Utility Regulator
ELECTRICITY GAS WATER

Electricity Buyer's Guide

For large energy users

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Buyer's Guide for Electricity: Large Energy Users (LEUs)

Introduction

This document has been prepared to assist LEUs with understanding the options that are available to them regarding their choice of electricity supplier. Separate information is available for domestic customers and small and medium sized enterprises (SMEs).

The electricity market in Northern Ireland

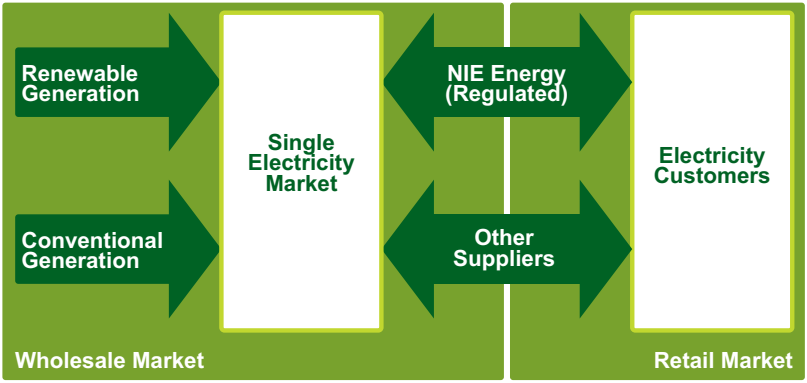
The electricity market in Northern Ireland has two components:

- **the wholesale market** is where the generators and suppliers trade with each other. Since 2007, this has operated on an all-island basis (known as the Single Electricity Market) and generators across the island of Ireland compete with each other for a share of the total demand; and

- **the retail market** is where suppliers trade with customers. Historically there was only one supplier in Northern Ireland (NIE Energy), however, since the market began to open up in 1999 more suppliers have entered the market providing a choice for business customers.

For customers who consume less than 150,000 units per year (equal to 150 MWh), NIE Energy publishes a range of tariffs which are approved by the regulator. Customers who consume more than 150,000 units will need to obtain an individual quotation from each of the suppliers. Quotes can be based on historic annual consumption by using the meter data from half hourly meters.

Figure 1: The electricity industry in Northern Ireland



The details of the suppliers currently active in the market can be found on the Utility Regulator website: www.uregni.gov.uk/electricity/#switching. Processes that can assist with obtaining quotes and changing supplier are described later.

Who's who?

- **The Utility Regulator's** role is defined in European and Northern Ireland legislation. It is responsible for protecting consumers of gas, electricity and water in Northern Ireland. The Utility Regulator approves the tariffs set by the monopoly companies in the electricity industry and is responsible, with the Department of Enterprise, Trade and Investment, for the structure of the markets. It also issues the licenses for the electricity companies in Northern Ireland.

- **The Consumer Council for Northern Ireland (CCNI)** has a responsibility to represent energy consumers in Northern Ireland. This is done by working with the energy companies, the Utility Regulator and CCNI's social partners, and by lobbying government to ensure that consumers are placed at the centre of all decision making.

- **Generators** with a capacity greater than 10MW must have a licence to operate and must sell their entire output into the Single Electricity Market. They can enter into 'contracts for differences' with suppliers to agree a fixed price for wholesale electricity, but they are only able to operate if they are instructed to do so by SONI. Generators with a capacity below 10MW are able to sell their power directly to suppliers and can decide their own production schedule.

- **NIE Transmission and Distribution** owns the network infrastructure in Northern Ireland. It is responsible for connecting new customers to the network and for reading meters. It owns the electricity meters and are responsible for their accuracy. The network owner has been fully separated from NIE Energy and is obliged to treat all suppliers equally.

- **SONI** is the operator of the transmission system. Its role is to dispatch the generators in a way that minimises the cost of producing electricity across the entire island of Ireland, while maintaining the security, stability and safety of the supply of electricity. As electricity cannot currently be stored in any meaningful quantity, SONI must balance the generation with the demand in real time.

- **SEMO** is the market operator and manages the trading systems used for the wholesale market. This includes calculating the price of energy for each half hour period, invoicing suppliers and paying generators.

- **NIE Energy** was the original electricity supply company in Northern Ireland. They provide regulated tariffs to domestic customers and business customers who consume less than 150,000 units per year. They also supply larger customers and this part of their business is not regulated.

- **Suppliers** must purchase the power they sell onto customers from the Single Electricity Market, however they can secure the price they pay by either arranging contracts for differences with generators or by entering into other types of financial hedges. They also pay the costs associated with the network infrastructure and operation of the market. Suppliers agree a price for the energy to be supplied with customers in advance. For LEUs there are a variety of ways that the price can be calculated.

How is my price of electricity calculated?

The price of electricity is made up of many components, but can be summarised in four areas: the cost of generating the electricity; the cost of the infrastructure to move the electricity to the customer; suppliers costs; and taxes.

- **Energy**: in the Single Electricity Market, the price of the energy is broken down into two components.

  - ***Electrical Energy:*** this is the electricity that is actually consumed by the customer, which is measured in kWh. Its price varies depending on the generating stations that are operating at any instant and the daily price of the fuel that they are burning. On the island of Ireland, this price is set for each half hour period by the market, as calculated by the market operator. When demand is low and/or it is windy, the price is lower. When demand is high and there is little wind, the price is higher. Therefore the time that a customer consumes electricity affects the average unit price that a supplier will quote.

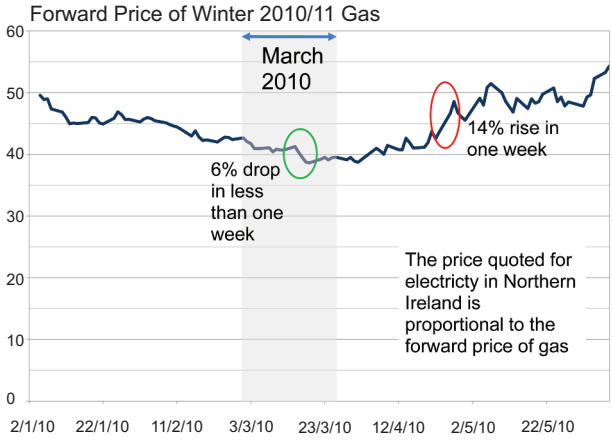
    In addition, the price that a supplier can secure for future supplies of wholesale electricity varies over time, sometimes in a volatile manner (shown in the graph below). This means that the day on which the quotation is requested can impact on the price that a supplier is able to offer and makes it very difficult to identify a benchmark price for electricity to business customers.

The unit price calculation for the electrical energy cost component is complex, however for the purpose of this guide, it can be simplified as follows:

Price per unit = MX+C
Where:
M is determined by the customer profile
C is the sum of the relevant regulated charges
X is the forward price of gas over the period being quoted for

Suppliers will use a formula based on the forward price of gas (or another index that they consider relevant) to calculate the price that they will quote for the energy component of their tender. In the traditional contract period of March 2010, the price of the forward price of gas for the winter period dropped by 6% in less than one week. Any movement in fuel prices, beyond a range determined by the supplier, directly impacts the price being quoted. Therefore the energy portion of a fixed price quote for a LEU would have varied by 6% over that week.

Figure 2: An example of the volatility of the underlying costs associated with electricity



- ***Capacity charge:*** the price paid for electricity in the Single Electricity Market reflects the variable operating costs of the generating stations. The fixed costs associated with the generators are paid via the capacity payment mechanism. The purpose of this is to reward the amount of generation that is required on the island of Ireland for being available at all times and to encourage investment in generation, thereby securing electricity supply in the longer term. The total amount to be paid to generation is fixed each year and is shared on a half hourly basis among the generators that are available. Suppliers are invoiced for this on a monthly basis.

- **Infrastructure**: the costs of each of the monopoly companies are approved through the price control process carried out by the Utility Regulator and then converted into tariffs that are charged to suppliers. Some of these tariffs are a fixed cost per unit, while others vary by time of day and time of year. The infrastructure costs are:

  - ***Use of the transmission system (TUoS):*** this charge is for the use of the high voltage system, and the price charged varies by connection voltage, time of day and time of year.

  - ***Use of the distribution system (DUoS):*** this charge is for the use of medium and low voltage system. It varies by connection voltage, time of day and time of year. It also

includes fixed charges related to the import capacity that the customer has requested.

- ***System support services (SSS):*** this covers the costs of operating the high voltage system, optimising the generator output and maintaining system stability. It is a flat charge per unit consumed.

- ***Market operator charges (MO):*** this covers the cost of operating the wholesale market. The cost is shared across all suppliers and generators on the island of Ireland. It is a flat charge per unit consumed.

- ***Imperfections charges:*** the price calculated in the market is the lowest possible price that the electricity required on the island of Ireland could theoretically be produced at. It ignores the limitations of the transmission network and is calculated with perfect foresight. As generators are obliged to sell into the Single Electricity Market, they are guaranteed not to operate at a loss (variable costs only). The imperfections tariff covers the gap between the market price and the cost of dispatching generation in real time.

- ***Public service obligation levy (PSO):*** The PSO levy covers a number of costs which have a public service element to them and include costs such as initial system costs of retail market opening; excess costs of some renewable contracts; the excess costs of the long-term contracts with the power stations which remain from the 1992 privatisation;

the Northern Ireland Sustainable Energy Programme costs; and landbank costs. It is charged as a flat rate per unit of electricity consumed.

- **Supplier costs and margin:** for NIE Energy's published tariffs this is currently regulated, while for other suppliers and NIE Energy's tailored contracts this is a commercial decision.

- **Taxes:** HM Revenue and Customs also taxes electricity, however the amount paid by customers varies depending on their circumstances and the choice of supplier. These taxes are for revenue purposes and to incentivise the transition to a low carbon economy. The taxes currently being applied in Northern Ireland are:

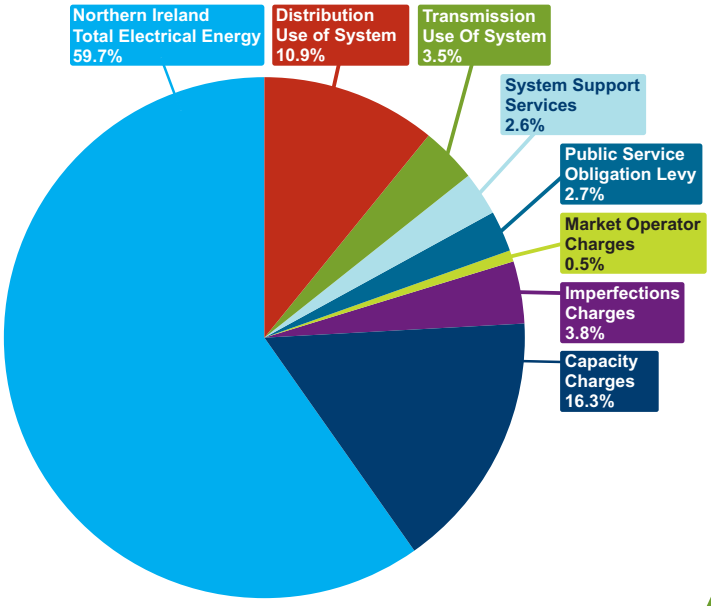
  - ***VAT:*** VAT for business customers of energy is generally in line with standard VAT rates, and is normally charged at full rate. However, some LEUs will meet the deminimis requirements of using an average of 33 kWh per day, and would then be billed at the reduced rate.

  - ***Climate change levy:*** not all customers have to pay this in full. Green energy is exempt from this charge. Customers who have a climate change agreement pay a reduced amount.

  - ***Carbon reduction commitment:*** this is a scheme that results in costs and benefits for large energy users, however any business with a half hour meter must register for this

scheme and provide information. Only businesses that consume more than 6,000 MWh per year have to purchase credits and are eligible to receive revenue recycling payments. This scheme is **not** implemented via the electricity suppliers, so no charges should be included within the electricity contracts or invoices. This scheme only includes energy that is not already covered by a climate change agreement or the European Union Emissions Trading Scheme. The customers who make the largest reductions in their consumption should receive more from the revenue recycling payments than they paid into the scheme.

Figure 3: The total cost of electricity in Northern Ireland 2009-10



How can I influence the price I pay?

There are three main factors that determine the price that a specific business will pay for its electricity supply. These are:

- the time of day/year that the electricity is consumed at, which is known as the consumption profile. The higher the ratio of peak time units to off-peak units, the higher the average unit price will be. This is because electricity is more expensive to produce and transport at periods of high demand (note this does not apply to all customers supplied by NIE Energy on a regulated tariff);

- the voltage that the customer is connected. Lower voltage customers use more of the system than high voltage customers and therefore pay more; and

- the taxes that the supplier has to charge, which depend on the amount of green energy supplied and if the customer is in a 'climate change agreement' with the government. It is important to note that not all suppliers are subject to the same taxes. This should be examined in detail when comparing the quotations from different suppliers, to ensure that the lowest total cost option is chosen.

Types of contract available to LEUs

Suppliers are currently offering four different types of contract to LEUs. Each has advantages and disadvantages and customers must decide for themselves which is best suited to their business model.

- **Fixed price contract**: some suppliers will offer a fixed price contract to LEUs. This provides price certainty for the business, however the contracts usually include a clause that adjusts the regulated component price when the regulated infrastructure costs are changed. This normally happens once a year on 1 October.

- **Energy price adjustment contract**: this is a contract where the price paid for the units consumed will change according to the wholesale price. This change is called the 'energy price adjustment' and is a monthly addition to or rebate off the price quoted on the tender. With this, the customer is guaranteed to be paying only the underlying cost of the power, but there is no price certainty and the adjustment factor is not known until the end of the month.

- **Floating price contract (formula)**: this contract contains an explicit formula that relates the price of electrical energy to a published commodity index (for example the forward price of gas shown in figure 2). The customer can then monitor the index and factors that influence the index. Based on this they can fix the price for portions of their consumption (for example a

month, quarter or season) at the time they consider most appropriate. This can either be based on expected trends in the index or to implement the company risk management policy. This type of contract allows the customer to separate the contacting process from the procurement decisions, and spreads the timing risk associated with the price decision.

- **Floating price contract (pool-price-pass-through):** this is a contract where the price paid for the units consumed will change each month according to the wholesale price. With this, the customer is guaranteed to be paying only the underlying wholesale cost of the power, but there is no price certainty and the actual price is not known until the end of the month.

Summary of the advantages and disadvantages of each type of contract

Contract Type	Advantages	Disadvantages
Fixed Price	✓ Price of the energy is known in advance.	✗ The price paid is dependant on the market on the day the contract is fixed. ✗ No benefit if underlying prices fall. ✗ Does not provide full budget certainty (pass through cost variations).
Energy Price Adjustment	✓ Benefit immediately from reductions in wholesale prices. ✓ Prices reflect the underlying cost drivers which react to the wider economy.	✗ Energy price not known at time of consumption. ✗ Prices can go up as well as down.
Floating Price (formula/ pool-price-pass-through)	✓ Spread the risks associated with the timing of energy purchases. ✓ Can be adapted to suit risk management policy.	✗ Prices can go up as well as down. ✗ Requires greater input and expertise from procurement and energy management staff.

How to choose a supplier?

The suggested steps to find out if it is appropriate for your business to change supplier are**:**

- **Contact suppliers:** The amount of information that suppliers can find out about customers is limited by the Data Protection act. The first step is to contact each of the suppliers (listed on the Utility Regulator website) to let them know that you are considering the options available to you and provide them with some basic data about your business. For the supplier to be able to process your request, it would be helpful if you also had the following data available**:**

  - ***Your meter point registration number (MPRN):*** is a 11 digit code that should be listed on your invoice. There will be one for each of the supply points that you have.
  - ***Your tariff code:*** is a four digit code starting with T (e.g. T101) that should be on your invoice or in your contract documentation. It lets the supplier know what voltage you are connected at and the approximate size of your connection.

- **Get your consumption profile:** it is easier for you to request your consumption data from NIE Transmission and Distribution (who read the meters) and then provide it to the suppliers, than for you to provide written authorisation for each of them to obtain it on your behalf. This is a simple process and requires you to contact NIE Transmission and Distribution and ask for your meter readings for the past year. You will need your MPRN for this. This step only applies to

customers with a half hourly meter. You can contact them on 08457 643 643 or by email at **datarequest@nie.co.uk.**

- **Consider the options available to you:** suppliers will make offers to you based on the size of your consumption and their own business model. It will be up to each customer to consider the advantages and disadvantages of each of the offers and then choose which is most appropriate for their business. If a number of 'fixed price' offers are received, it is essential that a like for like comparison is done. Payment options and contract terms and conditions can vary between suppliers.

- **Choose your supplier:** once you have chosen the supplier that best fits all of your needs, they will work with you to transfer your supply over to them. This is a standard procedure which has been approved by the Utility Regulator. If you do not already have a connection agreement with NIE Transmission and Distribution, this will need to be put in place. This will only need to be done if it is the first time that you have changed supplier.

- **Check again:** the market is continually evolving, and different offers may be available to you at the end of the contract. It is important to repeat this process before the end of the contract, allowing enough time for negotiations and the switching process. Don't wait for your supplier to contact you. The CCNI has produced a leaflet for businesses who wish to switch their energy supplier. It is available to download from their website or by calling 0800 121 6022.

Common concerns

- ***Will the quality of my supply change?***
  No – the electricity network is a regulated monopoly unlike, for example mobile phone suppliers, where each company has its own infrastructure. Therefore the same electrons will be generated and they will travel along the same wires whoever the supplier is. The only differences will be the price, tariff structure and the style of the invoice.

- ***How long does the process take?***
  It is important to allow enough time for suppliers to prepare your quotations. The decision to change to a new supplier must be made at least 10 working days before the end of your current contract. Therefore it is advisable to start researching the options available to you up to two months before the end of your contract.

- ***Does it have to happen at a specific time of year?***
  No, historically most contracts followed the tax year (1 April to 31 March), however there is no reason to stick with this. For businesses whose reporting year is different to the tax year there are benefits to changing the renewal date. The regulated infrastructure costs are reviewed annually and the new prices come into effect on 1 October, therefore there are advantages to having an annual contract that starts on that date.

Who to contact if you have a complaint

Most complaints by LEUs about their electricity invoices relate to two main aspects:

- meter reading, meter accuracy and interruptions to supply, which are the responsibility of NIE Transmission and Distribution. If you have a query about these issues, contact NIE Transmission and Distribution on **08457 643 643** or by email **customercontact@nie.co.uk**; and
- billing and/or payment issues. You should contact your own supplier, using the details provided on the invoice or the contract.

The agreed complaints procedure is as follows:

Step 1 In all instances your first point of contact should be with your electricity supplier.

Step 2 If your electricity supplier does not solve your complaint/query or you are not happy with the response, please contact CCNI, who has been empowered to help you with electricity, gas and water complaints arising in your home, industry or business.

Step 3 An additional way CCNI may help you is to refer your complaint/query to the Utility Regulator for determination. The Utility Regulator has the legal power to act on your behalf and investigate the matter, provided it is something they have the legal authority to make a determination on.

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