

# **Power NI's 1 October 2012 Tariff Review**

## **A Regulatory Briefing**

# Power NI's 1 October 2012 Tariff Review – A Regulatory Briefing

## Summary

The Utility Regulator (UR) has verified a 14.1% decrease in the Power NI tariff for domestic electricity customers to take effect from 1 October 2012. This paper sets out the background and reasoning behind the decrease.

## Background

The electricity supply market has been fully open to competition since 1 November 2007 and since June 2010, a number of suppliers have entered the domestic market. Since this time there has been a steady level of switching activity in the market. However, whilst facing competition from other suppliers, Power NI is still dominant in this sector of the market. The UR therefore takes an active role in scrutinising Power NI's proposed retail tariffs which are the final prices customers pay. The UR also continues to set a price control that sets allowances for Power NI's operating costs and profit margin. Also any other Power NI own costs that are passed through the tariff (which are not allowed for in the price control e.g. licence fees) must be approved by the UR. The aggregate of the price control allowances and pass through costs are the supplier charge.

Power NI retail tariffs for this upcoming year are made up of a number of components:

Retail Tariff	=	Wholesale Costs	+	SSS Charges	+	PSO Levy	+	Use of Systems	+	Supplier Charge	+	NIRO Costs	+	Correction Factors
What Customers Pay		Generation costs (cost of procuring electricity), Capacity costs, Imperfections (costs of electricity constraints), and MO charges		For system planning, operation and despatch		Public Service Obligation costs which must be spread across all customers		Costs of transmission and distribution of electricity		Costs to supply electricity to customers e.g. meter reading, billing		Net costs of NI Renewable Obligation - NIRO costs relate to government obligation to sell a proportion of their output as renewables		The difference between allowed revenue and actual recovered revenue (mechanism whereby differences between forecasts for tariff-setting and actuals can be recouped or returned to customers) and first year effect
Split 12/13	100%	62%		3%		2%		25%		9%		1%		-2%
Split 11/12	100%	64%		2%		2%		20%		7%		1%		4%

Figure 1: Components of Power NI tariff from 1<sup>st</sup> Oct 12<sup>1</sup>

<sup>1</sup> The first year effect relates to the time lag in revenues due to the quarterly billing cycle, this is a decrease in a year when there is a tariff decrease, as it takes actual revenue received some time (approximately three months) to catch up with the tariff change.

Several of these components are common across all suppliers and the final customer will pay these regardless of who their supplier is; these components are all subjected to regulatory review and approval:

<b>Cost/Tariff</b>	<b>Regulatory Approval</b>
<b>Market Operator (MO) charges</b>	SEMO Revenue & Tariffs 2012
<b>SSS charges (System Support Service)</b>	SONI Statement of Charges 2012
<b>PSO Levy (Public Service Obligation)</b>	NIE Ltd – approved annually
<b>Use of System charges (UoS)</b>	NIE Ltd Statement of charges 2012 and SONI statement of charges 2012

*Table 1: Tariff Components common across all suppliers and their regulation*

These costs are regulated because they are levied to recover the costs of parts of the industry which are natural monopolies. Independent suppliers are free to enter the market and purchase power, but they will usually decide to add on the tariffs outlined above before setting the final price to sell to customers as they are required to pay these tariffs in order to transport the power to the customer.

The remaining components of Power NI's tariffs, because of their dominant position in the market, are subject to regulatory scrutiny.

<b>Cost/Tariff</b>	<b>Regulatory Scrutiny</b>
<b>Generation costs</b>	Competitive and regulated wholesale market; approval of Power NI hedging methodology by UR; annual approval of Gt statement (forecast of Power NI wholesale costs).
<b>Supplier charge</b>	Application of Power NI Supply Price Control 2012 – 2014 and any other costs approved on a pass through basis
<b>NIRO costs</b>	Audited on behalf of the UR by Ofgem as part of its UK-wide audit.
<b>Correction factors</b>	Analysis by the UR of variances between forecasts used for setting tariffs and out-turn costs; agreement to the 'first year effect'.

*Table 2: Remaining Components of Power NI tariffs*

## Annual Review

The table below analyses the required revenues of Power NI for all of its regulated customers<sup>2</sup>, by key component, comparing the forecast revenue requirement underlying tariffs for the year beginning 1 October 2012 with the equivalent forecast revenue requirement for 1 October 2011.

Component	Oct 2011/12 (12 mths) <sup>3</sup> £m	Oct 2012/13 (12 mths)	12 month movement % Change
<b>Generation</b>	238.1	191.7	(19.5)%
<b>Capacity</b>	48.6	44.5	(8.5)%
<b>Other (MO, Imperfections, NIROC)</b>	25.7	25.6	(0.4)%
<b>UoS</b>	95.5	104.8	9.8%
<b>PSO</b>	12	8.5	(29.3)%
<b>SSS</b>	9.4	12.7	35%
<b>Supply costs</b>	33.3	36.9	10.8%
<b>Correction Factors</b>	19.4	(8.8)	(145)%
<b>TOTAL ALLOWED REVENUE</b>	<b>482</b>	<b>416</b>	<b>(14)%</b>

*Table 3: Price change comparison in Total Revenue terms. Please note, the figures in this table refer only to Power NI costs. Figures for last year have been re-stated.*

As demonstrated in the table above, there have been decreases across most of the costs areas. Specifically, attention is drawn to the level of decrease in wholesale costs (comprising of generation, capacity and other costs) which are forecast to decrease by almost £51 million from October 2011. These costs alone make up 63% of the total costs associated with the tariff. The main drivers of the reduction in these costs relate to a fall in the price of carbon in Europe which has led to more coal generation being utilised in the market. Coal generation is generally cheaper than gas. This together with the fact that both coal and gas have fallen in price since last year (leading to a decrease in the cost of all types of non renewable generation in comparison to last year) leads to a reduction overall for generation costs.

Network charges and levies (UoS, PSO and SSS) have increased overall by approximately 7% when compared with October 2011, with a significant drop in PSO partly counteracting the increase in both Use of System and System Support Services. These increases are explained further in this document.

There has been a large reduction in correction factors which includes the first year effect (see footnote 1) and an over recovery due to Power NI costs outturning lower than expected in the previous tariff year. With regard to over and under recoveries, if Power NI over-recover

<sup>2</sup> Power NI supplies some customers in some sections of the market that are competitive, where tariffs are not reviewed by the UR.

<sup>3</sup> To aid comparison, the 2011/12 amount has been restated for the same demand that Power NI have forecast for October 2012 – September 2013.

because underlying actual costs out-turn lower than forecast, this over-recovery will be returned to customers at the next tariff review. Similarly, if Power NI under-recover because underlying actual costs out-turn higher than forecast, this under-recovery will be included in customers tariffs at the next tariff review. This process is in line with Power NI's Tariff Methodology Statement and the Power NI licence originally approved by the UR.

The following sections discuss the cost components in table 3 in more detail.

### **Generation costs**

<b>Component</b>	<b>Oct 2011/12 (12 mths) £m</b>	<b>Oct 2012/13 (12 mths) £m</b>	<b>12 month movement % Change</b>
<b>Generation</b>	238.1	191.7	-19.5%
<b>Capacity</b>	48.6	44.5	-8.5%

### **Generation costs**

The table above shows that the forecast generation costs for the period October 2012 to September 2013 have decreased by 19.5% from the forecast generation costs for the period October 2011 to September 2012.

Forward gas prices for the upcoming tariff year are lower over the contracting period this year than they were at the same point last year. As part of the approval of Power NI forecast generation costs, the UR has analysed forecast forward gas prices and forecast forward SEM pool prices. This tariff year, these costs are 19.5% lower when compared with the same period last year.

Power NI continue to have a low level of hedging this year. Last year at the end of July, Power NI obtained hedges for 40% of their forecast customer demand and this year at the end of July it was lower at 30%. When Power NI purchase hedges they are buying electricity on a forward basis at a fixed price.

The process which was followed by the UR in scrutinising Power NI's forecast generation costs was:

Power NI provided the UR with detailed forecast wholesale cost inputs. The following information was provided:

- Power NI's demand forecast (as a proportion of the all-island demand forecast published by the Regulatory Authorities along with the Validated Plexos model for Directed Contracts 2012-13);
- Power NI's System Marginal Price (SMP) forecast;
- Power NI's capacity charges model;
- A breakdown of energy hedging;
- Details of currency hedging;

- Details of losses ; and
- Credit requirements.

The UR analysed all the information provided. The forecast SMP was independently verified using the published formula for pricing directed contracts. Hedges were reviewed to ensure they align with the approach detailed in Power NI's hedging methodology statement. The cost of hedges already entered into was verified, as was the expected premiums on hedges yet to be entered into. The capacity charges model was analysed in detail and was deemed to be robust. The remainder of forecast costs, which make up a much smaller proportion of total generation costs than energy and capacity costs were verified by the UR and appear reasonable.

### **Capacity costs**

In the SEM, generators receive a capacity payment as a contribution to fixed investment and operating costs. The total amount is revised annually to reflect the cost of new peaking capacity and the amount of capacity required to meet security standards. Suppliers in turn pay a capacity charge which is profiled monthly. The total capacity charge for 2012/13 has increased marginally since 2011/12.

However, although the forecast Euro capacity pot indicates a marginal increase from 2011/12 levels, the fall in Euro/Sterling exchange rate actually results in a decrease in Sterling terms. As a result, Power NI's forecast capacity charges (which were based on the indicative capacity pot for tariff setting purposes) are 8.5% lower for 2012/13 than that forecast for 2011/12.

### **Northern Ireland Network Charges**

At an overall market level the total network related revenue requirement (DUoS, TUoS & SSS) has increased from last year.

In addition to this, overall demand (i.e. total network demand across all of Northern Ireland customers) is forecast to decrease when compared with last year.

These two factors together have the impact of increasing the average unit network charges. This is due to the fact that the increased overall amount to be recovered for network charges will be spread across a lower number of units than last year.

### **Distribution Use of System (DUoS) Charges**

In terms of the DUoS revenue requirement for the whole of Northern Ireland, the maximum amount recoverable has increased marginally. The method of calculating NIE's regulated entitlement is set out in annex 2 of its licence. The licence (and DUoS tariffs) reflect the conditions specified for RP4 (NIE's current price control agreement) as RP5 is still being finalised. Any difference between the actual amount allowed (based on the RP5 Final Determination) and the amount included in the tariffs for the year from 1 October 2012 to 30 September 2013 will be settled via the k factor in the TUoS and DUoS tariffs next year.

To take into account the charges for DUoS, Power NI submitted the tables which form part of the model which calculates the retail tariffs. The tables detailed the various unit rates which were used across each tariff category. The rates used were checked by the UR and agreed to the rates which were published by NIE in their Statement of Charges (effective from 1 October 2012). The charges for DUoS are calculated by estimating the units used in each category and the time of day which they are used which allows an overall DUoS charge for each tariff category to be calculated.

### **Transmission Use of System (TUoS ) Charges**

The maximum amount recoverable for TUoS (for the whole market) has increased. Generators participating in the Single Electricity Market pay 25% of this amount. This increase is due to network development on the transmission network including reinforcement of the network for renewable generation. In addition, SONI under-recovered the amount of TUoS that should have been collected from customers in 2011/12. This has resulted in a k factor under recovery that is applied to supplier TUoS for 2012/13.

The format in which TUoS charges are levied is across four categories:

- Winter peak;
- Outside of peak;
- Evening and weekend; and
- Supply at all other times.

Power NI submitted spreadsheets showing how the charges were allocated on a 1/2 hourly basis across each day of the tariff year. The rates used were checked and agreed to the rates which were published by SONI in their TUoS Statement of Charges (effective from 1 October 2012).

### **System Support Services (SSS)**

System Support charges cover the operating costs of running the system operator (SONI) and ancillary services required to operate the transmission system safely and reliably. The maximum amount recoverable for 2012/13 has increased. This large increase is mainly due to a CAIRt submission received from Moyle.

Historically, Moyle has been able to cover its operating costs from interconnector capacity sales. However, a loss of sales due to outages, increased bond payments due to indexation and the introduction of a second interconnector (which will have the effect of reducing capacity sales on Moyle) has led to a forecast cash flow shortfall.

This shortfall is collected by SONI via SSS charges and is passed through to Moyle. Other aspects that have had resulted in an increase include increased ancillary services expenditure and an under recovery of revenue from previous years. The previous year's SSS tariff included an over recovery which reduced the maximum recoverable amount.

Power NI submitted the SSS amount to be included in the tariffs, this was agreed by checking the SSS unit charge used (published by SONI in their Statement of Charges). This rate remained as a flat rate across all categories. To calculate the overall amount for SSS, the unit rate is multiplied by the estimated consumption.

### **Public Service Obligation (PSO)**

The PSO is a levy which is charged at a flat rate on all units of electricity demand.

In summary the maximum amount recoverable between 1 October 2012 and 30 September 2013 under the PSO levy has reduced. Given that demand is forecast to be lower than last year's estimate, average PSO unit charges will decrease by slightly less in percentage terms as the total revenue recoverable is to be recovered over fewer units.

Power NI used an indicative PSO unit rate as set out in the PSO consultation paper for tariff setting purposes. This rate showed a 29% decrease in Power NI's PSO cost. The total PSO cost makes up only 2% of the final Power NI retail tariff that customers pay so the difference is not material and as described before any mismatch between the actual and forecast total costs will be captured in the k factor.

### **Supply Costs**

Total supply costs have decreased for the tariff year 2012/13 from the previous 2011/12 tariff year. Whilst the forecast of the allowed revenues associated with the pass through elements have remained largely flat, there has been a decrease in the allowance element of allowed costs due to the setting of a new price control effective from 1 April 2012. Supply costs in total make up around 9% of the tariff for this year. Last year supply costs made up 7% of the total tariff cost.

So whilst table 3 shows supply costs increasing by 10.8% from last year, supply costs have fallen in terms of actual revenue amount to be collected compared to last year. However, this amount is to be collected across less units due to a lower Power NI forecast demand for this tariff year (due mostly to expected customer losses). Hence, when last year's overall supply cost is restated to be comparable with this year i.e. reduced to bring the total down to the current Power NI demand forecast, the supply cost per unit is 10.8% higher.

### **Correction Factors**

If the amount of revenue recovered in any one year by Power NI exceeds or falls short of the amount allowed, the correction factor operates in the following year to give back any surplus with interest, or to recover any deficit with interest, as appropriate. Energy charges were lower than anticipated in the last year and this is the principal driver of the new over-recovery which accumulated over the last tariff year. Due to the decrease in the tariff, the level of first year effect has decreased (increasing the overall reduction) when compared with last year.



Power NI make a formal submission to the UR each month showing the under or over recovery position in the business each month. A breakdown and analysis is also provided to the UR. This account also forms part of Power NI's annual external audit.

In terms of the first year effect, Power NI submitted their calculations for determining the amount to be included in the tariff. These calculations and the underlying assumptions were checked for reasonableness.

## Recent Tariff Changes

For Power NI domestic customers using 3,300 kWh per annum on standard credit, this tariff review will see a movement in a customer bill from £588 (incl. VAT) per annum to £505 (incl. VAT), a decrease of £83 on an annual bill.

The graph below takes an average customer with average consumption of 3,300 kWh per year, and compares the average bill (inc VAT) for October 2012, October 2011, and October 2010.

This graph shows that wholesale costs have decreased since last year and that network costs have risen slightly since last year. It also shows that residual costs, made up of supply costs and correction factors, have also fallen. The graph also illustrates the high proportion of a customer bill which relates to generation costs.

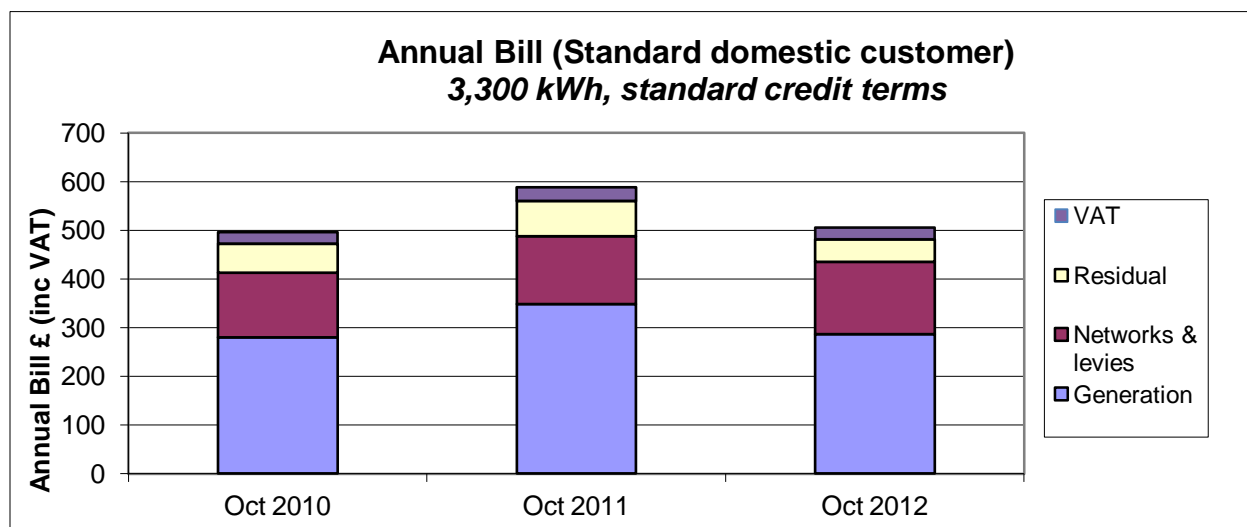


Figure 3: Recent tariff changes based on an average annual customer usage of 3,300kWh (inc VAT). [Note: in the chart above, 'Networks & Levies' includes SSS charges, PSO Levy, & Use of System charges. Residual costs include Supply costs and Correction factors. Generation includes wholesale and NIRO].

## Historic Comparison with GB

Power NI % Price Change	Effective Date	GB Comparison
5% decrease	October 2009	Following the round of price reductions in GB in spring 2009, NI domestic prices around 12% higher than GB average and 8% higher than comparator GB regions.
0% Price Change	October 2010	NI domestic prices around 11% higher than GB average and 7% higher than GB comparator regions.
18.6% Price Increase	October 2011	NI domestic prices around 13% higher than GB average and 10% higher than GB comparator regions.
14.1% Price Decrease	October 2012	NI domestic prices around 4% lower than the GB Comparator regions and slightly lower than the GB average

Table 5: Historical Power NI price adjustments compared to GB

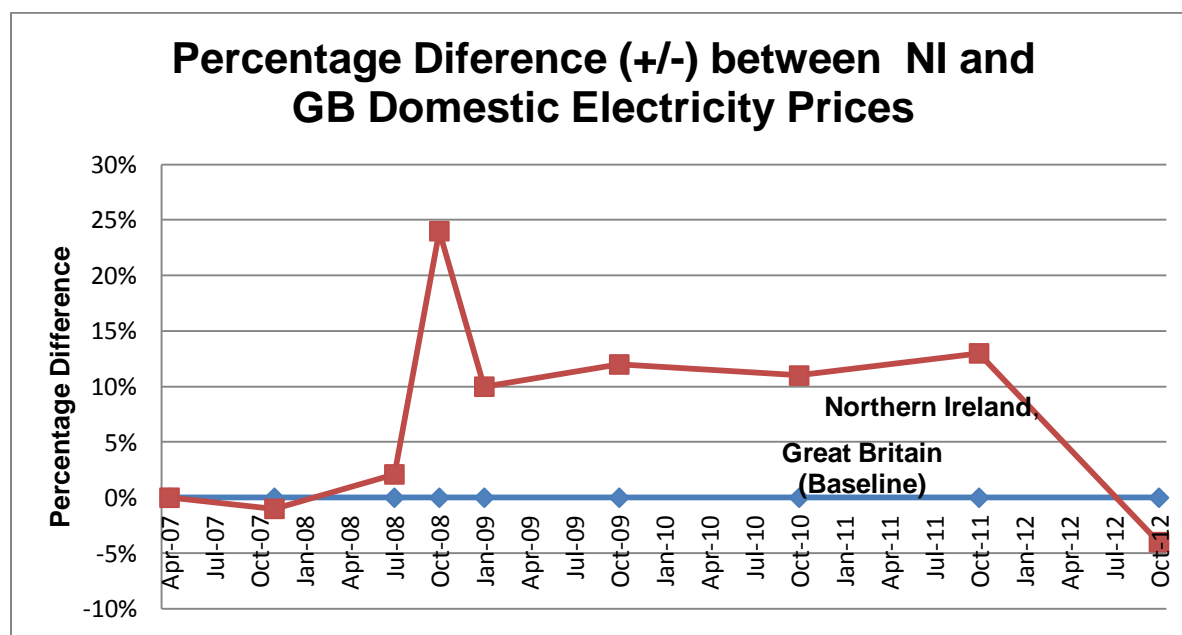


Figure 4: NI v's GB (GB Average) – comparison is of domestic standard tariffs.

The long-run trend is for electricity prices in Northern Ireland to be c.10% higher than those in GB (reasons are discussed in figure 5). Note that 2007 was an unusual year. The principal

cause of the temporary parity between GB prices in the period April 07 to April 08 was as a result of a significant over-recovery built up by Power NI in the previous tariff year.

The following graph compares the October 2012 prices for Northern Ireland to the August 2012 standard tariffs (as per individual supplier websites) from the larger suppliers in GB.

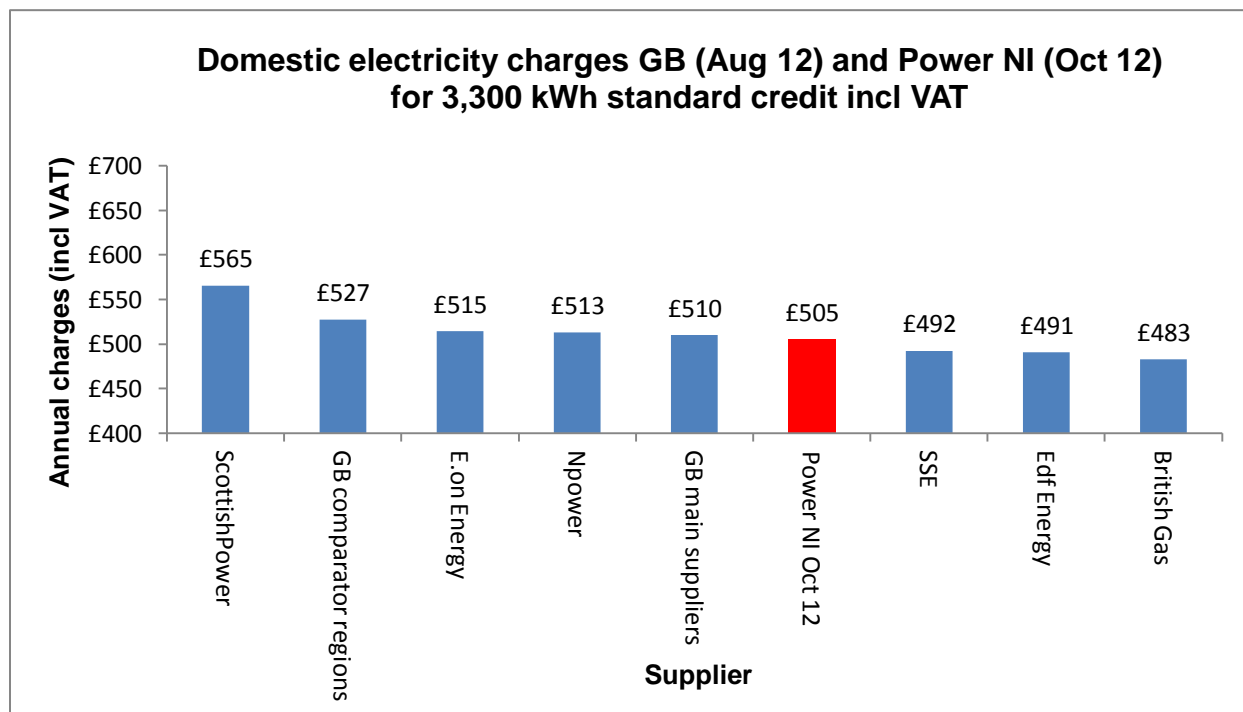


Figure 5: Power NI tariffs per average customer compared to GB

From the graph it can be seen that Power NI's tariff is c.4% lower than the current GB comparator regions.

Historically electricity prices in Northern Ireland have tended to be higher (c10%) than in Great Britain. Key factors that have historically led to higher prices in Northern Ireland are:

- higher energy transport costs as Ireland is at the end of the supply chain geographically;
- economies of scale in Great Britain owing to the size of the market there compared to Northern Ireland;
- Dispersed rural network in NI; and
- the different fuel mix in GB (i.e. Northern Ireland has a reliance on gas, GB's generation mix is spread between nuclear, gas and coal).

There could be several reasons which have led to the current situation where Power NI domestic tariff is lower than the GB average (which is contrary to the longer-term trend). These could include:

- differences in the timings of supplier's wholesale purchases;
- differences in timings of changes to retail tariffs across suppliers and jurisdictions;

- supplier gross margins being less in Northern Ireland as Power NI operate within a regulated price control designed to reduce supplier costs i.e. reduce gross margin; or
- other factors not readily apparent.

It is too early to say whether this will continue to be the future pattern in the differential between NI and GB.

### Comparison with Europe

The following graph compares the October 2012 and October 2011 prices for Northern Ireland to the most recent available official data for other countries in Europe including ROI (and relates to the second half of 2011).

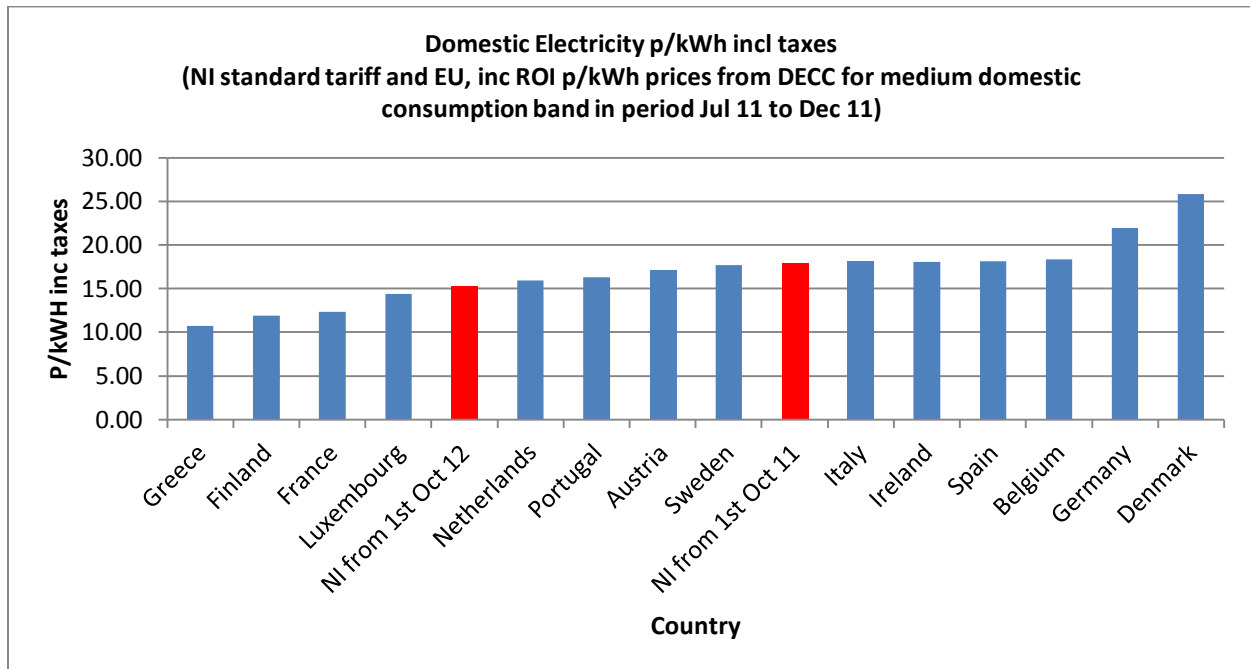


Figure 6: Power NI p/kWh tariffs compared to EU including ROI<sup>4</sup> - medium consumers refers to annual consumption of 2,500 – 4,999 kWh.

It should be noted that the data from the rest of the EU relates to the average for the period June 2011 – December 2011 (so figures for Europe are circa six months out of date). From the graph it can be seen that Northern Ireland October 2011 tariffs (i.e. those most comparable to the European data) are around the middle of the range of other countries shown in the graph. The upcoming Northern Ireland decrease may improve this position, but if this is the case it will only become apparent when more up-to-date EU data becomes available. This will be reported in the coming months in the regular UR Quarterly Transparency Reports, published on our website. The graph above shows that following the reduction in unit rates on the 1<sup>st</sup> of October 2012, NI regulated prices will be around 15% cheaper than current ROI prices.

<sup>4</sup> <http://www.decc.gov.uk/assets/decc/11/stats/publications/qep/5624-quarterly-energy-prices-june-2012.pdf>

Taken from Table 5.6.2