# Northern Ireland Electricity Transmission and Distribution Price Controls

2012-2017

**Draft Determination** 

19 April 2012

**Summary** 



## 1 ABOUT THIS DOCUMENT

- 1.1 This document has been prepared by the Utility Regulator to outline our draft determination for the fifth price control for Northern Ireland Electricity Ltd. This control will apply from 1 October 2012 to 30 September 2017. It is referred to as RP5.
- 1.2 This document contains a summary of the analyses that we have undertaken to reach our minded to position for RP5.
- 1.3 In addition, we have prepared more a detailed paper which is published separately. It can be accessed via our website<sup>1</sup>. This provides further details of our analyses and the full draft determination.
- 1.4 This price control will affect the network tariffs paid by everyone who consumes or generates electricity in Northern Ireland (NI), as well as all generators who participate in the Single Electricity Market (SEM).
- 1.5 The consultation on our minded to position is open until 19 July 2012. We would encourage all interested parties to share their views with us. Details of how to respond can be found in Section 21 of this document.
- 1.6 Please contact Kevin O'Neill if you have any queries about this document or the consultation process.

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<sup>&</sup>lt;sup>1</sup> http://www.uregni.gov.uk/

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## 2 INTRODUCTION

- 2.1 Our principal statutory objective is to protect the interests of consumers of electricity services. In Northern Ireland, the assets required to provide these services (that is, to transmit and distribute electricity) are owned by Northern Ireland Electricity Ltd.
- 2.2 Transmitting and distributing electricity is generally accepted as being a monopoly activity as the high cost of duplicating the necessary assets acts as a strong barrier to entry. This company is also responsible for planning, developing and maintaining the networks.
- 2.3 Northern Ireland Electricity Ltd (which is referred to as NIE T&D throughout this paper) was part of the sale from Viridian to ESB in December 2010. The current company structure is shown in Figure 1.<sup>2</sup>

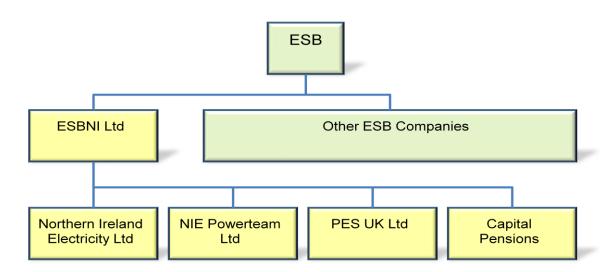


Figure 2.1 - Company structure

2.4 We make sure that consumers' interests are protected by setting price controls. The objective of a price control is to ensure that NIE T&D, as a monopoly provider, does not set prices too high. At the same time we make sure that NIE T&D can finance its licensed activities to provide an adequate service.

<sup>&</sup>lt;sup>2</sup>NIE Powerteam is a separate limited company that works exclusively for NIE T&D. PES UK is a separate limited company that provides technical services to companies other than NIE T&D. The only work PES UK undertakes for NIE T&D is emergency response to extreme weather events, where restoration time is critical and linesmen are also being imported from other countries. It is included in Figure 2.1 for completeness and has no impact on this price control.

- 2.5 To date, we have set four price controls (RP1 to RP4), covering the period from 1992 to 2012. This fifth price control (RP5) covers the period 2012-2017.
- 2.6 We have already consulted on the strategy<sup>3</sup> to be adopted for RP5. We also held three stakeholder events, in conjunction with the Consumer Council for Northern Ireland.
- 2.7 This draft determination for the RP5 price control covers all aspects of NIE T&D's revenue from the charges it makes for consumers to use the transmission and distribution systems. In coming to our decisions, we must allow for the income the company requires to cover its:
  - operating costs;
  - capital costs (expressed as depreciation and return);
  - pension costs; and
  - any costs of connections to the system.
- 2.8 The draft determination also specifies the mechanism we are putting in place to enable NIE T&D to claim capital expenditure on the transmission system for the integration of renewable generation and interconnection.
- 2.9 The price control defines separate limits for revenue from charges for the transmission and distribution systems.
- 2.10 The RP5 price control does not include any revenue collected by NIE T&D under the PSO Levy.<sup>4</sup>
- 2.11 All costs in this paper are in 2009/10 prices (unless otherwise stated).

## 3 APPROACH

- 3.1 RP4 was a five-year price control that began on 1 April 2007 and was due to end on 31 March 2012. As discussed in the RP5 strategy paper, we are minded to continue with five-year price controls.
- 3.2 We will implement RP5 from 1 October 2012, which means that RP4 will be extended from 1 April 2012 to 30 September 2012. This has been necessary because of delays in receiving the full RP5 submission from NIE T&D. As a

<sup>&</sup>lt;sup>3</sup> http://www.uregni.gov.uk/uploads/publications/RP5\_NIE\_TD\_Fifth\_Price\_Control\_Strategy\_Paper\_FINAL.pdf

<sup>&</sup>lt;sup>4</sup> The PSO levy is a separate tariff that covers a number of cost items that are not related to the use of the electricity network.

- result, we needed more time to complete a robust assessment of the submission itself and to deal with the significant issues that were subsequently identified.
- 3.3 For RP5 we are minded to implement an RPI-X type price control, designed to incentivise NIE T&D to manage its operating and capital costs efficiently. When setting the RP5 price control, it is important that incentives are properly balanced in order to prevent perverse outcomes and potentially excessive prices for consumers.

# **Price control components**

3.4 The form of the NIE T&D price control has historically followed the traditional 'building blocks' approach. This is illustrated in Figure 3.1.

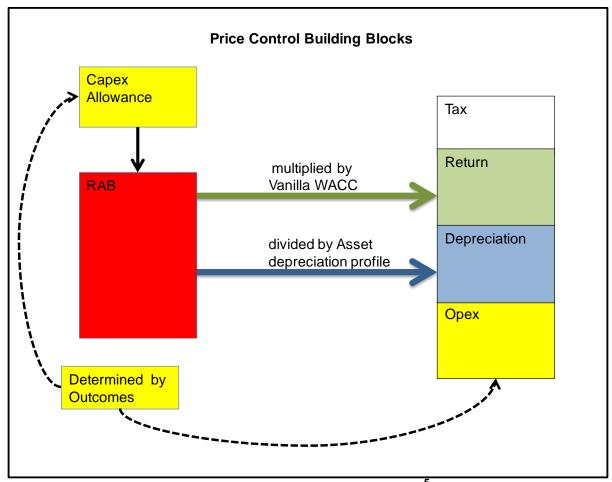


Figure 3.1 – Building blocks approach to price controls<sup>5</sup>

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<sup>&</sup>lt;sup>5</sup> See section 16 for further details on Vanilla WACC and the tax wedge

# **Using a Reporter**

- 3.5 A Reporter is an independent professional who audits, certifies and comments on submissions that are made by regulated companies to their regulators over a price control period. In September 2011, we published a consultation paper, 'Network price controls: Proposals for a cross-utility approach'<sup>6</sup>.
- 3.6 Our experience of regulating network price controls in recent years suggests that we need to tackle the issue of asymmetry of information between the regulator and the regulated company. Our experience from using a Reporter to regulate the water sector suggests that it is an effective way to rebalance the information flow and provide adequate scrutiny and accountability.
- 3.7 We are therefore minded to introduce a Reporter for RP5. The areas where a Reporter will be used are highlighted throughout this paper.

# **Transmission System Operator certification**

- 3.8 The implementation of EC Directive 2009/72/EC (IME3) could result in a transfer of ownership of the transmission network and/or reallocation of major transmission functions, including planning, development and maintenance.
- 3.9 This draft determination has been written on the basis that NIE T&D's current structure will stay in place. However, we may need to include a review clause in the final determination to allow for any changes which may result from the IME3 requirements<sup>7</sup>.

## 4 RP4 APPROACH

- 4.1 When setting the RP4 price control<sup>8</sup> we introduced new approaches for the treatment of capital expenditure (capex) and controllable operating expenditure (opex). These were based in part on submissions that NIE T&D had made over time, key elements of which we accepted.
- 4.2 The key features of the approach were as follows:

http://www.uregni.gov.uk/uploads/publications/Proposals\_for\_a\_cross\_utility\_approach\_to\_network\_price\_control s.pdf

<sup>6</sup> 

<sup>&</sup>lt;sup>7</sup> http://www.allislandproject.org/en/transmission\_current\_consultations.aspx?article=ee4464ea-1c6a-423c-a3dc-1f07c9561290&mode=author.

<sup>&</sup>lt;sup>8</sup> http://www.uregni.gov.uk/uploads/publications/TD\_Final\_proposals\_Sept\_06.pdf

- Controllable opex was based on a five-year rolling mechanism. The allowed controllable opex in any year was the actual controllable opex five years previously, inflated by RPI. The effect of this was to allow NIE T&D to retain the benefit of any efficiency savings for the full five years. After this point the ongoing benefit passes to consumers in line with generally accepted UK regulatory practice.
- The basic approach to capex (subject to certain efficiency incentives) was to allow NIE T&D to add its actual capital expenditure to the Regulatory Asset Base (RAB). It is then able to recover that expenditure over a 40-year period at the relevant rate of return.
- The weighted average cost of capital (WACC) was based on the WACC awarded to the distribution network companies in GB, including any changes made under Ofgem's price controls.

## **5 RP4 CAPEX**

- The capex mechanism that was used at RP4 was unique in that it allowed NIE T&D to add the actual capex it spent to its RAB. We have undertaken a review to ensure that capex added to the RAB was in accordance with the principles and guarantees agreed at the RP3 and RP4 price controls.
- 5.2 The RP4 capex settlement is based on the budget that is considered sufficient for NIE T&D to be able to discharge its obligations to maintain and develop a safe and reliable network. Expenditure on stakeholder priorities such as developing the network for renewable generation was to be assessed separately, as the need arose. The actual capitalised expenditure was added to the RAB.
- 5.3 In addition, an efficiency mechanism was developed to incentivise efficient procurement and improvements in productivity. The budget included a 10% efficiency challenge that NIE T&D itself proposed. The capital expenditure claimed by NIE T&D is shown in Figure 5.1. The outputs associated with this budget were not specified in the RP4 final determination.
- 5.4 We undertook a review of NIE T&D's capital investments during RP4. This established the following:
  - NIE T&D did not achieve the 10% efficiency challenge it had set itself.

- NIE T&D has been prudent in not undertaking planned investment where the forecast load growth did not actually materialise. This increased the amount of money available for asset replacement.
- Although NIE T&D spent the capex budget in full it did not deliver more asset replacement to compensate for the lower level of load-related expenditure.
- One of the reasons for this is that the underlying cost of materials used in network assets increased during RP4.
- NIE T&D has been provided with adequate funding during RP4 by comparison with the funding allowed to the network companies in GB. However, its capex spend as a percentage of its total spend is higher than that of the GB companies.
- We understand that NIE T&D made changes to its capitalisation practices in 2005 which require further investigation.
- The review showed that, under principles established when RP4 was approved by our board, not all of the expenditure that NIE T&D has claimed as capex may be added to the RAB.

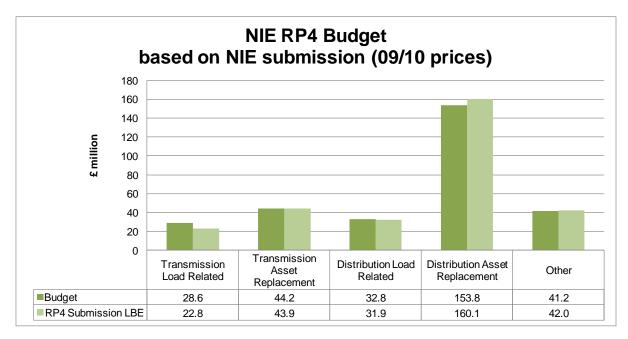


Figure 5.1 – RP4 planned and actual spend (latest best estimate)<sup>9</sup>

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<sup>&</sup>lt;sup>9</sup> LBE is latest best estimate

# 6 CHANGE TO CAPITALISATION PRACTICE DURING RP3 AND RP4

- 6.1 During RP3, NIE T&D's annual spend on controllable opex dropped by 46%, from £53.5 million a year to £29.1 million a year. There was a step change of 23% between year 3 (£44.0 million) and year 4 (£33.9 million). These figures have been converted to 2009/10 prices. This is demonstrated in Figure 6.1. The audited regulatory accounts that would have highlighted this 23% reduction in controllable opex to us were not available until after we had published the RP4 decision paper.
- 6.2 NIE T&D issues guidance to its staff who are responsible for determining the classification of expenditure as opex or capex. We understand that in 2005/06 (year 4 of RP3), NIE T&D approved changes to this guidance. This was shortly after we had written to NIE T&D confirming that we were minded to accept its proposal of a rolling opex mechanism to calculate allowances for RP4, with actual capex spend added to the RAB. The actual spend on controllable opex in each year of RP3 was then used to set the allowance for the equivalent year in RP4.

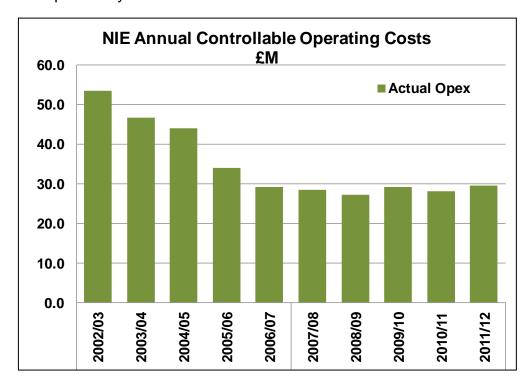


Figure 6.1 – NIE T&D's controllable opex 2002-2011

6.3 In a non-regulated business, a change of this nature is mainly of interest to financial auditors, investors and creditors. However in regulated businesses, where capex and opex are treated separately, a change of this nature has

potentially wider consequences. The change to the capitalisation practice, which allowed NIE T&D greater freedom to capitalise expenditure, could have had the following impacts:

- NIE T&D retained a considerable element of its opex allowance, in excess of its actual spend and genuine efficiencies; and
- NIE T&D increased the size of its RAB, on which the company claimed a return and depreciation, without delivering additional assets.
- This may mean that consumers have paid twice for certain services that NIE T&D provided. It should be noted that this is the opposite of what NIE T&D said in making its proposals in relation to the RP4 price control:

"The use of actual expenditure to determine future revenue entitlement removes ambiguity around the allocation of costs as between opex and capex. For regulatory purposes actual expenditure is recovered either via the RAB over 40 years or via the opex allowance but not through both."

- 6.5 The change to capitalisation practice was not highlighted to us as part of the RP4 submission.
- 6.6 The total outperformance against the controllable opex allowance in the five years between 2005/06 and 2009/10 was £118.5 million. We accept that some or all of this may be due to genuine improvements in operational efficiency. It is not clear however how much is due to efficiency and how much may be due to the change in capitalisation practice.

# Proposals for capitalisation practice change

- 6.7 We have initiated an investigation into NIE T&D's accounts. In order to determine if any of the outperformance has resulted from the change in capitalisation practice, the regulatory accounts from 2005/06 onwards will be re-stated, based on the pre- 2005 capitalisation practice. The investigation will be completed during the consultation period of this draft determination. As a result of the investigation, we will have a better understanding of the level of any double payment that consumers may have funded during RP3 and RP4.
- 6.8 Once the investigation is complete, we propose that (if appropriate) an adjustment should be made to the RAB for years 4 and 5 of RP3 and years 1 to 3 of RP4 to reflect the capitalisation practice that was in place in RP3.

- Years 4 and 5 of RP4 do not need an adjustment, as the capitalisation practice was consistent in this period and therefore comparable.
- 6.9 Once we have completed our investigation we will consider the balance of costs relating to opex and capex. We will also consider whether or not it is necessary to introduce a set of regulatory accounting guidelines.

## 7 REVIEW OF NIE POWERTEAM LTD IN RP4

- 7.1 As well as reviewing NIE T&D's expenditure, we assessed the opex costs of NIE Powerteam Ltd. We completed this review to assess:
  - the working relationship between NIE T&D and NIE Powerteam Ltd;
     and
  - NIE Powerteam Ltd's relative efficiency as a service provider.

# Relationship between NIE T&D and NIE Powerteam Ltd

- 7.2 NIE Powerteam Ltd was created from within NIE T&D in the early 2000s, but is not a regulated entity. It provides engineering services to NIE T&D alone and all of its revenues are generated from NIE T&D. Consumers are therefore funding all of NIE Powerteam Ltd's costs.
- 7.3 NIE Powerteam Ltd generates its income via:
  - a time based charge-out rate for providing network services; and
  - managed service contracts.
- 7.4 NIE Powerteam Ltd recovers all of its costs on a 'cost plus' basis from NIE T&D and does not bear any risk of loss. NIE T&D has not recently market tested any of NIE Powerteam Ltd's costs and was unable to provide evidence of past market testing because of confidentiality.
- 7.5 Under its licence, NIE T&D is required to report annually on NIE Powerteam Ltd's profits. The licence refers to NIE Powerteam Ltd via a profit share mechanism that has been in existence since the start of RP4. The mechanism has resulted in electricity consumers receiving a 50% share of NIE Powerteam Ltd's profits during the RP4 period.
- 7.6 NIE T&D and NIE Powerteam Ltd both use many of the same systems. NIE Powerteam Ltd's costs are charged directly into the internal orders that NIE T&D creates when allocating work to NIE Powerteam Ltd.

# Proposals for relationship between NIE T&D and NIE Powerteam Ltd

- 7.7 NIE T&D claimed that the cost allocation processes that it operates with NIE Powerteam Ltd are straightforward. However, it became clear during our RP5 analysis that the two businesses are closely integrated. Accounting for the separate legal entities is achieved through sophisticated cross-charging and cost allocation. The following points summarise our analysis:
  - Average salaries at NIE Powerteam Ltd are above the Northern Ireland average. They have increased at a higher rate over RP4 than equivalent wages in the private sector in NI.
  - It appears that the charging arrangements from NIE Powerteam Ltd to NIE T&D are unnecessarily complex. In addition, there is a lack of competition and local benchmarking. There does not appear to be sufficient evidence that consumers benefit from the current arrangement. Nor is there evidence to support a continuation of the profit sharing arrangement for this company.
- 7.8 NIE Powerteam Ltd is not subject to competition or regulation. Under RP4, NIE T&D had an opex allowance and capex was treated as 'pass through'. NIE T&D capitalised around 80% of the costs charged by NIE Powerteam Ltd. It therefore appears that consumers have been paying higher costs than necessary in relation to NIE Powerteam Ltd during RP4. This has been partially offset by the profit share mechanism.
- 7.9 For the purposes of economic regulation, we are minded to bring the current arrangements relating to NIE Powerteam Ltd to an end. This will require any references to NIE Powerteam Ltd to be removed from NIE T&D's licence. NIE Powerteam Ltd will in effect be treated like any other third party supplier of services. NIE T&D will have to undertake competitive procurement and be able to demonstrate this to us. These steps will ensure better efficiency for consumers in RP5.

# 8 RP5 CAPEX

8.1 NIE T&D has requested a significant increase in its capital spend for RP5. It published a paper<sup>10</sup> detailing an increase in 'business as usual' capital investment from £374 million in RP4 to £606 million in RP5. In a subsequent

http://www.uregni.gov.uk/uploads/publications/Capital\_Investment\_Requirements\_for\_RP5\_NIE\_Paper.pdf
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submission<sup>11</sup> this was increased again to £776 million (107% higher than RP4). NIE T&D is also expecting to invest an additional £291 million in infrastructure to support the development of renewable generation and further interconnection. This increase is shown in Figure 8.1.

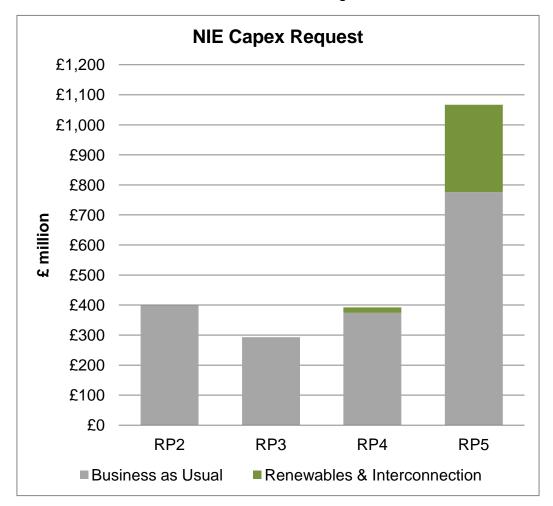


Figure 8.1 - NIE T&D's RP5 capex request

8.2 We subjected the request from NIE T&D to rigorous scrutiny, and enlisted the assistance of consultants SKM. We concluded that, from the information available, the processes used to build up the submission were based on subjective engineering judgement without sufficient guiding corporate strategy and/or threshold criteria for acceptable risk. This meant that the submission was heavy on opinion regarding the need for investment, but lacked the supporting factual evidence.

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<sup>&</sup>lt;sup>11</sup> NIE T&D's response to the Utility Regulator dated 27/01/2012

- 8.3 Network performance is currently measured by customer minutes lost. NIE T&D's network has over-achieved the required standard for eight out of the past nine years. This is shown in Figure 8.2.
- 8.4 We have not been able to identify any tangible reasons why NIE T&D's request for business as usual capex in RP5 was substantially higher than for a comparable company in GB. However, we do note that NIE T&D's current asset management approach has not been assessed to a recognised standard such as PAS55. We understand that NIE T&D is currently addressing this by implementing PAS55.

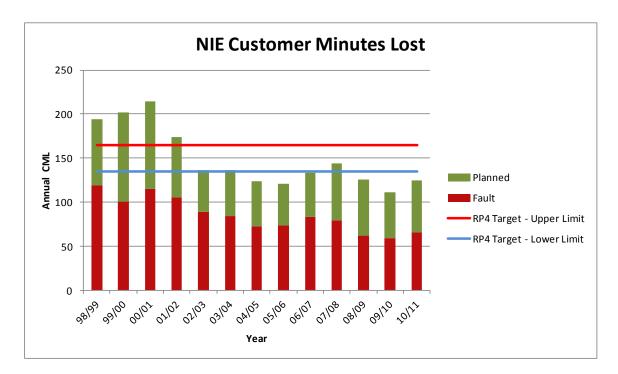


Figure 8.2 – NIE T&D's performance on customer minutes lost

# **Proposals for RP5 capex**

- 8.5 We reviewed NIE T&D's proposals for mitigating uncertainty during RP5. We also considered mechanisms that would satisfy our statutory duties to protect consumers and ensure that NIE T&D can fund their activities.
- 8.6 In its proposal, NIE T&D separated its capex into three 'pots'. The pots were based on the characteristics of the expenditure items. Given that there is a link between costs that can be incentivised and uncertainty, grouping similarly uncertain cost items into pots appears to be an appropriate approach for RP5. We also agree with NIE T&D that three pots is the right number. However, our

definition of the suitable 'funds' is not the same. Ours have the following characteristics:

- Fund 1: All asset replacement: Total units to be delivered and unit costs to be agreed before final determination. Reporter to verify delivery and substitution between asset types.
- Fund 2: Covers load growth, incremental costs of change of law, metering, IT & communications: Logging up/down based on efficient cost of delivery. Verified by the Reporter. Includes ring-fenced amounts for metering and connections.
- Fund 3: Large projects for renewable generation or interconnection: where there is material uncertainty over the timing and level of expenditure.
- 8.7 On 27 January 2012 NIE T&D submitted further responses to a series of questions we had asked. Based on these responses, read in conjunction with the original submission, and the subsequent analysis of need and efficient cost, we are minded to allow £314.7 million for business as usual capex during RP5 (funds 1 and 2). All capex investment will be verified by the Reporter. The proposals are summarised in Table 8.1.
- 8.8 In addition, fund 3 projects (for developing the network for renewable generation and interconnection) will be assessed on an individual basis as the need is determined during the RP5 period.
- 8.9 The cost of delivering the capex programme will vary with time, mainly as a result of changes in the costs of materials and labour. We have considered the risks associated with these changes when calculating the WACC to be applied to NIE T&D's RAB over RP5. Based on this, and the allocation of price and volume risk inherent in the three capex funds, we are minded to apply RPI to the annual capital allowances. Risks associated with deviations between RPI and the costs included in the NIE T&D's capex programme will be reflected in the asset beta that we use to calculate the WACC (see section 15).
- 8.10 In addition, the consultants identified a capex efficiency gap of 5%. This is related to the indirect costs associated with NIE T&D's capex programme. We are minded to apply an X factor of 1% (RPI-X) to close this efficiency gap over the five years of RP5.

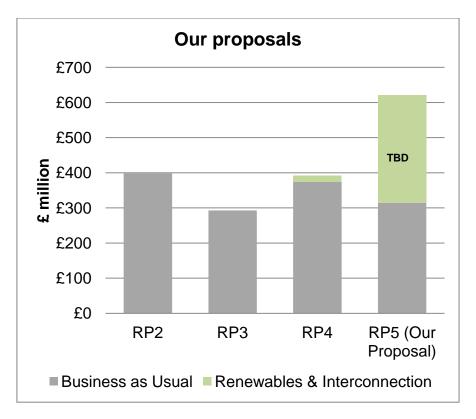


Figure 8.3 - Our proposals for RP5 capex

Table 8.1 - Summary of initial proposals for RP5 capex

		NIE T&D sub	mission (£m)	Our initial pro	oposals (£m)
Fund	Spend area	Transmission	Distribution	Transmission	Distribution
1	Asset replacement	£119.0	£357.3	£74.7	£118.8
2	Load related capex; network IT; network performance; changes to legislation; non- network IT; new technology trials	£60.1	£142.8	£34.7	£41.0
2R	Ring-fenced for metering	£0.0	£37.5	£0.0	£18.6
	Ring-fenced for connections and alterations	£0.0	£59.3	£0.0	£26.9
Sub-to	otal	£179.1	£596.9	£109.4	£205.3
		£776.0		£314.7	
3	Medium-term plan	£70.3	£0.0	TBD <sup>12</sup>	£0.0
	Wind farm clusters	£17.6	£0.0	TBD	£0.0
	Renewables Integration Development Plan	£127.2	£0.0	TBD	£0.0
	North-South Interconnector	£76.0	£0.0	TBD	£0.0
Sub-total		£291.1	£0.0	£TBD <sup>13</sup>	£0.0
Total		£470.2	£596.9		
		£1,0	66.9		

# 9 RP5 OPEX

9.1 NIE T&D proposed a total opex of £345 million for RP5 consisting of controllable, uncontrollable and 'new' opex. The RP5 submission is 22% higher than the total actual opex of £283.5 million that was incurred during RP4.

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<sup>&</sup>lt;sup>12</sup> TBD is 'to be determined'

<sup>&</sup>lt;sup>13</sup> NIE T&D has not yet specifically requested any funding in this area, therefore no figure can be included in the initial proposals, however funding will be considered on a project by project basis.

- 9.2 Controllable opex includes payroll; repairs and maintenance; IT & Telecoms; NIE Powerteam Ltd costs; corporate costs; insurance; property costs; professional services; meter reading; and other general controllable opex. The RP5 uncontrollable opex submission consists of rates, wayleaves and licence fees, as well as a new cost for injurious affection.
- 9.3 Before assessing NIE T&D's RP5 submission for new opex, we established a 'base year' as a starting point for analysing controllable and uncontrollable opex. We focused on actual expenditure, reconciled to the latest audited accounts (2009/10<sup>14</sup>).
- 9.4 We undertook a bottom-up analysis of actual costs in 2009/10, then adjusted for one-off costs and non-recurring costs. In parallel with this we also commissioned economic consultants Cambridge Economic Policy Associates (CEPA) to complete a benchmarking exercise of NIE T&D's opex in order to gauge whether efficiencies could be achieved.

# Proposals for controllable opex

- 9.5 We engaged CEPA to undertake an econometric assessment of NIE T&D's electricity network costs compared with those of the GB distribution network operators (DNOs). Econometric benchmarking is viewed as best practice when assessing a regulated company's relative efficiency.
- 9.6 CEPA's analysis excludes some costs that are outside the scope of Ofgem's work, such as metering. CEPA chose not to benchmark NIE T&D's performance for repair and maintenance costs separately as it considered that the cost drivers available do not fully explain the volume of work (e.g. number of trees cut or faults repaired) undertaken by NIE T&D. CEPA ranks NIE T&D's indirect costs as the ninth most efficient (out of 15).
- 9.7 We are of the view that NIE T&D can achieve opex efficiencies during RP5. We have noted CEPA's reference to low expenditure on repairs and maintenance. This may be a result of the change in capitalisation practice and will be considered in the investigation discussed in section 6. CEPA's analysis resulted in an efficiency gap of 9%<sup>15</sup>. An efficiency factor of 9% will therefore be applied to calculate an adjusted baseline for controllable opex costs.
- 9.8 We have considered whether the full impact of an efficiency adjustment should be applied in year 1 of RP5, or whether its extent should be applied in

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<sup>&</sup>lt;sup>14</sup> 2009/10 annual accounts were the latest available accounts at the time of NIE T&D's price control submission.

 $<sup>^{15}</sup>$  9.46%, based on a total efficiency adjustment of 12.9% \* 73.2% of total opex (which is made up of 'indirects').

- a more phased way. The achievement of this level of savings may be difficult during the first year. In our view, a two-year glide path should be experienced by the company, rather than applying the efficiency adjustment in year 1. One of the reasons for this is that NIE T&D may need to develop and implement additional procurement processes for engineering services.
- 9.9 We consider that two years is a fair period of time for efficiencies to be gained. This will mean that NIE T&D is allowed £1.45 million of additional revenue during the first two years of RP5, compared with the position had we stipulated that a 9% efficiency should be achieved immediately. The impact of an efficiency factor of 9% applied to controllable opex over the first two years of RP5 is shown in table 9.1.
- 9.10 We are minded to allow a total of £144.9 million for controllable opex, before any 'new' operating costs are considered for RP5 controllable capex.

Table 9.1 – Controllable opex (before new costs)

	2012/13	2013/14	2014/15	2015/16	201617
Controllable opex baseline	£31.7m	£31.7m	£31.7m	£31.7m	£31.7m
Adjusted controllable opex	£30.1m	£28.7m	£28.7m	£28.7m	£28.7m

9.11 In addition, NIE T&D has requested £63.3 million to cover new costs that were not included within the RP4 controllable opex allowance. We have assessed these in detail and our minded to position is shown in table 9.2.

Table 9.2 - New costs

Cost item	NIE T&D	Our proposals
Legislative and regulatory requirements	£3.7m	£0.5m
Workforce renewal	£7.4m	0
Real price effects	£8.8m	0
Storm costs	£1.6m	£1.0m
Renewables baseline	£19.3m	£10.6m
'Enduring Solution'16 and market opening	£22.5m	£16.4m
Total	£63.3m	£28.4m

9.12 As shown in table 9.3, we are minded to allow £173.3 million for controllable opex during RP5.

Table 9.3 - Our minded to position for controllable opex in RP5

	RP5 controllable opex (£m)
Adjusted baseline opex (after benchmarking)	£144.9
Add allowance for new costs	£28.4
Total	£173.3

# Proposals for uncontrollable opex

- 9.13 Uncontrollable opex refers to operating expenditure on which NIE T&D is deemed to have little or no impact. This category has historically included rates, wayleaves and licence fees. For RP5, NIE T&D has also included injurious affection costs of £11.4 million. In total, the company has identified uncontrollable opex during RP5 of £107 million.
- 9.14 We have assessed these requests and view rates and wayleaves as 'semicontrollable'. This is because there is an element of negotiation that NIE T&D

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<sup>&</sup>lt;sup>16</sup> The new data processing IT system for the electricity industry in Northern Ireland. It helps to facilitate customer switching between suppliers.

- can apply. We are therefore minded to use an RP4 average as a baseline amount and apply a risk allocation approach to the cost.
- 9.15 The risk allocation policy shares any under- or over-recovery of allowance on an 80:20 basis between consumers and the company. This limits the risk exposure of NIE T&D to 20% of the costs.
- 9.16 For example, if the baseline cost for rates and wayleaves in year 1 of RP5 is £16 million and the outturn costs are £20 million, consumers will pay £19.2 million (£16m + 80% x £4m = £19.2m). NIE T&D will need to fund £0.8 million from its own sources.
- 9.17 Conversely, if the baseline cost for rates and wayleaves in year 1 of RP5 is £16 million and the outturn costs are £12 million, consumers will pay £12.8 million (£12m + 20% x £4m = £19.2m). NIE T&D will be rewarded by £0.8 million for keeping the costs below the baseline.
- 9.18 Injurious affection is 'the diminution in value to a property caused by the existence and/or use of public works carried out under, or in the shadow of compulsory powers'. The first injurious affection claims under Northern Ireland law are currently before the Lands Tribunal. Therefore there has not been any precedent established here of injurious affection claims being paid.
- 9.19 Given the ongoing development of Northern Ireland case law by the Lands Tribunal, we are minded to treat this as an uncertain cost. However we cannot agree to an allowance as there are no historical costs on which to determine a suitable baseline. We will wait for the results of the Lands Tribunal before considering how to treat these costs.
- 9.20 Table 9.4 summarises the proposed costs associated with the uncontrollable elements of opex, totalling £88.8 million. We propose to introduce a Reporter for RP5 and an indicative value of £300,000 a year (or £1.5 million in total) is proposed in the uncontrollable opex category for this. The Reporter will be appointed by us and the scope of work will be determined by the need to protect consumers. Therefore we consider this to be an uncontrollable cost as NIE T&D will not be able to influence it.

Table 9.4 - Summary of proposals for uncontrollable opex in RP5

Cost category	RP5 amount		
	NIE T&D submission	Our proposal	
Rates	£69.0m	£66.0m	
Wayleaves	£21.0m	£18.0m	
Licence fees	£6.0m	£4.0m	
Injurious affection	£11.0m	£0.0m	
Reporter	£0.0m	£1.5m	
TOTAL	£107m	£89m	

# Application of efficiency adjustment and X

- 9.21 As a result of the benchmarking exercise we have applied a 9% efficiency factor to NIE T&D's controllable opex projections, excluding 'new' costs.
- 9.22 In addition, we are minded to apply an X of 1 to RPI-X regulation of controllable opex. The reasons for this are as follows:
  - Pay increases in Northern Ireland are likely to be below RPI over the next few years.
  - NIE T&D is currently paying above the Northern Ireland average there is therefore there is scope for correction.
  - Average salaries should drop as retirees are replaced by less experienced and therefore lower cost staff.
  - Following the ESB acquisition, synergies should emerge which consumers should benefit from.
- 9.23 The economics consultancy First Economics advises that the expectation for the UK economy as a whole is that workers will suffer reductions in real incomes for another two years. We need to recognise that the owners of electricity networks will be among the firms to benefit from lower cost pressures as a result.

9.24 The application of an X factor of 1 will assert the requirement for further efficiencies on NIE T&D. Once an X of 1 is applied<sup>17</sup>, the total opex proposal falls to £257.3 million (comprising £168.2 million for controllable opex, and £88.8 million for uncontrollable opex). This is summarised in table 9.5.

Table 9.5 - Minded to proposals for RP5 opex

	£ million					
	2012	2013	2014	2015	2016	Total
NIE T&D						
Controllable	47.0	46.5	46.9	48.2	48.9	237.5
Uncontrollable	20.8	21.0	21.4	21.9	22.3	107.3
Total	67.8	67.4	68.3	70.1	71.2	344.8
Utility Regulator (No X appli	Utility Regulator (No X applied)					
Controllable	37.1	34.2	34.1	33.9	33.9	173.2
Uncontrollable	17.8	17.8	17.8	17.7	17.7	88.8
Total	54.9	52.0	51.9	51.6	51.6	262.0
Utility Regulator (X of 1 app	lied)					
Controllable	36.8	33.5	33.1	32.6	32.2	168.2
Uncontrollable	17.8	17.8	17.8	17.7	17.7	88.8
Total	54.6	51.3	50.9	50.3	49.9	257.0

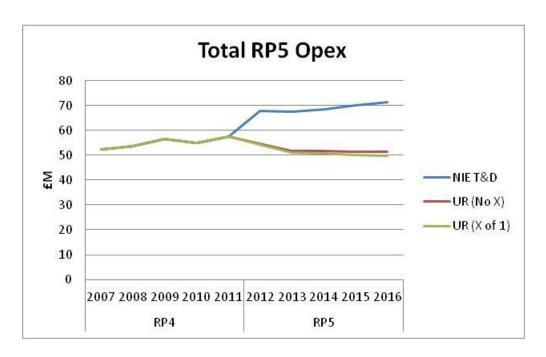


Figure 9.1 - Summary of opex proposals

<sup>&</sup>lt;sup>17</sup> Note that an X of 1 has not been applied to the SONI pension costs or the uncontrollable opex.

## 10 PENSIONS COSTS IN RP5

- 10.1 NIE T&D submitted total pension costs of £77.2 million (in 2009/10 prices) for RP5. This consisted of:
  - £10.5 million of ongoing pension costs (to cover both defined benefit and defined contribution members), and
  - £66.7 million of deficit repair costs associated with the defined benefit plan.
- 10.2 NIE T&D's submission was based on an actuarial assessment of the contributions required to fund ongoing costs and on a total pension scheme deficit of £150 million which took account of changes in funding position since the last formal valuation date (31 March 2011). They proposed that the deficit should be recovered over 11 years. NIE T&D assumed that consumers would fund the entire pension scheme deficit.
- 10.3 We commissioned both actuarial and regulatory expertise to aid our analysis of RP5 pension costs. Recent regulatory precedent was reviewed and a set of pension principles were adopted as follows:
  - NIE T&D should be allowed to recover the efficient on-going costs for its employees who are members of either the defined benefit pension scheme or the defined contribution scheme.
  - NIE T&D should be allowed to recover any deficit repair costs, associated with the defined benefit pension scheme, which it could not legally avoid.
  - Pension scheme trustees have a legal obligation to manage the
    pension fund prudently and in accordance with good investment and
    actuarial advice. Assuming that these legal obligations are complied
    with, there is little opportunity for NIE T&D to achieve efficiencies in
    regard to the defined benefit scheme, in the normal sense, other than
    by closing the scheme to new members.
  - Pension deficits which occur in any price control period may have been influenced by actions taken in previous price control periods. Therefore, in order to ensure that electricity consumers do not pay twice, it is important to take account of these effects.
  - Pension deficits will be based on the most recent formal actuarial valuation.

# **Ongoing costs**

10.4 We propose that consumers fund the unavoidable and efficiently incurred costs of the pension scheme which relate to the regulated company, NIE T&D, only. Our proposals allow for £10.5 million of ongoing costs, which align with NIE T&D's submission. We commissioned the Government Actuary's Department to analyse the contribution rate, level of benefits, investment strategy and actuarial assumptions applying to the NIE Pension Scheme (NIEPS) in order to reach this conclusion. The implications of legislation protecting the status of pension scheme members who were employed in the Northern Ireland electricity industry at the time of privatisation (1992) limits the extent to which benefit changes can be made.

# **Deficit recovery costs**

10.5 We reviewed the most recent actuarial valuation report, dated 31 March 2011 for the NIE Pension Scheme which reports a total deficit of £87.6 million. In order to establish the amount of this pension scheme deficit attributable to NIE T&D, we assessed the extent to which a legal liability existed. Various options were considered to split the deficit across different entities, but we consider it most appropriate to allocate the active liability to the current employer. For deferred and pensioner members, the same logic will apply, but the liability of such members will be allocated to the employer at the date of deferment or retirement. Applying this principle, we propose that 79% of the NIE Pension Scheme deficit at the formal valuation date can be allocated to NIE T&D. This equates to £69.2 million (79% x £87.6 million). In addition to this, we propose that the deficit be recovered over a period of fifteen years in line with recent GB regulatory precedent. During RP5, we therefore propose that an amount of £24.3 million can be recovered.

## Avoidable deficit costs

- 10.6 One of the pension principles which we adopted at the start of our review was that 'pension deficits that occur in any price control period may have been influenced by avoidable or inefficient actions taken in previous price control periods. Therefore, in order to ensure that electricity consumers do not pay twice, it is important to take account of these effects'.
- 10.7 To ensure that this principle was adhered to, we carried out a historic review of avoidable actions taken which have affected the current deficit position of the NIEPS.

- 10.8 We analysed the preceding four control periods to examine whether the current deficit is partly or wholly a consequence of avoidable past decisions. This is a necessary and proper part of the efficiency test, in respect of pensions only, that we are required by our duties to apply.
- 10.9 To gain an informed and balanced view, our analysis:
  - compared actual contributions paid into the scheme against regulatory allowances; and
  - identified and valued actions which we view as legally avoidable or inefficient.
- 10.10 Our analysis concludes that the NIEPS deficit amount of £87.6 million at 31 March 2011 is £33.4 million higher than it would have been if the net effect of actions which we have classed as legally avoidable or inefficient had not occurred. We propose therefore that consumers should not pay for this proportion of the deficit.

Table 10.1 Utility Regulator proposals compared to NIE T&D's submission

		£million					
		2012	2013	2014	2015	2016	Total
NIE T&D	Ongoing costs	£2.3	£2.2	£2.0	£2.1	£2.0	£10.5
	Deficit repair	£12.4	£12.4	£13.3	£14.3	£14.3	£66.7
	Avoidable	n/a	n/a	n/a	n/a	n/a	n/a
	Deficit Costs						
Our proposals	Ongoing costs	£2.3	£2.2	£2.0	£2.1	£2.0	£10.5
	Deficit repair	£4.9	£4.9	£4.9	£4.9	£4.9	£24.3
	Avoidable deficit	-£2.5	-£2.5	-£2.5	-£2.5	-£2.5	-£12.5
	costs						

# 11 TREATMENT OF CONNECTIONS

11.1 As part of the RP5 process, we consulted<sup>18</sup> on the distribution connection policy and audited NIE T&D's approach to pricing connection offers. As a result, we have instructed NIE T&D to remove the 40% subsidy for domestic connections from the statement of charges for connection to the Northern

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Ireland distribution system<sup>19</sup>. Any connection applications received in full after 1 October 2012 will be processed under the new rules.

- 11.2 This will not reduce the revenue that NIE T&D receive for connections. Rather it means that the connectee pays the full cost of the connection to NIE T&D
- 11.3 We are recommending that NIE T&D make significant changes to the statement of charges for connection and also to the transmission charging statement. It should also take steps to improve its estimating process. In doing so, NIE T&D will ensure that it is fully transparent in its pricing methods to improve consumer confidence. In addition, we intend to continue to work towards the introduction of contestability in connections. This will allow other companies to compete with NIE T&D for the work associated with the connection of new consumers and generators.

## 12 INCENTIVES AND RISK ALLOCATION

- 12.1 We carried out a review of potential incentive mechanisms for RP5 to cover areas such as customer service, facilitating renewables, other environmental considerations, and network losses. It is apparent through the current RP4 price control that there is inconsistency between incentives for opex and capex. We are of the view that this inconsistency should be removed in RP5. Furthermore, any incentive arrangements should take consumer preferences into account.
- 12.2 We propose that the following incentive arrangements should be in place during RP5:
  - A three fund model for capex to ensure that NIE T&D is incentivised to manage costs and uncertainty wherever appropriate.
  - Detailed reporting and an obligation to deliver the agreed outputs to dis-incentivise NIE T&D from transferring expenditure between opex and capex.
  - An ex-ante allowance for opex will be set, whereby NIE T&D is incentivised to outperform the allowance and consequently gain the rewards from this. Any benefits will be kept by the company for 5 years.

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<sup>&</sup>lt;sup>19</sup> see www.uregni.gov.uk – publications - April 2012

- A 'penalty only' incentive will be implemented related to unplanned customer minutes lost. The target proposed is 72 unplanned customer minutes lost per connected customer each year.
- An incentive may be introduced for the company to reduce distribution losses. This will require NIE T&D to collect the necessary data.
- Development and measurement of health and load indices will commence during RP5. Our intention is to implement incentives for this at the earliest possible time.
- A new Guaranteed Standard will be introduced to improve network performance for 'worst served customers', general complaints and generation connections.
- The existing Guaranteed Standards will be updated to reflect RPI inflation since the values were originally set.
- 12.3 The distribution losses incentive and the network outputs incentive (health and load indices) will require a considerable amount of data collection and analysis before the values to be used can be determined.

# 13 INNOVATION

- 13.1 Three formal innovation schemes were put in place during RP4. These were:
  - the Sustainable Management of Assets and Renewable Technologies (SMART) Programme;
  - the Vulnerable Customer Programme.
  - the Sustainable Networks Programme
- 13.2 NIE T&D reported annually to us on each of these. We assessed the schemes operating in RP4 and have determined that they should not be continued into RP5.
- 13.3 In RP5, NIE T&D is seeking £14.9 million to fund smart technology:
  - £2.5 million for the Research and Development Programme,
  - £6.0 million for trialling smart technology projects,
  - £3.3 million for applying advanced condition monitoring to network assets, and
  - £3.1 million for upgrading the distribution network management system to facilitate smart grids.

- 13.4 However, NIE T&D states that these costs do not include strategic investment in developing the communication systems that may ultimately be necessary.
- 13.5 We have given NIE T&D's proposals for innovation due consideration. Our approach was to ensure that any investment sought by NIE T&D is considered within the capex plan and does not stand alone as a separate approval. A number of projects in fund 2 include the application of innovative technology.

## 14 ENVIRONMENT AND SAFETY

14.1 As part of the review of NIE T&D for RP5, we have assessed the standards of performance and reporting associated with environmental and safety issues. Based on this assessment, we will require more reporting on these issues in RP5 and will develop the requirements and templates as part of the overall annual reporting requirements.

## 15 THE WEIGHTED AVERAGE COST OF CAPITAL

- 15.1 In its submission, NIE T&D proposed a framework for calculating the WACC. NIE T&D's report concludes that it would be appropriate to use a vanilla WACC (real) of 5.34%, made up of:
  - a post-tax cost of equity of 7.7% real (in line with the average which Ofgem actually allowed at DPCR5);
  - a pre-tax cost of debt of 3.6% real; and
  - an adjusted level of gearing for NIE T&D of 57.5%.
- 15.2 NIE T&D's submission considered ranges for the WACC parameters (equity risk premium etc), but concluded with the four values detailed in table 15.1.

Table 15.1 – Summary of NIE T&D's proposal for RP5 WACC

Parameter	NIE T&D
Gearing	57.5%
Cost of debt (%)	3.6
Risk free rate (%)	2.0
Post-tax cost of equity (%)	7.7
Vanilla WACC (%)	5.34%

- 15.3 We commissioned First Economics to recommend an appropriate WACC for RP5. First Economics deliberately sought to estimate the cost of capital independently from NIE T&D's current ownership arrangements, so that the return on offer through the price control would be capable of supporting any efficient investor.
- 15.4 We asked First Economics to assess the cost of capital for the separate transmission and distribution elements of the business. It concluded that the same range of values could be applied to both.
- 15.5 First Economics provided us with a range within which to choose an appropriate WACC. They recommended a range of 4.25% to 4.55% (vanilla real). Its report on WACC can be read in full in Appendix 4 of the main report.
- 15.6 Our minded to position for a conventional WACC for RP5 is summarised in table 15.2.

Table 15.2 – Summary of our proposals for WACC (existing RAB plus funds 1 and 2)

Parameter	Our proposals
Gearing	60.0%
Pre-tax Cost of debt	3.20%
Risk free rate	2.00%
Equity risk premium	4.8%
Debt beta	0.1
Asset beta	0.42
Equity beta	0.9
Post-tax cost of equity	6.32%
Vanilla WACC	4.45%

15.7 A comparison of our proposals with the WACC used for the GB DNOs is shown in Table 15.3.

Table 15.3 – Comparison with GB DNOs

	GB DNOs	NIE T&D	Our proposals
Gearing	65.0%	57.5%	60.0%
Pre-tax Cost of Debt	3.6%	3.6%	3.2%
Post-tax Cost of Equity	6.7%	7.7%	6.32%
Pre-tax WACC (real)	5.6%	6.4%	5.25%

Vanilla WACC (real)	4.7%	5.34%	4.45%
Vanilla WACC (nominal) <sup>20</sup>	7.5%	8.5%	7.9%

- 15.8 Most of our parameters are comparable with those used by Ofgem to set the WACC for the GB DNOs at the last price review in 2009. The difference in the proposed RP5 figures is mainly due to our lower real cost of debt. The lower real cost of debt is attributable to the forecast we have of RPI-measured inflation. The GB WACC was set in December 2009 when inflation forecasts and investment market conditions were different. In nominal terms, our proposed real vanilla WACC of 4.45% becomes 7.9%. This compares to a GB DNO nominal vanilla WACC of 7.5%.
- 15.9 Our approach to renewable generation-driven capital investment during RP5 is that it will be placed in a separate ring-fenced 'fund', with lower risk placed on the company than with the capex approved under the other two funds (Fund 3 as detailed in section 8).
- 15.10 This means that we will be setting Fund 3 capex allowances throughout RP5. As allowances are fixed just before costs are incurred, the likelihood of overor under-forecasting expenditure is significantly reduced in comparison to a regime in which a company has to make its best forecast of expenditure before the start of a five-year control period. This timing benefit will make costs less volatile and easier to predict and is therefore reducing NIE T&D's exposure to systematic risk.
- 15.11 In order to decide how much of a reduction we should make to the allowed return for Fund 3 capex, we carried out an assessment of the asset beta. The risk-free rate and equity-risk premium are generic market parameters and the relevant cost of debt should remain the same as the conventional WACC calculation. Based on the advice of First Economics, we propose to reduce the asset beta by around 0.1. This equates to a 45 basis point reduction resulting in a vanilla WACC of 4.0% real.

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<sup>&</sup>lt;sup>20</sup> To convert the real vanilla WACC to a nominal WACC, the inflation used for GB DNOs was 2.7%, 3% for NIE T&D and 3.35% (average) for the Utility Regulator proposals.

Table 15.4 – Summary of proposals for fund 3 WACC

Parameter – Fund 3	Our proposals
Gearing	60.0%
Cost of debt	3.20%
Risk free rate	2.00%
Equity risk premium	4.8%
Asset beta	0.33
Equity beta	0.67
Post-tax cost of equity	5.2%
Vanilla WACC - Fund 3	4.00%

15.12 RP4 was the first NIE T&D price control where the rate of return was prescribed on a non pre-tax basis. This meant that the return on RAB was calculated using the vanilla WACC and an allowance for taxation was provided.

# 16 DEPRECIATION AND RAB STRUCTURE

16.1 We have reviewed the depreciation profile and structure of the RAB for RP5. We also completed a review of how NIE T&D treat assets that they have disposed of in their regulatory accounts. Based on this, we are minded to leave depreciation periods and the depreciation type the same in RP5 as it is in RP4, with the exception of the market opening RABs. The core RAB will be divided into separate RABs for transmission and distribution.

## 17 FINANCEABILITY

- 17.1 As outlined in our statutory duties, we must have regard to:
  - "the need to secure that licence holders are able to finance the activities which are the subject of obligations *imposed by or under Part II of the Electricity Order or this Order.*"
- 17.2 We recognise that the longer term interests of consumers in any capital intensive business depend on maintaining the confidence of investors.

- 17.3 NIE T&D is currently rated by two rating agencies, Fitch and Standard & Poors. Fitch identifies financial ratios that it considers relevant to the rating of NIE T&D, specifically the company's gearing (or 'leverage', the ratio of debt to the value of the regulatory asset base) and the 'Post Maintenance Interest Cover Ratio' (PMICR). Fitch stated that "NIE's ratings would come under pressure if the expected leverage increased to above 57.5% and the PMICR decreased to below 1.4 on a sustained basis".
- 17.4 We have been monitoring the following financial ratios:
  - FFO interest cover
  - FFO/Net Debt
  - Net Debt/RAB (gearing)
  - PMICR
- 17.5 We have paid particular focus on PMICR in line with recent regulatory practice and due to the fact that this ratio showed the most stress.
- 17.6 We note that Fitch has suggested a PMICR value of 1.4 in relation to NIE T&D. We regard 1.4 as an acceptable level but consider a more desirable benchmark to be 1.5. The PMICR is detailed in figure 17.1 below.

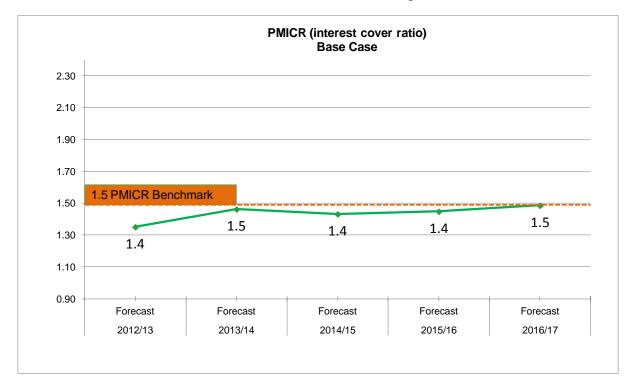


Figure 17.1 - PMICR for RP5 revenue

17.7 The graph demonstrates that NIE T&D are above the 1.4 level highlighted by Fitch, for most of the RP5 period. There is an increase in the metric over the

- RP5 period and by the end of RP5 they are at the desirable 1.5 benchmark. It should be noted that our modelling of the base case assumed that NIE T&D would pay out full dividends over the RP5 period.
- 17.8 In relation to gearing, our analysis shows that the actual gearing of NIE T&D remains in the region of 46% during the RP5 period.

# Funding capex for renewables and interconnection

- 17.9 Considering the significant level of capex estimated for renewables (£306m) is similar to what we are minded to allow for funds 1 & 2, new capital will almost certainly need to be provided. We would expect an investment of this scale to be funded via a mixture of both debt and equity to maintain the existing capital structure. From the submission provided by NIE T&D, we note that as well as debt via intercompany loans, they have also indicated reduced dividends and an equity injection towards the end of RP5.
- 17.10 We expect to engage with NIE T&D and will also discuss this area with the rating agencies regarding the impact that this investment requirement will have on the financial position of the company. These discussions would include the steps that the company will be able to take to support the investment and to discharge its licence obligations. Consistent with the general principle we outlined above, we would require compelling evidence that the company cannot reasonably support necessary investment before we would look to adjust revenue profiles in an NPV neutral manner.

## **18 REVENUE ENTITLEMENT**

- 18.1 We have calculated the revenue that NIE T&D would have received based on their submission. This is £1.22 billion over 5 years. This is shown in Table 18.1. Due to the uncertainty about the timing of the investments required to integrate renewable generation and interconnection (fund 3), we have also shown the total revenue required excluding these investments. This is £1.16 billion over 5 years.
- 18.2 Our proposals are also shown in tables 18.1. Again the revenue entitlement is shown with and without the cost of integrating renewable generation and interconnection. Excluding fund 3, the revenue entitlement would be £882 million. When the indicative costs for fund 3 are included, the entitlement increases to £910 million.

18.3 We have used the cost apportionment provided by NIE T&D to split the costs in the categories above across transmission and distribution. As a result the tariffs in RP5 should be fully cost reflective.

Table18.1 – Our RP5 revenue proposal - Total NIE T&D

	2012/13	2013/14	2014/15	2015/16	2016/17		
With Interconnection and Renewables							
NIE T&D	£225m	£232m	£240m	£254m	£273m		
Our proposals	£190m	£187m	£179m	£174m	£180m		
Without Interconnection and Renewables							
NIE T&D	£218m	£223m	£229m	£240m	£252m		
Our proposals	£189m	£184m	£175m	£167m	£167m		

## 19 IMPACT ON ELECTRICITY TARIFFS

- 19.1 We have analysed the impact that these proposals will have on the prices paid by consumers. Our analysis started by calculating the average amount paid by each consumer group under the current charges for use of transmission system (TUoS) and distribution system (DUoS). This formed the base case that any changes are measured against. We then assumed that the RP5 revenue would continue to be split among the consumer groups in the same proportions. This analysis included the k factor that is being recovered by NIE T&D during this tariff year.
- 19.2 The allowed revenue for transmission is collected by SONI via the Transmission Use of System (TUoS) tariff and the allowed revenue for the distribution assets is collected by NIE T&D via the Distribution Use of System (DUoS) tariffs. These two values are added together for presentation purposes in the tables below.
- 19.3 Our analysis indicates that NIE T&D's proposals would have resulted in an increase in its annual use of system charges to consumers of approx 40% over the RP5 period (excluding inflation). This includes the development of renewables and interconnection

- 19.4 As the timing and size of the costs associated with the development of renewables and interconnection (fund 3) are not certain, these have been excluded from the detailed results we are presenting here. Without these costs, NIE T&D's proposals would still have resulted in an increase in tariffs of over 25% (excluding inflation). This is shown in table 19.1.
- 19.5 Our minded to position would result in a decrease in prices (before inflation). The precise impact will vary depending on the voltage at which consumers are connected and their demand profile. The average reduction is shown in table 19.2
- 19.6 The impact shown is based on the average actual consumption at each voltage level. The actual impact on individual consumers will vary with their consumption volume and the timing of that consumption. The other costs included on the electricity bills, for example energy costs, SSS and PSO levies and tax are excluded from this analysis.
- 19.7 The tables below do not include any costs for the Tyrone Cavan Interconnector or for the transmission investments for the integration of renewable generation. This is because the exact size and timing of these costs are not yet known. However in Table 19.3 we have shown the potential impact that these investments could have on average network charges. This is based on the full cost estimated by NIE T&D being invested at the time indicated in the submission. We know that, due to delays to the Tyrone Cavan Interconnector, these investments will be delayed. The actual cost to consumers during RP5 is likely to be less than the values shown.
- 19.8 Figure 19.1 and 19.2 also show the impact each year on the average domestic consumer (4041 kWh per year) and the average EHV customer (27 GWh per year connected at 33kV). Comparisons of electricity costs across Europe are based on a standard consumption by domestic customers of 3300 kWh per year. The values should therefore be adjusted accordingly if they are to be used in such a comparison.
- 19.9 In summary, our proposals would result in a decrease of £85 over 5 years on the network charges paid by the average domestic consumer and a decrease of £99,151 for the average EHV customer.
- 19.10 It is important to remember that these figures all **exclude** inflation, which is applied to NIE T&D's allowed revenue each year.

Table 19.1 - Impact of NIE T&D request on network charges (excluding renewables and interconnection)

Year	Annual Cost for Average Use (TUoS + DUoS) £/year						Total Additional	
Customer Type	Current	12/13	13/14	14/15	15/16	16/17	Cost over 5 years	
Domestic <sup>21</sup>	£146	£161	£166	£170	£177	£186	£128	
Small Business (Quarterly Billing)	£505	£559	£574	£589	£612	£645	£452	
Half hourly	2505	2009	2374	1309	2012	2040	1,452	
Metered MV	£3,356	£3,724	£3,827	£3,928	£4,084	£4,298	£3,080	
Half hourly Metered HV	£38,983	£41,724	£42,890	£44,036	£45,737	£48,296	£27,767	
Half hourly Metered EHV	£138,850	£140,226	£144,241	£148,198	£153,647	£163,167	£55,229	

Table 19.2 - Impact of our proposals on network charges (excluding renewables and interconnection)

	0	Annual Cost for Average Use (TUoS + DUoS) £/year				Total	
Year	Current Average Cost	12/13	13/14	14/15	15/16	16/17	Additional Cost over 5 years
Customer Type							
Domestic	£146	£139	£135	£128	£122	£122	-£85
Small Business (Quarterly Billing)	£505	£481	£469	£443	£421	£421	-£293
Half hourly Metered MV	£3,356	£3,200	£3,121	£2,944	£2,796	£2,793	-£1,926
Half hourly Metered HV	£38,983	£36,340	£35,551	£33,783	£32,301	£32,409	-£24,532
Half hourly Metered EHV	£138,850	£124,909	£122,793	£118,055	£114,083	£115,259	-£99,151

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 $<sup>^{21}</sup>$  Based on 4041 kWh per year – current average consumption. Should be pro-rated to 3300 kWh per year for use in standard European comparisons.

Table 19.3 - Potential impact of investment in renewable integration and interconnection

	0	Annual Cost for Average Use (TUoS + DUoS) £/year				Total	
Year	Current Average Cost	12/13	13/14	14/15	15/16	16/17	Saving over 5 years
Customer Type							
Domestic	£146	£139	£137	£130	£125	£128	-£72
Small Business (Quarterly Billing)	£505	£482	£472	£449	£432	£441	-£250
Half hourly Metered MV	£3,356	£3,207	£3,140	£2,981	£2,860	£2,905	-£1,688
Half hourly Metered HV	£38,983	£36,583	£36,203	£34,945	£34,362	£35,831	-£16,993
Half hourly Metered EHV	£138,850	£126,653	£127,462	£126,237	£128,595	£139,010	-£46,292

Figure 19.1: Impact on domestic consumers (excluding inflation, renewables and interconnection)

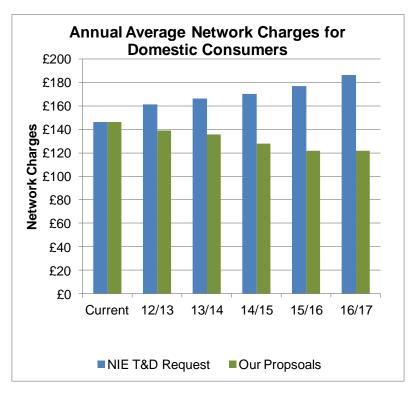
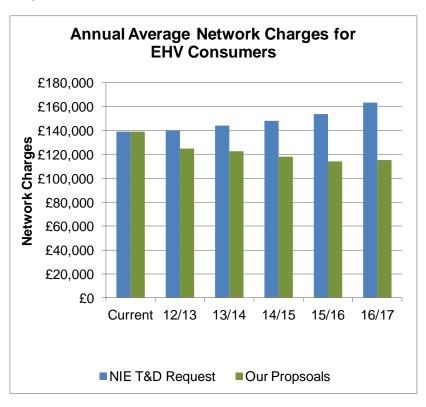


Figure 19.2: Impact on EHV consumers (excluding inflation, renewables and interconnection)



# 20 ANNUAL REPORTING

- 20.1 As highlighted earlier, we intend to introduce a Reporter for RP5. The aim for RP5 is to standardise the reporting in order to:
  - allow NIE T&D to collate and process the required information in an efficient and pro-active manner;
  - ensure that we have all of the information required to monitor progress during RP5;
  - ensure that the information is provided in the right format in a timely manner; and
  - facilitate the Reporter's verification processes.
- 20.2 The reporting will cover a range of areas. We propose to develop a coherent set of annual report templates for NIE T&D to complete. These will provide us with the level of detail we need to fully discharge our statutory duties while minimising the reporting burden on NIE T&D.

## 21 CONSULTATION PROCESS

- 21.1 The RP5 review has highlighted a number of key issues concerning capex, opex and pensions. These are explored further in the main paper, where our minded to proposals are also explained in greater detail. Readers are encouraged to respond to the minded to proposals set out in this paper. We will consider all responses in order to make an informed decision in our final determination.
- 21.2 This is an open consultation paper. The proposals affect the prices paid by all consumers and generators of electricity in Northern Ireland and all generators who participate in the SEM. We have not posed any specific questions in this paper. Instead we invite stakeholders to express a view on any aspect of the paper or related matter. Responses should be received by 1700 on Thursday 19 July 2012 and should be addressed to:

Kevin O'Neill Electricity Directorate Queens House 14 Queen Street Belfast BT1 6ED Tel: 028 9031 6349

E-mail: kevin.oneill@uregni.gov.uk

- 21.3 Our preference would be for responses to be submitted by e-mail, although hard copy responses are also welcome.
- 21.4 Individual respondents may ask for their responses not to be published (in whole or in part), or for their identity to be withheld from public disclosure. In either case, we will ask respondents to supply us with a redacted version of the response that we can publish.
- 21.5 As a public body and non-ministerial government department, we are bound by the Freedom of Information Act (FOIA) which came into full force effect in January 2005. According to the remit of FOIA, it is possible that certain recorded information contained in consultation responses can be put into the public domain. Hence it is now possible that all responses made to consultations will be discoverable under FOIA even if respondents ask us to treat responses as confidential.
- 21.6 It is therefore important that respondents note these developments and when marking responses as confidential or asking for responses to be treated as

- confidential, should specify why they consider the information in question to be confidential.
- 21.7 This paper is available in alternative formats such as audio, Braille etc. If an alternative format is required, please contact the office and we will be happy to assist.