NIE Networks is a regulated company and our business activities are overseen by the Utility Regulator (UR) in Northern Ireland. Our business plan for delivering our services to customers is approved for a number of years ahead in what are called “price control” periods. We are currently operating under the RP5 price control which runs from April 2012 to September 2017.

Our RP6 plan includes details on what we intend to deliver during RP6, how much it will cost and the benefits provided to customers and stakeholders. A detailed review will be carried out by the UR, followed by the publication of its Draft Determination in January 2017. Following a period of public consultation, a Final Determination will be published in June 2017 and NIE Networks will start to deliver the agreed plan from October 2017.

b. Plan development

Extensive planning, analysis and consultation have been used to ensure that the plan for RP6 delivers benefits for current customers and sets the foundations for the future. Maintaining, improving and expanding the network to meet customers’ needs requires continuous attention, innovation and investment.

In developing the plan we have considered a range of factors.

• **Delivering the required services at least cost.** Throughout the process of developing the plan we have worked hard to ensure that the allowances we are seeking only include work which is strictly necessary to enable us to carry out our transmission and distribution functions to an appropriate standard and to provide a network which is fit for purpose for our customers.

• **Ensuring a safe and reliable network.** Our aim is not only to protect customers in respect of the cost of using our networks but also in respect of the safety and reliability of supply. The availability of a reliable electricity supply is important to business as well as domestic customers and enables Northern Ireland to compete effectively for inward investment.

• **Balancing the needs of current and future customers.** It is important to balance the interests of different generations of customers, not to defer works which ought properly to be undertaken now, and to balance the interests of different groups of today’s customer (for example, rural and urban customers).

• **Utility Regulator guidance.** The UR published detailed guidance on the information it requires from NIE Networks to enable it to determine the

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a. Introduction

This document provides a summary of Northern Ireland Electricity Networks Limited’s (NIE Networks) business plan for the six and a half year period from 1 October 2017 to 31 March 2024. This will be the sixth regulatory price control period (Regulatory Period 6 or RP6) since the company was privatised in 1993.

NIE Networks is the owner of the electricity transmission and distribution networks in Northern Ireland and is the electricity distribution network operator, serving all 860,000 customers connected to the network.

Our role is:

• to operate our network of overhead lines, underground cables and substations effectively to ‘keep the lights on’ for our customers;
• to maintain our network so that it is in a condition to remain safe and reliable;
• to fix our network if it gets damaged or if it is faulty;
• to upgrade or extend the existing network to provide additional electricity supplies or capacity to our customers including the development of innovative solutions to manage the increasing level of renewables connections and the uptake of low carbon technologies;
• to provide electricity meters and provide metering data to suppliers and market operators. This is a key role in enabling wholesale and retail market competition; and
• to connect customers to the network, both for new electricity supplies and for new electricity generators.
Safety
NIE Networks’ core value is safety and we will relentlessly target improvements in our overall health and safety performance. Our objective is to identify and minimise the risks posed by the electricity network to the general public, employees and contractors.

During RP6, we plan to spend £60 million to ensure our network complies with new safety legislation which will reduce the risk from interference, vandalism or unauthorised access to the network. Similar legislation has been implemented in Great Britain (GB) and the work we plan to undertake is in line with other electricity companies.

Network reliability and availability
Customer and stakeholder engagement indicates that customers are broadly content with the existing level of network reliability and availability. Therefore we propose to maintain these levels during RP6 through delivery of our asset replacement and maintenance plans.

Fast resolution of power cuts is important to customers. By the end of RP6, we will aim to have 90% of customers restored within 3 hours (currently an 87% standard) and 100% of customers restored within 18 hours (currently a 24 hour standard), excluding severe weather events.

In total we propose to spend £277m to replace assets that are no longer fit for purpose. Continual investment is required to deliver the network performance that customers expect.

We propose to spend £53m to reinforce network capacity in heavily stressed parts of the network in order to meet the growth in housing and business development. Our plan includes the cost of developing innovative solutions to manage the increasing level of renewables connections and the uptake of low carbon technologies (LCTs) such as solar panels, heat pumps, electric vehicles and wind generation. Our plan will also address the congestion problem on the 33kV network. Congestion in the electrical sense is a term used to describe when a network quickly reaches capacity thereby limiting headroom for further connections and potentially limiting the development of the electricity market. This is becoming an increasing problem on the 33kV network, driven by the increasing prevalence of embedded generation occurring in parallel with a reduction in electricity demand in particular areas of the network (which is referred to as ‘load erosion’).

Future network development will incorporate both traditional and innovative smart network reinforcement...
approaches. We will spend £10m to enhance the telecommunications network and to assess the benefits of smart grid technologies for the long term future. Our plans for innovation in RP6 are primarily focused on integrating suitably advanced smart solutions into business as usual. We plan to do this by undertaking a programme of five focused integration projects with the objective of developing cost effective alternatives to conventional network expenditure, minimising the impact on future customers.

Environment
We will minimise the impact of our business operations on the environment by reducing greenhouse gas emissions, limiting pollution, improving waste management and improving visual amenity.

We will continue to target improvement in our overall environmental performance using our internationally recognised ISO14001 accreditation.

By working with local communities and environmental organisations we will demonstrate our commitment to sustainable initiatives.

Customer satisfaction
The provision of a high level of service for our customers is a core business objective. We are committed to keeping our customers at the centre of our focus and aim to provide a safe, reliable and responsive electricity service which meets the standards our customers expect.

As part of our engagement with customers and stakeholders, we have been listening to what they have been telling us about our current service level and what they would like us to deliver in the future. We want to make it easier for our customers to communicate with us and improve our overall customer service delivery.

We will continue to use surveys to determine the level of service delivered to customers. This will include internal employee surveys to establish the perceived level of service to customers as well as external customer surveys to understand their views on the level of service provided. Feedback from these surveys will be used to develop customer service improvement plans.

We will continue to operate an enquiry and complaints system which makes it easy for customers to access the right people and to obtain responses in a timely and effective manner.

Whilst we endeavour to get things right first time, sometimes things can go wrong. When complaints are received they are treated with urgency and with an aim to resolve the matter to the customer's satisfaction quickly.

We will continue to inform and provide priority information services for public representatives or emergency services who are working on behalf of customers.

Connections
Very good progress has been made on connecting renewables so far in Northern Ireland. In 2010, the Northern Ireland Assembly set a target of achieving 40% of electricity consumption from renewable sources by 2020, including an interim target of 20% by 2015. At this point, we have helped deliver 880MW of renewable generation, which at 25%, is ahead of the 2015 government target.

We are facilitating a 'contestable market' for all types of new network connections. This provides customers with a choice of suppliers and drives service improvements and efficiencies. Historically, NIE Networks was the only party in Northern Ireland that could design and build connections. By the end of 2017 Independent Connection Providers may undertake elements of new connection provision.

During RP6 we will consider alternative methods of connection for customers who are impacted by constraints on the network.
d. Network investment

The RP5 price control spans a five and a half year period from 1 April 2012 to 30 September 2017. The price control prescribes specific projects which NIE Networks is required to deliver during RP5. We are on target to deliver these projects by 30 September 2017, although the work programme is back-ended to the second half of RP5 because the price control was not finally determined until April 2014. We expect our total expenditure during RP5 to be broadly in line with the price control allowances.

Total capital expenditure proposed for RP6 is £508m and would be spent across the main categories in our core programme as shown in Figure 1. This excludes optional investments on the distribution network that were considered as part of the customer and stakeholder engagement process, as these require specific consideration by the UR. Also excluded are projects on the transmission network such as the North South Interconnector, which will be approved separately by the UR.

e. We will continue to operate efficiently

Since being privatised in 1993, we have implemented a series of initiatives and programmes designed to improve the efficiency of our cost base. These efficiencies are reflected in a 33% reduction in network charges since privatisation. We have also delivered a greater than 50% reduction in the average time customers are without electricity supply caused by faults on the network.

We plan to deliver further efficiency savings of £35m through:

• improvements to business processes supported by investment in new IT systems;
• improvements to operational working practices;
• effective procurement strategies;
• continued use of in-house resource to undertake core activities;
• design of the right engineering solutions to network problems i.e. no ‘gold plating’; and
• learning from other distribution network operators (DNOs), utilities and large asset based organisations.
f. How we will finance our plan

We will fund our RP6 plan through operating cash flows from revenue receipts, raising of new debt and retention of earnings as required. We estimate that our borrowings will increase to around £950m by the end of RP6 and that we will need to raise an additional £500m of new debt.

To calculate our allowed revenues we have assumed a weighted average cost of capital (WACC) of 4.1%. This is the same WACC that applied in RP5 and is commensurate with the financial ratios and credit rating we need to raise new debt finance efficiently. A satisfactory overall price control incorporating a WACC at this level will support a strong investment grade rating over RP6 and allow NIE Networks to raise debt efficiently over the RP6 period. Our economic advisers have assessed the long term impact to customers of differing credit ratings and found that it is beneficial to customers as a whole to maintain a strong investment grade rating as it results in lower long term financing costs, which means lower bills for customers over the long term.

GB and European regulatory precedent indicates that a strong investment grade credit rating of A- / BBB+ is appropriate for a high-performing network operator. NIE Networks is currently rated by Fitch (BBB+) and Standard & Poor’s (BBB+). Retention of at least a BBB+ credit rating is essential if NIE Networks is to compete effectively for new funding in the market.

g. Impact on customers’ bills

NIE Networks derives its revenue principally through charges for use of the distribution system levied on electricity suppliers and charges for use of the transmission system levied on SONI. Our network charges were approximately 21% of the final electricity bill for the 2015/16 tariff year. This percentage will vary each year depending on electricity wholesale prices and other costs which make up the final bill.

Under the regulatory framework, the costs associated with network investment are paid for by customers over 40 years reflecting the long term value of network assets. Our tariff forecasts for RP6 reflect the cost of ongoing investment in the network and significant new programmes of work required to comply with new safety legislation and to manage the increasing level of renewables connections and the uptake of LCTs.

The expected impact in customers’ bills is summarised in Table 1. Table 2 shows a comparison of average network charges at the end of RP6 (2023/24) compared to the last full year of RP5 (2016/17).

<table>
<thead>
<tr>
<th>Customer group</th>
<th>Increase in network charges, £/annum</th>
<th>Increase in retail bill, %/annum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic customers</td>
<td>1.5</td>
<td>0.28</td>
</tr>
<tr>
<td>Small businesses, max demand &lt; 70kVA</td>
<td>7</td>
<td>0.25</td>
</tr>
<tr>
<td>Small and medium sized enterprises, max demand &gt; 70 kVA</td>
<td>109</td>
<td>0.21</td>
</tr>
<tr>
<td>Large energy users connected at LV and HV, max demand &gt; 1MW</td>
<td>855</td>
<td>0.12</td>
</tr>
<tr>
<td>Large energy users connected at 33kV, max demand &gt; 1MW</td>
<td>2,293</td>
<td>0.07</td>
</tr>
</tbody>
</table>

Table 1 – RP6 average annual increase in network charges (2016/17 to 2023/24)

<table>
<thead>
<tr>
<th>Customer group</th>
<th>Number of customers</th>
<th>Average networks charges at the end of RP5</th>
<th>Average networks charges at the end of RP6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Distribution</td>
<td>Transmission</td>
</tr>
<tr>
<td>Domestic</td>
<td>790,000</td>
<td>£/annum</td>
<td>£/annum</td>
</tr>
<tr>
<td></td>
<td></td>
<td>115</td>
<td>15</td>
</tr>
<tr>
<td>Small business &lt;70kVA</td>
<td>65,000</td>
<td>538</td>
<td>75</td>
</tr>
<tr>
<td>SME &gt; 70kVA</td>
<td>5,000</td>
<td>8,187</td>
<td>1,343</td>
</tr>
<tr>
<td>LV &amp; HV LEU &gt; 1MW</td>
<td>172</td>
<td>54,248</td>
<td>17,789</td>
</tr>
<tr>
<td>33kV LEU&gt;1 MW</td>
<td>18</td>
<td>96,584</td>
<td>82,711</td>
</tr>
</tbody>
</table>

Table 2 – forecast average network charges in 2016/17 and 2023/24
h. Uncertainty and incentive mechanisms

Our proposals have been derived by using the most up-to-date information. However there are some areas of uncertainty, such as the uptake rate of low-carbon technologies or whether government will decide to install “smart” electricity meters across Northern Ireland. These uncertainties would require specific consideration during RP6, separate to the expenditure initially approved by the UR.

We welcome the continuation of the incentive mechanisms which drive service improvements for customers through business efficiencies. We propose widening the scope of the revenue protection incentive which protects customers from fraud and the introduction of a new incentive in relation to network reliability.

i. Our track record and our promise for RP6

NIE Networks is proud to serve Northern Ireland customers.

We have a strong track record of meeting our Guaranteed Standards for customers, restoring electricity to customers as quickly as possible when a fault occurs. We have substantially improved our safety, environmental and our network asset management, each of which is externally audited to internationally recognised standards. We are a leading company in restoring electricity to customers in the event of severe weather.

We demonstrate our responsibility to the communities in which we work through the proactive engagement of our employees with local schools, charities and community groups. We donate 2,000 hours of employee time each year to projects such as the promotion of engineering and science to young people and the provision of specialised skills to the boards of local charities. We also fund local charity initiatives through the NIE Networks Charity Fund.

We currently hold the Investors in People Gold Standard and our employee engagement has been recognised by the Chartered Institute of Personnel and Development. We are committed to training apprentices and our in-house training programme has been consistently assessed as ‘excellent’ by the formerly named Department of Employment and Learning. We are the first company in Northern Ireland to attain accreditation from the Institute of Engineering and Technology for our training and mentoring programme.

During RP6 all of our staff are committed to continuing to deliver improvements to meet the needs of customers, and we will continue to invest in the network in the long term interests of the economy and all customers in Northern Ireland.