

**Transmission Tariffs  
for the  
Gas Year 2015/16**

**26<sup>th</sup> August 2015**



## 1. Introduction

Gas Networks Ireland (GNI) welcomes the opportunity to present its paper to the CER on the Transmission Tariffs for 2015/16. The 2015/16 tariff calculation is based on the CER decision papers CER/15/140 and CER/15/141. The Tariffs for 2015/16, apply the Revenue Control Formulae as outlined in Section 3 and set against the revised forecast system demand for the gas year as outlined in Section 4. The Tariff Model developed as per the CER decision paper CER/15/140 and CER/15/141 then calculates the actual Tariffs for Moffat, Bellanaboy, Inch Production, Inch Storage and Exit.

The calculation of the 2015/16 Transmission tariffs involves a number of steps:

1. Updating the CER published 5-Year Revenue Control model to reflect the Incremental OPEX & CAPEX which results in the 2015/16 allowed revenue increasing by €0.07m in 15/16 monies.
2. Deriving the GNI allowed revenue through application of the revenue control formulae as determined by the CER for Price Control 3 (PC3).
3. Forecasting system demand, specifically:
  - GNI are forecasting that c.19% of Exit Revenues and 20% of Entry Revenues will be generated from Short Term Capacity Products in 2015/16.
4. Calculating unit capacity and commodity tariffs based on the required revenue and target revenue in accordance with the CER approved methodology as set out in CER/15/140 and CER/15/141.

The calculations are shown in the appendices.

Separate capacity booking will be required for Inch Storage and Inch Productions. In the event that the capacity bookings are not clear to the Transporter the default will be the Production Entry Tariff.

## 2. Executive Summary

Applying the Revenue Control Formulae and incorporating updated demand forecasts, results in a nominal tariff decrease of circa -0.4% for Moffat shippers (Exit Capacity plus Moffat Capacity) and a decrease of -2.6% nominal to capacity charges for Inch Storage shippers (Exit Capacity + Inch Storage Capacity) on the 2014/15 tariff's.

The Price Control determines the GNI allowed revenues for a 5-year period. GNI has calculated the 2015/16 revenue in line with the price control decision of November 2012 and the updated revenue profile published by the CER on 21st August 2013 when setting the 2013/14 tariff (ref CER/13/193).

When compared to the previous 2015/16 allowed revenue, the revised 2015/16 allowed revenue for GNI has decreased by €3.14m in 15/16 Monies. This decrease is the net effect following the application of:

- Incremental revenue for additional OPEX in relation to Middleton Compressor Station, the Apprenticeship scheme and Market Assurance amounting to c +€0.07m
- The 2015/16 allowed revenue has also been adjusted for an increase of €0.98m in Pass-Through costs and an adjustment for revenue over-recovered during 2013/14 (-€4.19m) which is now being returned.

The following sections outline the application of the Price Control Formula and discuss the tariff calculation in more detail.

### 3. Allowed Revenue Calculation

The Revenue Control Formula sets out the parameters for the calculation of the required revenue in a given gas year, in this case gas year 2015/16. The GNI required revenues are adjusted to take account of forecast pass through costs and inflation for 2015/16. The Revenue Control Formula also has a Correction Factor built into it which takes account of the actual revenue (over/under recoveries), inflation and pass through costs for the previous gas year i.e. 2013/14.

GNI have applied these formulae and have made the following assumptions therein;

- Inflation
  - In setting the 2015/16 tariffs, 0.95% inflation was assumed for the time period from April 15 to March 16<sup>1</sup>.
- Euribor<sup>2</sup>
  - 2013/14 Euribor of 0.56% which represents an average 12-month rate to May 6<sup>th</sup> 2014.
  - 2014/15 Euribor of 0.35% which represents an average 12-month rate to May 22<sup>nd</sup> 2015.

Please see Appendix 4 for an explanation of the interest rate multiplier/euribor rates.

The 2015/16 allowed revenues have been further adjusted for the following items:

GNI have included additional OPEX in relation to Middleton Compressor Station, the Apprenticeship Scheme and Market Assurance costs in the Price Control to determine the revised allowed revenues for the 5-year period. As these costs were not approved in the original PC3 decision, GNI have followed the CER guidance per sec. 8.5 of CER/12/196 and made a subsequent application as part of the 2015/16 tariff setting process. GNI has submitted separate submissions relating to these costs.

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<sup>1</sup> The inflation for 2015/16 is estimated to be 0.95% based on figures from the Central Bank.

<sup>2</sup> This is used to uplift revenue over/under-recoveries for the 2013/14 tariff year. Revenue over-recoveries up to 103% and under-recoveries attract an interest rate of Euribor + 2%.

Any over-recovery over 103% of allowable revenue attracts an interest rate of Euribor + 4% for Year  $t$ .

### Evolution of 2015/16 Allowed Revenues and Impact on PC3 Allowed Revenues

As outlined above, GNI have included additional OPEX with the Revenue allowed under the Price Control to determine the revised allowed revenue for 15/16, this is then adjusted for Pass Through Costs and the 13/14 Correction Factor.

### Forecast for 2015/16 Pass Through Costs

The impact of the forecast 2015/16 pass through costs can be seen in the table below:

2015/16 Forecasts	(Saving)/Charge
<i>(2015/16 monies)</i>	
<b>Pass Through Costs Variance</b>	<b>€m</b>
Rates *	0.55
CER Levy	0.00
Gaslink	0.55
CO2 **	-0.11
<b>Pass Through Costs Difference - Charge</b>	<b>0.98</b>

\*For rates, 50% of the variance between allowed and estimated costs is passed through.

\*\*For CO2, 100% of the variance between the original allowed price and the estimated price is passed through. In year of close out, 100% of the variance between the estimated and actual price is passed through when the actual price is known.

- **Pass Through Costs**
  - Pass through costs include Rates, CER Levy, scope of work previously carried out by Gaslink and Carbon (CO<sub>2</sub>) Costs
  - The projected carbon costs included for 2015/16 are based on a carbon price of €7.40 per tonne.
  - CER Levy for 15/16 is estimated to be €1.37m, already allowed in PC3
  - The costs associated with the activities previously carried out by Gaslink are forecast to be €2.91m.

### 2013/14 Correction Factor

The correction factor adjusts for differences in revised forecast and actual out turn revenues for the previous period (i.e. 2013/14). As can be seen from the table below, transmission over-recovered revenues in 2013/14 of €3.67m the actual versus out-turn pass-through costs varied by €0.32m which results in an over-recovery of €3.995 after applying the interest rate multiplier this results in an over-recovery of €4.19m which is offset against the allowed revenue requirement for 2015/16.

<b>2013/14 Actual Outturn (Kt-1)</b>	<b>€m</b>	
<b>Revenue Over Recovery</b>	-	3.67
<b>Pass Through Costs</b>		
Rates - Saving	-	0.44
CER Levy - Charge		0.20
ISO -Saving	-	0.20
CO2 - Charge		0.11
<b>Total Pass Through Costs</b>		<b>-0.32</b>
<b>Total 2013/14 Adjustment for Excess Revenue &amp; Cost</b>		<b>-3.995</b>
Interest Rate Multiplier		1.050
<b>Total Kt-1 Ajustment (2015/16 monies)</b>	<b>-</b>	<b>4.19</b>

Please see Appendix 1 for the correction factor calculations i.e. Moffat, Inch and Exit. It is important to note that these K Factor values are combined when calculating the Tariffs for 15/16 as we move towards one revenue forecast.

GNI are forecasting a significant over-recovery for the 14/15 gas year primarily as a result of increased capacity bookings at Moffat. In order to stabilise the movements in tariffs, given the estimated amount of projected over-recovery, there is a requirement that the 14/15 over recovery will be given back over both 16/17 and 17/18 gas years.

## Revenue Summary

The revenues derived from applying the Revenue Control Formula are as follows:

Table 3.1

2015/16 REVENUE CONTROL		Revenue		
<u>Revenue Summary</u>		Original Required Revenue	Control Formula	Difference
<i>(2015/16 monies)</i>		€m	€m	€m
Moffat		61.11	59.88	-1.23
Inch		1.97	1.98	0.02
Exit		130.99	128.99	-2.00
<b>Total Revenue Allowed</b>		<b>194.07</b>	<b>190.85</b>	<b>-3.22</b>

\*Please note that the original revenue requirement column also includes incremental opex and capex allowances.

Please see Appendix 2 for the Revenue Control Formula calculations.

At a total level the impact of the correction factor (Kt-1) adjustments and the revised forecast pass through costs for 2015/16 on the Revenue Requirement comes to (€3.22m). The detail can be seen in the table below.

<b>Total Revenue Summary</b>	
<i>Values in 2015/16 monies</i>	€m
GNI Allowed Required Revenue	194.00
<i>Plus : OPEX &amp; CAPEX adjustments</i>	0.07
	<b>194.07</b>
<u>Revenue Control Formula Adjustments</u>	
Pass Through Costs Forecast Charge 2015/16	0.98
2013/14 Correction Factor (Kt-1)	-4.19
<b>Total Revenue Control Formula Adjustments</b>	<b>-3.22</b>
<b>Final 2015/16 Required Revenue</b>	<b>190.85</b>

## **4. Revised Capacity**

The Capacity projected for 2015/16 assumes a mix of both firm and short term capacity products. It is expected that a significant amount of short-term capacity will be utilised in 2015/16 and these bookings are equivalent to c.20% of the revenue at the Entry Points and c.19% of the revenue at the Exit systems.

### Forecast Capacity for 15/16

The forecast Capacity figures are shown in table 4.1 below.

Table 4.1

<b>Capacity Bookings</b>		<b>2014/15 Tariff Forecast</b>	<b>2015/16 PC3 Forecast Revised Forecast</b>		<b>2015/16 % Change v's 2014/15</b>	<b>2015/16 % Change v's Original</b>
Exit Bookings	GWh	267.77	223.77	267.09	-0.3%	19.4%
Inch Production	GWh	31.91	31.70	3.99	NA	NA
Inch Storage	GWh	NA	NA	26.26	NA	NA
Moffat Bookings	GWh	138.41	164.78	124.37	-10.1%	-24.5%
Bellanaboy Bookings	GWh	NA	NA	50.26	NA	NA

The numbers outlined in table 4.1 are based on the following assumptions:

It is assumed that most DM and LDM shippers will continue to optimize their capacity booking between a combination of annual, monthly and daily products. And the NDM sector will continue to book for a 1-in-50 peak day.

15/16 annual Moffat capacity is 10.1% lower than 2014/15 forecasts due to the effect of Bellanaboy. It is assumed that Moffat Shippers will optimise their bookings and continue to rely on trades at Entry.

Inch Entry Bookings are based on details provided by Kinsale Energy. The numbers in this table for 14/15 represent storage and production combined.

Separate capacity booking will be required for Inch Storage and Inch Production. In the event that the capacity bookings are not clear the default will be the Production Entry Tariff.

Bellanaboy Entry assumed to commence in 2015/16. The estimate of capacity bookings for 15/16 is forecast at 50.26 as per the table above.

Note that the 2015/16 Revised Forecast demands are a mix of both annual and short-term capacities: The short-term capacity forecasted is converted into an annual equivalent value based on the month in which it is expected to arise and the relevant multiplier in that month.

Please see Appendix 3 for the underlying demand assumptions used in formulating the projected capacity bookings for gas year 2015/16.

### 5. Transmission Tariff for 2015/16

The 2015/16 tariff calculation is based on the CER decision papers CER/15/140 and CER/15/141. The Tariffs for 2015/16, apply the Revenue Control Formulae as outlined in Section 3 and set against the revised forecast system demand for the gas year as outlined in Section 4. The Tariff Model developed as per the CER decision paper CER/15/140 and CER/15/141 then calculates the actual Tariffs for Moffat, Bellanaboy, Inch Production, Inch Storage and Exit.

The primary tariff for Inch is €53.058 €/MWh which is equal to the simple average cost of all paths from the Inch Storage Entry multiplied by 33%, i.e., the percentage of the required revenue being recovered from entry.

The table below outlines the resultant tariffs by applying this approach and states the change in tariffs that a Shipper would incur.

<b>GNI Transmission Tariffs for 2015/16</b>			<b>Published Tariffs</b>		<b>% Change</b>
<b>Exit</b>	<b>€ 2015/16 Tariff</b>	<b>(15/16 Monies)</b>	<b>2013/14 Tariff €</b>	<b>2014/15 Tariff €</b>	<b>Nominal from 14/15</b>
<b>Exit</b>					
capacity	<b>430.882</b>	per peak day MWh	509.093	443.036	-2.7%
commodity	<b>0.267</b>	per MWh	0.268	0.275	-2.9%
<b>Moffat Entry</b>					
capacity	<b>367.786</b>	per peak day MWh	355.325	358.577	2.6%
commodity	<b>0.118</b>	per MWh	0.132	0.157	-25.2%
<b>Bellnabov Entry</b>					
capacity	<b>617.996</b>	per peak day MWh	NA	NA	
commodity	<b>0.118</b>	per MWh	NA	NA	
<b>Inch Storage Entry</b>					
capacity	<b>53.058</b>	per peak day MWh	45.717	53.604	-1.0%
commodity	<b>0.118</b>	per MWh	0.047	0.034	247.7%
<b>Inch Production Entry</b>					
capacity	<b>164.186</b>	per peak day MWh	45.717	53.604	206.3%
commodity	<b>0.118</b>	per MWh	0.047	0.034	247.7%
<b>Illustrative Transmission Transportation Costs</b>					
	<b>€</b>		<b>€</b>	<b>€</b>	
<b>Transmission Transportation Cost of UK Gas</b>					
capacity	<b>798.668</b>	per peak day MWh	864.418	801.612	-0.4%
commodity	<b>0.385</b>	per MWh	0.400	0.433	-11.0%
<b>Transmission Transportation Cost of Bellnabov Gas</b>					
capacity	<b>1,048.878</b>	per peak day MWh	NA	NA	
commodity	<b>0.385</b>	per MWh	NA	NA	
<b>Transmission Transportation Cost of Inch Storage Gas</b>					
capacity	<b>483.940</b>	per peak day MWh	554.810	496.639	-2.6%
commodity	<b>0.385</b>	per MWh	0.315	0.309	24.5%
<b>Transmission Transportation Cost of Inch Production Gas</b>					
capacity	<b>595.068</b>	per peak day MWh	554.810	496.639	20%
commodity	<b>0.385</b>	per MWh	0.315	0.309	25%

As can be seen above this will result in a decrease of circa -0.4% nominal to capacity charges for Moffat shippers (Exit Capacity plus Moffat Capacity) and a decrease of -2.6% nominal to capacity charges for Inch Storage shippers (Exit Capacity + Inch Storage Capacity) on the 2014/15 tariffs.



## APPENDIX 1: Correction Factor Calculations<sup>3</sup>

### Moffat

CALCULATION OF KIC <sub>t-1</sub>			
<b>KIC<sub>t-1</sub> = { (RIC<sub>t-1</sub> + (0.5*UICF<sub>t-1</sub>)) * (1+ HICPA<sub>t-1</sub> /1+ HICPR<sub>t-1</sub>) - PICA<sub>t-1</sub> - (AICR<sub>t-1</sub> + (0.5*UICA<sub>t-1</sub>)) }*(1+(I<sub>t</sub>/100))*(1+(I<sub>t-1</sub>/100))</b>			
Description		Formula Ref	Value
Allowed Revenue period t-1	Year t-1 Monies	RIC <sub>t-1</sub>	65.08
Forecast Other Revenue from IC in period t-1	Year t-1 Monies	0.5*UICF <sub>t-1</sub>	0.00
Actual Inflation t-1		HICPA <sub>t-1</sub>	3.12%
Allowed Inflation t-1		HICPR <sub>t-1</sub>	4.05%
<b>Calculation - Revenue * Inflation</b>		<b>(RIC<sub>t-1</sub> + (0.5*UICF<sub>t-1</sub>)) * (1+ HICPA<sub>t-1</sub> /1+ HICPR<sub>t-1</sub>)</b>	<b>64.50</b>
Expected pass-through costs less Actual (100%)	Year t-1 Monies	PICA <sub>t-1</sub>	-0.10
Expected pass-through costs less Actual (50%)	Year t-1 Monies	PICA <sub>t-1</sub>	0.31
Actual Revenue Recovered in period t-1	Year t-1 Monies	AICR <sub>t-1</sub>	65.68
Actual Other Revenue from IC in period t-1	Year t-1 Monies	0.5*UICA <sub>t-1</sub>	0.00
<b>Calculation - Actual Revenue</b>		<b>PICA<sub>t-1</sub> - (AICR<sub>t-1</sub> + (0.5*UICA<sub>t-1</sub>))</b>	<b>-65.89</b>
Actual Revenue Recovered vs Allowed			101%
Euribor Rate period t		I <sub>t</sub>	2.35%
Euribor Rate period t-1		I <sub>t-1</sub>	2.56%
<b>Correction Factor period t-1</b>	Year t+1 Monies	<b>KIC<sub>t-1</sub></b>	<b>-1.46</b>

### Inch

CALCULATION OF KINCH <sub>t-1</sub>			
<b>KINCH<sub>t-1</sub> = { (RINCH<sub>t-1</sub> + (0.5*UINCHF<sub>t-1</sub>)) * (1+ HICPA<sub>t-1</sub> /1+ HICPR<sub>t-1</sub>) - PINCHA<sub>t-1</sub> - (AINCHR<sub>t-1</sub> + (0.5*UINCHA<sub>t-1</sub>)) }*(1+(I<sub>t</sub>/100))*(1+(I<sub>t-1</sub>/100))</b>			
Description		Formula Ref	Value
Allowed Revenue period t-1	Year t-1 Monies	RINCH <sub>t-1</sub>	1.95
Forecast Other Revenue in period t-1	Year t-1 Monies	0.5*UINCHF <sub>t-1</sub>	0.00
Actual Inflation t-1		HICPA <sub>t-1</sub>	3.12%
Allowed Inflation t-1		HICPR <sub>t-1</sub>	4.05%
<b>Calculation - Revenue * Inflation</b>		<b>(RINCH<sub>t-1</sub> + (0.5*UINCHF<sub>t-1</sub>)) * (1+ HICPA<sub>t-1</sub> /1+ HICPR<sub>t-1</sub>)</b>	<b>1.93</b>
Expected pass-through costs less Actual (100%)	Year t-1 Monies	PINCHA <sub>t-1</sub>	-0.008
Expected pass-through costs less Actual (50%)	Year t-1 Monies	PINCHA <sub>t-1</sub>	-0.025
Actual Revenue Recovered in period t-1	Year t-1 Monies	AINCHR <sub>t-1</sub>	1.93
Actual Other Revenue from IC in period t-1	Year t-1 Monies	0.5*UINCHA <sub>t-1</sub>	0.00
<b>Calculation - Actual Revenue</b>		<b>PINCHA<sub>t-1</sub> - (AINCHR<sub>t-1</sub> + (0.5*UINCHA<sub>t-1</sub>))</b>	<b>-1.89</b>
Actual Revenue Recovered vs Allowed			98.8%
Euribor Rate period t		I <sub>t</sub>	2.35%
Euribor Rate period t-1		I <sub>t-1</sub>	2.56%
<b>Correction Factor period t-1</b>	Year t+1 Monies	<b>KINCH<sub>t-1</sub></b>	<b>0.04</b>

<sup>3</sup> Note: Terminology in tables is a per Transmission Submission during PC3

**Exit**

<b>CALCULATION OF KEXIT<sub>t-1</sub></b>			
<b>KEXIT<sub>t-1</sub> = { (REXIT<sub>t-1</sub> + 0.5*UEXITF<sub>t-1</sub>)*(1+ (HICPA<sub>t-1</sub>/100)/1+ (HICPR<sub>t-1</sub>/100)) - PEXITA<sub>t-1</sub> - (AEXITR<sub>t-1</sub> + (0.5*UEXITA<sub>t-1</sub>)) }*(1+(I<sub>t</sub>/100))*(1+(I<sub>t-1</sub>/100))</b>			
<b>Description</b>		<b>Formula Ref</b>	<b>Value</b>
Allowed Revenue period t-1	Year t-1 Monies	REXIT <sub>t-1</sub>	150.75858
Forecast Other Revenue in period t-1	Year t-1 Monies	0.5*UEXITF <sub>t-1</sub>	0.00
Actual Inflation t-1		HICPA <sub>t-1</sub>	3.12164%
Allowed Inflation t-1		HICPR <sub>t-1</sub>	4.05%
<b>Calculation - Revenue * Inflation</b>		<b>(REXIT<sub>t-1</sub> + (0.5*UEXITF<sub>t-1</sub>)) * (1+ HICPA<sub>t-1</sub> /1+ HICPR<sub>t-1</sub>)</b>	<b>149.41784</b>
Expected pass-through costs less Actual (100%)	Year t-1 Monies	PEXITA <sub>t-1</sub>	-0.01
Expected pass-through costs less Actual (50%)	Year t-1 Monies	PEXITA <sub>t-1</sub>	0.16
Actual Revenue Recovered in period t-1	Year t-1 Monies	AEXITR <sub>t-1</sub>	151.91
Actual Other Revenue from IC in period t-1	Year t-1 Monies	0.5*UEXITA <sub>t-1</sub>	0.00
<b>Calculation - Actual Revenue</b>		<b>PEXITA<sub>t-1</sub> - (AEXITR<sub>t-1</sub> + (0.5*UEXITA<sub>t-1</sub>))</b>	<b>-152.06</b>
Actual Revenue Recovered vs Allowed			101%
Euribor Rate period t		I <sub>t</sub>	2.35%
Euribor Rate period t-1		I <sub>t-1</sub>	2.56%
<b>Correction Factor period t-1</b>	Year t+1 Monies	<b>KEXIT<sub>t-1</sub></b>	<b>-2.77</b>

**APPENDIX 2: Revenue Control Formula Calculations<sup>4</sup>**

<b>INTERCONNECTOR</b>		<u>Revenue Allowed in year t+1</u>	
<u>Description</u>		<u>Formula Ref</u>	<u>Value</u>
Inflation		<i>HICPD<sub>j</sub></i>	3.79%
Allowed Revenue for period t+1	<i>10/11 Monies</i>	<i>BIC<sub>t+1</sub></i>	58.88
<b>Calculation - Inflated Allowable Revenue</b>		<b><math>\{(1+(HICP_j / 100)) * BIC_{t+1}\}</math></b>	<b>61.11</b>
Forecast less Allowable pass through costs (50%)	<i>Yr t+1 Monies</i>	<i>PICF<sub>t+1</sub></i>	0.33
Forecast less Allowable pass through costs (100%)	<i>Yr t+1 Monies</i>	<i>PICF<sub>t+2</sub></i>	-0.09
Correction Factor K <sub>t-1</sub>	<i>Yr t+1 Monies</i>	<i>KIC<sub>t-1</sub></i>	-1.46
Forecast Other Revenue in period t+1	<i>Yr t+1 Monies</i>	<i>0.5*UICF<sub>t</sub></i>	0.00
<b>Allowable Revenue to be Recovered in year t+1</b>			<b>59.88</b>
<b>INCH</b>		<u>Revenue Allowed in year t+1</u>	
<u>Description</u>		<u>Formula Ref</u>	<u>Value</u>
Inflation		<i>HICPD<sub>j</sub></i>	3.79%
Allowed Revenue for period t+1	<i>10/11 Monies</i>	<i>BINCH<sub>t+1</sub></i>	1.89
<b>Calculation - Inflated Allowable Revenue</b>		<b><math>\{(1+(HICP_j / 100)) * BINCH_{t+1}\}</math></b>	<b>1.97</b>
Forecast less Allowable pass through costs (50%)	<i>Yr t+1 Monies</i>	<i>PINCHF<sub>t+1</sub></i>	0.00
Forecast less Allowable pass through costs (100%)	<i>Yr t+1 Monies</i>	<i>PINCHF<sub>t+2</sub></i>	-0.02
Correction Factor K <sub>t-1</sub>	<i>Yr t+1 Monies</i>	<i>KINCH<sub>t-1</sub></i>	0.04
Forecast Other Revenue in period t+1	<i>Yr t+1 Monies</i>	<i>0.5*UICF<sub>t</sub></i>	0.00
<b>Allowable Revenue to be Recovered in year t+1</b>			<b>1.98</b>
<b>EXIT</b>		<u>Revenue Allowed in year t+1</u>	
<u>Description</u>		<u>Formula Ref</u>	<u>Value</u>
Inflation		<i>HICPD<sub>j</sub></i>	3.79%
Allowed Revenue for period t+1	<i>10/11 Monies</i>	<i>BEXIT<sub>t+1</sub></i>	126.21
<b>Calculation - Inflated Allowable Revenue</b>		<b><math>\{(1+(HICP_j / 100)) * BIC_{t+1}\}</math></b>	<b>130.99</b>
Forecast less Allowable pass through costs (50%)	<i>Yr t+1 Monies</i>	<i>PEXIT<sub>t+1</sub></i>	0.22
Forecast less Allowable pass through costs (100%)	<i>Yr t+1 Monies</i>	<i>PEXIT<sub>t+1</sub></i>	0.55
Correction Factor K <sub>t-1</sub>	<i>Yr t+1 Monies</i>	<i>KEXIT<sub>t-1</sub></i>	-2.77
Forecast Other Revenue in period t+1	<i>Yr t+1 Monies</i>	<i>0.5*UEXITF<sub>t</sub></i>	0.00
<b>Allowable Revenue to be Recovered in year t+1</b>			<b>128.99</b>

<sup>4</sup> Note: Terminology in tables is a per Transmission Submission during PC3

### **APPENDIX 3: Assumptions Used in Formulating the 2015/16 Commodity Forecast**

The main assumptions used in formulating the Entry/Exit forecast for the gas year 2015/16 when compared to the 2014/15 tariff forecast may be summarised as follows:

- Overall Exit Commodity is static compared to the 14/15 forecast.
- Power demand is down 4% on 14/15, this reflects the ongoing demand destruction due to increased wind and interconnection.
- DM demand is projected to be 7% up on 14/15 reflecting strong growth in 14/15 and a number of large new connections in 15/16
- NDM Demand is up 3% on 14/15
- Bellanaboy assumed to commence production in 2015/16.

**APPENDIX 4: Interest Rate Multiplier/Euribor Rates**

The interest rate multiplier is used to uplift revenue over/under recoveries for the previous year (e.g.13/14). In 2013/14 Transmission experienced a revenue over-recovery. This over recovery of revenue was under 103% for the Exit and Moffat System and therefore attracted an interest rate of Euribor + 2%. The Euribor Rate applied is based on information downloaded from the Euribor website:

<http://www.euribor-ebf.eu/euribor-org/euribor-rates.html>

Euribor 2013/14	0.56%	
Euribor 2014/15	0.35%	
Euribor + 2% 2013/14	2.56%	<i>lt-1</i>
Euribor + 2% 2014/15	2.35%	<i>lt</i>
Euribor + 4% 2013/14	4.56%	<i>lt-1</i>
Euribor + 4% 2014/15	4.35%	<i>lt</i>
The interest rate factor calculated as		
$= (1 + lt - 1 / 100) * (1 + lt / 100)$	1.050	@Euribor + 2%
$= (1 + lt - 1 / 100) * (1 + lt / 100)$	1.091	@Euribor + 4%