

# **Tariff Methodology Statement**

# Prepared by

# **NIE Supply**

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#### **1** Executive summary

In setting tariffs NIE Supply must abide by various conditions of its licence, particularly those controlling its prices and preventing undue discrimination between customers or cross-subsidy.

This tariff methodology statement explains how NIE Supply intends to calculate its tariffs for 2007-08 given the information that will then be available to it on the likely costs of supply.

NIE Supply intends to maintain the categories of its existing domestic and SME tariffs, however, will alter the form of indexation associated with its monthly billed tariffs from the BST related "fuel price" to the SEM "pool price".

NIE Supply is permitted to recover an amount equal to its wholesale generation, transmission costs, distribution costs, renewable obligation costs, any correction factor and plus an allowed revenue for the supply business itself<sup>1</sup>. The charges on each tariff will be set so that there is an expectation that, at the forecast demand, they will recover an amount equal to the expected costs and allowed revenue allocated to that tariff.

The process of allocating transmission, distribution and supply costs, which are governed by their own price controls, is relatively simple. Wholesale, or generation costs, will be allocated between half-hours according to a Portfolio Supply Tariff (PST) for all time periods from which, given the load shape assumed for the tariff category, the generation component of the charge can be calculated. The half hour PST will be calculated using generation contract costs, forecast pool costs and other generation items<sup>2</sup> that are mainly preset by the regulators or market operators. It is expected that, using NIE Supply's base forecast for demand, pool prices, contract costs etc., forecast generation costs.

In the all-island market there may be errors in the forecasts of demand and of the costs of serving it. These may stem from a number of factors including variations in customer numbers and their electricity consumption, inaccuracy of loss factors, weather, electricity pool and fuel prices, plant availability and exchange rates. NIE Supply's policy towards abating these risks is set out in its hedging policy statement. However, this will not result in their complete removal. NIE Supply will therefore monitor their impact over the year. If they cumulatively lead to a likelihood of an error exceeding  $\pm 2.5\%$  in any year, NIE Supply will consider the introduction of a tariff adjustment within the year.

<sup>&</sup>lt;sup>1</sup> See Appendix 1

<sup>&</sup>lt;sup>2</sup> including without limitation; capacity charges, imperfections charges, currency exposure costs, market operator charges, CfD associated costs, NFFO and de minimis generation costs

### 2 Introduction and regulatory requirements

A number of conditions of NIE Supply's licence affect how it may set its tariffs. In particular it is required to:

- Use its best endeavours to ensure that the average charge per unit supplied does not exceed a price control maximum, which is calculated by adding the average cost of its purchases of electricity generation, transmission etc to an allowed supply business charge;
- Ensure that it does not sell electricity to any customer on terms which are materially more or less favourable than those on which it sells to other comparable customers;
- Avoid cross-subsidising other businesses.

In order to assist the Northern Ireland Authority for Utility Regulation in scrutinising its adherence to these and other licence conditions, NIE Supply provides information to the Authority. This includes advance notice of the tariffs themselves and forecasts of what it expects to be its average charge and average costs.

This tariff methodology statement precedes the provision of information on tariffs and forecasts of average revenues and costs. It explains how, at a later date, NIE Supply intends to set its tariffs for 2007-08 given the information that will then be available to it on its likely costs of supply.

### 3 Background

NIE Supply intends to maintain the categories of its existing domestic and SME tariffs, however, will alter the form of indexation associated with its monthly billed tariffs from the bulk supply tariff related "fuel price" to the SEM "pool price".

While there is some market growth and there will be customer migration between suppliers after market opening, NIE Supply does not expect major changes in the number of customers served on each tariff in 2007/08.

#### 3.1 <u>Tariff structure</u>

NIE Supply expects to set 12 tariffs, in addition to serving some customers on discontinued tariffs such as the "off-peak" preserved tariffs.

These are:

- Domestic
  - Home energy a per unit price with no standing charge. As will, to some extent, be the case on any tariff its structure does not entirely match that of the cost drivers, since there are some fixed costs. However, the tariff is; socially progressive, popular and matches the price structure of most goods and services purchased by customers.
  - Eco-energy a similar tariff to home energy
  - Power-shift tariff utilising keypad metering time of day functionality.
- Economy 7 a tariff with more disaggregated charges, i.e. a standing charge and separate day and night unit rates
- Small business
  - o Popular a standard tariff with a standing charge and a unit rate
  - Weekender a standing charge and separate day and evening/weekend rates
  - Nightsaver standing charge and separate day and night rates
  - Farm popular a standard tariff with a standing charge and a unit rate
  - Farm nightsaver standing charge and separate day and night rates
  - Large business<sup>3</sup>
    - Multi-rate medium voltage
    - o Multi-rate high voltage
    - o Maximum demand

<sup>&</sup>lt;sup>3</sup> All such tariffs will have a level of pool price indexation

The terms of all tariffs differ slightly depending on whether payment is made by quarterly credit, direct debit or keypad prepayment meter. Such differential pricing is reflective of the underlying cost to serve for each payment type.

#### 3.2 Customer numbers and demand

NIE Supply will project the number of customers on each tariff based on previous years' recorded numbers and projections of household formation, economic activity and customer migration.

The demand on each tariff will also be projected based on previous years' recorded numbers, projections of customer numbers and economic activity, and an assumption of "average cold spell" weather. This will be done over the entire load shape resulting in a projected demand in each half hour.

#### 3.3 <u>Risk treatment</u>

There will be risks to the forecasts of demand and to the costs of serving demand from a number of factors including variations in:

- Customer numbers
- Electricity consumption, including as a result of weather changes
- The effect of the "differencing" settlement method
- Pool prices affecting unhedged demand (including that resulting from demand variation)
- Fuel price variation affecting unhedged contracts
- Plant availability affecting non-firm contracts
- Exchange rates affecting non-sterling contracts.

NIE Supply's policy towards abating these risks is set out in its hedging policy statement. However, this will not result in their complete removal. NIE Supply will therefore monitor their impact over the year. If they cumulatively lead to a likelihood of an error exceeding  $\pm 2.5\%$  in any year, NIE Supply will consider the introduction of a tariff adjustment within the year.

## 4 Components

NIE Supply is permitted to recover an amount equal to its wholesale generation, transmission costs, distribution costs, renewable obligation costs, any correction factor and plus an allowed revenue for the supply business itself<sup>4</sup>. The charges on each tariff will be set so that there is an expectation that, at the forecast demand, they will recover an amount equal to the expected costs and allowed revenue allocated to that tariff.

#### 4.1 Wholesale

#### 4.1.1 Construction of a Portfolio Supply Tariff (PST)

Wholesale, or generation costs, will be allocated between half-hours on a portfolio supply charge for all time periods. This will be derived by calculating the cost per unit averaged over groups of time periods. Given the load shape assumed for a particular tariff category, the generation component of the tariff can be calculated. It is expected that, using NIE Supply's base forecast for demand, pool prices, fuel prices etc., forecast revenue from this component will equal forecast generation costs.

In making this calculation the load to be served at the pool indexed tariff will be excluded. The wholesale price for that load will be based on the ex post pool price plus other relevant TSC charges.

Capturing all generation related costs in the Portfolio Supply Tariff (PST), which is in many ways a proxy for the old BST, will enable NIE Supply to continue with the current tariff setting process.

#### 4.1.2 Contracts for Differences

NIE Supply will examine its contract (ie CfD) portfolio and allocate costs to each time period. The precise method of doing so will depend on the details of the contract portfolio but NIE Supply expects that:

<sup>&</sup>lt;sup>4</sup> See Appendix 2

- Where there is a one-way contract or hedge the allocated cost will be the demand covered by the contract assessed at the expected price, which is the expected value of the distribution of pool prices truncated by the strike price of the contract at the upper end.
- Where there is a premium payment, it will be allocated to the time periods covered by the contract. The allocation between periods may depend on the perception of the degree of risk in each period.
- Where there is expected over-contracting, perhaps because it was not economic to tailor the portfolio precisely to forecast demand, any expected cost of the overcontracting in overcontracted periods is likely to be allocated to other periods covered by the contract.
- Bilateral trades outside the pool (eg de-minimis generation)
- Interconnector trades

Normally, i.e. unless there are particularly skewed risk distributions, NIE Supply will calculate the cost of its contract portfolio using expected values of customer demand, pool prices, fuel prices etc.

#### 4.1.3 Pool

Uncovered demand will be assumed to pay the expected pool price.

#### 4.1.4 Capacity charge

The suppliers' capacity payment charge, which is set in advance, will be allocated to demand in the relevant time periods.

#### 4.1.5 Other charges

Imperfections and market operator charges are also set in advance and will be allocated to the appropriate period. The currency charge has an expected minimal value and will be charged on a simple per unit allocation.

There may also be an adjustment for expected losses.

#### 4.1.6 Load management

The allocation of the charges described under 4.1.2 to 4.1.5 will result in a Portfolio Supply Tariff, but NIE Supply may consider further adjustments if it considers that they are necessary to manage load and prevent it migrating with consequent changes in the pool price in the time periods from and to which the load migrates.

Economy 7 night charge rates may be an example where a load incentive may be warranted.

#### 4.2 Transmission

An element representing transmission charges will be included in each tariff. Expected receipts on the tariff will normally equal expected transmission charge payments. Where the tariff contains charge elements (e.g. standing charge, unit charge, maximum demand charge) that are similar to those under which transmission charges are levied, the structure of the tariff charge element will normally mimic that of the transmission charge.

#### 4.3 Distribution

An element representing distribution charges will be included in each tariff. Expected receipts on the tariff will normally equal expected distribution charge payments and any distribution services charges (ie common services transaction charges). Where the tariff contains charge elements (e.g. standing charge, unit charge, maximum demand charge) that are similar to those under which distribution charges are levied, the structure of the tariff charge element will normally mimic that of the distribution charge.

#### 4.4 Levies

PSO and SSS levies are expected to continue to be charged on a tariff basis (ie delivered unit basis), aligning with the UoS tariff categories.

#### 4.5 <u>Retail's own costs</u>

An element representing supply business costs will be included in each tariff. Expected receipts on the tariff will normally equal expected allowed revenue. Where the tariff contains charge elements both a standing charge and a unit charge, the structure of the tariff charge element will be related to the extent to which supply business costs are customer or unit driven.

#### 4.6 Correction factor

There will be an allocation of recovery correction to each tariff, based on an estimate of the proportion of the error that is related to the tariff.

#### 5 Other terms

The terms of all tariffs will differ depending on whether payment is made by quarterly credit, direct debit or keypad prepayment meter.

#### 6 Other supply obligations

#### 6.1 Supplier of last resort

NIE Supply will maintain a supplier of last resort tariff in the form of a pool price tariff for larger customers. In the event of a supplier of last resort event being triggered, NIE will consider whether the option of other tariffs can also be offered to the customers in question (eg standard tariff for smaller customers until the next review point).

#### 6.2 Universal service obligation

NIE Supply's tariffs are available on a contractual basis to all customers that are connected to the network. This effectively discharges its Universal Service Obligation, which relates to the right of customers to be supplied with electricity of a specified quality within their territory at reasonable, easily and clearly comparable and transparent prices. However, depending on the credit situation, NIE Supply may require an individual customer to be supplied on particular credit terms.

## 7 Reporting

NIE Supply's licence requires it to provide a forecast of its allowed average revenue and the average cost components no later than fourteen days before any change in supply charges or, if there is no change in charges, within three months of the start of a year<sup>5</sup>.

To support this forecast NIE Supply will provide a statement of the hedges that it has purchased in advance of the period together with its expectation of the average cost of generation in the groups of time periods that it uses to calculate its tariffs (ie the Portfolio Supply Tariff).

The licence also requires that NIE Supply send a statement of the average cost that has been incurred in each component within three months after the end of the price control year. NIE will additionally provide a statement of its purchases and sales of all hedges affecting that cost.

<sup>&</sup>lt;sup>5</sup> A relevant year as defined in the price control.

#### **Appendix 1** 8

**Current Domestic and Non-Domestic Tariffs** 

#### Domestic Quarterly billed

. ,			
HOME ENERGY TARIFF			
Unit rate	10.69p		
ECO ENERGY TARIFF			
ECOEnergy from renewable energy sources is available to all HomeEnergy customers at no extra cost. To sign up call the Customer Helpline.			
Unit Rate	10.69p		
ECONOMY 7 TARIFF			
Standing charge	£9.20		
Day unit rate *8am - 1am	10.74p		
Heating/Night unit rate *1am - 8am	3-94P		
DISCOUNTS FOR HOME	s		

#### Enjoy two weeks free electricity every year when you pay by Direct Debit

Pay by monthly Direct Debit and get 4% discount off your bills (saving up to £28 a year - £7 a quarter). On average this will pay for two weeks electricity every year. To 'sign up' please call our Customer Helpline with your bank details - no forms, no fuss.

#### Discount of 2.5% with 'Pay As You Go' Keypad

Similar to buying top-up's for a mobile phone, you can now buy electricity as you need it with a 'Pay As You Go' keypad meter. You will also get a discount of 2.5% off the standard unit rate. To have a keypad meter installed free of charge, call our Customer Helpline.

> **Customer Helpline** 08457 455 455 Mon - Fri 8am-8pm / Sat 9am-1pm (Business Enquiries : Mon-Fri gam-5pm)

#### **Small Business** Quarterly billed

POPULAR TARIFF		
Standing charge per quarter Unit rate	Standard £15.00 11.53p	Discour £ 14.4 11.07
WEEKENDER TAF	RIFF	
Standing charge per quarter Day unit rate Mon - Fri 7,30am - 8pm Evening & Weekend unit rate Mon - Fri 8pm - 7.30am & all weekend	Standard £19.00 14.43P 6.24P	Discour £18.2 13.85 5-99
NIGHTSAVER TA	RIFF	
Standing charge per quarter Day unit rate *8am - 1am Heating/Night unit rate *1am - 8am	Standard £20.00 11.95p 4.44p	Discour £ 19.2 11.47 4.26
FARM POPULAR T	ARIFF	

#### Standard Discount Standing charge per quarter £7.00 £6.72 Unit Rate 11.10p 10.66p

#### FARM NIGHTSAVER TARIFF

	Standard	Discount
Standing charge per quarter	£10.00	£9.60
Day unit rate *8am - 1am	11.28p	10.83p
Heating/Night unit rate *1am - 8am	4.40p	4.22p

Discount : Discount is for payment by Direct Debit and is deducted from your bill total before VAT. Discount rates shown are for information only. Unit Rates : One unit is one kilowatthour. Summer rates apply March to October inclusive.

Uctober inclusive. Value Added Tax: Pices shown do not include VAT, which will be charged at the appropriate rate. Times : All times stated are Greenwich Mean Time, please adjust by adding 1 hour during British Summer Time. "Heating/Ngbft Unit Times may vary sight's - If a doubt check your IIE timechod: or call the Customer Helpline. Quarterly billed tariffs : Available to sites with Maximum Demands of less than 70kVA only.

than 70kWA only. Climate Change Levy (CCL) : CCL applies to business & farm tariffs if on average you use more than 33 units of electricity a day (3,003 units a quarter) It only applies to electricity which attracts VAT at 17,5%.

#### Large Business Monthly billed

MULTI RATE TARIFF : Medium Voltage

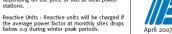
andard £30.00 1.03p 8.90p d 6.00p	1.00p 8.63p
9-47 p	9.19p
;e - 11k	V
andard £70.00 69p	
- 21	67 p
8.10p	
	£30.00 1.03P 8.90P 4 6.00P 9.47P 9.47P re - 11k andard £70.00

Standing Charge per month Availability Charge per kVA/month (min. 50kVA)	Standard £30.00 £1.03	Discount £29.10 £1.00
UNIT RATES :		

Summer Daytime Mon-Fri Sam-8.30pm 8.90p 8.63p Evening & Weekend Mon-Fri 8.30pm-8am & w'kend 6.00p 5.82p

Winter Rates It may be necessary to review our tariffs again in the run up to the introduction of the Single Electricity Market in November 2007. Our rates for the winter months will be confirmed at this time.

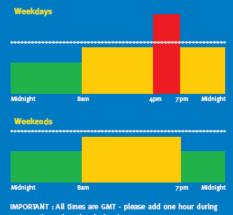
Fuel Price Adjustment : Monthly rates may vary depending on the price of fuel at local power stations.



#### **Keypad Power-shift**

Keypad customers can save money on their electricity costs with Keypad Power-shift. Low cost electricity is available every evening, all weekend and during the daytime Monday to Friday.

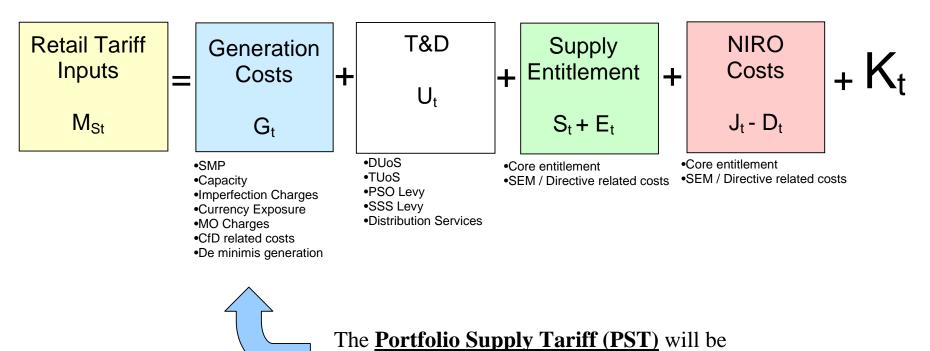
The graph below shows when the different rates apply. The white dotted line shows the standard Keypad rate to allow you to compare it with Power-shift rates.



summer time when the clocks change.

### 9 Appendix 2

## **NIE Supply's Key Tariff Inputs**



constructed reflecting these input costs.