

Northern Ireland Electricity plc Transmission and Distribution Fifth Price Control (RP5)

Strategy Paper

1 Executive Summary

The current NIE T&D price control expires on 31 March 2012. The next NIE T&D price control, due to begin in April 2012, will be known as RP5 (Regulatory Period 5). This high level introductory paper sets out the background of NIE T&D price controls and identifies the make up of the current price control, RP4. In particular it also describes issues that will need to be considered within the context of the next price control. The paper aims to give stakeholders an opportunity to raise issues which they consider relevant, and to help formulate thinking prior to the Utility Regulator forming a view on the structure and content of RP5. There will be further and more detailed consultations on specific aspects of RP5 at later stages.

The Northern Ireland Authority for Utility Regulation (the 'Utility Regulator') has a statutory principal objective to protect the interests of electricity customers in regard to the generation, transmission, distribution and supply of electricity. The transmission and distribution of electricity are generally accepted as monopoly activities. In Northern Ireland the assets are owned by the Transmission and Distribution (T&D) business of Northern Ireland Electricity (NIE plc). They are also responsible for planning, developing and maintaining these systems.

The Utility Regulator ensures value for money for customers of these monopoly activities by setting price controls. Typically these are reviewed every five years. The objective of price controls is to ensure that NIE T&D do not abuse their monopoly position by charging customers prices which are too high, whilst at the same time ensuring that NIE T&D can finance its licensed activities to provide an adequate service. Economic regulation of NIE T&D aims to achieve a balance of interests between the company itself, shareholders and consumers.

The current price control, RP4, is based on a capital allowance and RPI-X regulation for Opex. RPI-X is a form of incentive regulation which involves setting a base revenue allowance for NIE T&D to cover efficient costs while delivering required outputs. If NIE T&D manages to operate at a lower cost than expected, it can increase the effective rate of return it earns. When setting the RP5 price control, it will be important to give NIE T&D properly balanced incentives to prevent them from creating perverse outcomes, and possibly a negative outcome for customers. In a move away from the traditional methods applied to a price control a number of new approaches to incentive mechanisms were introduced for RP4. These included a 'rolling' Opex mechanism and setting Capex using actual rather than forecast expenditure. An evaluation of these mechanisms will be required to assess the appropriateness of continuing with them in RP5.

The RP5 price control has to be considered in the context of recent legislative and policy developments regarding the ownership and operation of electricity networks, renewable electricity generation and demand side participation. Specific examples which form part of the new framework include the Third European Internal Market Directive (IME3)¹, the Renewable Energy Strategy (RES) Directive² and the Strategic

¹ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:211:0055:0093:EN:PDF>

Energy Framework (SEF)³. The implementation of IME3 could potentially result in a transfer of ownership of the transmission network and/ or re-allocation of major transmission functions including planning, development and maintenance. This in turn will have implications for incentives and cost of capital. The duration of the price control(s) and the financial considerations also need to be assessed. The Utility Regulator will consider other UK and international regulatory practice regarding these areas.

In setting the RP5 price control the Utility Regulator needs to ensure customer value and that NIE T&D's allowed revenue delivers a secure and more sustainable network as well as being capable of adapting to changing needs.

The objectives of the RP5 Price Control will be:

- To ensure value for money for customers for the service provided;
- To ensure security of supply by maintaining and developing a network which is fit for purpose; and
- To facilitate sustainability in the generation and consumption of electricity.

Significant network development will be required to meet renewable targets. Changes in fuel source and an increase in renewable generation requires the NIE T&D network to be designed and operated in a way that is responsive to changing needs. The associated capital programme will require careful scrutiny to ensure value for money for customers and risks will have to be managed and allocated to ensure efficient financing costs. The Utility Regulator has a statutory duty to ensure that licensed companies can finance their activities and will assess the financeability of NIE T&D in light of this renewable integration and upcoming transmission infrastructure investment.

To assist in making decisions the Utility Regulator is carrying out a review of regulation in the form of cross-directorate project across Water, Gas and Electricity. The Utility Regulator may also consider the use of a "reporter" to help implement and manage the price control and will continue to work closely with the Consumer Council to provide more structured consumer input.

Smart grids and smart metering is an area that the Utility Regulator expects to consider for RP5. The Utility Regulator will also consider other areas such as a Low Carbon Network developing during RP5.

In this paper, questions are highlighted at the end of various sections. We welcome feedback from a wide range of interested stakeholders.

² http://www.decc.gov.uk/en/content/cms/what_we_do/uk_supply/energy_mix/renewable/res/res.aspx

³ http://www.detini.gov.uk/draft_strategic_energy_framework_2009-2.pdf

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Responses to this strategy paper must be received by 5.00pm on 1st October 2010

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2 Introduction

The electricity network in Northern Ireland is owned by Northern Ireland Electricity plc⁴ and is made up of a Transmission and a Distribution component. Throughout this paper, NIE plc will be referred to as NIE T&D. Due to its natural monopoly position, the amount of revenue which NIE T&D earns is subject to a price control. This is set by the Utility Regulator following consultation with stakeholders.

This paper will provide a high level review of the current price control under which NIE T&D revenues are set, and identifies the key considerations for the next price control period beginning in April 2012. Views are sought at this early stage on the strategy which the Utility Regulator should follow for NIE T&D's next price control.

2.1 Purpose of this Paper

This document outlines the Utility Regulator's approach for a fifth price control, beginning 1 April 2012. This price control will be referred to as RP5 ('Regulatory Period 5') in this paper.

The paper acknowledges the likely impact of recent government policy and, in particular, upcoming targets regarding the generation of electricity from renewable sources on the next price control for NIE T&D. As a result of this, the paper aims to ensure transparency and seek feedback from a wide range of stakeholders.

This is the first consultation paper on RP5. It is aimed at stimulating debate about key issues and is not intended to undermine the current price control or imply that any of the issues raised or areas discussed will definitely form part of the next price control. Further work will continue on the components of the price control during 2010 and 2011 and these will also be consulted on further in due course.

2.2 Role of the Utility Regulator

The role of the Utility Regulator is determined under legislation⁵ and its statutory principal objective is:

To protect the interests of electricity consumers in Northern Ireland, wherever appropriate by promoting effective competition between persons engaged in or in commercial activities connected with the generation, transmission or supply of electricity.

In carrying out its functions, the Utility Regulator should act in the manner best calculated to further the principal objective, having regard to:

(i) The need to secure that all reasonable demands for electricity are met; and

⁴ www.nie.co.uk

⁵ The Energy (Northern Ireland) Order 2003. 2003 No. 419 (N.I. 6). Northern Ireland <http://www.opsi.gov.uk/si/si2003/20030419.htm>

(ii) The need to secure that licence holders are able to finance the activities which are the subject of obligations imposed under NI energy law.

In performing the above duties, regard shall be had to the interests of groups of vulnerable consumers in Northern Ireland, comprising the disabled and chronically sick, pensioners, low income consumers and residents of rural areas.

In carrying out its electricity functions, the Utility Regulator must not discriminate between persons whose activities include generating, supplying or transmitting electricity.

In setting price controls for NIE T&D, the Utility Regulator seeks to protect the interest of consumers and have regard to its other duties outlined above.

3 Background to NIE T&D Price Controls

3.1 The electricity industry in Northern Ireland

NIE T&D carries out transmission licensed activities including the development, planning, construction and maintenance of the transmission and distribution network, as well as the operation of the distribution system. The transmission network is operated by the System Operator (SONI⁶).

The electricity industry in Northern Ireland can be categorised into four broad areas:

- Generation
- Networks
- Supply
- Market

Generation involves the production of electricity from various fossil fuels and renewable energy sources. Generators with a capacity greater than 10MW must have a licence to operate and must sell their entire output into the Single Electricity Market (SEM, see section 3.1.1).

The NIE T&D network comprises of overhead lines, underground cables and substations. The transmission network operates at 275kV and 110kV. This connects onto the distribution network, which operates at 33kV, 11kV and Low Voltage (LV). These networks connect the power stations and other sources of electricity generation to businesses and homes. There are approximately 2,020km of overhead line and 80km of underground cable making up the transmission system; approximately 29,800km of overhead line and 13,100km of underground cable making up the distribution system, and approximately 240 major substations. NIE T&D's transmission system is connected to the Republic of Ireland through 275kV and 110kV Interconnectors and to Scotland via the Moyle Interconnector. A second interconnector between Northern Ireland and the Republic of Ireland is jointly proposed by NIE and Eirgrid⁷. This proposal involves a 400kV power line running from Tyrone to Cavan⁸.

Supply involves the final sale of electricity to business and domestic customers. Suppliers trade in the wholesale market (SEM) to purchase the electricity which they sell on to customers.

The regulated costs associated with NIE T&D are recovered from customers via the annual tariff process. Separate tariffs are set to recover distribution and

⁶ <http://www.soni.ltd.uk/>

⁷ <http://www.eirgrid.com/>

⁸ <http://www.nie.co.uk/interconnector/docs/InterconnectorFactSheet.pdf>

transmission costs associated with the use of the system. As well as these network tariffs, electricity customers also incur a number of other regulated costs⁹:

- Energy Costs
- System Support Services
- Public Service Obligation Levy
- Market Operator Charges
- Imperfections Charges
- Capacity Charges

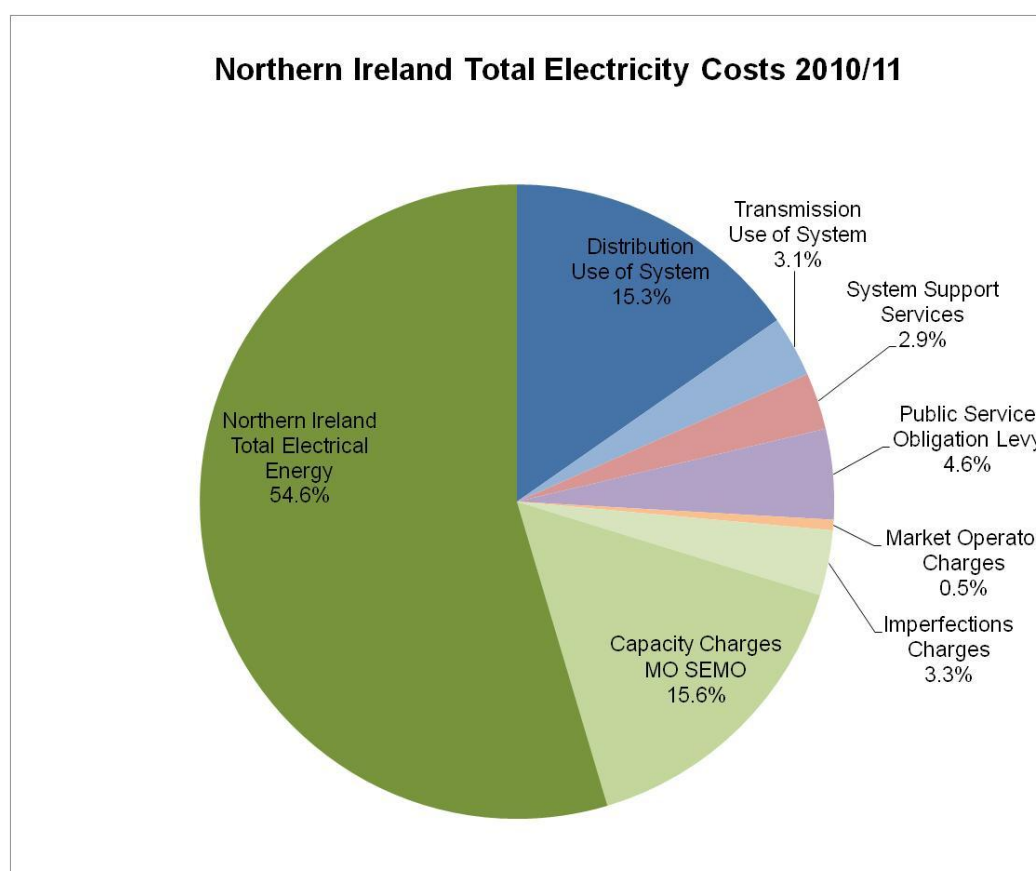


Figure 3.1 – Forecast Breakdown of costs in Annual Domestic Tariffs 2010/11

The pie chart (figure 3.1) shows the forecast breakdown of electricity costs in Northern Ireland for the tariff year October 2010 – September 2011. NIE T&D costs are recovered by the Transmission Use of System and Distribution Use of System tariffs. Using the forecast figures from the 2010/11 tariffs, these costs make up

⁹ An explanation of the various regulated costs can be found on pages 6-10 of The Buyers Guide, published by the Utility Regulator in June 2010:

18.4% of the total. It should be noted that tariffs vary from year to year and international fuel prices have a significant impact on the tariff value. Regulated tariffs are available to all customers who use less than 150,000 units per year. These are offered by NIE Energy which is the only regulated supplier due to its continued dominance in the domestic electricity sector in Northern Ireland. NIE T&D is a separate entity and is responsible for delivering electricity to all customers in NI and collecting meter readings, regardless of who the supplier is.

3.1.1 The Single Electricity Market (SEM)

Currently there is a Single Electricity Market (SEM) operating on the island of Ireland. The SEM went live on 1 November 2007, and allows wholesale electricity to be traded in the Republic of Ireland and Northern Ireland on an all-island basis. Electricity suppliers across the island purchase their energy via this market. The market is specifically designed to ensure that prices reflect the least cost of production and that any market power cannot be abused.

Responsibility for overseeing the development of the SEM rests with a SEM Committee, which is made up of representatives from the Utility Regulator, the Commission for Energy Regulation (CER)¹⁰ and an independent member appointed by the relevant government departments. A number of policies are now harmonised through the SEM arrangements which may influence the future operation and development of the network in Northern Ireland. These include policies to encourage demand side market participation, transmission connection policy, locational network signals, and the promotion of regional integration.

Question 1:

Which aspects of the SEM arrangements do respondents believe should be taken into account for the NIE T&D RP5 price control?

3.2 History of NIE T&D Price Control

In Northern Ireland there have been combined price controls for transmission and distribution. Elsewhere in GB, transmission and distribution have had separate price controls.

As part of the arrangements to re-structure the electricity industry in Northern Ireland following privatisation in 1992, regulated price control periods have been set for NIE T&D. Each price control period since then has run for five years.

The aim of a price control is to ensure that NIE T&D does not abuse its monopoly position by charging prices which are excessive, and also to ensure that an appropriate level of service is provided to customers. A price control provides a regulated company with a level of revenue and incentives that are adequate to

¹⁰ <http://www.cer.ie/>

finance an efficient business. This level of revenue should enable the company to earn a return for shareholders commensurate with the risk level of the business.

Since privatization, four price controls for NIE T&D have been set. The formation of NIE T&D followed the electricity sector re-structuring in 1992 with the first price control covering the period from 1992-97, set by government. The Monopolies and Mergers Commission (now the Competition Commission) set the second five year price control after referral by the Utility Regulator. A third price control was set by the Utility Regulator for the period of 2002-2007 (RP3) after an extensive consultation process. For RP3, the Utility Regulator made extensive use of comparisons with Great Britain's distribution network operators and historical savings in setting the baseline revenue and efficiency targets. The fourth price control (RP4) has been in place since 1 April 2007 and ends on 31 March 2012.

4 Legislative and Policy Developments

Recent EU policy and legislative developments are likely to have a direct impact on the next price control for NIE T&D. Consultation in relation to these legislative changes is carried out by DETI.

4.1 The Third European Internal Market Directive (IME3)

IME3¹¹ is the third European electricity and gas Directive of the European Commission. The first directives were adopted in the late 1990s, with the primary objective of opening up energy markets to competition. Most member states had implemented the electricity and gas directives by September 2000, but in 2001 a Commission inquiry concluded that further measures were necessary in order to complete the internal energy market and reap its benefits. The second gas and electricity directives were introduced in June 2003. These included “unbundling” provisions, whereby energy transmission networks had to be operated independently from production and supply businesses. A Competition enquiry in the electricity sector, published in January 2007, revealed some ‘serious malfunctions’ in the market for industrial customers. Market concentration still reflected the ‘old’ market structure, characterised by national or regional monopolies which controlled electricity prices in the wholesale market and blocked new entrants. Therefore, corrective action promised by the EU Executive came in the form of IME3 in September 2007.

Member states are required to implement the unbundling provisions by March 2012. One of the key elements of IME3 is a more rigorous requirement for the unbundling of transmission network functions from the generation and supply functions. This has been the subject of DETI consultation, with further consultation expected in Autumn 2010.¹²

The IME3 Directive develops unbundling of energy transmission assets further by including provision for full transmission ownership unbundling, together with the transfer of the planning, development, operation and maintenance functions to an independent system operator. In NI, responsibility for the operation of the electricity transmission network currently rests with SONI whilst responsibility for planning, development and maintenance of the network rests with NIE which it carries out in co-ordination with SONI under the processes set out in the Transmission Interface Arrangements. The Directive sets out two alternative options to full ownership unbundling. Firstly there is the Independent System Operator (ISO) model which requires that the functions relating to investment, planning, development and maintenance of the system would have to be transferred to an independent transmission system operator, but not the assets themselves. Secondly the Independent Transmission Operator (ITO) model allows for the transmission system

¹¹ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:211:0055:0093:EN:PDF>

¹² Information on DETI's consultation can be viewed at:
http://www.deti.gov.uk/consultation_on_implementation_of_unbundling_provisions_of_the_2009_electricity_directive__2009.72.ec_.pdf

operator and transmission system owner to be a separately ring-fenced business within a vertically integrated utility. Further to this, there is scope in the Directive for a vertically integrated organisation owning the Transmission system on 3 September 2009 to seek an exemption from the Directive if they can demonstrate that as of the specified date the model in place provided greater independence than the ITO model. DETI, in conjunction with DECC¹³, will decide which model should be implemented in Northern Ireland. The Utility Regulatory will certify this. Ownership, responsibilities and allocation of risk will vary depending on which of the options above is selected.

4.2 Renewable Energy Directive

The Renewable Energy Strategy (RES)¹⁴ was published in July 2009 in response to the UK signing up to the EU Renewable Energy Directive, which includes a UK target of 15% of energy from renewable sources by 2020. These renewable sources include onshore and offshore wind-power, biomass and tidal power. The RES aims to tackle climate change, reduce CO₂ emissions and promote security of energy supply. In order to reach the 15% overall energy target, the RES suggests that:

- More than 30% of electricity is to be generated from renewable sources;
- 12% of heat is to be generated from renewable sources such as biomass, solar and heat pump sources in homes and businesses;
- 10% of transport energy is to come from renewable sources.

The RES recognises that increasing generation from renewables will have implications for grid investment, grid technology and grid connection policy. All of these issues have the ability to impact on NIE T&D's investment plans.

4.3 Strategic Energy Framework for Northern Ireland

The draft Strategic Energy Framework (SEF) Consultation¹⁵ was published by DETI in July 2009, proposing a 40% target for electricity generation from renewables by 2020. It recognises the implications for grid investment and refers to the grid development proposals currently being developed by NIE T&D. The draft SEF envisages a more sustainable position where energy is used as efficiently as possible, where more energy is generated using renewable sources, and where generation of energy is as competitively priced as possible. The draft SEF outlines its four key objectives as competitiveness, security of supply, sustainability and infrastructure.

¹³ <http://www.decc.gov.uk/>

¹⁴ http://www.decc.gov.uk/en/content/cms/what_we_do/uk_supply/energy_mix/renewable/res/res.aspx

¹⁵ http://www.detini.gov.uk/draft_strategic_energy_framework_2009-2.pdf

Question 2:

Are there any other legislative or policy developments that the Utility Regulator should take into consideration for the RP5 price control?

5 Components of NIE T&D Price Control in RP4

A regulated company incurs both operating and capital costs, including finance costs. Under the current price control, a formula within NIE T&D's licence determines the amount of revenue which the company can raise in year t in respect of its operating and capital costs, including a return and depreciation. The formula is:

$$MD_t = CO_{t-5} + P_{t-5} + UO_t + (RAB_t \times CoC_t) + Tax_t + Dep_t + CoL_t + D_t + K_t^{16}$$

Where:

MD_t is the maximum regulated T&D revenue

CO_{t-5} is the actual controllable operating expenditure (Opex) five years earlier (excluding pensions costs and after making the one-off adjustments in respect of 2002/03 and 2003/04), RPI indexed to the year t price base;

P_{t-5} is the amount of pensions costs paid five years earlier (less a disallowance of £225k in respect of early retirement deficiency costs), RPI indexed to the year t price base;

UO_t is the actual uncontrollable Opex in year t in nominal prices;

RAB_t is the average regulatory asset base (RAB) for year t in nominal prices;

CoC_t is the allowed cost of capital;

Note: CoC_t is also referred to as the WACC and $RAB_t \times CoC_t$ is known as the 'Return on RAB'

Tax_t is the allowance for tax costs;

Dep_t is the RAB depreciation allowance;

CoL_t is revenue adjustments arising under the change of law provisions;

D_t is revenue adjustments arising from assessed capital expenditure (Capex) efficiency gains or losses and revenue due under SMART programmes. Any costs in this category require regulatory approval.

K_t is the correction factor due to over/under recoveries

¹⁶ This formula is for illustrative purposes and is fully described in Annex 2 of the license: http://www.uregni.gov.uk/uploads/publications/2009-08-26_NIE_plc_-_Licensing_Scheme_Transmission_Licence_-_Consolidated.pdf

Based on the RP4 Price control, the graph below shows the approximate allocation of the cost types that make up the annual costs of T&D in the tariff year 2009/10. These are each discussed below.

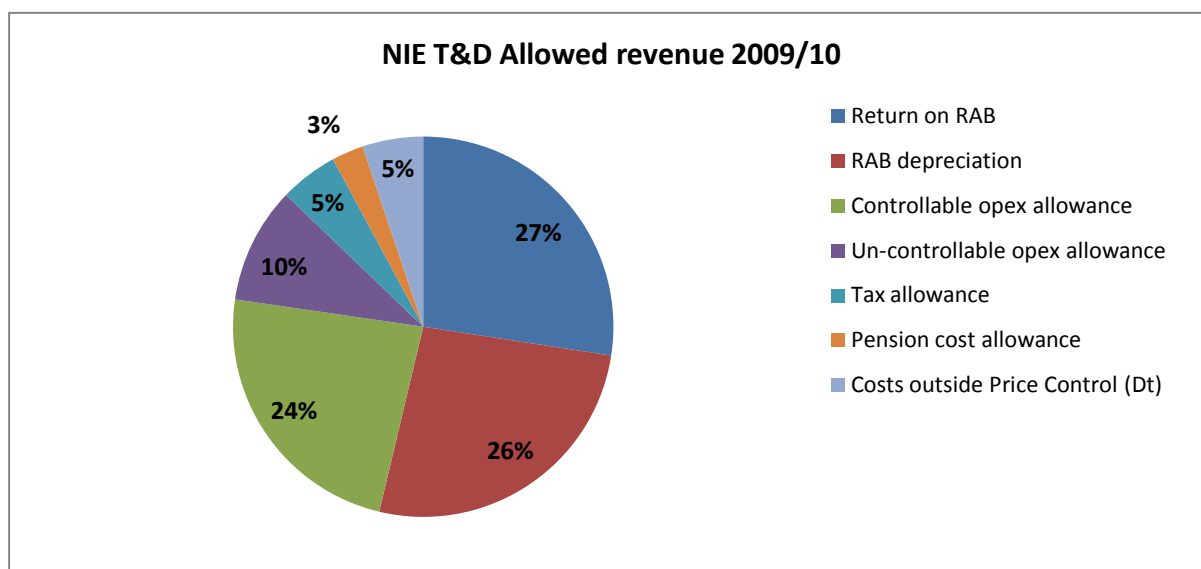


Figure 5.1 –NIE T&D allowed revenue, 2009/10

5.1 Return on RAB ($RAB_t \times CoC_t$)

The Regulatory Asset Base (RAB_t in the revenue formula) is retail price index-linked and reflects the investment in the assets used to provide the regulated services. The company earns revenues on the RAB to provide a return on the capital employed. New capital assets which have been invested in (Capex) are added to the RAB, subject to regulatory approval. It can be seen from Figure 5.1 that the return on the RAB accounts for approximately a quarter of the annual NIE T&D regulated revenue.

The Weighted Average Cost of Capital (abbreviated as WACC and referred to as CoC_t in the revenue formula) is the percentage rate of return that NIE T&D is allowed to receive on its RAB during the price control period. For the RP4 price control, the WACC values determined for the Distribution Network Owners (DNOs) in GB were used, with an adjustment made for the Transmission WACC. In GB, Ofgem deals with network companies who solely provide a distribution service. NIE T&D is unique in the UK in that it deals with both transmission and distribution with a joint price control applied to the company. Following the publication of the DPCR5 Price Control by Ofgem, the WACC (post tax) for the distribution element of the NIE T&D price control was reduced from 4.84% to 4.0% for Year 4 and Year 5 of RP4.

5.2 RAB Depreciation (Dep_t)

The depreciation profile applied to the NIE T&D RAB is based on the following two elements:

- Assets comprising the pre-vesting part of the RAB (i.e. those in existence at NIE's flotation in June 1993) are depreciated according to the profile established by the MMC¹⁷ during the 1996 referral.
- Post-vesting assets are depreciated over forty years according to the so-called 'kinked' profile (whereby the annual rate of depreciation is 3% for the first twenty years and 2% for the second twenty years).

The opening RAB at 1 April 2007 was agreed as part of the current price control for RP4. The opening RAB is rolled forward during RP4 by adding actual capital expenditure during RP4 and subtracting depreciation.

5.3 Controllable Opex allowance (CO_t)

Controllable Opex are those operating costs which NIE T&D are deemed to be able to control. The main costs are:

- Manpower costs
- Managed service costs
- Repairs and maintenance (R&M)
- Information Technology
- Telecoms
- Corporate charges
- Supply chain
- Insurance
- Costs transfers from supply
- Call handling

The Utility Regulator sets a level of allowed controllable Opex for the price control. NIE T&D is incentivised to make efficiencies and under-spend this amount and retain the difference between the allowed and actual spend. In order to set a level of allowed Opex, the Utility Regulator used a rolling mechanism for RP4. The rolling opex mechanism means that the actual controllable Opex in each year of the last price control period (RP3) is rolled forward with RPI indexation to become the controllable Opex allowance for the corresponding year in the current period (RP4). Thus, the

¹⁷ http://www.competition-commission.org.uk/rep_pub/reports/1997/397northern.htm

controllable Opex allowance in year one of the RP4 price control (2007/08), was set equal to the actual controllable Opex in year one of the RP3 price control (2002/03), RPI-indexed and so on. This rolling approach was intended to simplify the Opex allowance calculation process while still incentivising the company to reduce costs with the savings automatically being passed back to customers in due course. There were also adjustments made to the overall Opex allowance for pensions (see section 5.7) and a one-off adjustment (equivalent to 1.9% - proxy for efficiency savings). These deductions are discussed further in the RP4 consultation papers.¹⁸

5.4 Un-controllable opex allowance (UO_t)

Uncontrollable Opex are those costs which fall within the operating expenditure category, but over which the actions of the regulated company have been deemed to have little or no impact. Currently, the following costs are classed as uncontrollable Opex:

- Rates
- Wayleave payments
- Licence fees

Rates are the annual business property rates paid by NIE T&D. A Wayleave is a contractual licence for which an annual payment is made in advance to the owner and/ or occupier to cover the financial impact of having equipment or apparatus located on their private land. Licence fees are an annual payment made by NIE T&D to the Utility Regulator.

5.5 Tax allowance (Tax_t)

For the first time in NIE T&D price controls, the rate of return was calculated on a post-tax basis. This means that the allowance for taxation would be based on the actual tax cost rather than an assumed 'tax-wedge' in the cost of capital calculation. Calculating the rate of return on a post-tax basis also allowed the incentives to increase gearing to be moderated. This means that if NIE's gearing increases above the level of gearing used in the cost of capital model, the Utility Regulator could claw back the associated tax benefits for customers at the next review.

Because of this, an allowance is included in the annual tariffs to cover the tax requirements. The formula for this calculation is included in Annex 2 of the T&D licence. The level of tax allowances follows HMRC rules and NIE T&D are required to provide the

¹⁸ The RP4 consultation papers can be viewed using the following links:

<http://www.uregni.gov.uk/uploads/publications/price-control-rp4-public-paper-nie4.pdf>

http://www.uregni.gov.uk/uploads/publications/T_D_Price_Control_2007-2012_Further_Consultation_Paper_June_06.pdf

Utility Regulator with a tax return annually against which it can compare actual taxation with NIE's forecast.

5.6 Pension cost allowance (P_t)

An allowance is included in the annual tariffs to cover pension costs. The formula for this calculation is included in Annex 2 of the T&D licence.

Within the NIE T&D price control, pension costs are classified as a separate Opex category since they form an integral part of labour costs. Pension costs are made up of a mixture of ongoing costs of funding the scheme through contributions, and dealing with any shortfall in the scheme in its ability to pay pensions in the future, and are treated in the same manner as the rolling Opex mechanism. This means that the cost associated with funding pensions is not analysed by the Utility Regulator, but is rolled forward in each relevant year with RPI.

During RP4, a disallowance of £225k (2004/05 prices) per year for Opex was implemented in respect of early retirement deficiency costs which had been borne during RP3. In RP3, a surplus of the pension scheme was used to pay early retirement pensions which were paid due to redundancies, rather than using part of the Opex allowance for RP3. It was agreed that, in line with Ofgem principles, the proportion of the pension deficit which had arisen by RP4 which attributed to early retirement costs would have 70% of the cost borne by customers and 30% by shareholders. Further work will be done on this to assess the treatment of funding a pension deficit in RP5.

5.7 Costs outside the price control (CoL_t , D_t)

The NIE T&D Licence allows for the addition of costs that are not captured within the price control period (CoL_t term and D_t term). CoL_t means the allowance in relevant year t for change of law costs. The D_t term covers a number of areas included within the tariff process that have evolved since the start of the RP4 period. The significant cost areas captured under this category are:

- Meter reading & Keypad assets (this was moved from NIE Energy as part of market opening)
- Business & Domestic Market Opening Costs
- North/South Interconnector Development Costs
- Renewable Integration Development Costs
- Past Service Pension Liability - Transfer from SONI (due to divestment)

These costs are recoverable on a pass-through basis provided NIE T&D can demonstrate that they have been reasonably incurred.

5.8 Incentives

A price control also includes incentive mechanisms to encourage companies to deliver what customers require. For example, companies can be rewarded or penalised depending on the quality of service they deliver. Incentives which have been in place for the first three years of the RP4 Price Control so far are:

- Rolling mechanism for Opex (as described in section 5.3)
- Capex efficiency incentive
- Revenue protection
- Profit share scheme for NIE Powerteam
- SMART programme

The above incentive mechanisms will continue for the remaining two years of RP4. The main objective of these incentive mechanisms is to encourage NIE T&D to reduce costs for the ultimate benefit of customers.

5.8.1 Capex efficiency incentive

RP4 was notable for its removal of the traditional incentive for Capex. In RP2 and RP3, the broad incentive arrangements prevalent in GB had been applied. Under this approach regulated revenue depends on allowed Capex with an incentive on the company to under-spend its Capex allowance and hence increase profits by avoiding (for the price control period) some financing costs. There are potential benefits to consumers from this approach. It can incentivise the company to seek more efficient ways of implementing the capital programme (e.g. efficiency in procurement of materials and services or other types of technical efficiency). If the latter allowed Capex to be deferred without any detrimental impact on network performance, then some reward to the company was seen as providing the appropriate incentive. In practice, however, it is difficult to be sure that any Capex under-spend is due to genuine efficiencies. The company can simply inflate the Capex forecasts at the start of the price control process and then spend less. This can be done by simply inflating the forecast costs of particular outputs though this can, to some degree, be mitigated by using consultants with access to benchmarking data. Recognising this difficulty, the Utility Regulator decided in RP4 that allowed revenue would be based on actual rather than allowed Capex with a separate Capex efficiency mechanism.

A review of NIE T&D's RP4 Capex plans was carried out. The purpose of the review was to examine the investment proposals of NIE T&D. This included investigations of investment policy in RP3 (examining actual and projected expenditure in RP3) as well as an analysis of investment proposals for RP4. The aim was to identify unnecessary expenditure or reductions in or deferral of expenditure which could be accommodated without affecting NIE T&D's abilities to fulfil its licence duties.

Included in RP4 capital expenditure is the expenditure incurred from connections to the network. NIE T&D currently provides all connections to its electricity network,

although SONI is responsible for the commercial aspects of connections to the transmission network. NIE T&D publishes an annually approved 'Distribution Connection Charging Statement' which provides the basis upon which charges will be made. Indicative unit costs are also provided. It should be noted that domestic and small commercial users pay 60% of total cost calculated, with the balance to be recovered from all customers through use of system charges. The cost of all other connections is charged 100% to the applicant. The Utility Regulator will be consulting later in the year in relation to the current connection charging policy and any changes to this may impact on the allowance for RP5.

The Capex Efficiency incentive was based on procurement and labour efficiencies. With this approach, the difficult issue of Capex under-spend was avoided and the incentive to achieve efficiencies within the capital programme were strengthened so that customers would benefit through the savings. The efficiency incentive involves NIE T&D retaining 38.9% of every £1m of efficiency savings, with customers retaining the remaining 61.1%. Note that, to date, the impact of this retention by NIE T&D has been relatively small in the context of the price control.

5.8.2 Revenue protection

The Revenue Protection program incentivises NIE T&D to maximise the recovery of monies relating to the illegal abstraction of electricity at de-energised non-domestic sites. The scheme provides an incentive to NIE T&D by allowing the benefits of recovered monies to be shared equally between them and customers. The scheme therefore also recognises that the ultimate cost of illegal abstraction is borne by customers and requires NIE T&D to split the recovered amount on a 50/50 basis.

5.8.3 Profit share scheme for NIE Powerteam

NIE Powerteam is a ringfenced legal entity which only provides services to NIE T&D. The revenue earned by NIE Powerteam is therefore a cost to NIE T&D. NIE Powerteam is also ringfenced from another Viridian company, Powerteam Electrical Services, who provide services only to third parties. Under its licence, NIE T&D is required to report annually on NIE Powerteam's profits. NIE Powerteam is not regulated, but the Utility Regulator assesses the content of their annual accounts. NIE Powerteam profits are shared with customers on a 50:50 basis, thereby providing NIE Powerteam with an incentive to reduce operating costs. Details of the mechanism are described in Annex 2 of the NIE T&D licence (PPS_t term).

5.8.4 SMART Programme

The SMART Programme also needs consideration. Where a renewable based alternative to conventional network reinforcement is confirmed and the support mechanism can be capitalised, it was agreed that it would be funded from NIE T&D's network capital investment plan at a 1% (pre tax) additional rate of return. The two themes of the SMART Programme are 'Smart 1' and 'Smart 2'. 'Smart 1' includes projects such as solar water heating, biomass generation and heating, small scale wind generation and tidal generation, and seeks to stimulate near market renewable technologies through the funding of programmes of renewable installations. Through the 'Smart 2' programme, NIE T&D has sought to encourage, identify and support

renewable energy and energy efficient alternatives to conventional network reinforcement.

The Utility Regulator intends to review these schemes to determine if it is appropriate to continue with them in RP5.

5.9 Lessons Learned to date from RP4

Before determining the approach to RP5 there is a need to assess the effectiveness of the approach adopted in RP4. This may be possible by looking at efficiency data so far, though it will be limited by only two to three years' data. There may also be some scope to carry out comparative analysis with GB.

The Utility Regulator intends to carry out an in-depth evaluation of both the approach and form of the current price control, RP4. The Utility Regulator will assess individual components of the price control and complete a detailed analysis of other elements which might affect the next NIE T&D price control, RP5, such as the integration of renewables and the approach to metering.

Question 3:

The Utility Regulator welcomes respondents views on the depreciation policy and profile used for the current NIE T&D price control. Do respondents agree with the current profile and are there alternatives we should consider?

Question 4:

Currently, rates, wayleaves and licence fees are classed as 'uncontrollable opex'. Do respondents agree with this classification?

Question 5:

The Utility Regulator welcomes views on the treatment of the proportion of a pension scheme deficit which has arisen due to early retirement deficiency costs. How do respondents think this should be funded?

Question 6:

The Utility Regulator welcomes any comments on the current incentive mechanisms in place for RP4. Do respondents think that these incentive mechanisms should continue for RP5?

6 Key Areas for Consideration for RP5

The Utility Regulator is in the early stages of initiating work to define the principles for the RP5 price control.

As well as the traditional components of a price control, the Utility Regulator will have to consider the effect that new developments in regulatory, governmental and environmental areas will have on the price control, as discussed in section 4. Another key area to consider is the possibility of splitting the joint Transmission and Distribution price control to effectively have two separate price control allowed costs and RABs. This is discussed further in section 6.5 and 6.6.

When deciding on the approach to take for RP5, it will be necessary to carry out a detailed review of the RP4 price control to consider the treatment of the various components of the price control. In addition, consideration will be given to cost of capital, financeability, pass-through costs, duration, form and performance incentives.

6.1 Objectives for RP5

The objectives for the RP5 price control are:

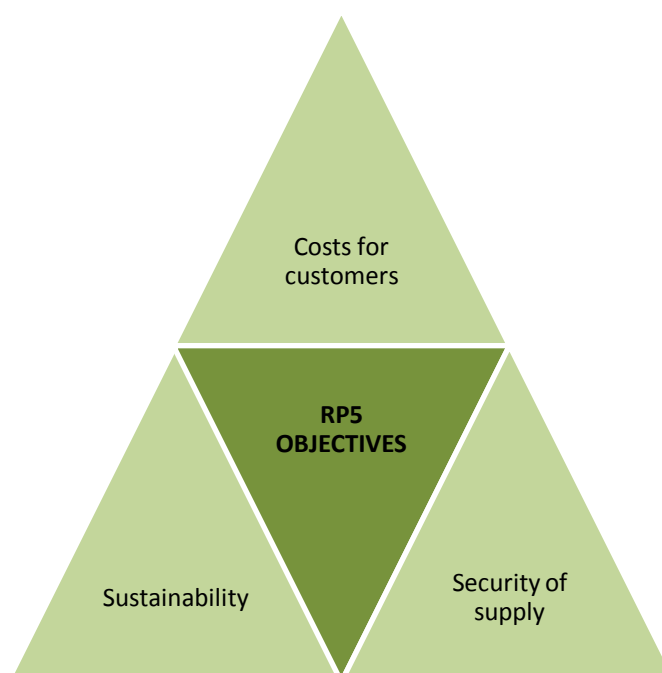


Figure 6.1: RP5 Objectives

The Utility Regulator has a legal obligation to protect the interests of consumers. Ensuring that costs are minimised for customers is therefore one of the main aims of a price control. The Utility Regulator ensures that the network is operated and developed to meet customer needs in a cost-effective and efficient manner, and

intends to continue to meet this objective, especially in the context of the current economic climate.

Security of supply aligns with customers' expectations and NIE T&D have licence obligations to ensure that the network is maintained and developed to ensure certain security standards. RP5 must ensure that NIE T&D are able to finance these obligations.

Sustainability is a key objective for RP5 because further investment is required in the electricity network in light of carbon reduction targets and renewables development. Developments towards mitigating climate change are at the forefront of government policy, as set out in the Renewable Energy Strategy and the Strategic Energy Framework. The Utility Regulator aims to carry out its duties having regard to the environment and sustainability in mind. It should be noted that a 40% target for generation of electricity by renewables is expected in Northern Ireland by 2020 (proposed in SEF).

There is increasing recognition that the next T&D price control will be in the context of much more uncertainty than previous price controls. There are different ways to meet renewable energy targets, including deployment of energy from wind (both offshore and onshore), biomass, tidal and wave. However, if network development lags significantly behind investment in generation, then consumers will suffer from increased constraint costs and generators from delays in return of investment. IME3 introduces further uncertainty in regard to ownership, planning, development and maintenance of the transmission network. Linked to this are issues of risk allocation between customers and shareholders and the ability to raise finance in today's capital markets. It is worth noting that the objectives of RP5 may sometimes be conflicting. For example, investment in the network to facilitate the connection of increased renewables may fulfil the objective of sustainability but could increase costs for customers. Ultimately, these objectives will have to be balanced over both the short-term and long-term.

6.2 Form of RP5

The amount of money that a monopoly network business such as NIE T&D can earn on its regulated business can be restricted by an RPI-X price control that is reviewed every five years. RPI-X is a form of economic regulation. It controls revenue, not profits, and encourages efficiency within the company. The RPI-X price control takes the retail price index (RPI, the rate of inflation) as its benchmark and subtracts X (an efficiency factor) from it. For example, at a time when annual inflation was 3%, an X of 2% would allow the company to raise revenues by no more than 1%, thereby setting a revenue cap. The system is intended to provide incentives for efficiency savings, as any savings above the predicted rate X can be passed on to shareholders, at least until the revenue caps are next reviewed (usually every five years). A key part of the system is that the rate X is based not only on a firm's past performance, but on the performance of other firms in the industry: X is intended to be a proxy for a competitive market, in industries which are natural monopolies.

The amount of revenue which NIE T&D needs to recover from customers (as discussed in section 5) is calculated to ensure the company has sufficient income to finance new capital expenditure (Capex), to continue to operate and maintain its network, to cover annual depreciation, and to provide a reasonable return to both debt and equity investors. A correction factor (K-factor) is included in the licence to recover any over or under recovery of monies from the tariff process in the previous year.

The use of RPI-X incentive based regulation is widely used by both the Utility Regulator and by other regulators in the UK. Looking forward to RP5, the Utility Regulator intends to build on the existing strengths of RPI-X regulation by reviewing possible additional mechanisms. Innovations in the area of incentive regulation, such as Totex and Menu regulation, are discussed below.

6.2.1 Totex Regulation

The optimization of incentives needs to be considered when analysing Opex and Capex. For example, in the NIE T&D RP4 price control review the Capex allowance was set to actual costs incurred, rather than an allowance determined by the Utility Regulator. This may result in a perverse incentive for NIE T&D to minimise Opex by doing capital work instead or classifying Opex work as Capex. This incentive may be more pronounced when there is an Opex allowance but Capex is pass-through. Ofgem has been considering this issue over DPCR4 and DPCR5 and, as well as equalising incentives in menu regulation, it is now considering undertaking total cost benchmarking (Totex).

The Utility Regulator is aware that the concepts of total cost benchmarking and incentives is relatively new and its success relative to separate analysis of Opex and Capex is unproven, even if the principles of total cost analysis are sound. However, if the Utility Regulator wishes to use information produced by Ofgem for benchmarking purposes we may need to consider a move in this direction, so it will be important for us to continue to monitor how they implement total cost benchmarking and incentives.

An alternative approach would be to design similar and consistent incentives for Opex and Capex in order to reduce any “gaming” opportunity to move funds between Opex and Capex. It should also be helpful to adopt clear accounting definitions of Opex and Capex.

6.2.2 Menu Regulation

Under the menu regulation approach,¹⁹ unlike standard RPI-X regulation, regulated companies are no longer presented with a ‘take it or appeal it’ regulatory offer regarding the allowed level of expenditure, but are given a range of options from which to choose. Menu regulation seeks to overcome the incentives for price regulated firms to bid for a high amount of expenditure and then under-spend against

¹⁹ Menu regulation is referred to as CIS (capital expenditure incentive scheme) in the water industry and IQI (information quality incentive) in energy.

that figure by basing the rewards available to a company on both the amount of expenditure they request (relative to the regulator's assessment) and their performance against this bid. That is, if a company chooses a relatively lower level of expenditure, they are able to receive a higher reward on that amount. Equally, if they then manage to deliver the package of outputs specified in the price control at lower costs, they will again receive additional reward (or penalties if the reverse is true). Hence each company faces a menu of combinations and permutations of levels of expenditure and ex-ante and ex-post rewards which it must trade-off in making decisions. Menu regulation is designed to provide different incentives to high and low cost companies, be more reflective of the specific circumstances of firms and reduce the regulatory burden.

The principles of menu regulation appear to be a well founded attempt to overcome some of the difficulties in a traditional approach where companies have an incentive to overstate expenditure requirements and rely on their information asymmetry to persuade the regulator of the merits of these overstated expenditure requirements.

Regardless of which approach to Capex evaluation the Utility Regulator adopts, we will need to determine a base line. Therefore the question remains as to whether Menu regulation is advantageous.

Question 7:

Do respondents agree on the continued RPI-X approach for the RP5 price control, or do they support developments in incentive regulation such as Totex or Menu regulation?

Question 8:

Are respondents aware of any other alternative approaches to incentive regulation, other than RPI-X, Totex or Menu regulation which they feel is appropriate for RP5, taking into account changing circumstances and the integration of renewables?

6.3 Approach to Opex

One of the requirements of any price control is for an assessment to be made of the level of operating costs that the company should be allowed to recover in the next price control period.

Traditionally, the controllable Opex allowance is set by the Utility Regulator after carrying out a detailed analysis of each item of Opex and benchmarking it against other electricity network companies. The regulated company is incentivised to spend less on Opex than that allowed by the Regulator. The difference between allowed Opex and actual Opex would be realised as efficiency gains by the company. At the

time of the next price control review the Regulator would then see the reduction in Opex levels and would set a correspondingly lower entitlement for the next period. Customers would then benefit from the efficiency improvements through lower bills in the subsequent price control period.

For RP5, instead of basing the Opex allowance on the outturn from the previous period, it may be more appropriate to use a bottom-up approach supported by benchmarking, rather than continuing with the RP4 approach to Opex. A bottom-up approach will ensure a detailed analysis of how expenses are incurred and provided a robust set of results to work with. The Utility Regulator will consider benchmarking options for Opex, including wages and support costs specifically for NI. In addition, the Utility Regulator will carry out a detailed assessment as to whether a rolling Opex incentive mechanism can be continued within RP5.

Question 9:

The Utility Regulator welcomes views on whether they should continue to use a 'rolling mechanism' for controllable Opex in RP5, or alternatively a bottom-up approach supported by benchmarking?

6.4 Approach to Capex

A return on capital invested (Capex) needs to be funded from NIE T&D revenues. An intensive audit of actual Capex spend in RP4 will be undertaken by the Utility Regulator to compare annual capital expenditure with the initial estimate at the start of the price control period.

The Utility Regulator is aware that the use of actual costs (which are passed through to customers bills) rather than an allowance is not common. The Utility Regulator will consider recent developments in Capex, in particular the idea of introducing output measures. Ofgem are the UK regulator for gas and energy markets. Ofgem, as part of the price control for electricity distribution companies (DPCR5), has introduced output measures for load and non-load related capital expenditure, which includes reliability (of network services and the wider system), safety, environmental targets (particularly the delivery of low carbon energy services), conditions for connection to network services, customer satisfaction and network related social obligations. Ofgem also included load and health indexes to assist it in determining whether the distribution operators have carried out their forecast Capex set out in their business plan.

6.4.1 Categorization of Capex

In RP4 the capital expenditure was limited to asset replacement, with investments to facilitate renewables approved as pass through items. During RP5, capital expenditure will be required for a wider range of reasons, including the need to meet targets for the consumption of renewable energy and the installation of smart meters. This spend could be divided into more categories than in RP4 to allow greater

transparency and risk allocation. These categories may include asset replacement, the connection of renewable generators, smart grids and smart meters.

6.4.2 Incentives

Incentive regulation has been regarded as beneficial to the degree to which it can encourage and reveal efficiency savings which are ultimately to the benefit of customers. There has however also been concern that, if not properly designed, incentives can allow gaming opportunities for the company and result in unintended windfall gains and losses. Similarly the new approach to Capex was aimed at removing the potential windfall gains where Capex expenditure was deferred or under-spent without an identified efficiency gain. This could encourage the regulated company to benefit from the under-spend in the current price control period whilst the Capex was still required in the next price control period.

Ofgem have been assessing their price control DPCR4 and the extent to which over and under performance by companies reflects efficiency/performance improvements within the control of the companies. As a result of this, Ofgem have begun to look at output measures (as mentioned in section 6.4) and also the links with Capex expenditure. The aim is to develop an approach which allows only Capex under-spend which is due to genuine efficiencies to be rewarded; under-spend which is due to Capex deferral (both within and between price controls) and which is at the expense of the health of the network should not, in Ofgem's view, be rewarded.

For RP5 the Utility Regulator will need to consider if its reasonably simple approach to Capex revenue entitlement in RP4 is sufficient. The Utility Regulator will also analyse the operation of the other incentive mechanisms discussed in section 5.8.

Question 10:

For RP5 should there be an allowance for Capex or should it be recoverable on an actual (pass-through) basis?

Question 11:

Do the respondents have any views on any other incentive mechanisms that should be considered for RP5?

6.5 Split of Transmission and Distribution & Price control duration

The current NIE T&D RAB is split 18% for Transmission and 82% for Distribution, but both Transmission and Distribution are dealt with under a single price control. Distribution includes a large number of small projects with costs apportioned to each type of project. Transmission generally consists of large one-off projects which vary based on their location and have a low turnover due to their size and nature.

NIE T&D has informed the Utility Regulator that the transmission system will require significant development to facilitate DETI's proposed 40% renewable target and the increased connections applications, particularly from wind generators. However, the

Utility Regulator has to date not received a detailed plan of NIE T&D's proposals. The Utility Regulator has concerns relating to how realistic it is to assume that a detailed Transmission development plan can be agreed and costed by the start of 2012. There is also uncertainty about how IME3 will be implemented and the possible structural implications for NIE T&D. Continuing on from this, the Utility Regulator is therefore minded to effectively complete 2 price controls:

- (1) A Transmission Price Control, and
- (2) A Distribution Price Control

Question 12:

The Utility Regulator is interested to hear views on the proposal that two separate price controls could be implemented in 2012 for Transmission and Distribution. What are respondents' views on this possibility?

6.6 Duration

Historically, the NIE T&D price control has been set for 5 years as it was believed that this duration was necessary for a Transmission and Distribution business to fully plan ahead its expenditure profile and to provide sufficient opportunity to deliver efficiency gains. Following on from the suggestion that separate price controls may be completed for Transmission and Distribution in RP5, the Utility Regulator intends to assess what is the most appropriate duration for each price control. Most international evidence on the length of price controls is between 3 and 5 years²⁰, although the network controls set for the gas, electricity and water sectors in Great Britain currently all have five-year durations.

A three-year duration may be appropriate for Transmission for RP5 due to uncertainty around network development. The Utility Regulator will assess whether a five year duration for Distribution is still appropriate, bearing in mind the need to plan for embedded generation, electric vehicles, smart meters etc.

Question 13:

The Utility Regulator welcomes views on changing the duration of the price control to 3 years for Transmission, while maintaining a 5 year price control for Distribution. Interested parties who believe the Utility Regulator should maintain the 5 year duration for Transmission are invited to lay out specific reasons in their response as to why we should do so.

²⁰ There are a number of countries that have shorter price control periods (such as France and Netherlands).

6.7 Finance

6.7.1 WACC

With the possibility of implementing two separate price controls in RP5 for Transmission and Distribution and the detailed review of the WACC parameters, the Utility Regulator could set separate WACC values for the Transmission Price Control and the Distribution Price Control.

In developing the two WACC values, the Utility Regulator would compare the WACC values being set across the various regulators in GB and internationally, as well as ensuring a consistent approach across price control work undertaken in the Water and Gas Directorates within the Utility Regulator.

Other academic thinking suggests setting a WACC for a long period of time, based on asset lives. Rather than having a WACC set for, say three or five years in line with the price control duration, a WACC could be set for 20-40 years, to allow debt to be secured for longer periods and better rates. It can be argued that the financial profile of Opex and Capex are different to the financial profile of the RAB. The Utility Regulator will be carrying out an assessment on the treatment of the WACC when deciding on the most appropriate duration for the Transmission and Distribution price controls for RP5.

6.7.2 Financeability

The Utility Regulator's approach is, and will continue to be, underpinned by a statutory duty to ensure that licensees can finance their licensed activities.

The recent turbulence in the financial markets has led to increased uncertainty and volatility in obtaining finance. Even in reasonably stable markets there may be issues of financeability in situations where very large amounts of investment relative to the asset base are required. Financeability considerations which would previously not have been an issue for a T&D price control may come to the fore. Changes in depreciation periods may also need to be considered.

Other more radical solutions may also be worth considering, which could include various mutual models, risk-transfer between customers and shareholders, greater debt-financing, a split cost of capital. In different ways, these options might mean adjusting the risk and reward mechanism in a way that might improve financeability, incentives or the overall expected cost of finance. The Utility Regulator will consult regarding financing options for future Transmission projects.

6.7.3 Pensions

Arrangements concerning the treatment of Pension costs were discussed in section 5.6. The pension costs for RP4 accounted for 3% of NIE T&D's total allowed revenue in the tariff year 2009/10. Currently employer pension contributions are treated as a separate part of the allowed Opex. However, there is no uniform treatment of pension deficit amongst regulators.

Employees of NIE T&D have membership of the Viridian Group Pension Scheme (VGPS). The VGPS comprises both a defined benefit section (which is now closed to new membership) and a defined contribution section. In order to be able to pay out members' pensions in the future, the scheme invests both employer and employee contributions in a mixture of equities and bonds. Depending on the performance of these investments, along with other factors, the scheme can be either in surplus (where the value of the scheme assets outweighs the amount required to pay members' pensions) or in deficit (meaning that the level of assets falls below the level of liabilities). The VGPS scheme is currently in deficit, partly attributable to underperformance of investments, but also due to longer life expectations.

The pension scheme is run by Trustees, over whom the Utility Regulator has no influence or regulatory remit, but the Trustees should, in determining pension scheme funding and deficit plans, take into account the Utility Regulator's position on upcoming price controls.

The Utility Regulator is aware that the introduction of the Pensions Act²¹, The Pensions Regulator²², the Pension Protection Fund (PPF)²³ and changes in mortality levels and investment yield assumptions are outside NIE T&D's control, however, options to deal with a pension fund deficit need to be analyzed. It should be noted that NIE T&D must fund its portion of the Viridian Group Pension Scheme deficit, in line with statutory requirements. The Utility Regulator will therefore need to ensure that NIE T&D manages this liability prudently, and assess the split of funding between customers and shareholders. A pension deficit may have an impact on the company's debt position, which could in turn affect the company's level of gearing (the ratio of debt to equity).

The duration of a deficit recovery plan will be considered by the Utility Regulator to assess how this aligns with RP5 and future price controls. The Utility Regulator will consider the attitude taken to pension deficit recovery plans by the Pensions Regulator who is the watchdog for work-based final salary pension schemes in the UK. The Pensions Regulator is minded to set the length of a deficit recovery plan at no longer than 10 years.

6.7.4 Tax Treatment

The Utility Regulator intends to evaluate the appropriateness of calculating the WACC on a post-tax basis for RP5. One of the reasons that other regulators have moved to a post-tax approach to the cost of capital is that it allows the incentives to increase gearing to be mitigated. Correspondingly if NIE's gearing increases above the 57.5% used in the cost of capital model and interest costs are higher than those assumed in the financial model underpinning these proposals, the Authority intends to claw back the associated tax benefits for customers at the next review (based on the

²¹ http://www.opsi.gov.uk/si/si2010/uksi_20101145_en_1

²² <http://www.thepensionsregulator.gov.uk/>

²³ <http://www.pensionprotectionfund.org.uk/Pages/homepage.aspx>

difference between actual interest and interest charges included in the financial model underpinning these proposals). This policy is the same as that adopted by Ofgem for the DNOs.

Question 14:

The Utility Regulator wishes to ascertain respondents' opinions on using Ofgem's WACC as precedent for NIE T&D. Do respondents think the Utility Regulator should continue to do this for RP5?

Question 15:

The Utility Regulator welcomes views on the treatment of a pension scheme deficit as part of the price control. What are respondents' views on the appropriate duration of a deficit recovery plan?

Question 16:

The Utility Regulator welcomes views on whether the current pension deficit in respect of NIE T&D employees should be treated as debt as part of the company's gearing calculation.

Question 17:

The Utility Regulator welcomes respondent's opinions on continuing with setting the rate of return on a post-tax basis for the next price control. Are respondents in agreement with this?

7 Other Utility Regulator work relating to Price Controls

The Utility Regulator is in a unique position compared to other UK regulators, as it is responsible for the regulation of the three main utilities: Water, Gas and Electricity. To maximise customer benefit, the Utility Regulator is carrying out a review in the form of a cross-directorate project.

The areas which the cross-directorate project is concentrating on are:

- A review of historic price control consistency
- A review of external thinking and identification of lessons that can be learnt
- How to achieve optimal efficiency in the price control process, by identifying scope for synergies, joint approaches and resource sharing
- Consideration and development of network financing issues
- Reporting requirements in respect of Asset Management and Investment
- Development of Cross-Utility Benchmarking in respect of Efficiencies and Incentives.

Work on this project is ongoing and findings of the project will be implemented to areas of RP5 where appropriate. In addition to this, the Utility Regulator is also aware of work being completed by other regulators, and will review any developments on an ongoing basis:

Ofgem is currently carrying out a review of the future regulatory framework for electricity and gas transmission and distribution networks, RPI-X@20²⁴. This is a two-year review of the way Ofgem regulates gas and electricity networks. It aims to review and consider holistically the appropriate regulatory framework. The timeframe allows development of proposals which could potentially be implemented in April 2012.

Conclusions and recommendations are expected in Quarter 4 of 2010 and may also be considered by the Utility Regulator for the NIE T&D price control.

In addition, results from Ofgem's Project Discovery will also be reviewed. This investigates the options for securing the future supply of electricity and gas over the next 10-15 years.

²⁴ <http://www.ofgem.gov.uk/Networks/rpix20/Pages/RPIX20.aspx>

The European Regulators' Group for Electricity and Gas (ERGEG) recently issued a position paper on Smart Grids²⁵, to understand how smart grids can benefit network users and to explore ways in which development of smart grids can be encouraged.

Ofwat's 'Climate Change – good practice from the 2009 price review'²⁶ focus report may provide guidance for the Utility Regulator for RP5. It highlights both the positive and negative implications of climate change, including the opportunity for innovation by the regulated companies.

²⁵ http://www.energy-regulators.eu/portal/page/portal/EER_HOME/EER_CONSULT/CLOSED%20PUBLIC%20CONSULTATIONS/ELECTRICITY/Smart%20Grids

²⁶ http://www.ofwat.gov.uk/sustainability/climatechange/prs_web_1004climate

8 Other areas to consider

8.1 Use of a Reporter

The Utility Regulator is considering whether the use of a reporter for NIE T&D would be of benefit. The use of reporters has been a fundamental part of water regulation across the UK since it was established, but has rarely been used in other sectors. The Commerce Commission in New Zealand is now adopting this approach across all the utilities it regulates. There is a real prospect that effective use of a reporter could reduce subsequent consultancy costs for the Utility Regulator by providing assurance about the rigour of company projections.

The Reporter's role would be to provide an independent opinion to the Utility Regulator on NIE T&D's business plan, by checking compliance with regulatory requirements and advising the Utility Regulator of material discrepancies. If the use of a Reporter was deemed appropriate and agreed by NIE T&D, the Utility Regulator would approve the appointment of a Reporter and agree a protocol to regulate its activities.

8.2 Consumer input

Under the Energy (Northern Ireland) Order 2003, and the General Consumer Council (NI) Order 1984, the Consumer Council has statutory functions and powers to review and provide information concerning energy-related consumer matters and investigate such matters. In GB such a statutory body does not exist and Ofgem set up a Consumer Challenge Group to assist them in ensuring consumers' views were considered during the development and implementation of the DPCR5 price control. Given the extent of consumer issues in RP5, the Utility Regulator is keen to ensure that consumer views are considered and will work with the Consumer Council to achieve this. Some means of drawing in consumer expertise from outside NI might be appropriate, but we would look to the Consumer Council for views on this.

8.3 Smart grids

Another development which will affect RP5 is the introduction and implementation of smart grids. Smart grids modernise existing Transmission and Distribution networks by using two-way digital technology to deliver information on network operation which can be used to optimise network operation in real time. Some proposals have gone as far as proposing that this may control appliances at consumers' homes to save energy, reduce cost and increase reliability and transparency. Supporters of renewable energy have suggested that smart grids can enable a broader range of generation and storage options with real time network management. The form and structure of a possible smart grid for the network in NI is yet to be decided, but the Utility Regulator proposes a trial during RP5 and a level of funding may be required.

8.4 Smart Metering

As part of RP5, there is a high likelihood of a requirement to invest in smart metering. Smart meters may be part of a smart grid, but alone do not constitute a

smart grid. A smart meter is an advancement on traditional meters and can provide customers and electricity supply companies with accurate real-time information on the amount of electricity being used. This is in line with EU legislation. NIE T&D are currently conducting trials into Smart meters, supported by the Utility Regulator. This will help to inform future policy in this area.

8.5 Low Carbon Networks Fund

To ensure sustainability in electricity supply, low carbon initiatives including electric vehicles, micro-generation and smart metering are at the forefront of government policy. Research is essential to assess the viability of their implementation to secure the supply of electricity for consumers. A Low Carbon Networks Fund has been introduced by Ofgem, to run between 2010 and 2015. The aim of the fund is to provide monetary support to DNOs to encourage them to trial new projects which can facilitate low carbon technologies in the provision of energy. The Utility Regulator will consider the introduction of a Low Carbon Networks Fund as part of RP5. Consideration may also be needed on an all island basis.

8.6 Electric Vehicles

The current transmission and distribution networks may also require investment to allow for prospective future development of electric vehicles. It is not proposed that RP5 will include funding for this, however, current proposals for the roll out of charging points in both NI and ROI is something that will be monitored.

Question 18:

The Utility Regulator welcomes views on the use of a Reporter for the NIE T&D RP5 price control. Do respondents think this would be beneficial?

Question 19:

The Utility Regulator welcomes views on encouraging additional consumer expertise for RP5?

Question 20:

Do respondents support a smart metering roll out as part of RP5?

Question 21:

The Utility Regulator is interested to hear respondent's views on the possible introduction of a fund similar to Ofgem's Low Carbon Networks Fund as part of RP5. Do respondents think this would be beneficial on a Northern Ireland/ all Ireland basis?

9 Next Steps & Responses

Questions are highlighted at the end of various sections and summarised in Appendix 2. We welcome any feedback to these from a wide range of stakeholders who are interested in the price control. Please note that further comment can be made on the proposed price control components at the next consultation stage during Quarter 4 of 2010.

Any responses to this policy paper regarding the Utility Regulator's strategy for the upcoming price control, RP5, should be directed to:

Leigh Smyth
Utility Regulator
Queens House
14 Queen Street
Belfast
BT1 6ED

Email: Leigh.Smyth@uregni.gov.uk

Responses to this strategy paper must be received by 5.00pm on 1 October 2010.

Appendix 1: Glossary

C

Capital expenditure (Capex)

This is expenditure on investment in long-life assets.

Consumer Council NI (CCNI)

The Consumer Council is an independent consumer organisation, working to bring about change to benefit Northern Ireland's consumers. Our aim is to make the consumer voice heard and make it count. We represent consumers in the areas of transport, water and energy. We also have responsibility to educate consumers on their rights and responsibilities and to equip them with the skills they need to make good decisions about their money and manage it wisely.

D

Department of Enterprise, Trade and Investment (DETI)

DETI plays a crucial role in formulating and delivering economic development policy in terms of Enterprise, Social Economy, Innovation, Energy, Telecoms, and Tourism in Northern Ireland. In addition, the Department has responsibility for ensuring a modern regulatory framework to support business and protect consumers.

Distribution Network Operator (DNO)

A company which operates the electricity distribution network in GB. DNOs are regulated by Ofgem, the regulator of gas and electricity markets in GB.

Distribution price control review 4 (DPCR4)

This price control ran from 1 April 2005 to 31 March 2010, and was set by Ofgem.

Distribution price control review 5 (DPCR5)

This price control is expected to run from 1 April 2010 to 31 March 2015, and was set by Ofgem.

E

The European Regulators' Group for Electricity and Gas (EREG)

The European Regulators' Group for Electricity and Gas (EREG) is an advisory group to the European Commission on internal energy market issues in Europe. EREG was set up by the European Commission to assist the Commission in consolidating a single EU market for electricity and gas. EREG's members are the heads of the national energy regulatory authorities in the EU's 27 Member States.

O

Ofgem

Ofgem is the Office of the Gas and Electricity Markets. Ofgem protects consumers in GB by promoting competition, wherever appropriate, and regulating the monopoly companies which run the gas and electricity networks.

Ofwat

Ofwat is the economic regulator for the water and sewerage industries in England and Wales.

Operating expenditure (Opex)

These are the costs incurred from day-to-day operation and maintenance of the network.

P

Pension Protection Fund (PPF)

This was set up to pay compensation to members of eligible defined benefit schemes, where there is a qualifying insolvency event in relation to the employer and where there are insufficient assets in the pension scheme to cover Pension Protection Fund levels of compensation.

R

Regulatory Asset Base (RAB)

This is the value ascribed to NIE T&D's regulated business upon which it earns a return. The RAB is calculated by taking the initial market value of the business at privatization, plus capital additions less any asset disposals less depreciation and then applying annual indexation by RPI.

Regulatory period 1 (RP1)

The regulatory price control for NIE T&D, running from 1 April 1992 to 31 March 1997.

Regulatory period 2 (RP2)

The regulatory price control for NIE T&D, running from 1 April 1997 to 31 March 2002.

Regulatory period 3 (RP3)

The regulatory price control for NIE T&D, running from 1 April 2002 to 31 March 2007.

Regulatory period 4 (RP4)

The regulatory price control for NIE T&D, running from 1 April 2007 to 31 March 2012.

Regulatory period 5 (RP5)

The regulatory price control for NIE T&D, to start on 1 April 2012.

Renewable Energy Strategy (RES)

The UK Renewable Energy Strategy (RES) was published in July 2009. The RES aims to tackle climate change, reduce CO₂ emissions and promote security of energy supply.

RPI-X

RPI-X is a method of profiling prices/ allowed costs over a period of time.

RPI-X@20

This is a review by Ofgem of the regulatory regime for energy networks. It is a two-year review, examining whether the current approach will continue to deliver customers reliable, well-run-networks with good service at reasonable prices amid growing investment challenges faced by energy networks in the future.

S

Strategic Energy Framework (SEF)

The draft Strategic Energy Framework (SEF) was published by DETI in July 2009, proposing a 40% target for electricity generation from renewable sources.

Single Electricity Market (SEM)

The SEM went live on 1 November 2007, and allows wholesale electricity to be traded on an all-island basis.

SMART Programme

A scheme introduced by NIE T&D to support renewable energy and sustainable alternatives to conventional network reinforcement.

System Operator NI (SONI)

System Operator for Northern Ireland (SONI) Ltd is owned by EirGrid plc. Based in Belfast, SONI ensures the safe, secure and economic operation of the high voltage electricity grid in Northern Ireland and in cooperation with EirGrid colleagues is also responsible for running the all-island wholesale market for electricity.

W

Weighted average cost of capital (WACC)

This is the weighted average of the expected cost of equity and the expected cost of debt.

Appendix 2: Summary of Questions

Question 1:

Which aspects of the SEM arrangements do respondents believe should be taken into account for the NIE T&D RP5 price control?

Question 2:

Are there any other legislative or policy developments that the Utility Regulator should take into consideration for the RP5 price control?

Question 3:

The Utility Regulator welcomes respondents views on the depreciation policy and profile used for the current NIE T&D price control. Do respondents agree with the current profile and are there alternatives we should consider?

Question 4:

Currently, rates, wayleaves and licence fees are classed as 'uncontrollable opex'. Do respondents agree with this classification?

Question 5:

The Utility Regulator welcomes views on the treatment of the proportion of a pension scheme deficit which has arisen due to early retirement deficiency costs. How do respondents think this should be funded?

Question 6:

The Utility Regulator welcomes any comments on the current incentive mechanisms in place for RP4. Do respondents think that these incentive mechanisms should continue for RP5?

Question 7:

Do respondents agree on the continued RPI-X approach for the RP5 price control, or do they support developments in incentive regulation such as Totex or Menu regulation?

Question 8:

Are respondents aware of any other alternative approaches to incentive regulation, other than RPI-X, Totex or Menu regulation which they feel is appropriate for RP5, taking into account changing circumstances and the integration of renewables?

Question 9:

The Utility Regulator welcomes views on whether they should continue to use a 'rolling mechanism' for controllable Opex in RP5, or alternatively a bottom-up approach supported by benchmarking?

Question 10:

For RP5 should there be an allowance for Capex or should it be recoverable on an actual (pass-through) basis?

Question 11:

Do the respondents have any views on any other incentive mechanisms that should be considered for RP5?

Question 12:

The Utility Regulator is interested to hear views on the proposal that two separate price controls could be implemented in 2012 for Transmission and Distribution. What are respondents' views on this possibility?

Question 13:

The Utility Regulator welcomes views on changing the duration of the price control to 3 years for Transmission, while maintaining a 5 year price control for Distribution. Interested parties who believe the Utility Regulator should maintain the 5 year duration for Transmission are invited to lay out specific reasons in their response as to why we should do so.

Question 14:

The Utility Regulator wishes to ascertain respondents' opinions on using Ofgem's WACC as precedent for NIE T&D. Do respondents think the Utility Regulator should continue to do this for RP5?

Question 15:

The Utility Regulator welcomes views on the treatment of a pension scheme deficit as part of the price control. What are respondents' views on the appropriate duration of a deficit recovery plan?

Question 16:

The Utility Regulator welcomes views on whether the current pension deficit in respect of NIE T&D employees should be treated as debt as part of the company's gearing calculation.

Question 17:

The Utility Regulator welcomes respondent's opinions on continuing with setting the rate of return on a post-tax basis for the next price control. Are respondents in agreement with this?

Question 18:

The Utility Regulator welcomes views on the use of a Reporter for the NIE T&D RP5 price control. Do respondents think this would be beneficial?

Question 19:

The Utility Regulator welcomes views on encouraging additional consumer expertise for RP5?

Question 20:

Do respondents support a smart metering roll out as part of RP5?

Question 21:

The Utility Regulator is interested to hear respondent's views on the possible introduction of a fund similar to Ofgem's Low Carbon Networks Fund as part of RP5. Do respondents think this would be beneficial on a Northern Ireland/ all Ireland basis?