed to it in Condition 2.3.11;
"Review Disapplication	means a notice given in accordance with Condition
Notice"	2.3.13 (d);
"Total Conveyance	means the revenue (measured on an accruals basis)
Revenue"	derived by the Licensee from the provision of

conveyance services after deduction of value added tax

(if any) and any other taxes based directly on this

revenue; means the allowed revenue for the conveyance

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#### of gas determined by the Authority;

"Total Volume"	mean	ns the aggr	rega	te	quantity	y of	gas, in therms,	taken	off
	the	Network	as	a	result	of	arrangements	with	gas
	supp	liers in the	e Fo	rm	ula Yea	r;			

"Working Capital" means, in respect of each Formula Year and to the extent only that they relate to the Controlled Charges:

- (i) any monies due to the Licensee, at the end of that Formula Year; plus
- (ii) any payments by the Licensee that, at the end of that Formula Year, constitute prepayments; plus
- (iii) any grants that are, at the end of that Formula Year, still due to the Licensee; less
- (iv) any monies due from the Licensee, at the end of that Formula Year; less
- (v) any payments <u>due fromto</u> the Licensee that, at the end of that Formula Year, constitute <u>accrualsprepayments</u>.

In this Condition 2.3, "revenue", "expenditure", "debtors", "prepayments", "creditors" and "accruals" *including Capital Creditors* are the amounts that which are confirmed by the Licensee as *relatingauditors to be relevant* to the *provision of conveyance services within the meaning of this Licence and which are equal to such of those relevant amounts as have been included under appropriate headings in the financial statements of the Licensee's Separate Business of conveying gas by* 

distribution pipe linesto, through and within the Licensed Area as specified in <u>Condition 1.3</u> for each period in question.

## 2.3.232.3.24 Determination Values

The Determination Values to apply in the first Formula Year (year m+1) and in each subsequent Formula Year up to and including Formula Year n shall be as notified by the Authority to the Licensee in accordance with Condition 2.3.13.

## 2.3.242.3.25 Best Available Values, Determination Values and Actual Values

Description	Best Available Values	Determination Values	Actual Values
Volume (for Conveyance Categories <i>i</i> )	$V_{B,i,t}$	$V_{E,i,t}$	$V_{F,i,t}$
Capital Expenditure	$C_{B,t}$	$C_{E,t}$	
Capital Creditors	$\underline{CC_{B,t}}$	$\underline{CC_{E,t}}$	
Operating Expenditure	$O_{B,t}$	$O_{E,t}$	
Annual Depreciation	$D_{B,t}$	$D_{E,t}$	
Cash Flow (calculated in accordance with Condition 2.3.16)	$F_{B,t}$	F <sub>E,t</sub>	
Working Capital	$Q_{\scriptscriptstyle B,t}$	$Q_{E,t}$	
Revenue Per Therm (for Conveyance Categories <i>i</i> )	$P_{B,i,t}$	$P_{E,i,t}$	$P_{F,i,t}$
<u>Total Conveyance</u> <u>Revenue</u>	$R_{B,t}$	$R_{E,t}$	

<u>Number of New</u> <u>Connections (for</u> <u>Conveyance</u> <u>Categories i and</u> <u>Conveyance</u> <u>Subcategories j)</u>	N <sub>B,i,j,t</sub>	$N_{E,i,j,t}$	$\underline{N_{F,i,j,t}}$
Average Incentive Value (for Conveyance Categories i and Conveyance Subcategories j)	$\underline{H}_{\underline{B},i,j,t}$	$\underline{H}_{E,i,j,t}$	
Depreciated Asset Value (calculated in accordance with Condition 2.3.17)	$DAV_{B,t}$	$DAV_{E,t}$	
Total Regulatory Value (calculated in accordance with Condition 2.3.18)*	$TRV_{B,n}$	$TRV_{E,m}$	
Profile Adjustment (calculated in accordance with Condition 2.3.19)*	$PA_{B,n}$	$PA_{E,m}$	

\* at end of Formula Year *n* (for the Review in which Best Available Values are being submitted) or at the end of Formula Year *m* (on and following determination of Determination Values for that Review).

2.3.252.3.26 Designated Parameters

Description	Designated	Limitation to the application of re-
	Parameters	designated values

Rate of return	r <sub>t</sub>	Means a pre-tax rate of return of 7.5% up to and including Formula Year 2016 applied to real cashflows, after which time it may be reviewed by the Authority;
Trigger for Reviews (as defined in Condition 2.3.11)	n	A Formula Year
The Formula Year that was n for the preceding review	m	A Formula Year
The forecasting horizon for review calculations (as defined in Condition_2.3.12)	q	Shall be the Formula Year 2046 until 2041, after which time it may be the Formula Year 2046 or any Formula Year after 2046
The indexation base *	RPI	None

\* which will, in respect of the Determination Values determined at the Review in question, reflect the prices in which those Determination Values are expressed. It can therefore be used, in conjunction with– $RPI_{F,t}$ , to adjust the Determined Revenue Per Therm value to allow for changes in the Retail Prices Index in the period since the value of the Determined Revenue Per Therm was determined.

Key to other formula parameters:

- *a* subscript to denote a Formula Year as defined in Condition 2.3.12;
- *B*\_\_\_\_\_\_ subscript to denote a Best Available Value;
- $C_t$  \_\_\_\_\_Capital Expenditure in Formula Year t;

<u>CC</u> <sub>t</sub>	Capital Creditors in Formula Year t;
<u> </u>	Movement in Capital Creditors in Formula Year t;
<i>E</i>	subscript to denote Determination Values;
<i>F</i>	subscript to denote Actual Values;
i	subscript to denote a Conveyance Category;
<u>j</u>	subscript to denote a Conveyance Subcategory;
<i>I</i> <sub>t</sub>	Average Specified Rate in Formula Year t
m	subscript to denote a Formula Year as defined in Condition 2.3.12;
<i>Q</i> <sub>t</sub>	Working Capital in Formula Year t
Q' <sub>t</sub>	Movement in Working Capital in Formula Year t;
<i>O</i> <sub>t</sub>	Operating Expenditure in Formula Year <i>t</i> ;
$PA_t$	Profile Adjustment (calculated in accordance with Condition 2.3.19) in Formula Year t;
$RPI_E, RPI_B$	Retail Prices Index base reference points (as defined in Conditions 2.3.8 and 2.3.14);
$RPI_{F,t}$ ;	Retail Prices Index value for September of Formula Year =
	<i>t</i> ;
t	subscript to denote any Formula Year;

 $Z_{F,i,t}$ the Actual Value for accumulated under or over-recoveriesfor Formula Year t t and Conveyance Category t t(calculated in accordance with Condition 2.3.9).

#### Other Minor Ammendments

#### 1.3.1 <u>Financial years</u>

For the purposes of this Condition the first financial year of the Licensee shall run from the 5<sup>th</sup> September 19962006 to 31st December 19962007 and thereafter each financial year of the Licensee shall run from 1st January to the following 31st December.

## 2.3.6 <u>Resolution of Disputes</u>

(b) notwithstanding the provisions of Conditions 2.3.1 and 2.3.2, in accordance with a price determined by the Authority as will allow the Licensee to enjoy a revenue within the maximum amount recoverable under its conveyance charging methodology for the use of the Network by gas suppliers allowed average conveyance revenue as may be realised under Conditions 2.3.8 and 2.3.14 as the case may be, and where applicable, the Licensee's connection charges, and on such other terms as the Authority reasonably considers appropriate in all the circumstances, including terms as to the Network Code, or as may establish, modify or amend a Network Code, where the Licensee's conveyance charges and other terms for the conveyance of gas and/or the Network Code:

## **APPENDIX 2 – MODIFICATION NOTICE**

In pursuance of its duties and powers under Article 14(3) of the Gas (Northern Ireland) Order 1996 (the "Order"), the Northern Ireland Authority for Utility Regulation ("the Authority"), having obtained the consent of Phoenix Natural Gas Limited (the "Licensee"), hereby gives notice as follows:

- 1. It proposes to modify the price control condition, specifically Part 2 Condition 2.3 of the conveyance licence held by the Licensee by removing the volume of throughput revenue driver (average yield revenue cap) and replace it with a fixed revenue cap combined with connections revenue driver in the domestic owner-occupied (OO) and small industrial and commercial<sup>[1]</sup> (I&C) sectors.
- 2. The reasons for the proposed modifications are to:
  - a) help achieve our objective to promote development of the gas industry;
  - b) ensure that the Licensee is adequately incentivised to maximise connections to its network; benefiting customers via a larger customer base.
  - c) deliver optimum outcomes for customers;
- 3. The effect of the proposed modifications will be to:
  - a) reduce revenue volatility due to the volume driver associated with average revenue yield cap;
  - b) strengthen the incentives to development of the Belfast owner occupied and small I&C sectors via a connection incentive scheme and a per-connection marketing and advertising allowance;
  - c) lower long run average customer costs.
- 4. Representations or objections with respect to the proposed modifications (which are available on the Authority's website or can be obtained by contacting the person named below) may be made on or before 5pm on 15<sup>th</sup> May 2009 to:

Michael Lowry Gas Distribution and Supply Utility Regulator, Queens House 14 Queen Street

<sup>&</sup>lt;sup>[1]</sup> Tariff I&C customers consuming less than 2,500 therms per annum.

Belfast BT1 6ED

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or by email to michael.lowry@niaur.gov.uk

The Authority intends and prefers to publish all comments received to its consultations, but will consider facilitating those respondents who wish certain sections of their submission to remain confidential. Accordingly, respondents that so wish should submit these sections in an appendix that is clearly marked "Confidential", and explain why they believe such content to be so categorised.

5. The Authority has, pursuant to Article 14(4)(b) of the Order served a copy of this notice on the Licensee and sent a copy to the Department of Enterprise Trade and Investment.

Dated this 3<sup>rd</sup> April 2009

**Brian McHugh** 

For and on behalf of the Northern Ireland Authority for Utility Regulation