

# Mitigating network charging volatility arising from the price control settlement

## Consultation

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### Overview:

Stakeholder engagement is a core part of the new RIIO (Revenue = Incentives + Innovation + Outputs) price control framework. One of the key issues raised through this engagement process is network charging volatility. Some suppliers have indicated that, when offering customers fixed price contracts, they include a risk premium to protect themselves against unforeseen changes to network charges. They have also stated that perceived volatility in network charges acts as a barrier to entry to the retail energy market, particularly for smaller suppliers who may be less able to absorb network charge fluctuations.

This consultation outlines five potential options that could help mitigate network charging volatility, or its effects, arising from the price control settlement. This issue affects all four network sectors that Ofgem regulates. This consultation therefore discusses common measures that could be introduced for gas distribution, gas transmission, electricity distribution and/or electricity transmission sectors.

## Associated documents

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- [Regulating energy networks in the future: RPI-X@20 decision \(ref 128/10\)](#)
- [Decision on strategy for the next transmission price control – RIIO-T1 \(ref 46/11\)](#)
- [Decision on strategy for the next gas distribution price control – RIIO-GD1 \(ref 47/11\)](#)
- [Decision on strategy for the next transmission and gas distribution price controls -RIIO-T1 and GD1 Uncertainty mechanisms \(ref 47/11\)](#)
- [Open letter consultation on the way forward for the next electricity distribution price control review – RIIO-ED1 \(ref 15/12\)](#)
- [RIIO price control glossary](#)

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## Executive Summary

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### **The price control process and scope of this consultation**

We are currently undertaking price control reviews for the gas and electricity transmission networks (referred to as RIIO-T1), the gas distribution networks (RIIO-GD1), and the electricity distribution networks (RIIO-ED1). The price control reviews will set out the revenues that these network operators (NWOs) can recover from customers in return for delivering what customers require. They will also set out the rules (through the licence conditions) on how NWOs' allowed revenues are updated during the price control period. These updates are designed to reduce the risk on NWOs and customers of inaccurate cost forecasts over the period. They also ensure that we adjust revenues in a timely way to reflect a NWO's performance.

As part of the network price control consultation process some suppliers have asked us to consider the impact of the price control settlement on network charging volatility. These suppliers have told us that they include a risk premium in customers' energy bills in order to compensate them for unforeseen changes in network charges. Suppliers also consider that charging volatility can act as a barrier to entry to the energy retail market, particularly in relation to entry by small suppliers.

We agree that network charging volatility – particularly the ability to predict charges reasonably accurately - is an important issue for suppliers, and ultimately energy consumers. In this consultation paper, we identify a number of options that could help mitigate network charging volatility, or its effects, arising from the price control settlement (while maintaining the benefits of the RIIO framework including strong incentives for delivering efficiently). We do not, as part of this consultation, directly address volatility arising from the application of charging methodologies, that is, how the overall revenue constraint set at the price control is recovered from different customer groups. In this area, we will continue to work with the industry to develop the methodologies through the respective code governance arrangements.

### **Our evaluation criteria and initial assessment of options**

We have identified five options that could help to address network charging volatility, or its effects, arising from the price control process. We consider it is the predictability (or lack of predictability) of charge changes that is the key issue identified by stakeholders. Thus, the options we currently consider are likely to deliver the greatest benefits are primarily aimed at improving predictability rather than providing stability in network charges per se. We provide our initial assessment of these options in Table 1. The options are not mutually exclusive and we consider that a combination is likely to best address the issue.

Our principal criterion for assessing the options is a consideration of which party is best placed to bear the cash-flow risk associated with changes to network allowed revenues. For example, limiting the number of changes or improving predictability of changes will reduce the risk to suppliers, and therefore potentially reduce the risk premium included in customers' bills. However, limiting NWOs' ability to recover costs may lead to increased variability in NWOs' cash-flows, which increases their financing costs, and potential leads to higher overall network charges. In undertaking our initial assessment, we have also identified secondary criteria in relation to the

additional complexity associated with the price control framework, and we consider any implications of our options on other Ofgem policy objectives.

As set out in Table 1, we consider that improved information provision in relation to the expected changes to NWOs' allowed revenues (option 1) would reduce risk to suppliers, by improving the predictability of changes, without any concomitant increase in risk to NWOs. We also consider that imposing restrictions on intra-year charge changes (option 2) would both improve the predictability of charge changes and reduce the frequency of changes. Thus, reducing suppliers' risk exposure but with limited increase in NWO cash-flow risk. We also consider that a more systematic approach to the lagging of rewards and penalties associated with incentive mechanisms (option 3) would improve the predictability of charge changes with very limited or no additional cash-flow risk for NWOs.

By contrast, we do not consider that the automatic lagging of adjustments to allowed revenues from uncertainty mechanisms (option 4) would improve the allocation of risk. We have already introduced measures to minimise the effects of uncertainty mechanisms and consider that such restrictions provide for an optimal allocation of risk. However, we will consider if there are any specific improvements we can introduce on a case-by-case basis. Our initial assessment is that introducing a cap and collar (option 5) is unlikely to be beneficial. We consider that the benefits in terms of improved predictability would be moderate given our proposals in relation to options 1, 2 and 3. We also consider that the prospective benefits would not justify the potential increase in cash-flow risk faced by NWOs.

**Table 1: Potential options and our initial assessment**

Option	Initial assessment
1 Improved information for suppliers and customers	Reduces risk to suppliers, and reduces risk premium No additional risk for NWOs and low cost Implementation likely to be beneficial
2 Restricting the frequency of intra-year charge changes	Reduces risk to suppliers with limited additional risk for NWOs Implementation likely to be beneficial
3 Increasing the lag on incentive rewards/penalties that networks recover through allowed revenues	Reduces risk to suppliers with limited additional risk for NWOs Implementation likely to be beneficial
4 Increasing the lag on adjustments to allowed revenues from uncertainty mechanisms	Reduces risk to suppliers but at cost of increased risk for NWOs Consider changes on a mechanism-by-mechanism basis
5 Imposing a cap and collar on changes to allowed revenues	Reduces risk to suppliers but potential material additional risk for NWOs Implementation unlikely to be beneficial

## Implementation of any changes and next steps

We intend to publish our decision on network charging volatility this summer taking into account the responses to this consultation. The deadline for responses is 11 June 2012.

In relation to RIIO-T1 and GD1, our intention is to introduce any changes for the start of the next price control review period on 1 April 2013. For RIIO-ED1, our initial view is that we could introduce options 1 and 2 prior to the next price control, ie before 1 April 2015. However, we do not propose to introduce any other options prior to the start of the RIIO-ED1 price control period on 1 April 2015 to avoid introducing potentially substantive changes to existing price control arrangements.

# 1. Introduction

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## Chapter Summary

In this chapter we outline the reasons for this consultation and highlight the views we have heard so far from stakeholders. We also outline what other industry work is ongoing to tackle the issues of network charging volatility.

## Purpose of this consultation

1.1. This consultation seeks stakeholders' views on the impact that network charging volatility has on them, and how we can best address this issue. Stakeholder engagement has been a core part of the current price control reviews in the gas distribution and transmission sectors. This consultation is intended to consolidate the views expressed to date as part of the RIIO consultative processes, provide a further opportunity for stakeholders to comment on this issue, and develop a common approach across network sectors to mitigate charging volatility.

1.2. In our March strategy decision, we set out the policy framework for RIIO-T1 and GD1 including how to deal with charging volatility (eg in the context of designing uncertainty mechanisms).<sup>1</sup> We also stated that we would consider charging volatility further once we received NWOs' business plans. This consultation is the next step in this process. We have decided to include electricity distribution in the scope of this consultation given that the issues are common to all regulated energy networks.

1.3. For RIIO-T1 and GD1, we expect to introduce any changes to the regulatory framework arising from this consultation at the start of the next price control periods on 1 April 2013. For electricity distribution, it may be appropriate to implement some changes ahead of the next price control period given that it commences in 2015.

1.4. The industry has set out proposals for addressing charging volatility in responses to our strategy documents, and network operators (NWOs) have included proposals in their business plans. We have taken these suggestions on board and included many within the options we discuss in chapter 3.

## The scope of this consultation

1.5. This consultation is predominantly concerned with mitigating network charging volatility, and its effects, arising from the price control settlement, ie the setting of the allowed revenue constraint at the price control, and how this is updated year-on-year.

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<sup>1</sup> Para 2.13: Decision on strategy for the next transmission and gas distribution price controls – RIIO-T1 and GD1 Uncertainty mechanisms (ref 47/11)

1.6. We know that changes in allowed revenues are not the only factor that creates volatility. We are fully aware of continuing concerns with volatility in individuals' charges created by the charging methodologies, which set out how the total revenue constraint is recovered from different customer classes.

1.7. However, a review of the charging methodologies lies outside the scope of this consultation. There are currently ongoing work streams looking at potential changes to current methodologies to help manage charge volatility (through open governance arrangements as part of the industry codes). Ofgem is also currently undertaking a review of the charging methodology for electricity transmission (Project TransmiT) and implementation of a common methodology for the electricity distribution sector is continuing. We need to avoid replicating ongoing projects or addressing issues subject to industry codes.

1.8. In addition, this consultation does not directly deal with System Operator (SO)<sup>2</sup> external costs in the transmission sector. We set an incentive scheme for the SOs which provides a reward/penalty around the achievement of cost targets for performing their SO functions. As per the RIIO price controls, we are in the process of setting the incentive scheme that will endure for eight years from 1 April 2013.<sup>3</sup> Where changes are made following our decision we will consider whether similar changes are also suitable for the SOs as part of the SO price control process.

1.9. We discuss below the stakeholder feedback we have already received on network charging volatility. This feedback has helped form the scope of this consultation. We also briefly discuss what other measures are being taken by the industry to look at this issue in the context of the charging methodologies.

## Stakeholders' views and other industry work

1.10. As part of the current price control review process, suppliers have expressed their concern to us and NWOs regarding charging volatility. For example, British Gas (BG) set out its concerns in a response to our December 2010 consultation on strategy for the RIIO price controls. BG's response included a report from Cambridge Economic Policy Associates (CEPA), its consultants, which set out analysis on the impact of network charging volatility on the retail energy market, the perceived causes of volatility and proposals to mitigate volatility.<sup>4</sup>

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<sup>2</sup> National Grid Gas and National Grid Electricity Transmission act as the SO for the gas and electricity sectors. They have responsibility for the balancing of supply and demand on the respective networks.

<sup>3</sup><http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=277&refer=Markets/WhIMkts/EffSystemOps/SystOpIncent>

<sup>4</sup> British Gas response: <http://www.ofgem.gov.uk/Networks/GasDistr/RIIO-GD1/ConRes/Documents1/Centrica.pdf>

CEPA report: [http://www.ofgem.gov.uk/Networks/GasDistr/RIIO-GD1/ConRes/Documents1/Centrica\\_Annex\\_2.pdf](http://www.ofgem.gov.uk/Networks/GasDistr/RIIO-GD1/ConRes/Documents1/Centrica_Annex_2.pdf)

1.11. In November 2011, the gas distribution networks (GDNs) submitted their business plan proposals for RIIO-GD1 including proposals for mitigating charging volatility arising from both the price control settlement, as well as charging methodologies. The GDNs' proposals included limiting intra-year charge changes, relaxing the penalty rate for over or under recovery of revenue, as well as the consideration of caps and collars. We summarise GDNs' proposals in Appendix 2. The latest business plan submissions by National Grid Transmission (gas and electricity) also considered in more depth stakeholders' views on this issue (see Appendix 2).

1.12. We have taken suppliers' and NWOs' proposals into consideration in this consultation.

1.13. Industry has raised a number of change proposals to the industry codes recently that have looked to address volatility in the charging methodologies. These have been raised across the network sectors. As set out above, this consultation does not address charging methodology issues. We expect the industry to progress modifications through the relevant code governance arrangements.

1.14. npower has raised three modifications to make changes to the Distribution Connection and Use of System Agreement (DCUSA), the industry code for the electricity distribution sector.<sup>5</sup> These modifications seek to address a number of issues: smoothing the impact of manifest errors across a three year period, limiting charge changes to 1 April and 1 October, and ensuring that suppliers are made aware of electricity distribution network (DNO) requests to Ofgem for changes in allowed revenues.

1.15. Haven Power has recently raised three modifications to make changes to the Connection and Use of System Code (CUSC), the industry code for the electricity transmission sector.<sup>6</sup> Two of these change proposals (CMP 206 and CMP 208) if implemented would require NWOs to provide a year ahead forecast of charges. The additional change proposal, CMP 207, if implemented would introduce a cap on changes to charges to customer groups.

1.16. Total Gas & Power Ltd raised a change proposal to the Uniform Network Code (UNC), the industry code for the gas distribution and gas transmission sectors.<sup>7</sup> The modification proposed a limit on charge changes to once per year and smoothing of any over or under recoveries of allowed revenues over a four year period.<sup>8</sup>

1.17. There is also ongoing work to review volatility resulting from the electricity distribution charging methodologies, including looking at the feasibility of offering long-term products that provide more stability and transparency in the market.

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<sup>5</sup> DCP104, DCP105 and DCP 106: <http://www.dcusa.co.uk/Public/CPs.aspx>

<sup>6</sup> CMP 206, CMP 207 and CMP 208: [http://www.nationalgrid.com/uk/Electricity/Codes/systemcode/Panel/2012/134\\_30Mar/](http://www.nationalgrid.com/uk/Electricity/Codes/systemcode/Panel/2012/134_30Mar/)

<sup>7</sup> <http://gasgovernance.co.uk/0368>

<sup>8</sup> The UNC Panel decided to postpone the progress of this modification when notified of our intention to consult on this issue.

## Interaction with other Ofgem policy development

1.18. As part of our Retail Market Review,<sup>9</sup> we published a consultation on the standardised elements of the standard tariff.<sup>10</sup> One option proposed is to fix the national standing charge and regional adjuster to the unit rate of the standard tariff for domestic customers annually. The unit rate would contain the majority of network charges. We think that any measure to address volatility in network charges could complement any proposals for standardised tariffs as part of our RMR.

1.19. As part of the RMR, we have also proposed that all non-standard domestic tariffs will be of a fixed duration and that unilateral price increases during the fixed term period will not be allowed.<sup>11</sup> We have also set out some potential exceptions to these proposals. We acknowledge that these proposals could affect the ability of suppliers to pass through changes in network costs during the fixed term. Again, reducing network charging volatility could reduce risks faced by suppliers (and ultimately their customers).

1.20. There is also a link between volatility in network charges and work considering how we should address issues facing independent and particularly smaller suppliers. The latter may be more vulnerable to charging volatility if they have a less diverse portfolio of customers. The issue of network charging volatility was raised at the Ofgem led independent suppliers' forum last year.

## Structure of this document

1.21. This document is structured as follows:

- Chapter 2 sets out how network charges impact customers' energy bills, the causes of volatility and why it is causing concerns. We also outline the criteria we have used to assess our proposed options.
- Chapter 3 outlines our five options and our initial assessment.

1.22. There are also a series of appendices to this consultation, including:

- Appendix 2 provides a summary of the NWOs' business plan submissions on network charging volatility.
- Appendix 3 lists the sections of the licences and industry codes that are relevant to the discussions within this paper.

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<sup>9</sup> The RMR is our investigation into the markets for electricity and gas for households and small businesses in Great Britain.

<sup>10</sup> <http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?file=Standardised%20element%20consultation.pdf&refer=Markets/RetMkts/rmr>

<sup>11</sup> <http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=72&refer=Markets/RetMkts/rmr>

## 2. Network charging volatility

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### Chapter Summary

This chapter outlines the causes of network charging volatility in relation to the price control settlement, historical data on volatility, and why volatility is a potential problem. We also set out our proposed criteria for assessing the options to address network charging volatility which we describe in chapter 3.

**Question 2.1:** Have we correctly characterised the scope of the problem we are trying to address?

**Question 2.2:** Are there certain market segments or groups of customers that are particularly affected by charging volatility?

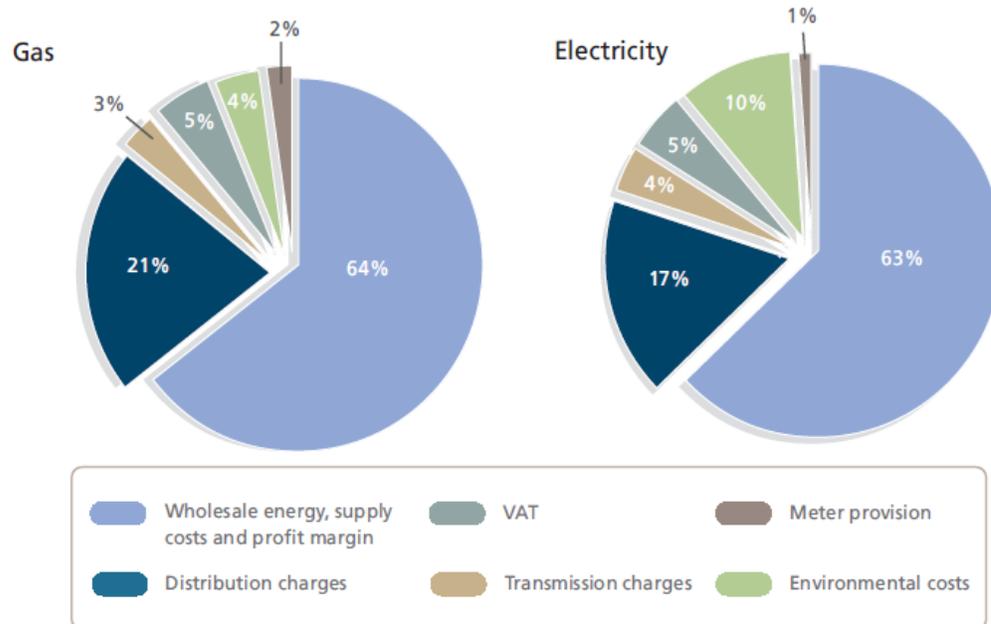
**Question 2.3:** Do you agree with the assessment criteria? Are there additional criteria that we should adopt for our final assessment?

### Network charges and the cost of energy

2.1. The final energy bill to a customer comprises a number of different elements. Figure 2.1 shows how a typical domestic energy bill is broken down. As shown, the main element comprises the wholesale energy charge, supply costs and profit margin. The next largest element is network charges (both transmission and distribution), which account for around 20 to 25 per cent of a domestic customer's energy bill. For non-domestic customers this proportion varies and is dependent on the type of contract the customer holds with their supplier.

2.2. This consultation is concerned with addressing charging volatility arising from network charges, ie charges that amount to up to a quarter of the domestic customer bill.

**Figure 2.1: What comprises the typical domestic energy bill?**



Source: Updated household energy bills explained, Ofgem January 2011<sup>12</sup>

## Causes of volatility in network charges

2.3. In October 2010 we introduced a new framework for network regulation: RIIO (Revenue = incentives + innovation + outputs).<sup>13</sup> We are currently undertaking the first two price control reviews, using this framework, for the gas distribution networks (GDNs) and transmission operators (TOs).<sup>14</sup> The price control will set the outputs that the eight GDNs, three electricity TOs and one gas TO need to deliver for their customers and the associated revenues they are allowed to collect for the eight-year period from 1 April 2013 to 31 March 2021. The price control review for electricity distribution network operators (DNOs) has just begun. It will also use this framework to set allowed revenues for the DNOs from 1 April 2015.

2.4. At the price control review, we set allowed revenues to enable NWOs to recover the efficient costs of running their network and delivering agreed outputs. Allowed revenues are not fixed for the duration of the price control period. They change for a number of reasons, including:

- annual indexation to protect against inflation
- changes to financial arrangements, including annual cost of debt indexation, and changes to pension and equity issuance allowances
- pass through of costs outside of NWOs' control, eg Ofgem licence fees and business rates

<sup>12</sup> <http://www.ofgem.gov.uk/Media/FactSheets/Documents1/updatedhouseholdbillsjan11.pdf>

<sup>13</sup> Regulating energy networks in the future: RPI-X@20 decision (128/10)

<sup>14</sup> There are 8 GDNs, 3 electricity TOs, 1 gas TO and 14 DNOs operating across Great Britain.

- incentives that reward/penalise NWOs based on actual performance and expenditure outcomes
- funding for innovation projects through the Low Carbon Networks Fund and Network Innovation Competition
- correcting for NWOs' forecast error in relation to demand (ie the units over which they recover allowed revenues)
- adjustments due to uncertainty mechanisms for additional costs not provided for in up front allowances.

2.5. Some of these factors, eg annual indexation for inflation and cost of debt, are more predictable than others as generally there is good market information on the expected values. Other changes, such as those based on actual NWO performance, eg adjustments due to incentives, are less predictable. The options outlined in this consultation are aimed at mitigating the impact that changes in these factors have on changes in network charges.

## Historical volatility in allowed revenues

2.6. In Table 2.1 and Table 2.2 below we present data on the main causes of changes in allowed revenues. The percentages represent the contributions of each factor to the difference between allowed revenues and base revenues.<sup>15</sup>

**Table 2.1: Contribution to volatility in allowed revenues: distribution**

	Electricity distribution <sup>1</sup>		Gas distribution <sup>2</sup>	
	Average decrease	Average increase	Average decrease	Average increase
<b>Inflation</b>	-0.4%	3.5%	-0.4%	3.9%
<b>Pass through costs</b>	-1.4%	1.1%	-0.8%	0.5%
<b>Incentives</b>	-2.9%	4.1%	0.0%	3.0%
<b>Uncertain costs</b>	-0.1%	0.1%	0.0%	0.6%
<b>Innovation funding</b>	0.0%	0.3%	0.0%	0.2%
<b>Other*</b>	0.0%	0.0%	-1.6%	1.2%
<b>Carry over from previous year</b>	-2.4%	4.4%	-1.6%	1.7%
<b>Total difference**</b>	<b>-4.7%</b>	<b>9.4%</b>	<b>-0.3%</b>	<b>6.6%</b>

<sup>15</sup> In comparing allowed revenues to base revenues, we inflate base revenues by the Retail Prices Index (RPI) to year t-1 prices, as this will be known a year in advance and therefore does not contribute to volatility. The contribution to volatility of inflation in our data analysis represents the additional year of RPI included in allowed revenue (ie inflation to year t).

<sup>1</sup> Average of all GDNs from 2008-09 to 2010-11

<sup>2</sup> Average of all DNOS from 2005-06 to 2010-11

\* Other is adjustments for mains and service replacement costs for gas distribution

\*\*Represents the average decrease (and increase) across all years where allowed revenue was lower (higher) than the base revenue

**Table 2.2: Contribution to volatility in allowed revenues: transmission**

	Electricity transmission <sup>3</sup>		Gas transmission <sup>4</sup>	
	Average decrease	Average increase	Average decrease	Average increase
<b>Inflation</b>	-0.7%	3.9%	-0.4%	4.1%
<b>Pass through costs</b>	-0.4%	4.1%	0.0%	9.3%
<b>Incentives</b>	-0.1%	0.6%	0.0%	0.0%
<b>Uncertain costs<sup>^</sup></b>	0.0%	5.3%	0.0%	0.0%
<b>Innovation funding</b>	0.0%	0.4%	0.0%	0.4%
<b>Other</b>	-0.2%	0.0%	0.0%	0.0%
<b>Carry over from previous year</b>	-1.7%	2.6%	-1.2%	2.6%
<b>Total difference**</b>	<b>-3.1%</b>	<b>12.9%</b>	<b>0.0%</b>	<b>13.5%</b>

<sup>3</sup> Average of all three electricity TOs (exc. System Operator revenues) from 2007-08 to 2010-11

<sup>4</sup> Average of National Grid Gas Transmission TO revenues (exc. System Operator revenues) from 2008-09 to 2010-11

<sup>^</sup> Includes funding under the Transmission Investment for Renewable Generation (TIRG) scheme and Transmission Investment Incentive (TII) scheme

2.7. Carry over from the previous years revenue recovery, ie allowed revenue that has either not been collected in charges in the year before or was over recovered the year before contributes significantly to volatility in all sectors. Under option 3 we discuss introducing a lag on this adjustment to improve the predictability of its impact. Other significant factors contributing to volatility include adjustments for uncertain costs, incentive payments and pass through items. It is important to note that some adjustments will be more predictable than others. This is explained in more detail in chapter 3 where we discuss each option. This data does not account for the extent to which the change to charges was predictable.

## Why is network charging volatility a problem?

2.8. Suppliers and large customers can mitigate volatility in the wholesale energy market through the use of hedging instruments. Wholesale energy prices are also determined in a competitive setting where there is greater information provision over

expected changes. We are consulting on measures to increase liquidity in the GB energy market that are intended to improve the availability of hedging instruments and provide more robust information on future prices.<sup>16</sup> By contrast, there are no hedging instruments for network charge changes that suppliers can enter into to mitigate risk.<sup>17</sup>

2.9. When suppliers enter into fixed price contracts with customers, they have told us that they include a risk premium to compensate them for the risk associated with unexpected changes in network charges (ie that they cannot recover from the customer). Some suppliers have also stated that the uncertainty in network charges can present a barrier to entry in the retail market particularly for small suppliers that have more limited access to working capital and/or higher financing costs.

2.10. We have considered whether the primary concern in relation to charging volatility relates to the (lack of) stability of charges or their unpredictability. We consider that changes in charges should not give rise to a risk premium if the changes are predictable, as the supplier can price the expected change into the contract with the customer. Suppliers can also manage cash-flow risk where changes are predictable. We therefore consider that it is the predictability (or lack of predictability) of charge changes that gives rise to the potential inclusion of a risk premium in customers' charges, and provides a potential barrier to entry in the retail market. Thus, the proposals set out in this consultation are primarily aimed at improving predictability (eg by providing advance notice of expected changes) rather than providing stability in network charges per se.

2.11. However, we also recognise that some customers value stability in network charges, eg those customers entering into fixed price contracts.<sup>18</sup> We also note that there are costs to suppliers (and therefore to their customers) of adjusting to changes in network charges for customers not on fixed price contracts, eg the administrative cost of informing customers of changes to charges. As part of our March strategy decision for the RIIO-T1 and GD1 price controls, we included the potential option to re-profile revenues across the eight years of the price control to improve charging stability.<sup>19</sup> We will consider re-profiling where it could provide greater stability in revenues without undermining a NWO's ability to finance its activities or the incentive properties of the price control.

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<sup>16</sup><http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=84&refer=Markets/RetMkts/rmr>

<sup>17</sup> There is ongoing work by the electricity distribution sector to investigate the feasibility of offering long-term charging products

<sup>18</sup> We note the low proportion of customers that enter into fixed price contracts provides prima facie evidence that in general customers have a relatively low willingness to pay for stability or certainty in relation to their final energy bill. For example, the report commissioned by BG quotes DECC figures that only 7 per cent of domestic electricity customers and 9 per cent of gas customers enter into fixed price contracts. See Table 2 and 3: [http://www.decc.gov.uk/assets/decc/statistics/publications/trends/articles\\_issue/1\\_20100324\\_125048\\_e\\_@\\_variationtariffatypes.pdf](http://www.decc.gov.uk/assets/decc/statistics/publications/trends/articles_issue/1_20100324_125048_e_@_variationtariffatypes.pdf)

<sup>19</sup> Paragraph 2.9: <http://www.ofgem.gov.uk/Networks/GasDistr/RIIO-GD1/ConRes/Documents1/GD1decisionbusplan.pdf>

2.12. We would welcome respondents' views on whether we have characterised the problem arising from charging volatility correctly, and our conclusion that the problems can be addressed through improving the predictability of charge changes. In particular, we would also welcome respondents' views on whether there are certain market segments or groups of customers that are particularly affected by charging volatility.

## Criteria for assessment of options

2.13. In this section, we describe our criteria for assessing the options. The principal criterion is which party is able to most efficiently manage cash-flow risk in relation to network charges. The secondary criteria include the potential complexity of any changes, as well as consistency with other Ofgem policy objectives.

### Risk sharing

2.14. The principal criterion against which we intend to assess the options is the extent to which they move regulatory arrangements towards a more efficient allocation of risk, or an overall reduction in risk, arising from changes to NWOs' allowed revenues and charges.

2.15. For example, a limitation on changes to NWOs' allowed revenues and therefore network charges could provide greater certainty for suppliers. This could potentially reduce the risk premium they include in customers' bills to compensate them for bearing such risks. However, limiting NWOs' ability to align allowed revenues to efficient costs may result in increased cash-flow risk to NWOs and therefore a higher cost of capital, which leads to higher overall network charges. In evaluating our options, we need to consider the effects on suppliers' tariffs (and customers bills), as well as NWOs, and identify who can manage the risks associated with network charging volatility most efficiently.

### Complexity

2.16. We need to be careful not to introduce any undue complexity into the setting of allowed revenues. Greater complexity could make the setting of allowed revenues more difficult to understand for network users and undermine our objective to improve transparency and predictability. Complexity can also increase regulatory costs. Thus, in evaluating our options we need to consider the costs of any additional complexity, and whether such complexity is justified, eg in terms of the benefits associated with mitigating charging volatility.

### Other criteria

2.17. An aspect of the new RIIO framework is to provide for a more powerful incentive regime, which provides greater rewards for NWOs that exceed prescribed outputs and service levels, and penalties for NWOs that fail to deliver the requisite outputs and services. One intention of the framework is to ensure that we adjust revenues in a timely way to reflect a NWO's performance, such that investors have a

clear understanding of performance through such metrics as the return on equity. In turn, the alignment of returns with performance provides useful signals to improve corporate governance. Some of the options to address charging volatility could weaken the link between a NWO's performance, and financial indicators.

2.18. In evaluating the options, we also need to consider any links to other Ofgem policies or objectives. For example, as noted in paragraph 1.18, in retail markets we have recently consulted on methods to promote competition through the standardisation of supply tariffs. Thus, in evaluating our options we will consider how the reduction in charging volatility could support the proposed setting of any standing charge.

## 3. Options to mitigate volatility in network charges

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### Chapter Summary

This chapter outlines five potential options for mitigating network charging volatility, or its effects. We also set out our initial assessment of the options against our proposed criteria, and discuss implementation.

**Question 3.1:** Do you have any further suggestions of what could be done to mitigate network charging volatility arising from the price control settlement?

**Question 3.2:** Do you agree with our initial assessment of each option?

3.1. We have identified the following options for consultation

- Identifying opportunities for industry and Ofgem to provide more information to stakeholders on expected changes to allowed revenues and charges.
- Restricting the frequency of intra-year charge changes.
- Increasing the lag on adjustments to allowed revenue due to incentive rewards or penalties.
- Increasing the lag on adjustments to allowed revenues due to the provision of uncertainty mechanisms.
- Imposing a cap and collar on changes to allowed revenues.

3.2. As well as the questions set out above (ie questions 3.1 and 3.2), we have also identified specific questions associated with each of the options listed above. We set out the specific questions when describing each option.

3.3. Table 3.1 summarises our initial assessment of each option. As our assessment demonstrates, the options are not mutually exclusive and we consider that a combination is likely to best address the issue.

**Table 3.1: Summary of options and our initial views**

Option	Assessment against optimal allocation of risk	Assessment against other criteria	Current view
1 Improved information for suppliers and customers	Reduce risk to suppliers No additional cash-flow risk for NWOs	Low cost Relatively easy to implement	Implementation likely to be beneficial
2 Restricting the frequency of intra-year charge changes	Reduce risk to suppliers of intra-year changes Limited additional cash-flow risk for NWOs	Reduces complexity in charging arrangements Reduction in administration costs	Implementation likely to be beneficial
3 Increasing the lag on incentive rewards/penalties that networks recover through allowed revenues	Reduce risk to suppliers Limited additional cash-flow risk for NWOs	Potentially weakens the incentive regime and signals to investors	Implementation likely to be beneficial
4 Increasing the lag on adjustments to allowed revenues from uncertainty mechanisms	Reduce risk to suppliers Potential additional cash-flow risk for NWOs	Potentially weakens signals to investors	Universal changes unlikely to be beneficial. May consider changes on mechanism-by-mechanism basis
5 Imposing a cap and collar on changes to allowed revenues	Reduce risk to suppliers Potential material additional cash-flow risk for NWOs	Introduces complexity to the regulatory regime Potentially weakens effectiveness of performance incentives and signals to investors	Implementation unlikely to be beneficial

3.4. Below, we provide further detail and pose additional questions on the five options we have identified. For each option, we first outline the current requirements and processes, and then discuss potential improvements and our initial assessment.

3.5. We would welcome respondents' views on both the options set out, and any additional options that respondents consider could address charging volatility. We request that if you propose additional options in your response you consider the criteria for assessment that we have set out, including any proposed modifications to the criteria.

## Option 1: Improved information provision

### Specific questions in relation to option 1:

**Question 3.3:** Do code and licence charge notification differences in each network sector create problems in managing charge changes?

**Question 3.4:** What information would you like the network operators to provide, that they currently do not, in order to help improve predictability of network charges for different customer groups? This should include:

- a) what information you would like to see in their business plan submissions, and
- b) what information you would like to see provided on an ongoing basis.

**Question 3.5:** What information do you think we could provide, that the network operators cannot, that would benefit you in terms of improving predictability of network charges?

3.6. This option considers what improvements can be made to how we and the network operators (NWOs) communicate changes in allowed revenues and network charges to other industry participants.

3.7. We consider that improving information provision:

- reduces volatility risk faced by suppliers by improving the predictability of changes
- will not adversely impact the NWOs as it will not create any additional cash-flow risk
- improves transparency in relation to network performance
- is consistent with our wider duties to promote competition, by reducing potential barriers to entry in the retail market, and promotes quality and value to customers in the energy market.

3.8. We have not identified any negative consequences of implementing this option. We consider that improvements can be made by both us and the wider industry to improve both the predictability of allowed revenues and also charges.

## Current requirements and processes

3.9. Each NWO must hold a licence<sup>20</sup> and abide by an industry code<sup>21</sup> in order to operate in the gas or electricity market. Both impose requirements on when notice of network charge changes must be given to users of the network and restrictions on when changes can be made. The arrangements vary by network sector and are outlined in Appendix 3. We invite respondents' views on whether having different arrangements in each sector causes additional problems.

3.10. In the distribution sector the industry codes also govern the provision of forecasts of allowed revenues by NWOs to users of the network. In the transmission sector information is also provided on expected revenue and charge changes. Table 3.2 outlines the information provided and further detail and links to the latest reports can be found in Appendix 3. There is also a Charging Methodologies Forum for each network sector where network charges and changes in allowed revenue are further discussed and explained.

**Table 3.2: Current information provided by NWOs to users of the network**

Network sector	Information provided
Gas distribution	UNC0186 quarterly reports contain a five year forecast of the components of total allowed revenues
Electricity distribution	DCP066 quarterly reports contain a five year forecast of the components of total allowed revenues
Gas transmission	Information on forecast allowed revenues produced in the same format as for gas distribution
Electricity transmission	Condition 5 reports produced at least once per year indicate expected TNUoS tariffs for five years ahead

3.11. This consultation is concerned with addressing changes to allowed revenues and charges arising from the price control settlement in relation to both setting the ex ante allowances at the price review (ie at April 2013 for RIIO-T1 and GD1), and the annual update of allowed revenues.

3.12. In setting the ex ante allowance during the price review, we expect NWOs to set out the expected evolution of revenues/charges in their business plans. We also set out the expected level of revenues and changes in our initial and final proposals documents. Following the setting of ex ante allowances, allowed revenues can change during a price control period. There are mechanistic rules set out in the licence that drive these changes. For example, through revenue drivers or incentive

<sup>20</sup> Section 5(1) of the Gas Act 1986 (as amended) and section 4(1) of the Electricity Act 1989 (as amended) set out that companies involved in the generation, distribution, transmission, supply, transportation, shipping or provision through interconnectors of electricity or gas require licences, unless specifically excluded from doing so by the Secretary of State.

<sup>21</sup> The licenses require the establishment of a number of multilateral industry codes that underpin the gas and electricity markets. These codes establish detailed rules for industry that govern market operation, the terms for connection and access to energy networks.

mechanisms, or through more discretionary changes, which generally involve a period of public consultation.

### **Our initial view on potential changes**

3.13. We consider that better information provision for all sectors could improve the predictability of changes to charges, should reduce overall cash-flow risk to suppliers without increasing the risk faced by NWOs, and can be implemented with little or no additional cost or complexity. Improved information provision may also encourage better performance by the NWOs through greater transparency with regard to their performance and therefore strengthened corporate governance.

#### *Improvements by Ofgem*

3.14. We have already taken steps to encourage the NWOs to improve the way they engage with their stakeholders. As part of the current electricity distribution price control and the forthcoming RIIO price controls for gas distribution and transmission there is provision for NWOs to earn a reward if they can demonstrate that their engagement activity has led to exceptionally positive outcomes for their stakeholders. The scope of this mechanism is wide. For example, there is potential to reward a NWO that takes actions to improve their information provision, outside of arrangements already in place and for the benefit of suppliers and customers.

3.15. We engage widely with stakeholders on potential changes when setting NWOs' allowed revenues during a price control review. Respondents to the GDNs' business plan submissions last November<sup>22</sup> indicated that the GDNs did not set out clearly the proposed changes to revenues and impact on customers' charges in a consistent way to allow comparison of the impact across the GDNs. We are considering what improvements we can make to the reporting requirements for the next electricity distribution price control (RIIO-ED1) business plan submissions to ensure that it contains information that is easily understood by all parties. We would welcome respondents' suggestions on what information they would find useful.

3.16. We generally consult on material changes to allowed revenues within price controls, eg additional project funding or the use of uncertainty mechanisms. However, we consider that there might be areas where we can make more information available to network users (or require NWOs to publish such information). For example, we could:

- publish the annual Regulatory Instructions and Guidance (RIGs) that all NWOs submit to us (or require the NWOs to do so)
- publish NWOs' performance against their incentive targets
- publish initial NWO requests for additional funding, eg when they trigger an uncertainty mechanism

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<sup>22</sup><http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=325&refer=Networks/GasDist/RIIO-GD1/ConRes>

- make our new RIIO financial model available to all parties in order that forecast changes in allowed revenue can be modelled
- publish the results of the annual iteration of the financial model each November/December.

3.17. In respect of the last two items, we envisage setting the annual change to allowed revenues for RIIO-T1 and GD1 through the use of a publicly available financial model. The annual iteration of this model will capture changes to allowed revenues due to changes in financial parameters, additional allowed revenues in relation to uncertainty mechanisms, and through the totex incentive mechanism.<sup>23</sup>

3.18. We consider that that the financial model will provide a useful tool to ensure stakeholders understand the reasons for revenue changes (as the model user can verify the impact of the new input value on allowed revenues). The model will also be a valuable tool for forecasting allowed revenue changes over the price control period, eg drawing on both market forecast data (in respect to inflation) and data provided.

3.19. Before coming to a firm conclusion on additional improvements we can make we will need to consider further any data confidentiality issues. We also want to avoid duplicating the publication of such information where this is already provided, eg through industry code processes. We would particularly welcome views on what information respondents consider useful, and which is not currently provided.

#### *Improvements by the industry*

3.20. Information exchange processes are already in place as set out in Table 3.2. However, stakeholders have indicated to us that they think the information provided could be improved to help them understand potential changes to network charges and therefore improve predictability. We note recent industry code change proposals that have been raised in a number of sectors to try and address some of the concerns around inadequate information provision. We encourage all industry participants to review the current processes and work together to improve information provision.

3.21. In particular, we encourage the development of changes to the forecasts provided to also capture expected changes to charges as well as changes to allowed revenues. We think this development would be a key benefit for suppliers and we would encourage the industry to look at how this could be usefully implemented. We understand that network charges are the output of the charging methodologies which rely on a number of inputs. There may be difficulties in forecasting these inputs further in advance of the current timescales but we think this is an area that should be looked at in more depth. Potentially, the NWOs could provide scenarios around

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<sup>23</sup> For an explanation of the totex incentive mechanism, Decision on strategy for the next transmission and gas distribution price controls - RIIO-T1 and GD1 Financial issues , Chapter 7: <http://www.ofgem.gov.uk/Networks/GasDistr/RIIO-GD1/ConRes/Documents1/GD1decisionfinance.pdf>

their forecasts to help suppliers further understand what impacts network charges in different customer groups.

3.22. We will continue to examine any steps taken by parties to implement such improvements and where changes are not progressed in a timely manner we may investigate the possibility of introducing licence requirements to achieve the same ends.

## Option 2: Restricting the frequency of intra-year charge changes

### Specific questions in relation to option 2:

**Question 3.6:** In the last five years how frequently have networks introduced intra-year changes? What were the main reasons for these changes?

**Question 3.7:** Are there any business processes that would mean only allowing one change per year on 1 April would not be feasible?

**Question 3.8:** Do you think that there should be exemptions that would allow for changes due to specific events? Do you think these events should include the occurrence of errors when calculating charges or changes to the charging methodologies? Are there any other events that should potentially be exempt?

**Question 3.9:** Do you agree with our proposed change to the penalty for over or under recoveries were this option to be implemented?

**Question 3.10:** Do you agree with our initial view that there should be a two year lag on adjustments due to the over or under recovery of revenue through the correction factor?

**Question 3.11:** Are you aware of any errors that have been made when calculating network charges in sectors other than electricity distribution?

**Question 3.12:** Do you think that introducing an additional licence condition to penalise NWOs when they make charge calculation errors is warranted?

3.23. Under this option we are considering restricting the number of times network charges can be changed during a year.

3.24. We think that restricting intra-year charge changes:

- will remove or reduce intra-year volatility risk facing suppliers
- will result in limited additional cash-flow risk for NWOs
- simplifies the energy market and potentially reduces administration costs
- is consistent with our wider duties to promote competition, by reducing potential barriers to entry in the retail market
- could cause temporal impacts on the cost reflectivity of charges.

3.25. We have also identified additional changes that will be required were this option to be implemented. We also discuss below potential exemptions from these restrictions and seek respondents' views on these.

## Current requirements and processes

3.26. Each licence requires the licensee to take appropriate steps/ use best endeavours to ensure the revenue they collect in any one year is not greater than allowed revenues determined under the price control settlement. A penalty is applied if allowed revenues are over or under recovered from customers in any year. The penalty equates to an interest charge on any difference, with rates varying by network sector (see Appendix 3 for details).

3.27. There are currently no restrictions on when network charges can be changed, although in both the licence and the industry codes NWOs are encouraged not to make changes other than on defined dates each year, generally 1 April and 1 October. Technically charges could be changed each day, as long as the required notice period is given, however most changes occur at the start of the regulatory year on 1 April. The charges set on this day reflect the NWOs' forecasts of what they will need to charge each customer in order to recover their allowed revenue for the year ahead.

3.28. When changes are made more than once per year it can be for a number of reasons:

- correction to ensure the recovery of allowed revenues, eg given updated demand forecasts
- changes to the charging methodology
- correction for errors when calculating charges.

3.29. In order to recover allowed revenues, NWOs must forecast total network demand, ie the units over which they recover revenues. Unless NWOs forecast demand precisely, they will over or under recover their total revenue allowance. NWOs are penalised for over or under recovering revenues outside a set band. The penal rates provide them with an incentive to forecast accurately. However, the penal rates also mean that NWOs introduce intra-year charge changes to correct for differences between forecast and actual (or an updated forecast) of demand. Additionally some other components of allowed revenue for the year ahead must be forecast, for example the correction factor (the over or under recovery of allowed revenues in the preceding year), innovation funding, some pass through items, some revenue drivers and some incentive payments.

3.30. The charging methodologies which translate allowed revenues into individual customer charges are governed by the industry codes; hence proposals to change them can be made at any time. Such changes may add to charging volatility as they affect the calculation of customers' charges. We note that the industry code governing electricity transmission does not allow methodology changes outside of 1 April, unless in exceptional circumstances and by the consent of the Authority.<sup>24</sup> The current arrangements for other sectors allow changes to charging methodologies at

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<sup>24</sup> Ofgem is governed by the Gas and Electricity Markets Authority (GEMA), consisting of non-executive and executive members.

any time. We have also seen, particularly in the last year, that errors can be made by the NWOs when calculating charges using the charging methodologies. This issue has become apparent in the electricity distribution sector. We are not aware that this has been a problem for the other sectors but welcome views on whether this is an issue that affects all networks.

### **Our initial view on potential changes**

3.31. We are considering whether the current arrangements, which in effect do not restrict when charges can be changed, should be amended. We think the options for change are:

- restrict to two changes per year on 1 April and 1 October
- restrict to one change per year on 1 April.

3.32. Our initial view is that restricting to two changes would not provide much improvement on the current situation, as generally charges are not changed outside of these two dates. We think that restricting to one change on 1 April each year would be more beneficial.

3.33. We realise there may be some industry processes that prevent the restriction to one change per year. In particular, we understand that parts of gas transmission charges (TO exit capacity charge and TO entry capacity reserve prices) are set on 1 October each year. Commodity charges are set on 1 April but can also be changed on 1 October. We are particularly keen to hear the views of those parties operating in the gas transmission and gas distribution sectors to gauge the impact of intra-year charge restrictions on their business processes.

3.34. Restricting changes to network charges to once per year would reduce intra-year volatility and therefore we think it will improve predictability on the timing of changes for both suppliers and customers. It reduces the risk on the supplier of unforeseen network charge changes, which may reduce any risk premium included in customers' bills. Additionally, some customers are on contracts where their energy bill will automatically change when network charges change. For these customers, restricting intra-year network charge changes would provide more certainty on the costs that they will face over the coming year.

3.35. We also think that restricting the number of intra-year changes would simplify the current regime and potentially reduce administration costs to both NWOs and suppliers arising from changes to charges. This ultimately reduces customers' bills.

3.36. The proposals could though involve some additional cash-flow risk to NWOs if they are unable to readjust charges intra-year to recover allowed revenues. However, we consider that such risk transfer is minimal as any impact would be temporary given that charges would still be updated once each year.

3.37. We are considering whether there are benefits of exempting certain activities from these restrictions. Exemptions could be provided for within the licence via a

facility for the Authority to direct that a change be made outside of 1 April, or we could specify certain events as exemptions. We consider there are two specific events where it may be beneficial to allow for charges to change within year: correcting for charge calculation errors and for changes to the charging methodologies.

3.38. Our initial view is that there may be limited benefit in exempting changes to the charging methodologies from the 1 April change restriction, but we envisage situations may occur that would warrant some flexibility. We note that currently in the electricity transmission sector changes to the methodologies can only be implemented on 1 April, except in exceptional circumstances.

3.39. We have more concerns with not allowing changes to charges that will correct for calculation errors. Errors could materially impact the charge an individual customer pays in any given year. We consider that there are benefits of a NWO correcting for errors at the earliest opportunity, in order that customers pay the correct cost-reflective charge. That said, we are aware that many customers would not immediately see the impact of the correction as their energy tariff, set by their supplier, is unlikely to automatically adjust for changes. Exempting the correction of errors would therefore still leave suppliers bearing the volatility risk. We discuss further the impact of charge calculation errors and what other measures we are considering implementing to prevent them occurring in the first place in paragraph 3.45 below.

*Additional requirements if implemented*

3.40. We see two additional requirements were we to implement this option. The first is to consider changes to the current penalty rate for over or under recoveries. The second is to consider how to deal with the potential for larger annual adjustments for over or under recoveries as intra-year changes will not be allowed for the purpose of preventing these.

3.41. If this option is implemented, we are minded to relax the penalty rate for over or under recovery of allowed revenue. The penalty is intended to incentivise the licensee to correctly forecast the drivers of costs to service each customer. Perversely it therefore incentivises intra-year charge changes. We consider that keeping the penalty rate but widening the band before any penalty is applied is appropriate as it gives more flexibility on the value of over or under recoveries but keeps the incentive on the NWOs to forecast accurately. We would welcome respondents' views on changes to the size of the band.

3.42. We are also proposing to include a mechanism where we consider NWOs' performance over a number of years, and apply a penalty where there is persistent (or systematic) over or under recovery. Similar arrangement already exists in gas distribution and gas transmission (see Appendix 3), and we propose to extend these arrangements to all sectors.

3.43. To overcome the second potential issue we could introduce a mechanism to smooth over or under recoveries, or we could increase the lag in the adjustment.

Currently there is a one year lag in the adjustment, but as charges are set before the close of the year an estimate of the over or under recovery must be used. The magnitude of the adjustment will also not be known in advance, although NWOs should be able to provide a forecast. A smoothing mechanism could also be applied to limit the magnitude of any change in allowed revenues due to the addition of under recovered revenues or subtraction of over recovered revenues from the year before.

3.44. Delaying revenue recovery comes at a cost to NWOs as they must finance this delay. This in the end will be paid by customers. With this in mind we consider that, if this option is implemented, increasing the lag on the adjustment for over or under recoveries to two years is preferential, ie an adjustment for over or under recovery in year  $t$  impacts network charges in year  $t+2$ . This would both improve predictability and remove the need to estimate the adjustment when setting charges and true-up later. It is also the least complex mechanism to implement.

#### *Charge calculation errors*

3.45. We would welcome respondents' views on whether we should exempt the correction of errors from any intra-year restrictions on changes in charges.

3.46. We would also welcome respondents' views on whether we should introduce a penalty for errors made when applying the charging methodologies to calculate network charges. We envisage that if implemented the penalty would act to reduce NWOs' allowed revenues if errors are made. We have not reached a minded to position on the introduction of a penalty mechanism as we would like to take into account the views of respondents on whether this is a key concern across the all NWOs or specific to the electricity distribution sector.

### **Option 3: Increasing the lag on changes due to incentive rewards or penalties**

#### **Specific questions in relation to option 3:**

**Question 3.13:** What do you consider to be an appropriate notice period for changes to allowed revenues?

**Question 3.14:** Do you consider there to be any potential exemptions to our proposal to lag all incentive adjustments?

3.47. In this option we are considering applying a lag on adjustments to allowed revenues arising from incentive rewards or penalties and also the appropriate lag period.

3.48. We think that lagging adjustments to allowed revenues from incentive payments:

- improves predictability and therefore reduces the volatility risk borne by suppliers and customers
- is consistent with our wider duties to promote competition, by reducing potential barriers to entry in the retail market
- could weaken the incentive framework.

3.49. There are a range of incentives across the four network sectors. We consider that in the majority of cases a two year lag on adjustments would be beneficial. By a two year lag, we mean that the reward/penalty for NWOs performance in year t will feed through into charges in year t+2. In most cases, this should provide at least one year's notice of the expected change in charges.

### **Current requirements and processes**

3.50. As part of the price control settlement a range of incentives act to increase or decrease a NWO's allowed revenue based on their actual performance. Under the RIIO framework additional emphasis will be put on delivering agreed outputs. The NWOs will be able to earn rewards for improved performance, or be penalised where agreed outputs are not met.

3.51. Many incentive mechanisms under the current price control framework and proposed under the RIIO framework are already designed to work on the basis of a two year lag which will provide network users at least one years advance notice of changes, ie adjustments for incentives earned in year t will be reported in year t+1 and will impact network charges in year t+2. By the end of year t, NWOs should be able to set out the expected impact on allowed revenues. We discussed information exchange under option 1.

3.52. However, there are some discretionary awards (eg stakeholder elements of the broad measure in electricity and gas distribution) where the NWOs will not be able to forecast the impact in advance of the Authority making a determination. For the stakeholder engagement element of the proposed broad measure, in the electricity distribution price review 5 (DPCR5), NWOs performance in year t will be assessed by us in year t+1, and any reward will be reflected in charges in year t+2. Although there is a two year lag between NWOs performance and any resulting penalty, the discretionary nature of the reward means that NWOs and network users will not have certainty in relation to the expected change until we make our determination in t+1.

3.53. As part of the RIIO incentive framework we also intend to introduce more timely adjustments for under or over spend through the totex incentive mechanism. This mechanism will adjust allowed revenues annually but with a two year lag. The adjustment is equal to the proportion of any under or over spend that is kept/borne by the NWO. As a simple example, if the totex incentive rate is 50 per cent and the NWO under spends relative to its allowances by £100, the NWO retains £50 of that under spend and their customers benefit by £50 by means of reduced network charges.

3.54. There are some incentive mechanisms which currently do not provide network users with this period of visibility in the expected change. For example, the environmental emissions incentive (EEI) for shrinkage in gas distribution is based on the forecast of expected performance within the charging year, and forecast error is then corrected in year  $t+1$ .<sup>25</sup> The potential for forecast error may undermine predictability of charges. Under our proposals, we would introduce a lag on such incentive mechanisms which would avoid the need to forecast performance and improve the predictability of charge changes.

### **Our initial view on potential changes**

3.55. We think there are potential benefits of consistently applying a two year gap or lag between the year in which performance is being assessed against the incentive target, and the change to NWOs' allowed revenues and hence charges. In most instances, such a lag should provide at least one year's notice of the expected change in charges.

3.56. However, as discussed in paragraph 3.52 there are some instances where this period of notice of expected changes would not be possible as the final decision on the magnitude of the adjustment rests with the Authority. In these specific instances, we do not intend to increase the lag beyond two years. We consider to do so would dampen the intended incentive arrangements. We would welcome respondents' views on this issue.

3.57. In addition, in some limited instances, the benefits of a two year lag in terms of improved predictability to charge changes might not outweigh the cost, eg in terms of weakening the incentive mechanism and/or creating additional complexity. For example, if the NWO can provide an accurate forecast of the expected reward/penalty for future charging years, there might be limited benefit to lagging such incentives. We would welcome respondents' views on any potential exemptions to our proposal to lag all incentive mechanisms by two years.

3.58. Any delays to the recovery of NWOs' allowed revenues, from the introduction of lags, will be net present value neutral, ie the NWOs will recover the cost of financing the delay in revenues from customers. The majority of incentives are symmetrical; hence there is no a priori expectation that customers would systematically face higher or lower charges to cover these additional financing costs.

3.59. We do not envisage that this option would put materially greater cash-flow risk on the NWOs. The majority of adjustments discussed under this option are not direct payments for costs that the NWOs have occurred. It would improve predictability for suppliers, enabling them to better price network charges into the contracts that they offer customers and thus reduce cash-flow risk on them.

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<sup>25</sup> For example, see: Special Conditions to the Licensee (DN): Part E –Wales and West Distribution Network, Condition E9:  
[http://epr.ofgem.gov.uk/document\\_fetch.php?documentid=14863](http://epr.ofgem.gov.uk/document_fetch.php?documentid=14863)

3.60. While we see that further increasing the lag could further improve predictability, there are potential drawback in terms of the effectiveness of the incentive framework. We would like views on whether respondents think a two year lag is adequate or what the reasoning is for the added benefit of an additional years lag, as well as the reasons for any proposed exceptions to this general rule.

## **Option 4: Increasing the lag on changes due to uncertainty mechanisms**

### **Specific questions in relation to option 4:**

**Question 3.15:** Do you agree or disagree with our initial assessment of whether a lag should be applied to the following uncertainty mechanisms? Please explain your reasoning.

- a) indexation
- b) pass through costs
- c) revenue drivers
- d) within period determinations
- e) reopeners
- f) innovation funding

3.61. We think that lagging adjustments to allowed revenues for costs determined under the provisions of an uncertainty mechanism:

- improves predictability and therefore reduces the volatility risk borne by suppliers and customers
- is consistent with our wider duties to promote competition, by reducing potential barriers to entry in the retail market
- has a cost impact on the NWOs which ultimately is paid by customers
- could cause financeability concerns for the NWOs, impacting on our duty to have regard to the need to secure that NWOs are able to finance their regulated activity.

3.62. On balance we do not think that it is beneficial to automatically lag all adjustments to allowed revenues due to uncertainty mechanisms. Such a measure could increase NWOs cash-flow risk and financing costs, which we consider could outweigh the potential benefits in terms of more predictable or stable charges. We consider that there are some improvements that can be made and we discuss these below.

### **Current requirements and processes**

3.63. Uncertainty mechanisms are used to provide NWOs protection against the risk that additional costs may arise during a price control period that were not accounted for when setting allowed revenues due to a lack of certainty on timing and/or the magnitude of such costs.

3.64. Uncertainty mechanisms can take many forms:

- indexation to take account of retail price inflation and changes in the cost of debt
- pass through of costs where the NWO has limited control
- revenue drivers which mechanistically adjust allowed revenues when trigger events occur
- within period determinations for additional funding to cover additional costs generally associated with new investment projects
- reopeners to recover costs that NWOs have been exposed to but were not provided for upfront
- funding for innovation projects through the Low Carbon Network Fund and innovation stimulus.

3.65. We have already set out our policy for uncertainty mechanisms for the RIIO price controls as part of our March strategy decision.<sup>26</sup> Similar policy formed the decision making process in the last electricity distribution price control review (DPCR5). The important factors to note are that mechanisms are to be used in the minimum of circumstances and only where there is clear evidence of the benefits that they bring. These include reducing the risk on consumers of potential inaccurate forecasts of expenditure, and reducing the risk on NWOs by providing a mechanism that allows them to recover additional costs when they arise.

3.66. We acknowledge that uncertainty mechanisms do increase volatility in allowed revenues and hence add to the volatility of network charges. They are however designed in order to limit this draw back. For example, through limiting when changes to allowed revenues can be made, as is the case for reopeners, or by setting the unit cost upfront and therefore allowing changes in relation to uncertain volumes (which can be forecast by the NWOs), as is the case for revenue drivers.

### **Our initial view on potential changes**

3.67. In contrast to our initial view on lagging incentives we think that lags on uncertainty mechanisms may not always be beneficial and the decision should be taken on a case by case basis. Unlike most incentive payments, changes in revenue due to uncertainty mechanisms are directly linked to the costs the NWOs' face. Therefore introducing lags could increase NWOs' cash-flow risk, their financing costs, and ultimately lead to an increase in the overall level of network charges. Some changes in relation to uncertain costs are also predictable (eg indexation for inflation, and cost of debt indexation). We discuss below our initial views on including lags for each broad type of mechanism.

3.68. *Indexation mechanisms:* We do not think that it is appropriate to make changes to our approach for the annual indexation of allowed revenues for inflation and cost of debt. These annual changes are predictable as they are based on

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<sup>26</sup>Decision on strategy for the next transmission and gas distribution price controls – RIIO-T1 and GD1 Uncertainty mechanisms (ref 47/11)

publically available information.<sup>27</sup> We therefore do not think that the small improvement in predictability from lagging would be warranted given the prospective increase in NWO cash-flow risk and additional complexity.

3.69. *Cost pass through*: Currently the majority of pass through costs are within year adjustments, eg the NWOs must forecast these costs when setting charges.<sup>28</sup> As discussed earlier there are disadvantages to this approach as any forecasting error will need to be “trued up” via charges in the following year. We try and minimise this by providing an ex ante allowance for pass through costs and therefore minimising adjustments. We are also considering whether lagging these adjustments would be beneficial. We will take into account the materiality of the adjustment, whether the expected value of the adjustment can be accurately forecast and respondents views before coming to a decision.

3.70. *Revenue drivers*: Our initial view is that it may not be appropriate to lag adjustments to allowed revenues due to the use of revenue drivers and that judgement should be made on a case by case basis. We are still developing what revenue drivers will apply in RIIO-T1 and GD1 and we will consider further their likely impact on volatility in allowed revenues. We will assess against the criteria discussed in this consultation. The same criteria will apply when developing potential revenue drivers for RIIO-ED1.

3.71. *Reopeners*: For costs recovered through reopener mechanisms it is likely that there will already have been some delay in the recovery of these costs. For example, we have a reopener for the gas distribution sector to allow for recovery of additional costs incurred for the implementation of additional street works legislation. We have proposed, for the RIIO price controls, that adjustments to revenues to recover these costs be restricted to two opportunities during the price control period. The NWOs also have to demonstrate that costs reach a materiality threshold, one per cent of revenues (net of the totex incentive) to trigger the reopener. The proposed restriction to two windows and the inclusion of a materiality threshold is designed to aid predictability in charges. However, these restrictions mean that a NWO that incurs costs in year one of the price control will not recover such costs until year four (assuming the costs meet the materiality test). These restrictions already introduce some cash-flow and financing risk for NWOs but which we consider are justified in terms of improving predictability and minimising the regulatory burden. We therefore do not propose changes to general reopeners.

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<sup>27</sup> In the RIIO-T1 and GD1 licence conditions, our intention is to base the allowed change in revenues on a forecast of the average Retail Prices Index over the period April to March of year t. (see: <http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=117&refer=Networks/Tran/s/PriceControls/RIIO-T1/ConRes>). For the cost of debt indexation, our intention is to use a 10 year trailing average up to 31 October in year t-1.

<sup>28</sup> For example, see: Special Conditions to the Licensee (DN): Part E –Wales and West Distribution Network, Condition E3: [http://epr.ofgem.gov.uk/document\\_fetch.php?documentid=14863](http://epr.ofgem.gov.uk/document_fetch.php?documentid=14863)

3.72. *Within period determinations*: These allow for adjustments to allowed revenues to recover the costs of additional infrastructure investment. For example, a proportion of electricity transmission network investment expenditure is recovered through this process. Introducing a lag between a decision to allow recovery of costs and the actual recovery of those costs through charges to customers could potentially either delay the start of these projects or require the NWOs to seek intermediary funding from investors at potentially higher cost than the cost to suppliers of funding the volatility risk.

3.73. For both reopeners and within period determinations the impact on allowed revenues should not come as a surprise to the industry. This is because they come at the end of a consultation process. As discussed under option 1 we and the NWOs can make improvements in how information is shared to make sure this prior notice is available.

3.74. *Innovation costs*: Funding for innovation through the Innovation Funding Incentive (IFI) in current price controls and through the Network Innovation Allowance (NIA) in the RIIO price controls is collected within year, ie expected spend is forecast for the year ahead and charged to customers within that year. Other funding, through the Low Carbon Networks Fund or Network Innovation Competition, is directed by the Authority in year t-1. Our initial view is that introducing lags here would not be appropriate as it may delay projects and reduce the incentive on the networks to innovate. The amounts are relatively small, therefore have limited impact on volatility, and are predictable as the maximum adjustments will be set out in the licences.

3.75. We think that the current policy of limiting the use of uncertainty mechanisms, and where possible limiting the number of adjustments (as seen in the use of reopener windows and materiality thresholds) provides the right balance between maintaining predictability for suppliers and customers, and ensuring financeability of the NWOs. We welcome respondents' views on whether they agree with our initial assessment of the treatment of each type of mechanism in this option.

## Option 5: Imposing a cap and collar on allowed revenue changes

### Specific questions in relation to option 5:

**Question 3.16:** Do you agree or disagree with our initial assessment that the benefits of introducing one of the three options for a cap and collar do not outweigh the drawbacks?

**Question 3.17:** Do you consider there are any other options for the design of a cap and collar mechanism that we have not considered?

**Question 3.18:** Do you have any views on whether a cap and collar, if implemented, should be symmetric or asymmetric?

3.76. We are considering imposing a cap and collar which would prevent allowed revenues going above or below a defined band each year.

3.77. We think that imposing a cap and collar on allowed revenues:

- reduces the volatility risk borne by suppliers and customers, by imposing a maximum allowed change on allowed revenues
- is consistent with our wider duties to promote competition, by reducing potential barriers to entry in the retail market
- introduces additional complexity to the regulatory regime
- has a cost impact on the NWOs which ultimately is paid by customers and could weaken the incentive framework
- could cause financeability concerns for the NWOs, impacting on our duty to have regard to the need to secure that NWOs are able to finance their regulated activity
- diminishes signals to investors as impact of NWO's performance is smeared over future years.

3.78. On balance, we consider that the benefits to suppliers (and their customers) in terms of a reduced risk are unlikely to outweigh the potential increase in cash-flow risk for NWOs, and the additional complexity this option would introduce to the regulatory regime.

### **Current requirements and processes**

3.79. There is currently no restriction on how much allowed revenues can change from one year to the next. There is also no cap on how much charges can change. The NWOs are obliged by their licence to calculate charges in order that by the end of the year allowed revenues have been recovered from users of the network, and no more or less.

### **Our initial view on potential changes**

3.80. When calculating charges there are two factors that can cause changes. One is a change in allowed revenues and the other is a change in how these allowed revenues are recovered from each customer. A cap and collar could be applied to either process, or to both. This consultation is not discussing the second option, applying a cap and collar on individual customers' network charges. We briefly discussed the capping of changes to individual charges in chapter 1 as one supplier has raised this through an industry code change proposal to the charging methodology for electricity transmission.

3.81. There are several forms that a cap and collar could take:

- i. a limit on increases or decreases in allowed revenue when compared to the ex ante allowed revenues as set at during the price control review
- ii. a limit on outturn allowed revenues, when compared to a forecast of allowed revenues made the year ahead
- iii. a sliding scale for required notice periods of charge changes, the larger the change the longer the period of notice required.

3.82. Under the three mechanisms above, the arrangements could be symmetrical, ie a cap and collar, or asymmetrical, ie just a cap preventing revenues going above a defined limit. Under a symmetrical cap and collar NWOs could potentially recover more revenue in one year than allowed as the cap and collar would force a minimum revenue recovery.

3.83. At each price review we set the allowed base revenues over the price control period (ie for an eight year period). In relation to mechanism (i), introducing a cap and collar would prevent changes above or below a set boundary around this base revenue. Any changes that fall outside of this boundary will be deferred until future years. Potentially the deferral could last for a number of years if the cap is continually breached.

3.84. Limiting outturn allowed revenues when compared to a forecast, as per mechanism (ii), would allow for a little more flexibility. A supplier proposed this approach in correspondence as part of the current RIIO price control reviews. We envisage that this may work as follows:

- In January/February of year t-1, the NWO publishes final charges for year t as well as forecast allowed revenues for year t+1.
- In the January/February of year t they will publish final charges for year t+1. Allowed revenue for year t+1 will not be able to exceed or be below a fixed percentage of that forecast for year t+1 made in year t-1.

3.85. We have concerns that this mechanism may introduce a perverse incentive for the NWO to intentionally overstate their forecast of allowed revenues in order to mitigate the risk that the cap on the allowed charges relative to forecast is reached. If NWOs behaved in such a way, this option would undermine the accuracy of revenue forecasts and make charge changes less predictable.

3.86. Mechanism (iii) prevents changes above defined limits if the required notice period has not been provided. This approach was suggested by SGN in their business plan proposals for RIIO-GD1 (see Appendix 2). We note that most of the changes to charges that will take effect on 1 April each year will not be finalised until around four months before, ie until we make a direction in the November prior to the charging year. However, most changes directed in November should be predictable. Thus, we consider the important point is not the notice period per se but whether the change was predicted.

3.87. Of the agreed changes set out in November prior to the charging year, certain uncertainty mechanisms (eg reopeners) and incentive rewards or penalties are not predictable. However, as we described under option 4, we already impose restrictions on the ability of NWOs to recover uncertain costs, ie through limiting reopeners and materiality thresholds. We also propose to consider on a case-by-case basis if we can improve predictability in relation to uncertainty mechanisms. Under option 3, we would lag incentive mechanisms to provide an effective notice period. More generally, option 2 (if implemented) would limit intra-year charge changes to 1 April which provides an effective notice period.

3.88. We therefore consider that our other proposals, if implemented, largely address the issue that mechanism (iii) would seek to address.

3.89. Under a cap and collar, NWOs would still recover their efficient costs as allowed through the price control settlement. Revenues above or below the cap would be deferred to later years. There will be a cost to NWOs of financing these delays in revenue recovery, ie the mechanism will be net present value neutral, and this would be paid for by customers.

3.90. The crucial issue is the level of the cap and collar. Too restrictive and the cap could introduce cash-flow risks from the build-up of significant deferrals of revenue when persistently breached. At the extreme it could pose financeability concerns for the NWOs which in the long run will be viewed as increasing the riskiness of network businesses, and therefore increase the cost of operating the networks. Too high, and the cap would be ineffectual in improving predictability.

3.91. The introduction of a cap and collar may also dampen the link between NWOs' performance and the revenues they earn, and thereby weaken the price signal provided to investors in relation to network's performance.

3.92. Overall, we do not consider that the benefits of a cap and collar in terms of improved predictability outweigh the costs in terms of complexity, and a potential increase in NWOs cash-flow risk and financing costs. In particular, we consider that the benefits in relation to improvement in predictability are limited in the context of our proposed implementation of other options set out in this paper, namely, improved information provision (option 1), limitations on intra-year charges (option 2), lagging of incentive mechanisms (option 3), and consideration of improvements to uncertainty mechanisms on case-by-case basis (option 4).

## Timing of implementation

**Question 3.19:** Do you agree that if changes are needed in the gas distribution or transmission sectors that they should be implemented on 1 April 2013, the start of the next price control period?

**Question 3.20:** When should we apply any changes to the electricity distribution sector?

3.93. Implementation of many of the proposed options would require changes to the NWOs' licences. We envisage that, for the TOs and GDNs, this work would feed into the ongoing licence drafting work as part of the RIIO price control reviews. This would allow for amended licence conditions to be in place for 1 April 2013, the start of the next price control periods.

3.94. For the DNOs we consider there are two opportunities to introduce each option: introduce licence changes prior to the next price control, ie before 1 April 2015, or introduce for the start of RIIO-ED1 on 1 April 2015. We see potential benefits and concerns associated with both options.

3.95. In relation to the DNOs, the current price review runs from 1 April 2010 to 31 March 2015. In general, we seek to avoid changes to the regulatory framework within the price control period. Some of the options outlined above could have a material impact on the current framework, ie changing the timing of incentive rewards/penalties or uncertainty mechanisms (option 3 and 4) or introducing restrictions on allowed revenue changes (option 5). For these options, we would not propose to introduce changes during the current price control.

3.96. However, if the decision is to implement option 1, we consider improvements can be made prior to the next price control period. We also consider that if implemented option 2 could be introduced prior to RIIO-ED1 as we do not consider that it would cause material changes to the risk borne by NWOs. We welcome views from respondents on implementation of each option for the electricity distribution sector.

3.97. Industry codes may need to be brought into line with the licence in any changes were to be made. We would expect the industry to propose any changes to codes under the respective code governance arrangements.

## 4. Next Steps

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4.1. We intend to publish our decision in the summer taking into account the responses to this consultation. Our decision will conclude on what options we intend to implement and finalise the timing of implementation for each sector.

4.2. For the gas distribution, gas transmission and electricity transmission sectors our intention is to introduce any changes as a result of our decision for the start of the next price control review period on 1 April 2013.

4.3. For the electricity distribution sector our initial view is that we could introduce some options prior to the next price control, ie before 1 April 2015. However, we do not propose to introduce any option that may introduce substantive changes to existing price control arrangements.

4.4. Responses to this consultation should be received no later than 11 June 2012 and be addressed to Joanna Campbell ([joanna.campbell@ofgem.gov.uk](mailto:joanna.campbell@ofgem.gov.uk)). Further details about responding can be found in Appendix 1, including a copy of the questions posed in this document. Unless marked confidential, all responses will be published by placing them on our website.

## Appendices

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## Appendix 1 - Consultation response and questions

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1.1. Ofgem would like to hear the views of interested parties in relation to any of the issues set out in this document.

1.2. We would especially welcome responses to the specific questions which we have set out in each chapter and which are replicated below.

1.3. Responses should be received by 11 June 2012 and should be sent to:

Joanna Campbell  
Smarter Grids and Governance  
9 Millbank, London, SW1P 3GE  
020 7901 7094  
[joanna.campbell@ofgem.gov.uk](mailto:joanna.campbell@ofgem.gov.uk)

1.4. Unless marked confidential, all responses will be published by placing them in Ofgem's library and on its website [www.ofgem.gov.uk](http://www.ofgem.gov.uk). Respondents may request that their response is kept confidential. Ofgem shall respect this request, subject to any obligations to disclose information, for example, under the Freedom of Information Act 2000 or the Environmental Information Regulations 2004.

1.5. Respondents who wish to have their responses remain confidential should clearly mark the document/s to that effect and include the reasons for confidentiality. Respondents are asked to put any confidential material in the appendices to their responses.

1.6. Next steps: Following consideration of the responses to this consultation, Ofgem intends to publish its decision. Any questions on this document should, in the first instance, be directed to:

Joanna Campbell  
Smarter Grids and Governance  
9 Millbank, London, SW1P 3GE  
020 7901 7094  
[joanna.campbell@ofgem.gov.uk](mailto:joanna.campbell@ofgem.gov.uk)

### **CHAPTER: Two**

**Question 2.1:** Have we correctly characterised the scope of the problem we are trying to address?

**Question 2.2:** Are there certain market segments or groups of customers that are particularly affected by charging volatility?

**Question 2.3:** Do you agree with the assessment criteria? Are there additional criteria that we should adopt for our final assessment?

### **CHAPTER: Three**

**Question 3.1:** Do you have any further suggestions of what could be done to mitigate network charging volatility arising from the price control settlement?

**Question 3.2:** Do you agree with our initial assessment of each option?

#### **Specific questions in relation to option 1:**

**Question 3.3:** Do code and licence charge notification differences in each network sector create problems in managing charge changes?

**Question 3.4:** What information would you like the network operators to provide, that they currently do not, in order to help improve predictability of network charges for different customer groups? This should include:

a) what information you would like to see in their business plan submissions, and

b) what information you would like to see provided on an ongoing basis.

**Question 3.5:** What information do you think we could provide, that the network operators cannot, that would benefit you in terms of improving predictability of network charges?

#### **Specific questions in relation to option 2:**

**Question 3.6:** In the last five years how frequently have networks introduced intra-year changes? What were the main reasons for these changes?

**Question 3.7:** Are there any business processes that would mean only allowing one change per year on 1 April would not be feasible?

**Question 3.8:** Do you think that there should be exemptions that would allow for changes due to specific events? Do you think these events should include the occurrence of errors when calculating charges or changes to the charging methodologies? Are there any other events that should potentially be exempt?

**Question 3.9:** Do you agree with our proposed change to the penalty for over or under recoveries were this option to be implemented?

**Question 3.10:** Do you agree with our initial view that there should be a two year lag on adjustments due to the over or under recovery of revenue through the correction factor?

**Question 3.11:** Are you aware of any errors that have been made when calculating network charges in sectors other than electricity distribution?

**Question 3.12:** Do you think that introducing an additional licence condition to penalise NWOs when they make charge calculation errors is warranted?

#### **Specific questions in relation to option 3:**

**Question 3.13:** What do you consider to be an appropriate notice period for changes to allowed revenues?

**Question 3.14:** Do you consider there to be any potential exemptions to our proposal to lag all incentive adjustments?

#### **Specific questions in relation to option 4:**

**Question 3.15:** Do you agree or disagree with our initial assessment of whether a lag should be applied to the following uncertainty mechanisms? Please explain your reasoning.

- a) indexation
- b) pass through costs
- c) revenue drivers
- d) within period determinations
- e) reopeners
- f) innovation funding

**Specific questions in relation to option 5:**

**Question 3.16:** Do you agree or disagree with our initial assessment that the benefits of introducing one of the three options for a cap and collar do not outweigh the drawbacks?

**Question 3.17:** Do you consider there are any other options for the design of a cap and collar mechanism that we have not considered?

**Question 3.18:** Do you have any views on whether a cap and collar, if implemented, should be symmetric or asymmetric?

**Timing of implementation:**

**Question 3.19:** Do you agree that if changes are needed in the gas distribution or transmission sectors that they should be implemented on 1 April 2013, the start of the next price control period?

**Question 3.20:** When should we apply any changes to the electricity distribution sector?

## Appendix 2 - RIIO business plan submissions

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1.7. Under the RIIO framework we encouraged the GDNs and TOs to consider the impact of their business plan proposals on network charging volatility and consult with stakeholders on potential solutions.

1.8. National Grid Gas Distribution (NGGD)<sup>29</sup> canvassed the following options:

- spreading the correction factor (for over or under recovery of revenues) over more than one year
- imposing an absolute limit on annual price changes eg at 5%
- reducing the variability in factors leading to uncertainty
- relaxation of licence constraints on over or under recoveries.

1.9. Of these options, NGGD favoured reducing the impact of factors such as Supply Offtake Quantity (SOQ) (ie fixing this for charging purposes) and introducing a "rolling Annual Quantity (AQ)" (through a industry code modification<sup>30</sup>). It also favoured relaxing licence requirements around over or under recovery of allowed revenues. It also suggested reviewing the information it provides in quarterly industry reports to allow shippers, suppliers and customers to better predict movements in allowed revenues.

1.10. Northern Gas Networks (NGN)<sup>31</sup> also identified that SOQ changes are a material driver of transportation charges and have been difficult to predict, suggesting this element be isolated for the purposes of charging. It also suggested delaying certain revenue impacts such that only actual rather than forecast data are used in the setting of revenues each year. NGN was opposed to the option of placing a cap and collar on allowed revenue movements as well as smoothing over or under recoveries of allowed revenues on the basis that these mechanisms would, according to its analysis, add to uncertainty and volatility.

1.11. Scotia Gas Networks (SGN)<sup>32</sup> proposed a cap on price changes which would become more restrictive with shorter notification periods. For example, it suggested that the cap of 10 per cent apply when notice of less than five months of the price change is given, reducing to 5 per cent where notice is less than three months. Any required revenues not recovered because of the operation of the cap would be deferred to later years. SGN considered that uncertainty mechanisms not be included

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<sup>29</sup> Chapter 13, Section 9: <http://www.talkingnetworksngd.com/>

<sup>30</sup> We note that they raised change proposal modification UNC 380, but it has since been withdrawn as it is to be captured in ongoing work through Project Nexus, <http://gasgovernance.co.uk/nexus>

<sup>31</sup> Business Plan, Section 9.4: <http://www.northerngasnetworks.co.uk/documents/ngn-business-plan.pdf>

<sup>32</sup> Appendix C:

<http://www.sgn.co.uk/index.aspx?id=6557&rightColHeader=87&rightColContent=15&ri>

in assessing compliance with this cap given they are subject to consultation and their impact on charges is therefore sufficiently known in advance. It addressed the previous concern expressed by Ofgem that caps would reduce cost reflectivity by noting that this was only one element of ensuring the efficient operation of the network. It also proposed relaxing the restriction on the amount of over or under recovery that can be carried over from one charging year to the next, with required changes to associated interest penalties. It also proposed introducing a lag on some incentive mechanisms (ie removing the need to include forecast performance in the administration of penalties and rewards). It noted it would continue to provide quarterly information to shippers of expected price changes, including a summary of reasons for change.

1.12. National Grid (NG) Transmission (both Gas and Electricity)<sup>33</sup> resubmitted their business plans in March 2012. These revised plans included further details on how they have engaged with stakeholders to seek their views on charging volatility. NG highlight that the main suggestions from stakeholders were that it should publish more frequent and transparent forecasts, set pre-agreed timings for changes to charges with longer notice periods and consider fixed price products. Some stakeholders also felt that some form of smoothing may help but others had doubts. NG note that they have already taken steps to improve the information available.

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<sup>33</sup> Electricity stakeholder engagement process, Page 81: <http://www.talkingnetworkstx.com/electricityplan/default.aspx> Gas stakeholder engagement process, Page 67: <http://www.talkingnetworkstx.com/gastransmissionplan/default.aspx>

## Appendix 3 - Provisions in the licences and industry codes

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1.13. This appendix sets out the relevant licence conditions and relevant sections of the industry codes that relate to charge changes and required notice periods, and also details of the penalty rate for over or under recoveries in each network sector.

1.14. All licences can be found on the electronic public register on our website.<sup>34</sup>

### Charge changes and notification periods

#### Electricity distribution

##### *Licence*

- **Standard condition 14, para 11:** must give the Authority three months notice of charge changes and send to parties that have entered into a Use of System agreement.

##### *Distribution Connection and Use of System Code (DCUSA)*<sup>35</sup>

- **Clause 19:** 40 days notice of charge changes to be provided to the user. DNO shall use best endeavours not to vary charges outside of 1 April and 1 October.
- **Clause 35A:** by the fifth working day of May, August, November and February in each year DNOs shall send to the secretariat, and they shall publish on their website, tables of actual/forecast revenue position for years t-1 to t+4. Link to the latest report: <http://www.dcusa.co.uk/Public/Documents.aspx?t=10>

#### Gas distribution

##### *Licence*

- **Standard condition 4, para 2:** use all reasonable endeavours to provide the Authority 150 days notice of indicative charge changes. Give notice of final decision one month before change.
- **Standard special condition A4, para 2:** use all reasonable endeavours to provide the Authority 150 days notice of indicative charge changes. Give notice of final decision one month before change.
- **Standard special condition D11:** obliges the GDNs not to make changes outside of 1 April and requests that if they do make changes outside of 1 April

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<sup>34</sup> Licences: <http://epr.ofgem.gov.uk/index.php?pk=folder97241>

<sup>35</sup> DCUSA: <http://www.dcusa.co.uk/Public/DCUSADocuments.aspx?s=c>

that they inform the Authority not later than three months after the change is made.

*Uniform Network Code (UNC)*<sup>36</sup>

- **Principle document section B, para 1.8:** shall provide at least 2 months notice of charge changes to shippers.
- **Principle document section V, para 5.13:** produce a quarterly report (published in April, July, November and January) of forecast cost information projected forward five years. Link to the latest reports (UNC0186 Reports): <http://gasgovernance.co.uk/dcmf/270112>

## Electricity transmission

*Licence*

- **Standard condition C4, para 5:** give the Authority 150 days notice (except where the Authority consents to a shorter period) of indicative changes to use of system, except where changes are in relation to balancing services activity. Give notice of final decision one month before change.

*Connection and Use of System Code (CUSC)*<sup>37</sup>

- **Part 3.14.1:** where the company proposes a change to charges it shall notify the user as soon as is practicable after the proposal is made to the Authority.
- **Part 3.14.3:** not less than 2 months notice shall be provided. Unless the Authority determines otherwise.

*Other information provision*

- **Condition 5 reports:** The Authority requests National Grid to publish information at least once a year on the forecast future (at least five years) path of Transmission Network Use of System (TNUoS) tariffs under a range of credible generation and demand scenarios (consistent with those already contained in the Seven Year Statement). Latest report: <http://www.nationalgrid.com/uk/Electricity/Charges/gbchargingapprovalconditions/5/><sup>38</sup>

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<sup>36</sup> UNC: <http://gasgovernance.co.uk/UNC>

<sup>37</sup> CUSC: <http://www.nationalgrid.com/uk/Electricity/Codes/systemcode/contracts/>

<sup>38</sup> Please note that the latest full report is dated January 2011. Due to potential changes in the charging methodology as a result of Project TransmiT National Grid have delayed publication of the 2012 report.

## Gas transmission

### *Licence*

- **Standard condition 4, para 2:** use all reasonable endeavours to provide the Authority 150 days notice of indicative charge changes. Give notice of final decision one month before change.
- **Standard special condition A4, para 2:** use all reasonable endeavours to provide the Authority 150 days notice of indicative charge changes. Give notice of final decision one month before change.

### *Uniform Network Code (UNC)*

- **Principle document section B, para 1.8:** shall provide at least 2 months notice of charge changes to shippers.
- **Principle document section V, para 5.12:** in each calendar month the NTS Operator shall publish on a website transportation revenue information for the current and preceding months in the current formula year.

### *Other information provision*

- 5 Year TO and SO Revenue Forecast. NTS revenue forecasts produced on a consistent basis to that produced by the GDNs as a consequence of UNC0186. Latest reports (under TO and SO Revenue Report): <http://www.nationalgrid.com/uk/Gas/Charges/Tools/>

## Revenue restrictions and penalty rates

### Electricity distribution

#### *Licence*

- **Charge restriction condition 3, para 3.2:** The licensee, in setting Demand Use of System Charges, must take all appropriate steps within its power to ensure that, in Regulatory Year *t*, Regulated Combined Distribution Network Revenue does not exceed Combined Allowed Distribution Network Revenue.
- **Charge restriction condition 14:**
  - If Regulated Combined Distribution Network Revenue exceeds 103 per cent of Combined Allowed Distribution Network Revenue, the penalty rate is 3 per cent. If Regulated Combined Distribution Network Revenue is less than 97 per cent of Combined Allowed Distribution Network Revenue, the penalty rate is zero. In all other cases the penalty rate is 1.5 per cent.
  - If Regulated Combined Distribution Network Revenue exceeds 105 per cent of Combined Allowed Distribution Network Revenue, the licensee must provide an explanation to the Authority and must not increase its Use of System Charges during the next Regulatory Year.
  - If Regulated Combined Distribution Network Revenue is less than 90 per cent of Combined Allowed Distribution Network Revenue, the Authority

may specify the value of RDt-1 to be used in calculating the correction factor term (Kt).

## Gas distribution

### *Licence*

- **Special condition E2, para 2:** The licensee shall use its best endeavours in setting its charges to ensure that in respect of any Formula Year t the Distribution Network Transportation Activity Revenue for the Distribution Network (Rt) covered by this condition shall not exceed the maximum Distribution Network Transportation Activity Revenue (MRt) in that year.
- **Special condition E2, para 3:**
  - If in any Formula Year the Distribution Network Transportation Activity Revenue exceeds by more than 4 per cent the maximum Distribution Network Transportation Activity Revenue, the licensee shall provide the Authority with a written explanation and in the following year shall not increase prices unless the Authority has consented.
  - If in any two successive years the sum of Distribution Network Transportation Activity Revenue exceeds by more than 6 per cent the maximum Distribution Network Transportation Activity Revenue, the licensee shall, if the Authority requests, adjust its prices in order to not exceed again.
- **Special condition E4:** If in any Formula Year the Distribution Network Transportation Activity Revenue exceeds by 3 per cent or more the maximum Distribution Network Transportation Activity Revenue, the penalty rate is 3 per cent. If in any Formula Year the Distribution Network Transportation Activity Revenue is less than 3 per cent of the maximum Distribution Network Transportation Activity Revenue, the penalty rate is zero. In all other cases the penalty rate is 1.5 per cent.

## Electricity transmission

### *Licence*

- **Special condition D2/J2<sup>39</sup>, para 1:** The licensee shall use its best endeavours/take all appropriate steps to ensure that in any relevant year transmission network revenue shall not exceed the maximum revenue which shall be calculated in accordance with the formula given in the licence.
- **Special condition D2, para 2 (calculation of K):** Where transmission network revenue exceeds by more than 2.75 per cent the maximum revenue the penalty interest rate shall equal four, otherwise it shall equal zero.

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<sup>39</sup> Special condition D2 refers to National Grid Electricity Transmission plc's licence. Special condition J2 refers to SP Transmission Ltd's and Scottish Hydro Electric Transmission Ltd's licence.

- **Special condition J2, para 2 (calculation of K):** Where transmission network revenue exceeds by more than 2 per cent the maximum revenue the penalty interest rate shall equal four, otherwise it shall equal zero.

## Gas transmission

### *Licence*

- **Special condition C8B, para 1a:** The licensee shall use its best endeavours in setting its charges to ensure that in respect of any formula year the NTS transportation owner revenue shall not exceed the maximum NTS transportation owner revenue.
- **Special condition C8B, para 1b:**
  - If NTS transportation owner revenue exceeds by more than 4 per cent the maximum NTS transportation owner revenue, the licensee shall provide the Authority with a written explanation and in the following year shall not increase prices unless the Authority has consented.
  - If in any two successive years the sum of NTS transportation owner revenue exceeds by more than 6 per cent the maximum NTS transportation owner revenue, the licensee shall, if the Authority requests, adjust its prices in order to not exceed again.
- **Special condition C8B, para 3d:** Where NTS transportation owner revenue exceeds maximum NTS transportation owner revenue the penalty interest rate.

## Appendix 4 - Feedback Questionnaire

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1.15. Ofgem considers that consultation is at the heart of good policy development. We are keen to consider any comments or complaints about the manner in which this consultation has been conducted. In any case we would be keen to get your answers to the following questions:

1. Do you have any comments about the overall process, which was adopted for this consultation?
2. Do you have any comments about the overall tone and content of the report?
3. Was the report easy to read and understand, could it have been better written?
4. To what extent did the report's conclusions provide a balanced view?
5. To what extent did the report make reasoned recommendations for improvement?
6. Please add any further comments?

1.16. Please send your comments to:

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