

**TRANSMISSION and DISTRIBUTION
PRICE CONTROL REVIEW
Final Proposals**

For

NORTHERN IRELAND ELECTRICITY plc

A paper by

The Director General of Electricity Supply for Northern Ireland

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Chapter One

Introduction

In March I published my initial proposals for NIE's Transmission and Distribution (T&D) price controls for the period 2002 to 2007. In those Initial Proposals I made provision for a revenue reduction of 25% followed by small annual real reductions of 0.5% below the rate of inflation. I invited comments on my proposals and in the interval I have been considering the points that have been put to me by NIE and others who took the opportunity to comment. NIE has in the meantime taken the opportunity not only to respond to my initial proposals but also to lobby others to make similar representations. That is of course their right but the point needs to be made that in this price control process NIE is not a disinterested party. Under the existing price control framework the higher prices are the larger the company's profits will be. In considering the representations made by NIE or by others reflecting NIE's concerns it is necessary to seek to disentangle the sectional interest of shareholders from objective statements about the financing requirements of the network.

The price control process has been illuminating not least because it illustrates the fundamental limitations in the entire regulatory regime. At the very beginning of this process in the paper I published in April 2000 I expressed the view that price divergence from the downward trend in Great Britain was endemic and structural - that is it flowed from the nature of the arrangements which had been put in place at privatisation. At one stage NIE succeeded in persuading me that I was mistaken in their response to the Issues paper which I published in November 2001. In their response NIE demonstrated that, on a regulatory year basis, that they had succeeded in tracking the downward movement of prices in GB. However they have since made it clear that their considered view is that the natural or normal price gap with GB is something in the region of 40%. The best NIE can therefore offer customers in Northern Ireland, after ten years in the private sector, is a gap in T&D prices which is nearly three times the gap which existed at privatisation.

This price control is therefore no ordinary run of the mill price control. What NIE want me to do, on customers behalf, is to accept in perpetuity that relative to the rest of the United Kingdom that they must be worse off than they were at privatisation. There is no corresponding suggestion from NIE that shareholders should accept lower returns here and as the record shows Viridian's shareholders continue to earn good returns - at least on the businesses which Ofreg regulates.

Is a radical and permanent raising of relative prices in Northern Ireland objectively justified or is it reflective of less efficient management and /or less effective regulation?

A Flawed Process

The setting of a price control has a beguiling simplicity. The regulatory authority looks at the industry's costs, establishes a cost of capital which would enable it to finance its activities and earn a return for shareholders commensurate with the riskiness of the business and passes the

efficiency gains of the current period on to customers in the form of price reductions. In practice each component of a price control is a mixture of facts and judgements. The advantage the company has over the Regulator in the intimate knowledge that it has of its own business - the asymmetry of information - has been long recognised as a problem. Over time this has been partly offset by the growing body of knowledge and experience within regulatory bodies but even more so by the increasing availability of industry wide data on trends and cost comparison both within and across countries.

Northern Ireland is in a different position to Great Britain in that the price control concerns a single company. Similar businesses in Great Britain - while each being a regional monopoly like NIE - must compete by emulation and comparison. A GB distribution company which was significantly less efficiently managed would show up - and moreover inefficient management would be - unlike NIE's management - subject to the possible challenge of take-over.

In the unique circumstances of Northern Ireland there is in practice no reason for NIE to agree anything. The price control becomes a clash of opinion between two sets of experts on the revenue which an efficiently run business needs and there is no scientifically definitively correct answer. NIE's views must be robustly tested using independent experts in the sector because of their vested interest in maximising profits. But they do have the inside track in their detailed knowledge of their business. If the company's high cost view of its requirements is not accepted by the Regulator then it has recourse to the Competition Commission.

While there is no question that the Competition Commission does its best with integrity it suffers from the problem of asymmetry of information to a vastly greater extent than the Regulatory body which has now ten years of day to day knowledge of the company. And it has to be said that the Competition Commission and its immediate predecessor's record in producing outcomes which are less favourable to shareholders and more favourable to customers than the regulatory body had proposed is not encouraging. In these circumstances it is indeed questionable if the regulatory system which operates in Northern Ireland is capable of adequately protecting the interests of customers.

The credibility checks

Given the lack of pressure on the company to agree to any of the cost reductions or scope for efficiency gains identified by my consultants it is necessary to test the range of possible price controls by other means. These can be considered as credibility checks of the different outcomes proposed by Ofreg and NIE and the risks which flow from an outcome being chosen which is objectively wrong. That is an outcome which provides the company with either too much or too little revenue to maintain an efficient system and provide an appropriate return to shareholders.

There are three credibility tests which can be applied. These are:

- (a) the record of each of the parties in "getting it right" on previous occasions;
- (b) the performance of the industry outside Northern Ireland in reducing its costs; and
- (c) the profitability of the business.

Secondly after considering the credibility of the parties it is necessary to consider what the effect would be of the Ofreg proposal prevailing and this resulting in the company being inadequately financed; and conversely what would be the result of the NIE view prevailing if this resulted in larger than required revenues.

“Getting it right”

The nature of the traditional UK price control process is that the regulated company has typically argued for more than it needs and probably for more than it believes it needs. Regulators have attempted to remove this excess from the company’s proposals. It is thus part of the ritual that NIE should be very critical of Ofreg’s proposals. The trouble with a regulatory process which incentivises the boy “to cry wolf” is that a point may indeed come when there really is a wolf but how on the basis of past behaviour will any objective observer ever know?

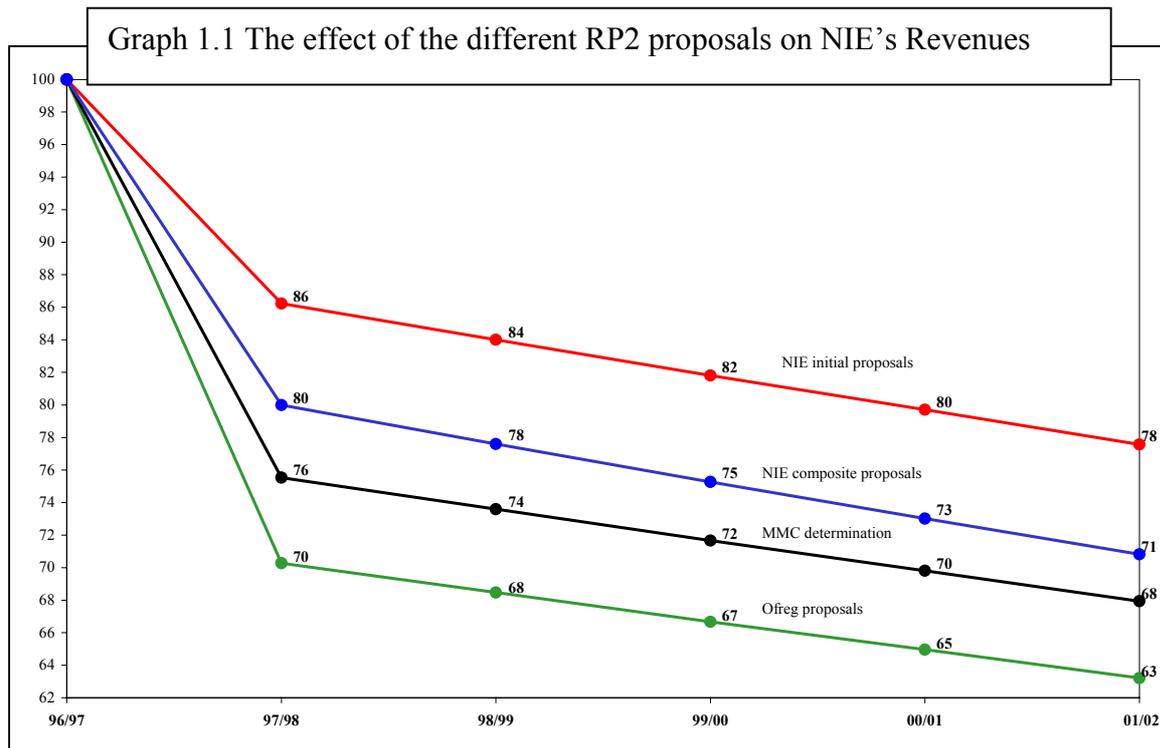
At the time of the last price control NIE’s proposal to the MMC was based on a proposed reduction of 16% and an X-factor of 2. NIE stated that in an attempt to reach a compromise with me and avoid the MMC reference they made me an offer which they called their ‘composite proposal’ which was based on a reduction of 20% and an X-factor of 3. NIE however stated that this would leave it unable to finance its regulated activities out of its regulated revenues. This shortfall would need to be made good out of a combination of a reduction in shareholder value, reduced customer standards, and significant price increases for customers in RP3.

Ofreg on the other hand maintained that price reductions slightly larger than those imposed by the MMC were quite compatible with a healthy business and a satisfactory quality of supply. Graph 1.1 over-page shows what the effect the different proposals would have had on NIE’s revenues during RP2.

Industry Trends

Much has been written about trends during this price control process. However the reference here is not in order to suggest a target price level for NIE’s T&D business. The point that is being made here is that if the industry all over the world is finding lower cost ways of managing its activities or is finding that the cost of equipment is falling then NIE ought to be able to achieve the same types of efficiency gains.

NIE has not dealt with this “sanity check” in a convincing way. The company has made much of the change in position of the Scottish companies from being those with the lowest tariffs in the UK to being above the GB average. This however merely re-enforces Ofreg’s point because



the Scottish companies before privatisation should not have been able to charge lower tariffs than the GB average given the size of their asset bases in relation to the volumes of electricity flowing through them. This together with the fact that Scottish companies before privatisation appear to have been more efficient than the English and Welsh companies explains the change in their relative position.

For NIE's relative position to have worsened so significantly over the last ten years it would have had to be so efficient at privatisation that it lacked the scope for the efficiency gains made by all other British companies. Yet there is no evidence that was the case. Before privatisation NIE had the highest costs for Opex of any British distribution company and therefore greater scope than the rest to make efficiency gains.

For the trebling in the relative price differential which has occurred since privatisation - and which NIE now say they believe should be perpetuated into the indefinite future - to be acceptable, the onus of proof is entirely on NIE. If they want customers to accept this they need to be able to show that they have made efficiency gains at least as fast as other companies - and given the inefficient starting base it really should be faster than other companies.

T&D Profits

The third credibility check is T&D profits since privatisation. Since privatisation T&D has earned profits which have been the main source of profits for the Viridian Group. Over the last year the T&D contribution as a percentage of Group profits has been larger than at any time

since privatisation.

It has been the profitability of the T&D business which has enabled the Viridian Group to pay dividends which have grown at 10% above the rate of inflation until the unregulated businesses, developed by Viridian after privatisation, had disappointing results last year. Given the disproportionately large contribution of T&D to Group profits the rate of dividend growth has been surprisingly generous to shareholders. As the MMC said in 1997 NIE's real long term dividend growth should be consistent with that expected in the economy as a whole.

Over the period since privatisation there has been a stark asymmetry in the fortunes of customers and shareholders. Shareholders have seen their dividends increase by 10% per annum. By a curious coincidence customers have seen the relative price differential with Great Britain increase also by a yearly average of about 15%. That is in a period in which the annual dividend per share has increased from 11.4p to 31.4p the price gap for T&D with GB has increased from 18% to 45%. There thus seems a strong negative correlation between the continuous enrichment of shareholders and the continuous relative impoverishment of customers.

Risks from under or over funding

NIE have suggested that if the Ofreg proposals were applied in full the system in Northern Ireland would be in crisis with the spectre of customers being off supply for much longer periods and much more frequently than they are now. If this doomsday scenario painted by NIE were accurate it would demonstrate the risks a regulator and his advisers would run if they were able to impose this type of imprudently severe price control. The reputation of those consultants would be damaged and the price control would in practice become the regulator's suicide note. These considerations alone would suggest that neither the regulator nor his consultants would wish to be associated with such a price control.

The reality would be somewhat different. If the industry were not allowed sufficient revenue to finance its activities any deterioration of the network would not be instantaneous and catastrophic but gradual. An inability to fund new investment would also become apparent and might produce a momentary hiatus in the investment programme but it would not damage the existing network and - if necessary - could be made good quickly through accelerating investment later. In other words a price control which after the event could be shown to constitute an under funding could be re-opened and the damage fixed.

The converse would not be true. It need not be so obvious that the company had been over funded. Some companies might well respond to over funding by seeking to minimise their capex programme and their opex costs giving their shareholders five unusually profitable years and justifying the regulator making large cuts in the next period. But alternatively a lax price control might well be used to maintain opex and capex levels at high levels and be only partly taken in the form of additional profits. While a GB company might very well tend to seek to minimise costs it is unlikely that NIE would do the same. Its experience of being punished by the MMC for underspending on capex in RP1, and its apparent desire to retrospectively validate the MMC imposed price control, suggest that NIE would spend up to the levels permitted by a lax price control - especially one imposed by the Competition Commission - rather than risk demonstrating that the price control had indeed been too generous. It is therefore within the company's power to demonstrate that any price control - no matter how generous - has merely

allowed the company the amount it required. Moreover any excess profits - that is profits which are greater than the amount which equates to the allowed rate of return on the asset base - by a very convenient logic - would always by definition be justified by the company as efficiency gains. In the company's logic the possibility of the out-turn demonstrating that the allowed revenue was excessive simply does not exist.

The British system of incentive regulation works on the very simple assumption that companies will always seek to minimise costs and maximise profits and this is good for customers because in a second period they will benefit from lower prices. NIE's very different regulatory history makes it extremely doubtful if this assumption is valid in this case. NIE is therefore in a position to completely control the regulatory process because it can always manage the outcome to provide ex post validation of the allowed revenue it required. While management is protected by the Golden Share it can make its prophecies self fulfilling.

The only evidence which is available to challenge this otherwise impregnable position is the constant upward drift of T&D prices here compared to everywhere else.

There is therefore a considerable asymmetry of risk between the consequences of a price control which is too lax and a price control which is too stringent. A stringent price control can be remedied. A lax price control could well be incapable of being re-opened because there might not be evidence of super profits and its effects would be to build up over forty years a larger than necessary asset base. In other words lax price controls do permanent damage to customers. Tight price controls can be made good. There is therefore a marked asymmetry of risk between these two possible "wrong" outcomes. But in any event no Regulator, conscious of his statutory duties and the professional standard expected of the Regulatory body would impose a price control it believed to be more strict than the company could bear.

Options

It is in my view extremely doubtful if the regulatory system in Northern Ireland as currently framed is capable of sustainably protecting the interests of customers. Moreover even if it does achieve an outcome which is satisfactory in price terms for customers the method of getting there would not have been satisfactory. Unlike the system in GB where over time customers and shareholders interests are aligned by management always seeking to minimise costs there is no structural alignment of customers' and shareholders' interests in Northern Ireland. The T&D price control is played out as a "zero sum game"- every gain for customers is a loss to shareholder value and vice versa.

In these circumstances I believe there are two options. The first is to try to achieve a traditional price control based on my assessment of the requirements of an efficiently managed company using the work of my consultants. The second option is to try to construct a price control which recognises the peculiarities of Northern Ireland and passes beyond the problems with the present regulatory structure by aligning the interest of shareholders and customers.

The traditional price control: The traditional price control approach is one which is based on Ofreg's assessment of NIE's need for the next five years. Since it is based on local costs it need over time bear no relation to price trends in Great Britain and in so far as we in Northern Ireland are successful in avoiding some of the costs which go into the GB cost base there is no

theoretical reason why at some point a rigidly applied price control of this nature should not result in lower prices than in parts of GB. This price control is described in Chapter Three of this paper. My proposals under this format would result in lower prices than the alternative described below.

Aligned Incentives price control: NIE and Ofreg have succeeded in creating price controls for NIE's Supply business and its Power Procurement Business (PPB) which effectively align the interests of customers and shareholders. In the former the company earns additional profits from adding to the value of the energy services which it sells to its customers and all its efficiency gains have been retained for a longer period. In the latter the more electricity which PPB sells the larger its profits and the lower the unit price of electricity for franchise customers. There should be some basis for a similar approach in the T&D business by which management is incentivised to be more efficient - from which customers would benefit - and not as at present when they have in fact incentives to keep their cost base as large as possible, and indeed to be inefficient, so long as they can attribute the "inefficiency" to circumstances outside their control and not to their own performance.

The building blocks of an aligned and a traditional price control are similar. The difference will be in the sharing or aligning of interest in the way in which change from any specific starting point is managed. Instead of change being a zero sum game it has to be transformed into a game which has only winners and no losers. Electricity customers want -for any given level of service - lower electricity bills. These could result from either lower unit prices or from requiring fewer units of electricity.

While the aligned price control would result in higher electricity bills initially than the traditional approach it would give NIE's management unambiguous incentives to seek to reduce the costs customers face, a more stable regulatory environment in that the adversarial relationship between company and regulatory would be moderated, at least in respect to the quinquennial price controls, and would give both customers and shareholders a shared interest in preventing additional costs being piled into the T&D cost base. The aligned option is described in chapter 2.

The difference between the outcome of the two price controls is shown in Table 1.1 over-page.

Table 1.1**Revenues £m 2001/02 prices**

	01/02	02/03	03/04	04/05	05/06	06/07	NPV @ 6.5%
NIE proposals	154	160	159	158	157	155	663.0
Ofreg proposals	154	128	128	127	127	126	546.7
Ofreg aligned	154	154	149	144	139	134	619.8
% change							
NIE proposals		3.9%	-0.7%	-0.7%	-0.8%	-0.7%	
Ofreg proposals		-16.7%	-0.4%	-0.5%	-0.5%	-0.5%	
Ofreg aligned		0.0%	-3.5%	-3.5%	-3.5%	-3.5%	
Unit prices							
p/kWh							
NIE proposals	2.02	2.02	1.96	1.91	1.85	1.80	
Ofreg proposals	2.02	1.62	1.58	1.54	1.50	1.46	
Ofreg aligned	2.02	1.94	1.83	1.73	1.64	1.55	
% change							
NIE proposals		0.10%	-2.80%	-2.76%	-2.79%	-2.69%	
Ofreg proposals		-19.7%	-2.5%	-2.5%	-2.5%	-2.4%	
Ofreg aligned		-3.6%	-5.5%	-5.5%	-5.5%	-5.4%	

NIE are seeking revenue with an NPV of £670m (2001/02 prices) or £663m if we assume Ofreg's 6.5% cost of capital. Ofreg's traditional or building block approach to price control would allow NIE £547m. The aligned incentives based price control would allow £620m with the opportunity for additional profits.

Chapter 2

An Aligned price control

Objective

The objective of an aligned price control must be to attempt to incentivise management to manage the business in such a way as to provide customers with what they want without damaging and preferably improving returns to shareholders. Paradoxically as the major inefficiencies have been squeezed out of privatised utilities the scope for shareholder pressure being an effective means of securing further price reductions is somewhat limited. Shareholder pressure on management is most likely to be effective where there is scope for growth and increasing shareholder value. That is not the case with this sort of business - at least as it has traditionally been approached. Shareholder pressure in this business is only likely to be a catalyst for efficiency in so far as the business can be re-modelled into a business with some sort of growth prospects. Unless that sort of transformation is achieved then the logic of this type of business moving to a debt financed business in which shareholders are increasingly an anachronism may become harder to resist.

Customers would like to have lower bills. They can achieve this by using fewer units of electricity or by a lower cost per unit or by a combination of both. In principle in so far as management can achieve these outcomes they should be rewarded. So long as the reward is set as a proportion of the saving to customers both parties are better off.

Customers will achieve lower bills if management:

- (i) reduces the opex requirement of each unit of electricity using the system;
- (ii) reduces the need for additional capital expenditure by taking steps to reduce demand growth particularly in areas where demand growth can only be accommodated by additional capital expenditure;
- (iii) reduces peak demand by moving peak demand to load troughs;
- (iv) reduces the cost of capital;
- (v) manages their asset base efficiently;
- (vi) avoids the inclusion in the cost base of additional costs such as renewables levies through facilitating better outcomes at lower cost.

The aligned price control proposed for this price control would operate as follows:

The allowed revenues of the company during RP3 would be set so that during RP3 they would be flat in real terms in the first year and fall by 3.5% per annum in the remaining four years.

The Capex allowance would be set as per the final proposals in Chapter Three. The following

differences would apply:

(a) capex which is spent on avoiding network investment – i.e. demand side management or embedded generation investment - would attract a 1% higher rate of return and be amortised over ten years;

(b) notified capex efficiency gains would be credited to the company each year so that the value of capex not spent in any year would be allowed to enter the asset base for the five years following the year in which the spend was scheduled to take place subject only to being netted off against any overspend in those years which had not been agreed with the regulator.

The difference between the value of the allowed revenues and the amount required to finance the Capex programme proposed is used to finance the asset base, and set the allowed level of Opex for RP3. If the company accept this proposal Ofreg would like to talk to NIE so we can agree what the starting value of the asset base and the pattern of Operating costs is over the five year period.

When the level of Opex for any given year is set the benefit of any Opex reduction below this level would be retained by the company for a period of five years. Provided the company responds to this incentive the setting of the efficient level of Opex in 2006/07 should become a more transparent and less controversial exercise.

There is undoubtedly scope with an appropriate regulatory framework for a significantly lower cost of capital. The cost of capital in the aligned price control proposal is however the same as that proposed in chapter 3. Should this aligned price control be accepted by the company I would want to explore with it within a short period ways in which the financing regime might be modified to the longer term benefit of both customers and shareholders.

In an aligned price control it would be necessary to have long term incentives in place to ensure that the company manages its assets efficiently. It would therefore be proposed that where an asset is disposed of that the asset base is reduced by the amount of the disposal price five years after the disposal has taken place.

For the longer term it would be necessary to create a stakeholder mechanism to determine the size of the capex programme in subsequent years. Work on establishing an appropriate methodology should start as soon as the price control has been agreed.

An aligned price control on this basis would however not have the scope for growth which it needs to have in the case of a company where the concept of shareholder pressure for growth is to remain credible and not just empty rhetoric. In this context management does have a hitherto unidentified product to sell to electricity users. This is the value to them of the savings which they make from having a lower energy bill. Every unit of electricity which customers don't put on the transmission system saves them Transmission Use of Systems (TUoS) charges; every unit they don't put on the distribution network also saves them Distribution Use of System charges (DUoS); every unit a customer avoids using altogether saves them TUoS and DUoS charges as well as the cost of Generation and Supply and taxes. An aligned price control should incentivise the T&D business to find agents who could deliver to it these reductions in demand.

An aligned price control of this type would put NIE in a very special position in the electricity industry. It would graduate from being the proprietor of an industry whose growth in traditional terms is at best a necessary evil and at worst environmentally damaging into an industry in which it would be possible to once again contemplate growing the business and expanding the horizon.

It would be very easy to lose sight of the radical change this type of price control would make in the relationship between the industry’s stakeholders. The zero sum game would be replaced by a price control in which all parties would have an interest in lower cost ways of managing the business. Shareholders and customers would also have a common interest in higher profit levels as these would always be indicative of the fact that management had saved customers even larger sums of money.

As a result of this type of price control the T&D business would have an interest not only in minimising costs for any given level of system demand but it would also have an interest in facilitating and stimulating energy efficiency, embedded generation whether through renewables or combined heat and power, more efficient conventional generation, lower priced generation through competitive generation market outcomes, and the expansion of the natural gas industry.

The Aligned Price Control

Under this proposal the price control would give the T&D business the following allowed revenues for the period 2002 to 2007:

Table 2.1

YEAR	2002/03	2003/04	2004/05	2005/06	2006/07
£m*	147.3	142.2	137.2	132.4	127.7

* All figures in 1999/00 prices

Under the aligned price control the allowed revenue could be higher than the level set out in this table with extra revenue earned from demand related incentives passed to the company under new excluded terms.

Incentive proposals can have - if they are not rigorously thought through and tested – unintended and even perverse outcomes. If NIE accept the spirit of this proposal the next stage will be for Ofgem and NIE to meet to develop an agreed set of incentives together with a change mechanism should perverse outcomes appear in later years.

Chapter Three

The Final Proposals

Since publishing my initial proposals I have been reviewing the additional material which NIE has put to me. In this review I have been assisted by my consultants whose experience extends across the United Kingdom and beyond and who are familiar with the requirements of transmissions and distribution networks. As I have indicated in Chapter One of this paper I believe the onus of proof lies with those who want to perpetuate price divergence into the foreseeable future and who fail to appreciate just how profitable and robust NIE's T&D business has been since privatisation. I have not been persuaded that I should lock customers into the sort of long-term price divergence which NIE advocates.

It is in the nature of this price control process that the Regulator may not fully allow some of the inescapable costs which the company must face. But conversely it is the case that the company does not volunteer cost savings which it can and will make, or costs which it can manage better. In these circumstances a regulator has to look at things in the round and decide whether overall the revenue allowed is sufficient for an efficient company to manage its business when faced with all the actual costs which it will face into the future. Additional costs which may arise in the future from - for example - a change of law can be dealt with if they arise.

CAPEX and OPEX

A detailed commentary on the Capex and Opex proposals and the methodology employed can be found in the Initial proposals. Despite criticism by NIE I believe that my approach to these two areas remains valid and my final proposals are based on the same methodology.

CAPEX

The initial proposals contained a detailed assessment of each of the separate categories used to make up a capex programme. Each of these separate components was looked at, and the proposed level of expenditure in each category was summed to give the total capex budget. NIE have made it clear in their responses to me that while they agree this is the way the capex budget should be built up, they do not believe there should be a relationship between this budget and the areas where they choose to spend the money, when it has been allocated to them. The effect of this is to give NIE considerable discretion with regard to where they spend their capex allowance. Indeed this is what happened in the RP2 period and the problems this creates, particularly in relation to identifying efficiency savings, have been highlighted in the initial proposals.

The principal change which I propose making to the Initial Proposals is to increase the Capex allowance to enable NIE to continue with the low voltage network refurbishment at the rate at which NIE was proposing. NIE's arguments for this programme went beyond the straightforward Capex aspect. They argued that in addition to providing a better quality of supply to rural communities this programme was particularly labour intensive and consequently it additionally provided much of NIE's capability for dealing with storms and emergencies. Accordingly I propose allowing the full programme but as it is much more than a Capex

programme I require it to be ring fenced. By this I mean that unlike the rest of the Capex programme where management has considerable discretion as to how the money is spent this particular programme must be implemented or the underspend in relation to this programme returned to customers.

The net allowance for capex in my initial proposals document totalled £178m approximately. As a result of changes made the most significant of which is detailed above the new net capex allowance for RP3 has been set at a level of £227m. The estimated expenditure on the main categories is Load related 40%, Non-load related and refurbishment 44% and Other 16%. The profile of the capex budget is shown in the Table 3.1 below.

OPEX

In their response to my Initial proposals NIE were critical of the Operating Cost proposals put forward. Despite these criticisms I believe the approach adopted in my initial proposals remains valid and have adopted the same approach in my Final proposals. In their response NIE made a number of comments and having considered these carefully I have made a number of revisions to my Final proposals. The actual level of Opex and Capex proposed for RP3 are shown in Table 3.1 below.

Table 3.1 Opex and Capex Allowances in 1999/00 prices

	2002/03	2003/04	2004/05	2005/06	2006/07
Opex	54.7	50.5	49.9	49.3	48.6
Capex	40.9	48.2	46.55	45.65	45.65

The major adjustments made to the Opex allowances are detailed below.

The base year costs have been increased to £66.2m. The level of efficiencies achievable by NIE on these base year costs has been estimated to be £14.1m. This reflects the fact that wayleaves costs are to be allowed at their current level. NIE have been allowed four years from the base year to achieve the level of costs which I regard as efficient. On-going efficiencies of 1.5% per annum from the base year have been assumed.

The effect of the above adjustments is to allow NIE £253m in operating costs over the five year price control period starting in 2002/03.

Cost of capital and other financial issues

The November 2000 consultation and initial proposal documents set out the framework for the assessment of cost of capital and other financial issues as part of T&D price control review. Since the estimation of the cost of capital involves a significant amount of judgement I have considered relevant evidence from as many sources as possible, including the financial markets

and other regulators. The initial proposals established the estimates of generic components and a range for the company specific components to be used in the calculation of the weighted average cost of capital (WACC).

Cost of equity

The initial proposals establish a range for the post tax cost of equity, using the CAPM framework, of 5.2% - 6.3%.

Applying a gross up to the post-tax cost of equity based on the current marginal corporation tax rate gives a range for the pre-tax cost of equity of 7.43% - 8.93%.

This assumption is generous to NIE because it assumes that the company pays corporation tax at the current rate (30%). NIE's effective tax rate has been historically less than the marginal rate.

Cost of debt

A range of 4.15% and 4.55% has been established for the pre-tax cost of debt. This was based on a range for the debt risk premium of 1.4 -1.8 percentage points. The debt risk premium depends on a number of company specific factors including its level of gearing and its overall financial position.

WACC

Applying the gearing level of 50% to the estimates of cost of equity and debt gives a range for the pre-tax weighted average cost of capital of 5.74%-6.79%.

NIE argued against all the estimates of components used to build up the estimate of the cost of capital. None of the evidence presented has persuaded me to revise my estimates.

However I propose a cost of capital towards the upper end of the estimated range of 6.5%.

Adjustments to the RAB

The initial proposals set out my proposed treatment of the RAB with respect to:

- disposals
- depreciation and
- uplift

Disposals

The initial proposals set out an incentive mechanism for asset management. Where an asset is disposed of the asset based is reduced by the amount of the disposal price less any reasonably incurred costs five years after the disposal. NIE does not agree that the disposals incentive should apply to disposals in RP2. I consider that this disposal mechanism should apply to all

disposals irrespective of when they occurred.

NIE has provided details of the high street property transaction. As a result of the incentive mechanism I propose to allow NIE to keep the benefit of this for five years from the sale date of 99/00 and adjust the RAB by £3.1m in 04/05.

No adjustment is proposed in respect of the telecoms assets transferred.

MMC depreciation “error”

Ofreg remains convinced that the MMC adjustment to the RAB for depreciation over the first control period was an error and should be remedied. NIE did not agree with the Ofreg position and put forward a number of reasons why there should be no adjustment. Having taken account of NIE’s arguments Ofreg has decided that our original decision was correct. Accordingly the RAB will be adjusted by the amount of £56.8 million as set out in the initial proposals document.

Uplift

Ofreg has not been convinced that the uplift applied to the opening value of the RAB for the first price control period should continue and therefore will adjust the RAB by £15.5m

Price Control Calculations

	01/02	02/03	03/04	04/05	05/06	06/07	Total
Capex		-40.9	-48.3	-46.6	-45.7	-45.7	-227.0
Disposals		0.0	0.0	3.1	0.0	0.0	3.1
Net investment		-40.9	-48.3	-43.5	-45.7	-45.7	-223.9
Operating costs		-54.7	-50.5	-49.9	-49.3	-48.7	-252.9
Total		-95.6	-98.7	-93.3	-94.9	-94.3	-476.8
NPV @ 6.5%		-92.7	-89.9	-79.8	-76.2	-71.1	-409.6
NPV opening and closing asset value		-565.4				452.8	-112.6
							-522.2
Revenues (£m)	147.3	122.7	122.2	121.6	121.1	120.5	
Movement		-24.57	-0.55	-0.56	-0.57	-0.58	
Units (GWh)	7652	7940	8110	8280	8450	8620	
Revenue per unit (p/kWh)	1.92	1.55	1.51	1.47	1.43	1.40	
Pi (revenue)		-16.7%	-0.4%	-0.5%	-0.5%	-0.5%	
Pi (p/kWh)		-19.7%	-2.5%	-2.5%	-2.5%	-2.4%	

Chapter four

Miscellaneous Issues

There are some issues concerning the transfer of costs from T&D to Supply which I would be happy to discuss with the company with a view to locating the efficient level of costs for those activities in Supply or T&D as seems appropriate.

The Issues paper which I published in November 2001 raised the question of incentives for the T&D business to become involved in demand side management and spending Capex on non-network investment where this provided an as good or better solution. The company responded positively to this approach which - if successfully carried out - will enhance the incentives which already apply to the Supply business. Included in the November paper was a proposal to allow the company a small amount of money each year which it could use to lever other public and private monies to stimulate pilot projects using technologies that are not yet commercially viable. Once they become so they are likely to have widespread application and favour a decentralised approach to energy, based on integrating energy and buildings. Accordingly I propose allowing the company £250,000 per year to develop - presumably though not necessarily through partners - such a programme. Once the price control is agreed I will discuss with the company the arrangements which we might put in place to develop this aspect of the T&D business's future development and what incentive structure might be appropriate.

The Energy Efficiency Levy commands wide support as a means of reducing Northern Ireland's energy bill and as a means of reducing fuel poverty. Its success contributes to the T&D business's objective of seeking to reduce the rate of growth in the demand for electricity even though historically the types of activities funded by the levy have been implemented by the Supply Business. In order not to put the Supply Business at a competitive disadvantage to other supply business it has been the practice to have the levy collected by T&D and the resources which it provides are in principle available to any holder of a Supply licence. The Energy Efficiency Levy last year was based on £2.05p per customer. At the request of the Assembly and after widespread consultation it will be included in the T&D price control on the basis of £5 per customer at 2002 prices. The T&D business will collect this levy however if there are insufficient cost effective schemes to make use of the money the money will be returned to customers.

New Costs

NIE has raised the prospect of a variety of new costs being imposed on the company. These vary from charges for opening streets, to the cost of IT systems to cope with further market opening. Costs which may arise in the future cannot be included in a price control. I would expect NIE to work with me to avoid the imposition of additional costs on the industry and, where increased costs cannot be avoided, to minimise them. But where we are unsuccessful in resisting additional costs, then it will be necessary to re-open the price control to provide for any unavoidable net increase in costs which arise from change in law or Government policy.

Structure of the T&D Formula

NIE have argued for a change in the structure of the T&D formula to one which is more like the GB formula i.e. 50% units and 50% fixed. I have decided that the structure of the T&D Formula shall remain unchanged with a fixed element based on estimated customer numbers contributing to 75% of allowed revenues and a variable element based on units carrying a weight of 25%.

Interconnectors

The Moyle and North/South Interconnectors will be added to the Transmission Asset base. Any revenues which the interconnectors earn will become a negative excluded cost so that the cost of the interconnectors borne by customers will be the net cost. The Company has informed me that it expects to be able to put to me long term proposals for a separate Moyle Interconnector price control which would lower the cost to customers. It may therefore in due course and during RP3 be possible to remove the Moyle Interconnector from this price control.

NIE submitted costs for the Moyle Interconnector including interest charges incurred during the construction phase between 1992 and 2001. These were capitalised at the regulated return of 7%. Ofreg considers that interest charges during the construction phase should be based on the “average specified rate” (based on the Northern Bank base rate) contained in NIE’s licence for under/over recovery of revenues. Using this interest rate adjusted for inflation Ofreg have calculated the opening RAB value of the interconnector at £113m (2001/02 prices) compared to NIE’s £120m. NIE estimate an opex of £5.1 m p.a. Ofreg have not as yet been able to confirm that this is in fact an efficient level opex costs.

The capital value and operational costs of the North/South Interconnector have also been included in the calculations below. Allowing a regulated return of 6.25% consistent with the return allowed for transmissions business in GB gives annual gross revenues of £15.279m. These calculations are shown in Table 4.1 over-page. These figures are of course subject to the efficient level of Opex throughout the price control period for the Interconnectors being determined.

£m 2001/02 prices	02/03	03/04	04/05	05/06	06/07	Total
Operating costs	-5.382	-5.382	-5.382	-5.382	-5.382	-26.908
NPV @ 6.5%	-5.221	-4.914	-4.625	-4.353	-4.097	-23.209
NPV opening and closing asset value	-114.5				71.9	-42.7
						-65.9
Revenues (£m)	15.279	15.279	15.279	15.279	15.279	

Other Issues

The treatment of the losses and the CBO agreed between NIE and PPL remain the same as in the Initial proposals (Chapter 1). However if NIE opts for the aligned (Chapter 2) price control it would be appropriate to reconsider these in the context of a price control more effectively driven by an incentive based approach.