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for all gas and electricity customers

RIIO-T1: Final Proposals for National Grid Electricity Transmission and National Grid Gas

Final decision – Overview document

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Overview:

This document sets out our Final Proposals for the transmission price controls for National Grid Electricity Transmission (NGET) and National Grid Gas (NGGT) from 1 April 2013 to 31 March 2021.

This is the first transmission price control to reflect the new RIIO (Revenue = Incentives + Innovation + Outputs) model. Under RIIO we are adopting a different process for setting price controls. Companies are required to develop and submit well-justified business plans, supported by the views of stakeholders, setting out what they will deliver. Those plans inform the setting of the price control components.

In light of responses to our consultation on Initial Proposals this document sets out our Final Proposals on: what NGET and NGGT will be required to deliver during the next Price Control Period; the incentives that will be placed around that delivery; the costs the companies will be able to recover and the arrangements for addressing risk and uncertainty around those costs; and the basis of the financial package for determining the companies' allowed revenues.

Associated documents

Supporting Documents

RIIO-T1: Final Proposals for NGET and NGGT - Outputs, incentives and innovation

RIIO-T1: Final Proposals for NGET and NGGT - Cost assessment and uncertainty

RIIO-T1: Final Proposals for NGGT and NGET - Finance

Associated Documents

RIIO-T1/GD1: Final Proposals - Real Price Effects and ongoing efficiency appendix

RIIO-T1: ET1 Final Proposals Financial Model

RIIO-T1: GT1 Final Proposals Financial Model

PKF Audit letter on the financial models

RIIO Reviews Financeability Study (Imrecon working with ECA)

Other documents

RIIO-T1: Final Proposals for the Gas Distribution Networks - Overview Document

RIIO-T1: Initial Proposals for National Grid Electricity Transmission plc and National Grid Gas plc - Headlines

Glossary for all the RIIO-T1 and RIIO-GD1 documents

Contents

Executive Summary

Britain's gas and electricity network companies face unprecedented challenges. They will need to invest over £30 billion over the next decade to develop smarter networks, to meet environmental challenges and to secure energy supplies. Against this backdrop, it is more important than ever that network companies can show consumers they are getting value for money.

This is the first price control to be conducted under our new RIIO model (Revenue = Incentives + Innovation + Outputs). Through RIIO-T1, we are setting the price control framework to apply to electricity and gas transmission companies from 1 April 2013 to 31 March 2021. The objective of RIIO is to encourage network companies to play a full role in the delivery of a sustainable energy sector, and to do so in a way that delivers value for money for existing and future consumers.

In this document we set out our Final Proposals for National Grid Electricity Transmission (NGET) and National Grid Gas (NGGT). We are not putting forward proposals for SP Transmission Ltd (SPTL) and SHE Transmission Plc (SHETPLC) as we published Final Proposals for those companies' price controls in April 2012 as part of the RIIO "fast-track" process. However, in relation to a number of areas we are providing an update that is relevant for both SPTL and SHETPLC.

In our Initial Proposals we consulted on a package of proposals for NGET and NGGT. We made clear that our proposals had been developed based on the significant consultation we had undertaken to date and that we did not expect to make significant changes in setting our Final Proposals except in areas where new information was provided. We received 36 responses to our Initial Proposals.

The Final Proposals outlined in this document have been developed in light of respondents' views and other new information we have received. The key changes we have made to the package of proposals for NGET from Initial Proposals include:

- to increase the expenditure cap on the visual impact of existing infrastructure in designated areas from £100m to £500m to allow all electricity Transmission Owners (TOs) to start work on such measures
- to increase the level of potential funding available for innovation under the Network Innovation Allowance (NIA) to 0.7 per cent of NGET's allowed revenues
- to increase allowances for unit costs for capital expenditure by £174m
- to provide a funding mechanism as part of its uncertainty mechanisms to enable it to receive revenue in the second half of RIIO-T1 for expenditure to deliver customer-driven outputs in next price control period ie RIIO-T2
- to set a fixed level of rewards and penalties of 2.5 per cent of the value of any over/under delivery of network replacement outputs
- to update the allowances for price increases in certain areas above the rate of inflation.

The key changes we have made to the package of proposals for NGGT from Initial Proposals include:

- to increase the funding assumed for incremental capacity by £167m
- to increase the level of potential funding available for innovation under the NIA to 0.7 per cent of NGGT's allowed revenues
- to move £269m of compressor expenditure from the uncertainty mechanisms into the baseline

- to increase allowances for unit costs for compressors and pipelines by £130m
- to provide an annual collar of £60m on constraint management costs to protect NGGT from low probability high impact costs and a cap of £20m
- to provide greater certainty on the level of permits available to NGGT
- to set a fixed level of rewards and penalties of 2.5 per cent of the value of any over/under delivery of network replacement outputs
- to update the allowances for price increases in certain areas above the rate of inflation.

Scope of Final Proposals

Taking into account our changes, these Final Proposals for NGET and NGGT provide:

- a comprehensive set of outputs that reflect the interests of their customers and strong incentives to deliver those outputs over the RIIO-T1 period
- a package of measures to encourage NGET and NGGT to innovate to drive improved outcomes for consumers
- total funding of £20.9bn in 2009/10 prices of which around £15.5bn represents investment in the electricity and gas transmission networks
- a package of mechanisms for addressing risk and uncertainty over the eight year period of the price control
- a financial package which provides an appropriate level of financial reward to the companies for their activities and provides value for money to consumers.

Impact on consumer bills

Overall, our proposals result in an increase in allowed revenues for NGET by around 30 per cent and for NGGT by around 28 per cent over the RIIO-T1 period relative to the last year of the current price control (2012-13).

In terms of consumer bills, the increase in NGET's allowed revenues translates into an average annual increase in electricity bills over the RIIO-T1 period of £2.30. Taken together with the fast-track proposals for the Scottish transmission companies this would result in an average annual increase in electricity bills over the RIIO-T1 period of £6. For gas transmission the proposals result in a reduction in average annual bills over the RIIO-T1 period of 90p. This reduction reflects the inclusion of system operator costs. However, taking into account the changes being brought forward as part of the concurrent gas distribution price control (RIIO-GD1) the average annual gas bill will increase by approximately £6 per year under the Final Proposals being published today.[1]

Next steps

These Final Proposals will be given effect by changes to NGET's and NGGT's licence conditions. We will publish our statutory consultation on the changes to the licences for RIIO-T1 on 21 December 2012.

[1] These bill impact calculations are based on our May 2012 factsheet Updated household energy bills explained. They exclude the impact of inflation on network charges, or of any additional revenue or penalties resulting from performance under the incentives set out in this paper.

1. Introduction

Chapter Summary

This chapter explains the structure and purpose of this document and sets out the context of these Final Proposals.

Purpose of this document

1.1. This document sets out our Final Proposals for National Grid Electricity Transmission (NGET) and for National Grid Gas (NGGT) for the next transmission price control, RIIO-T1. NGET owns and maintains the electricity transmission network assets across England and Wales. NGGT owns and maintains the gas transmission network assets across Great Britain (GB). This price control will cover the eight-year period from 1 April 2013 to 31 March 2021.[2]

1.2. The document sets out a summary of respondents' views to our July Initial Proposals consultation and highlights the changes to the proposals we are making in light of these views. A more detailed summary of responses is provided in Appendix 1 of this document.

1.3. The document aims to provide an accessible overview of the Final Proposals for NGET and NGGT. Alongside this document we have published three documents (the Supporting Documents):

- RIIO-TI: Final Proposals for NGET and NGGT – Outputs, incentives and innovation[3]
- RIIO-TI: Final Proposals for NGET and NGGT – Cost assessment and uncertainty[4]
- RIIO-T1: Final Proposals for NGET and NGGT – Finance.[5]

1.4. The Supporting Documents are aimed primarily at network companies, investors and those who require a more in-depth understanding of the Final Proposals.

[2] All monetary values in this document are in 2009-10 prices unless otherwise stated.
[3] RIIO-T1: Final Proposals for NGET and NGGT – Outputs, incentives and innovation http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/2_RIIOT1_FP_OutputsIncentives_dec12.pdf
[4] RIIO-T1: Final Proposals for NGET and NGGT – Cost assessment and uncertainty http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/3_RIIOT1_FP_Uncertainty_dec12.pdf
[5] RIIO-T1: Final Proposals for NGET and NGGT – Financial issues http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/4_RIIOT1_FP_Finance_dec12.pdf

1.5. These Final Proposals are different from those we have set out in previous price control processes. This is for two reasons:

(1) At an early stage in the RIIO process we consulted, and then published decisions, on the regulatory framework for RIIO-T1 – our March 2011 Strategy Document[6] (the March Strategy Document). That document set out the regulatory framework for the RIIO-T1 price control.

(2) Under RIIO, companies are required to put forward well-justified business plans setting out what they will deliver, supported by the views of stakeholders. Companies that submit high-quality plans will be offered the option of settling their price controls early ie "fast-tracking". Although the plans put forward by NGET and NGGT were not fast-tracked, there are a number of aspects of these Final Proposals that are based on the updated business plans developed by NGET and NGGT. These plans are available at the following link: http://www.talkingnetworkstx.com/our-business-plans.aspx.

1.6. In a number of areas of this document we reference our March Strategy Document, the Supporting Documents and the companies' business plans where further detail is set out to support these Final Proposals.

RIIO

1.7. In October 2010[7], we announced a change in the way we will regulate the GB onshore network companies. We introduced the RIIO (Revenue = Incentives + Innovation + Outputs) model. The overriding objective of the RIIO model is to drive real benefits for consumers by providing energy network companies with strong incentives to meet the challenges of delivering a low carbon economy and a sustainable energy sector at a lower cost than would have been the case under the previous RPI-X approach to setting price controls.

1.8. The price control process under RIIO is different to previous controls. In particular, under RIIO the onus is on network companies to develop well-justified business plans. Each network company is required to develop detailed plans which demonstrate how they will deliver against those plans in the interests of both existing and future consumers and how they will meet the challenges associated with facilitating the move to a low carbon economy.

Role of this document in the RIIO-T1 process

1.9. Our March Strategy Document set out the key elements of the regulatory framework that the transmission companies would need to understand in order to develop their business plans. We received the transmission companies' initial RIIO-T1 business plans at the end of July 2011. We assessed those plans against the criteria that we had set out in our March Strategy Document.

[6] Decision on strategy for the next transmission price control: RIIO-T1 – March 2011 http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/T1decision.pdf

[7] RIIO: A new way to regulate energy networks: Final decision – October 2010 http://www.ofgem.gov.uk/Networks/rpix20/ConsultDocs/Documents1/Decision%20doc.pdf

1.10. In October 2011 we published our initial assessment of the RIIO-T1 business plans.[8] This set out our assessment of the quality of the plans and indicated those areas that may be suitable for proportionate treatment. Our initial assessment concluded that none of the TOs' business plans were suitable for fast-tracking in their existing format but that the scale of the outstanding issues for SPTL and SHETPLC may allow them to resolve these in a timeframe consistent with fast-tracking. On this basis we retained SPTL and SHETPLC in the fast-tracking process. Following consultation on Initial Proposals in February 2012[9], we published our fast-track Final Proposals[10] for both SPTL and SHETPLC in April 2012.

1.11. In the case of NGET and NGGT we concluded that the scale of the work required to address the outstanding issues in their plans was too great to enable these to be resolved in a timetable consistent with fast-tracking. However, we did identify a number of areas of those plans suitable for proportionate treatment.

1.12. In line with the RIIO-T1 process, both companies were required to submit updated business plans by 5 March 2012. Both NGET and NGGT submitted their updated plans on 2 March 2012 (updated business plans)[11]. In March 2012 we published a consultation on NGET's and NGGT's updated business plans.[12]

1.13. In July 2012 we published our Initial Proposals for NGET and NGGT. We received 36 responses to that consultation including a response from National Grid. The purpose of this document is to set out the basis of the Final Proposals for NGET and NGGT. The document sets out: what network companies will be required to deliver during the next price control period; the incentives that will be placed around that delivery; the costs the companies will be able to recover and the arrangements for addressing risk and uncertainty around those costs; and the basis of the financial package for determining the companies' allowed revenues.

Stakeholder engagement

1.14. The RIIO framework places considerable emphasis on stakeholder engagement, both by the network companies and by us. The requirement on TOs to undertake detailed stakeholder engagement and to demonstrate how this has been reflected in their plans is a key component of the RIIO process.

[8] Initial assessment of RIIO-T1 business plans and proportionate treatment – October 2011 http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/busplanletter.pdf
[9] RIIO-T1: Initial Proposals for SPTL and SHETL – February 2012 http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/SPT_SHETL_IP.pdf
[10] RIIO-T1: Final Proposals for SP Transmission Ltd and Scottish Hydro Electric Transmission Ltd – Overview document – April 2012 http://www.ofgem.gov.uk/NETWORKS/TRANS/PRICECONTROLS/RIIO-T1/CONRES/Documents1/SPTSHETLFP.pdf
[11] In a number of places in this document we compare our proposals against National Grid's plans. In doing so we are referring to the updated business plan.
[12] RIIO-T1: Publication of the revised business plans of National Grid Electricity Transmission plc and National Grid Gas plc – March 2012 http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=170&refer=Networks/Trans/PriceControls/RIIO-T1/ConRes

1.15. Since the start of RIIO-T1, we have adopted a multi-layered process to ensure that all affected parties have effective opportunities to engage in the review. When we have engaged with stakeholders, we have sought to adhere to our principles for effective enhanced engagement set out in the RIIO handbook.[13]

1.16. The key elements of our process since the publication of our Initial Proposals have been:

- our October consultation letter on implementation arrangements relating to two areas of gas policy - the treatment of incremental capacity and constraint management incentives.[14] We received five responses. These are summarised in Chapter 2 and in more detail in Appendix 1 of this document
- our October consultation letter on how we should deal with any changes arising from the Office of National Statistics (ONS) review of its retail prices index (RPI) methodology - this is discussed below
- presenting to stakeholders at National Grid's stakeholder sessions on 4 September and 5 September
- a range of meetings with interested stakeholders.

Consumer Challenge Group (CCG)

1.17. Separate from our stakeholder engagement processes, we have benefited throughout the RIIO process from feedback from the CCG, which comprises consumer and environmental experts acting as a critical friend to us.

1.18. The CCG has an important role in ensuring that consumers' views are fully considered as part of the price control process. We formed a single CCG for RIIO-T1 and RIIO-GD1. The group comprises eight members appointed by us on the basis of their expertise in the interests of existing and future consumers and energy sector knowledge.

1.19. During the RIIO process we have discussed a range of issues with the CCG. The key areas of focus for both RIIO-T1 and RIIO-GD1 have been the:

- overall quality and content of the companies RIIO business plans
- scope and quality of the companies' stakeholder engagement
- proposals for developing stakeholder surveys
- impact of the proposals on charging volatility
- coverage of innovation and its role in the price controls.

1.20. We expect to publish a final note on the role of the CCG in both RIIO-T1 and RIIO-GD1 shortly.

[13] Handbook for implementing the RIIO model
http://www.ofgem.gov.uk/networks/rpix20/consultdocs/Documents1/RIIO%20handbook.pdf
[14] RIIO-T1 (Gas): Further views sought on implementation arrangements relating to the treatment of incremental capacity and constraint management incentives
http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/RIIOT1_Consultation_Capacity_And_Constraint_Incentives.pdf

Impact assessment

1.21. In July, alongside the Initial Proposals, we also published an impact assessment (IA). We received two comments explicitly on the IA and a number of separate comments on the impact of those proposals. The issues raised and our responses to those points are set out below.

Impact on bills

1.22. One respondent questioned our calculation that the proposals for NGGT would add £2 to the average domestic gas bill on the grounds that they exclude System Operator (SO) allowed revenues. It argued that the impact was a decrease of 51p.

1.23. Our bill impact in Initial Proposals was based on the increase in allowed revenues from RIIO-T1 and reflected the impact on TO costs only. It did not reflect SO internal costs. We agree with National Grid that, if SO internal costs are included then the average annual impact would be a reduction of around 90p. This is the figure we have used in these Final Proposals.

1.24. On a separate point, another respondent argued that against a background of increased network investment, our conclusion that RIIO would lead to network charges that, on average, are less than those that would have arisen under the previous RPI-X framework was not easily demonstrated. It considered that the post-implementation review will have a key role in evaluating the net benefit from implementing RIIO.

1.25. We agree that there is not complete certainty on the level of network investment that will take place over RIIO-T1. However, we retain the view that the RIIO approach is likely on average to result in lower increases in network changes than would have happened with the same level of investment under the RPI-X framework. The main reason for this is that the RIIO framework provides the flexibility to assess the case for network investment when there is sufficient certainty for a project to be brought forward and therefore to ensure that the most efficient cost solution is adopted.

Impact on jobs

1.26. Two respondents commented that the proposed reductions in expenditure compared to the proposals in NGET's and NGGT's updated business plans would impact the training of future apprentices, engineers and graduates and significantly reduce National Grid's planned job growth.

1.27. We note that the price control packages being put forward for the three electricity TOs and for NGGT represent a significant increase in investment on the current price control period. We expect that this will have a very positive impact on jobs including on the training of apprentice, engineers and graduates.

Charging volatility

1.28. Four respondents expressed concerns about the impact of the proposals on charging volatility in the gas sector. Three noted and welcomed our work on charging volatility but two considered that none of the proposed solutions, combined with the potential magnitude of uncertainty mechanisms, would result in a more stable transportation pricing environment. A number of solutions were suggested including whether we could bring forward publication of Final Proposals or agreeing revenues to be used for both indicative and final tariffs with changes to be adjusted in future years' revenues. The respondent argued that these issues should also be addressed in planning Final Proposals for RIIO-ED1.

1.29. Following consultation, we published our decision on measures to mitigate charging volatility created by the price control settlement in October 2012.[15] We addressed a number of the points raised by respondents to Initial Proposals in that document. We are implementing our decision for gas and electricity transmission from the start of RIIO-T1. Our decision has implications for how incentive mechanisms and some uncertainty mechanisms will operate in RIIO-T1. The details of which can be found in the relevant sections of the Supporting Documents.

1.30. We will further consider the points raised by respondents in our planning for RIIO-ED1.

Visual amenity

1.31. A significant number of respondents commented on the potential impact of transmission investment on visual amenity. In particular, while supporting our proposed initial expenditure cap to allow all electricity TOs to start work on mitigating impacts of existing infrastructure in designated areas at the beginning of RIIO-T1, the majority argued that our proposals were too conservative and that the proposed allowance was insufficient to deliver real benefits from the start of RIIO-T1.

1.32. In light of respondents' views and the additional evidence they provided we are proposing to increase the cap to £500m from the start of RIIO-T1. This is discussed in Chapter 3 of this document and set out in more detail in the Outputs, incentives and innovation Supporting Document.

Overall impact

1.33. Overall, based on the package of proposals being put forward we consider that the benefits and impacts outlined in the IA are still applicable.

[15] Decision in relation to measures to mitigate network charging volatility arising from the price control settlement
http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=404&refer=Networks/Policy

Interaction with other policy areas

Transmission Investment Incentives (TII)

1.34. We introduced the TII framework in 2010 to supplement capital allowances and deep revenue drivers set within the previous price control review (TPCR4) by providing project-specific, interim funding (up to the end of the price control period) to facilitate the timely delivery of critical electricity transmission infrastructure projects. The TII framework was extended to the rollover year 2012-13.

1.35. For RIIO-T1, some of the projects funded under TII will be included in the TOs' baseline and we are introducing arrangements to enable TOs to make a request to us to determine the efficient forecast costs of delivering further wider works outputs and to adjust the TOs' wider works outputs and associated revenues during the price control period (ie within period determination). These arrangements, which include volume drivers and the Strategic Wider Works (SWW) mechanism, will replace the TII arrangements introduced during TPCR4.

SO incentives

1.36. In parallel with our work on RIIO-T1, our European Wholesale team has been working to set SO external incentives[16] for the period from 1 April 2013. One of our objectives across the two workstreams is to align the incentives facing the SO and TOs to encourage effective joint working. One of the areas where this will bring benefits is in relation to network availability in electricity, which is relevant to the RIIO-T1 outputs. We consider this issue in more detail in the Outputs, incentives and innovation Supporting Document.

Implementing competition in onshore electricity transmission

1.37. As part of the RIIO strategy, we have been developing a framework to enable us to hold, in appropriate circumstances, a competitive process to award a TO the revenue stream needed to build, own and operate onshore electricity transmission assets. We set out our initial thoughts on aspects of this framework in consultations published in March and December 2011.[17] We are continuing to develop the framework, and in April 2012 we published an open letter[18] stating that we were taking more time to consider the costs and benefits of implementing a competitive framework in onshore transmission.

[16] We are publishing our Final Proposals for gas SO external incentives alongside this document. For electricity, given the extent of our proposed changes, we published a further consultation in October 2012. This consultation closes on 21 December 2012. We will consider the responses of all stakeholders before proposing an appropriate way forward for electricity SO external incentives in the new year.
[17] RIIO-T1 – Implementing competition in onshore electricity transmission http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=150&refer=Networks/Trans/PriceControls/RIIO-T1/ConRes
[18] Implementing competition in onshore electricity transmission: update http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/Compupdate.pdf

1.38. We are now undertaking this work as part of a wider project on Integrated Transmission Planning and Regulation (ITPR).[19] We are taking a coordinated approach to our examination of the costs and benefits of a potential extension to the use of competition, and our consideration of what is needed to deliver a future integrated transmission system under ITPR. Our findings will form part of our consultation on ITPR options next year.

1.39. It is our intention that this competitive framework could potentially be used to award the revenue stream for any wider reinforcement works for which construction funding has not been awarded to date and is not contained in the licensees' RIIO-T1 baseline funding. For the avoidance of doubt, projects treated as SWW in our Final Proposals could be subject to this competitive process and therefore potentially delivered by a third party TO.[20] While the detailed arrangements for any competitive process are still being developed, TOs should be aware that they could be required to make relevant preconstruction outputs available to third parties as part of a selection process, and eventually such preconstruction assets might be transferrable to the party selected to construct the assets.

Broad environmental incentive

1.40. In our Strategy Decision document we noted our intention to include a reputational incentive on promoting low carbon energy flows. We also noted that, subject to consultation, we may introduce an incentivised financial reward which would future proof the output framework for new opportunities arising over RIIO-T1.

1.41. On 7 February 2012 we published a consultation on the introduction of the Environmental Discretionary Reward Scheme (EDR Scheme)[21] to complement the existing RIIO-T1 package for electricity transmission. On 4 July we published a decision letter[22], setting out our decision to implement the EDR Scheme in broadly the form set out in our consultation. One change we made, responding to feedback to the consultation, was to incorporate the role of the SO into the EDR Scheme.

1.42. The purpose of the EDR Scheme is to sharpen companies' focus on strategic environmental considerations and to encourage corporate and operational culture change to facilitate a growth in low carbon energy. Under the EDR Scheme the companies' performance will be measured and scored on a scorecard comprising six key strategic and operational environmental categories. In addition the companies will be required to publish an annual executive level statement and consult on that statement. We will establish an expert panel to act in an advisory capacity in the decision making process. Annual funding of up to £4 million (up to £32m over RIIO-T1) will be available in each scheme year.

[19] http://www.ofgem.gov.uk/Networks/Trans/ElecTransPolicy/itpr/Pages/index.aspx
[20] A third party TO may be one of the existing TOs or a new TO.
[21] Environmental discretionary reward under the RIIO-T1 price control – 7 February 2012 http://www.ofgem.gov.uk/NETWORKS/TRANS/PRICECONTROLS/RIIO-T1/CONRES/Documents1/EDR_consult.pdf
[22] Decision on the concept for the implementation of the Environmental Discretionary Reward for the electricity transmission owners and system operator http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/RIIO-T1%20-%20Environmental%20Discretionary%20Reward%20(EDR)%20decision%20letter.pdf

Innovation

1.43. As a core part of the RIIO framework we are introducing an innovation stimulus. The innovation stimulus comprises:

- **Network Innovation Allowance (NIA)** - The NIA is a set allowance that each of the RIIO network licensees will receive to fund small scale innovative projects as part of their price control settlement.
- **Network Innovation Competition (NIC)** - The NIC is an annual competition for funding larger more complex projects which have the potential to deliver low carbon and/or wider environmental benefits to consumers. The NIC will comprise of two competitions - one for gas and one for electricity.
- **Innovation Roll-out Mechanism (IRM)** - A revenue adjustment mechanism that enables companies to apply for additional funding within the price control period for the rollout of initiatives with demonstrable and cost effective low-carbon or environmental benefits.

1.44. In order to implement the innovation stimulus we have developed licence conditions to allow companies to raise the funding and set the legal framework for the governance of these arrangements. The governance document will set out these arrangements and provide detailed assessment criteria, guidance on obligations and requirements for the NIC, as well as criteria and obligations attached to the utilisation of the NIA.

1.45. In general, the innovation stimulus will be introduced as part of the RIIO-T1 and RIIO-GD1 price controls on 1 April 2013. In Initial Proposals, we set out an expected delay to the commencement of the Gas NIC as a result of an ambiguity in the Gas Act which prevents the use of our desired mechanism for raising and transferring funds. In light of this delay, we proposed two options: delay the competition until we get the required amendment to the Gas Act, or implement an alternative funding mechanism where funding is raised from the winning companies own customers only (rather than socialised across all customers). We have been actively working with the Department of Energy and Climate Change (DECC) to resolve this issue and note that the Secretary of State for Energy and Climate Change announced on 18 October that the Government would propose the necessary amendment to the Gas Act as part of the Department for Communities and Local Government's (CLG's) Growth and Infrastructure Bill.[23]

1.46. If the clause is included in the legislation and the Bill progresses to schedule, we believe that it would be possible for us to introduce licence conditions in a manner that would allow the Gas NIC to commence in 2013 under our desired funding mechanism (ie funding would be recovered from all customers and transferred to the winning licensee(s)). If subsequently there is an unexpected material delay to the legislative timetable that prevents the amendment being delivered in time, we would not award funding in 2013. In this instance, licensees would still be able to recover their efficiently incurred bid preparation costs through the NIA and the lost funds would be rolled-over into subsequent years such that the

[23] See DECC press release: 'Ed Davey tells CBI: Coalition will unlock energy investment'.

overall level of funding in RIIO-T1 is unchanged. This is equivalent to our preferred option at Initial Proposals that was supported by a majority of respondents.

1.47. The governance documents and the licence conditions have been developed in conjunction with the Innovation Working Group (IWG) and draft versions of the documents have been publicly consulted on throughout October and November 2012. In late December 2012, both will undergo a 28 day consultation, to enable them to take effect by 1 April 2013, at the start of RIIO-T1 and GD1.

DECC consultation on providing redress to consumers

1.48. In July 2012 DECC consulted on a new power for us to compel regulated energy businesses to provide redress to consumers.[24] On 29 November the Secretary of State for Energy and Climate Change confirmed the introduction of the Energy Bill to the House of Commons.[25]

1.49. The power would only be applicable if a regulated energy business breached its licence. Under the existing arrangements, we have the power to fine regulated energy businesses for licence breaches of an amount up to 10 per cent of their total annual turnover. The measures set out in the Bill would give us the power to mandate paying compensation to consumers in appropriate circumstances. The Bill proposes that the aggregate penalty / redress under the new regime should similarly be capped at 10 per cent of annual turnover. Whilst it is conceivable that in practical terms financial exposure might increase under the new system, it does not necessarily follow that we would award the same under the redress powers that we would under the current regime. We will be required to consult on and publish a statement on how we will exercise our new powers. We will be able at that stage to address the issue of overall risk levels including interactions with price control settlements and licensees will be able to respond on these issues.

Office of National Statistics (ONS) review of RPI

1.50. The ONS is currently reviewing its methodology for calculating RPI.[26] In particular, the review is examining the reasons for one of the differences between the RPI and consumer prices index (CPI) (known as the 'formula effect'), and whether recent increases in the formula effect mean that the ONS should revise its methodology for calculating RPI. The ONS issued a consultation on its proposed options regarding the RPI methodology in October 2012 and intends to publish its recommendations in January 2013.

[24] Consultation on a proposed new power for Ofgem to compel regulated energy businesses to provide redress to consumers
http://www.decc.gov.uk/assets/decc/11/consultation/4975-consultation-on-a-proposed-new-power-for-ofgem-to-.pdf
[25] Energy Bill 2012-2013
http://www.decc.gov.uk/en/content/cms/legislation/energybill2012/energybill2012.aspx
[26] See link: http://www.ons.gov.uk/ons/about-ons/user-engagement/consultations-and-surveys/national-statistician-s-consultation-on-options-for-improving-the-retail-prices-index/options-for-improving-rpi-consultation-document.pdf

1.51. In their responses to our Initial Proposals for both RIIO-T1 and GD1, a number of network companies stated that we should include a provision for a reopener in the licence to address any implications of this, should the ONS consultation result in a decision to change the RPI methodology.

1.52. We considered it was appropriate to review the impact on network companies of any change to RPI arising from the ONS review. On 30 October we published a consultation on our preliminary view that we should allow for a reopener to accommodate any change, and invited views on whether we should limit changes to application windows and apply a materiality test. The key points raised by respondents are outlined in Chapter 2 and set out in more detail in Appendix 1.

1.53. In light of responses we have decided not to make any changes to the licence at this stage but to consult on this issue in the event that the ONS makes a change to the way it calculates RPI. The effect of any change on network companies is unknown and it is difficult for us to put in place an arrangement which captures the range of potential changes that we might need to make to implement changes to the price control settlement. We would intend to subject any changes to a materiality test of one per cent of revenues to avoid making trivial changes.

1.54. This issue is discussed in further detail in the Cost assessment and uncertainty Supporting Document.

Delivery of Electricity Market Reform (EMR) measures

1.55. NGET may incur costs during RIIO-T1 if it assumes responsibility for the delivery of EMR measures. We note that a proportion of these costs are likely to be on NGET as the internal electricity SO.

1.56. In the event that NGET assumes this role then we consider it is appropriate for NGET to recover its efficiently incurred costs. To enable this we would amend the licence to allow us to adjust NGET's cost allowances where these are necessary to fund the delivery of new services or functions as a result of decisions taken by the Government in relation to EMR. The adjustment would be triggered by NGET providing notice to us that, as a result of decisions by the Government under its EMR policy, it is necessary for the company to undertake new or enhanced activities for which NGET will incur additional costs to those taken into account for the final settlement of the RIIO-T1 price control. In the notice to us NGET will need to include supporting evidence including:

- a description of the new undertakings NGET is responsible for under EMR
- potential measures of the outputs from these new undertakings
- a description of how NGET intends to carry out the new functions or activities
- the net incremental costs that NGET expects to incur as a result
- an explanation of why the relevant costs cannot be recovered under the revenue allowances provided under the RIIO-T1 price control settlement.

1.57. We expect NGET to bring forward this information as early as possible.

Income and expenditure deriving from unusual circumstances

1.58. Under RIIO we apply the same incentive rate, or sharing factor between the company and its customers, in the treatment of all types of income or expenditure. This means that over and under spend is shared at this rate, which varies from company to company but is broadly 50:50. This means that, for example, customers and the company share the benefits from efficiency savings from the year these are made. We made it clear in our consultation on the RIIO framework that some expenditure such as penalties would not be covered by the sharing factor – as customers and consumers should not bear the cost of a failure by a company to comply with its obligations – and that we would not apply the sharing factor if the network company had manifestly wasted money.

1.59. We are aware that there might be cases where income or expenditure derives from unusual circumstances eg compensation resulting from legal proceedings, including any settlement. In such cases, we still propose to apply the sharing factor, subject to the caveats we indicated in the establishment of the RIIO framework. However, we also recognise that judgments in legal proceedings might take this regulatory treatment into account and may be of such a nature that we are prompted to review the application of the sharing factor in this way in future cases. Therefore, we will keep this approach under review in the light of emerging decisions.

Gas Distribution price control (RIIO-GD1)

1.60. Alongside our RIIO-T1 Final Proposals, we are publishing Final Proposals for the Gas Distribution Networks (GDNs) for the next transmission price control, RIIO-GD1. The GDNs maintain and operate the local gas networks that transport gas from the national transmission system (NTS) to homes and businesses throughout GB. The RIIO-GD1 price control will also cover the eight year period from 1 April 2013 to 31 March 2021. In developing our proposals for RIIO-T1, we have taken into account the interactions with RIIO-GD1.

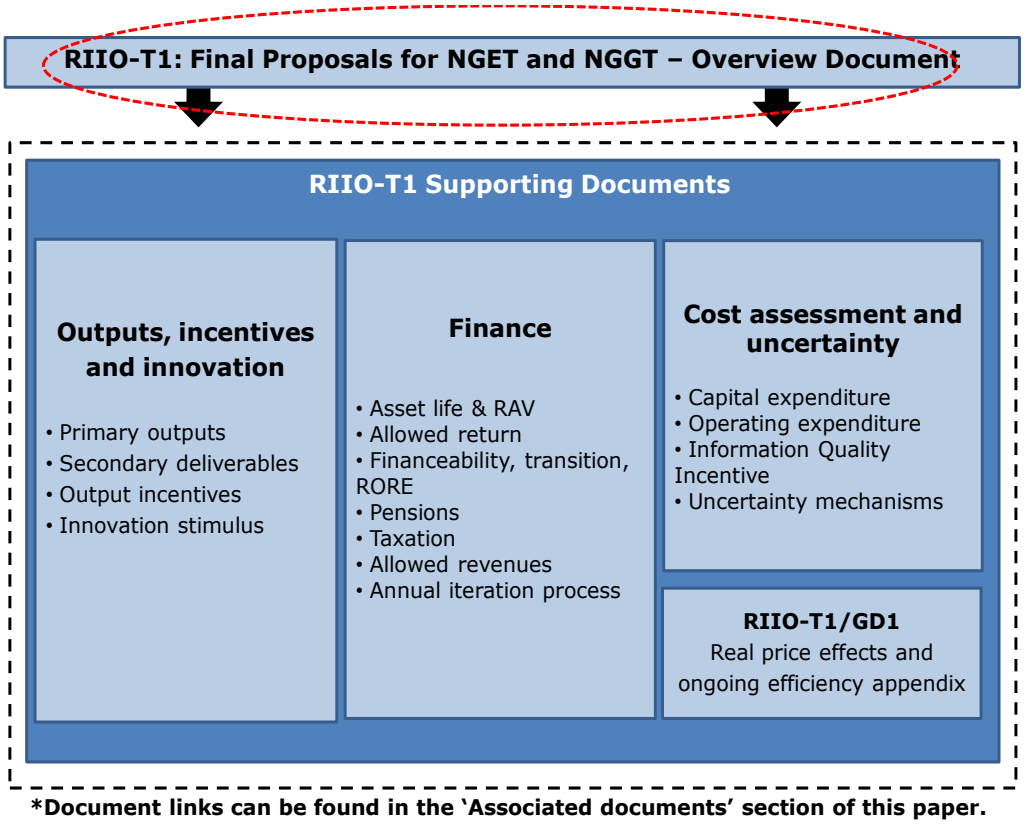
Structure of this document

1.61. The remainder of this document sets out the Final Proposals for NGET and NGGT. This document follows broadly the same structure as the Initial Proposals. It is structured as follows:

- Chapter 2 sets out a high level overview of the key points raised by respondents' on the Initial Proposals.
- Chapter 3 sets out a summary of the package of Final Proposals for NGET.
- Chapter 4 sets out a summary of the package of Final Proposals for NGGT.
- Chapter 5 sets our next steps for RIIO-T1.
- Appendix 1 sets out a more detailed summary of respondents' views.

1.62. Alongside this document we have published three Supporting Documents. These provide further information on each of the individual areas of the Final Proposals for NGET and NGGT. We are also publishing an appendix to the Cost assessment and uncertainty Supporting Document on Real Price Effects (RPEs) and ongoing efficiency. Figure 1.1 provides a map of the RIIO-T1 documents we are publishing today.

Figure 1.1 - RIIO-T1 Supplementary documents map



***Document links can be found in the 'Associated documents' section of this paper.**

2. Overview of responses

Chapter Summary

This chapter provides a high level overview of the key issues raised by respondents to Initial Proposals.

Introduction

2.1. We received 36 responses to the Initial Proposals consultation. This included a response from National Grid. Three responses were marked as confidential.

2.2. On 30 October we published two additional consultation letters. One sought further views on two specific gas policy issues: (1) the treatment of incremental capacity and the associated permit arrangements; and (2) the constraint management incentives for NGGT. The other letter sought views on how we should deal with any changes arising from the ONS review of its RPI methodology.

2.3. The purpose of this chapter is to set out an overview of the key points raised by respondents to these publications. The more detailed comments in relation to the different component parts of the framework ie outputs, innovation, financial issues and cost and uncertainty are summarised in the relevant chapter of the Supporting Documents.

2.4. A full summary of responses is set out in Appendix 1 to this document.

Key issues raised by respondents

Process

2.5. National Grid raised a number of process concerns with our Initial Proposals. It argued that the proposals included areas of policy not yet clarified, contradictions between documents, incomplete analysis in some areas and flawed benchmarking.

2.6. One respondent welcomed the fast-track process but considered that we had been unable to demonstrate the benefits.

Outputs

2.7. For the most part respondents were generally supportive of the proposed outputs and the associated incentives. The main issues on which comments were received are set out below.

Environmental outputs – visual amenity

2.8. The issue most respondents commented on was in relation to visual amenity and specifically on the size of the expenditure cap which we intend to provide for mitigating the impact of existing infrastructure in designated areas at the beginning of RIIO-T1.

2.9. Most respondents supported the introduction of the expenditure cap. At the same time, the majority had concerns that our proposals were too conservative and that a more substantial allowance was needed in line with NGET's proposed £1.1bn. Several stakeholders said that the proposed initial allowance was not enough to deliver real benefits from the start of the price control period. Many felt that a great deal of preparatory work was needed to identify projects (eg a strategic assessment of mitigation opportunities in the UK) and that the initial expenditure cap did not reflect the practical complexities of delivering individual projects, eg negotiations with landowners and complex pre-engineering works.

Treatment of incremental capacity

2.10. National Grid expressed disappointment that we did not set out an opinion on its proposed changes to the treatment of incremental gas capacity and the impact this would have on its level of risk. It argued that we should provide further clarity on the level of permits beyond 1 April 2014.

2.11. All third party respondents supported our proposed approach on the grounds that we should allow industry processes to be taken forward and not prejudice the outcome. However, one respondent agreed with National Grid on the need for further clarity on permits beyond 1 April 2014.

2.12. We received five responses to our second consultation on this issue published on 30 October. Four respondents supported retaining the status quo, although one noted that a shadow implementation of a unified approach may be appropriate, while one supported a unified system. Four respondents supported the removal of caps and collars as providing the right incentives. National Grid proposed rolling over the incremental buyback schemes with a cap and collar but updating a monthly cap and collar on operational buyback schemes. Three respondents supported the adoption of arrangements to provide for an annual smoothing of the scheme to limit significant one-off changes. Another respondent noted it might support this approach but that there was currently a lack of evidence to justify it. National Grid opposed smoothing on the grounds that it may result in significant one off effects at the end of the RIIO-T1 period.

Constraint management

2.13. National Grid argued that an uncollared constraint management scheme would potentially expose it to open ended risks over which is had very little control. It

linked this to uncertainty over its permits allowance beyond 1 April 2014. It considered this should be reflected in its cost of capital.

2.14. All third party respondents expressed concerns about National Grid's proposal for a single incentive mechanism for capacity constraint management. All supported retaining the status quo until a case could be made for amending the existing arrangements. However, they also highlighted additional factors including (1) that combining the incentives into one could encourage better decision making if the constraints of the current scheme could be removed; and (2) the requirement for further analysis on constraint management incentives which give rise to alternative capacity constraint arrangements.

2.15. We received four responses to our second consultation on this issue published on 30 October. Three respondents were concerned with the proposed £19m level of permits for 2013-14 on the grounds that it could provide NGGT with a windfall and put forward alternative options including a signal based allowance and a 'volume only' allowance ie permits with no cash-out value. In relation to the level of permits for the remainder of the period, three respondents considered that the level should be set later based on updated evidence. National Grid provided data supporting a permits allowance of £40.2m until the mid-period review.

Delivery of RIIO-T2 outputs

2.16. National Grid considered that our proposal to disallow the baseline allowances NGET requested in its business plan for generation connections and demand related infrastructure works that deliver outputs in RIIO-T2 would mean it would incur significant costs in advance of funding. It stated that these costs did not seem to be reflected in our financeability modelling.

Innovation

2.17. We received ten responses on our proposals on the level of NIA funding. One respondent stated that an NIA of 0.6 per cent was appropriate. Three respondents said explicitly that NGET and NGGT should receive an NIA of closer to 1 per cent and six respondents thought we should provide an NIA of sufficient size to allow NGET and NGGT to deliver their innovation programmes. National Grid highlighted that the NIA would be utilised for elements of SO innovation. It also stressed that the delivery of their operational capital efficiency programme would be dependent on access to additional innovation funding. It considered that it had demonstrated stronger stakeholder engagement than our assessment suggested.

Cost assessment and uncertainty

2.18. Very few third parties commented directly on our cost assessment or our proposed uncertainty mechanisms. Those that did considered our proposals were broadly appropriate although there were issues raised in relation to the impact on jobs and cost reflectivity. These were discussed in Chapter 1 in the context of our IA.

2.19. National Grid expressed concerns with a number of aspects of the proposals for NGET and NGGT. Among the key points it raised for both were that:

- our pay growth forecasts did not reflect energy sector pay pressures and would create challenges in recruiting and retaining staff including graduates coming into the industry
- our proposal to delay the TPCR4 efficiency review to 2013 was inappropriate given the potential impact of the outcome on the opening Regulatory Asset Value (RAV).

2.20. Among the key points it raised for NGET were as follows:

- *TO capital expenditure (capex)* – It considered the proposed baseline funding had been set at inappropriate levels in relation to the following categories of capex costs: load-related baseline funding; Hinkley-Seabank; DNO mitigation measures; RIIO-T2 outputs; and pre-construction works.
- *TO operating expenditure (opex)* – It considered our approach was inconsistent with the total expenditure (totex) approach and had no regard for top-down delivery. It also considered that errors and inconsistencies give rise to inappropriately low allowances.
- *SO internal costs* – It noted that we had reduced allowances but did not provide mechanisms to manage uncertainty. It set out the view that calculation errors incorrectly assume costs are linear to capex and noted that market facilitation has been reduced despite growing influence of European Union (EU) policy.

2.21. Among the key points it raised for NGGT were as follows:

- *Pipeline and compressor unit costs* – It considered that the origin of some data used ie from feasibility studies, the methodology employed to analyse them and the inappropriate application of RPEs, led to an underestimation of costs. It suggested that we needed to consider relevant cost drivers and the complexity of future projects. It provided external benchmarking data to support its views.
- *Industrial Emissions Directive (IED) investment* – It set out the view that there should be alignment between legal obligations under the IED and allowed funding. It also noted that funding needs to be provided in a timely manner to ensure deliverability of the IED programme.
- *SO internal costs* – It noted that analytical errors had assumed costs were linear to capex. It also questioned why allowances for market facilitation had been reduced despite the growing influence of EU policy.
- *Business support benchmarking* – It argued that logic errors and inconsistencies with the benchmarking methodology, including a failure to reflect future cost drivers, created inadequate allowances.

ONS review of the RPI methodology

2.22. Eight stakeholders responded to our consultation. The majority supported the proposal to include a specific reopener on the grounds that the ONS review was an area of uncertainty which network companies could not control. One considered that it would not be appropriate on the grounds that: (1) it would provide networks with greater protection than holders of government bonds; (2) networks have enjoyed windfalls from previous changes to the calculation of RPI and a re-opener would lock in these windfalls; and (3) the overall impact was unclear.

2.23. Of those that supported a reopener there were a range of views on the different parameters but a number considered it would need to be sufficiently flexible given the significant uncertainty around the potential outcomes.

Financial issues

Risk and financeability

2.24. Three respondents, including a report developed by Oxera for the Energy Networks Association (ENA), expressed some concerns with aspects of the financial package. The key points raised were:

- concerns on the credit ratios, particularly for NGGT and questions on what investment grade rating we were targeting
- the view that the differences in asset betas between network companies appeared large compared to the differences in the capex to RAV ratios
- that in some cases the cost of debt indexation could increase risk of error compared to fixed cost of debt allowance.

2.25. National Grid highlighted the same points in its response. It also disputed our relative risk analysis. It noted that its own analysis had demonstrated an increase in risk relative to TPCR4. It questioned our financeability assessment and in particular how we reflect the timing of cashflows arising from uncertainty mechanisms or the tax payable on revenues generated from pre-tax incentive schemes. It expressed particular concern with the financial parameters proposed for NGGT.

2.26. In light of these points National Grid argued that a level of gearing of 55 per cent was appropriate for NGET and NGGT. For NGET it considered that its greater risk relative to SPTL and SHETPLC merited a cost of equity of above 7 per cent.

Pensions

2.27. Four respondents commented on our proposed thresholds for pension scheme administration costs and Pension Protection Fund levies. There was some concern that allowances should not be set at too low a level, otherwise there would be no mechanism for reasonable and efficient costs to be recovered.

3. Summary of Final Proposals for NGET

Chapter Summary

This chapter summarises the Final Proposals for NGET.

Introduction

3.1. This chapter summarises the key components of the Final Proposals for NGET in its role as TO and also in relation to its internal SO costs. Further detail on each of the areas set out below is provided in the Supporting Documents.

Outputs and incentives

3.2. RIIO is an outputs-led framework. It is important that throughout the RIIO-T1 period, the TOs understand what they are expected to deliver and are held to account for delivery.

3.3. Table 3.1 summarises the outputs that NGET will be expected to deliver during RIIO-T1. These closely reflect the overall package of outputs that, following consultation, we set out for all TOs in our March Strategy Document.

3.4. We note that a number of the incentives are linked to the percentage of allowed revenue. To maintain strong output incentives and appropriate revenue allowances for specific activities it is important that the caps and collars on these do not just reflect the opening base revenue allowance but also adjust in response to ongoing, but uncertain, changes in revenue in order to better reflect the true change in network total expenditure (totex) and other in-period adjustments over the price control period. References to 'percentage of allowed revenue' therefore reflect a combination of the opening base revenue allowance plus within period adjustments captured through the annual iteration of the financial model.

3.5. We will generally consider a TO's performance against its outputs on an annual basis. We will set out information requirements and monitoring arrangements in our Regulatory Instructions and Guidance (RIGs). We consulted on draft RIGs in October. We intend to finalise the RIGs by April 2013.

Table 3.1 – NGET's outputs and incentive parameters for RIIO-T1

Category	Output	Incentive
Safety	Compliance with safety obligations set by the Health and Safety Executive (HSE). Supported by measures of asset health, condition and criticality with agreed targets and impacts on RIIO-T2 funding.	Statutory requirements. No financial incentive. A penalty/reward of 2.5% of the value of any over/under delivery of network replacement outputs.
Reliability	Primary output based on Energy Not Supplied (ENS).	Incentive rate of £16,000/MWh[27] which is based on an estimate of the value of lost load (VoLL).[28] A collar on financial penalties limiting the maximum penalty to 3% of allowed revenues.
Availability	Prepare and maintain a Network Access Policy (NAP).	Reputational incentive. Potential financial incentives if relevant during development and update of NAP.
Customer Satisfaction	Develop customer/stakeholder satisfaction survey.	Up to +/-1% of allowed revenue.
	Effective stakeholder engagement.	Up to 0.5% of allowed revenue via a discretionary reward scheme.
Connections	To meet existing legal requirements.	General enforcement policy.
Environmental	SF_6 – Baseline target calculated annually with best practice 0.5% leakage rate for new assets installed.	Differences to baseline subject to a reward/penalty based on the non-traded carbon price for carbon equivalent emissions.
	Losses – Publish overall strategy for transmission losses and annual progress in implementation and impact on transmission losses.	Reputational incentive.
	Business Carbon Footprint (BCF) – Publish BCF accounts at business level annually over RIIO-T1.	Reputational incentive.
	EDR Scheme – measures to focus on aspects of the roles of the TOs and SO not explicitly captured in RIIO-T1 incentives.	Positive reward available if achieve leadership performance across different scorecard activities.

[27] The actual incentive rate is effectively halved consistent with the application of the incentive rate, and will be further adjusted for inflation.
[28] VoLL represents the value that electricity users attribute to security of electricity supply and the estimates could be used to provide a price signal about the adequate level of security of supply.

	Visual amenity – to efficiently meet planning requirements for new infrastructure and deliver visual amenity outputs by mitigating impacts of existing infrastructure when it is located in designated areas.	Reputational incentive in the context of its performance in the utilisation of two mechanisms: (1) baseline and uncertainty mechanism funding for additional cost of mitigation technologies required for development consent (2) initial expenditure cap of £500m to reduce the impact of existing infrastructure in designated areas.
Wider works (new investment)	Baseline wider works outputs of approximately 7,250MW of additional transmission transfer capacity funded baseline funding. Best view wider works outputs (approximately another 22,150MW) are to be funded through flexible baseline (with volume driver to adjust allowances if delivery turns out to be different) and SWW arrangements for potentially a further 7,900MW of transmission capacity).	NGET's scheduled baseline and SWW outputs will be subject to timely delivery standards. For best view wider works (ie non SWW), NGET required to meet NDP criteria and take forward timing and phasing of WW outputs that are in best interests of consumers.

Context for proposed outputs

3.6. In a number of areas our proposed outputs differ from those set out in our Initial Proposals. The key changes are discussed below. These areas are discussed in further detail in the Outputs, incentives and innovation Supporting Document.

Connections

3.7. The RIIO-T1 connection output requires all TOs to deliver their licence obligations relating to timely delivery. However, we recognise that the obligations for NGET in its roles as both SO and TO are different from those for SPTL and SHETPLC whose timely connection obligations are through the System Operator - Transmission Owner Code (STC). While both sets of obligations involve multiple activities, NGET has a larger number of separate obligations, some associated with timely connections. A number of these are without specified timings for delivery. NGET highlighted this difference in its response.

3.8. In light of NGET's response we consider that it is more appropriate to consider its performance across the whole of its timely connections obligations rather than applying a financial adjustment to a subset of these obligations. Consequently, we consider its overall performance can best be considered through enforcement action, if needed, rather than incorporating the specific 0.5 per cent downside only financial incentive that is applied for SPTL and SHETPLC.

Environmental (visual amenity)

3.9. In Initial Proposals we consulted on an initial expenditure cap of £100m to allow all electricity TOs to start work on mitigating impacts of existing infrastructure in designated areas at the beginning of RIIO-T1. We also said we wanted further analysis of consumer willingness to pay (WTP) from the TOs, such as median WTP estimates, to inform the final expenditure cap for RIIO-T1.

3.10. We note that most of the respondents to Initial Proposals supported the introduction of the expenditure cap. However, we also note that the majority had concerns that our proposals were too conservative and that the proposed initial allowance was not enough to deliver real benefits from the start of the price control.

3.11. In light of both the comments raised by respondents and our additional analysis, we consider there is a justification for providing a higher initial expenditure cap from the start of RIIO-T1. We are proposing to set the cap at £500m. We are also continuing to require the TOs to undertake further analysis to help inform the final expenditure cap.

Wider works (new investment)

3.12. National Grid considered there were errors in the data for wider reinforcement works such that the data did not reflect the boundary capabilities of baseline wider works. It provided a revised boundary capability table.

3.13. For Final Proposals we have updated the best view of wider works outputs NGET might be required to deliver to approximately 37,300MW to reflect the additional transfer capacity resulting from a correction to boundary[29] B14 and also the use of Western HVDC's short-term rating as the maximum transfer capability across boundaries B6, B7 and B7a. This output is a combination of transfer capability delivered by baseline funding and SWW arrangements. For the avoidance of doubt any boundary with a transfer capability at the end of RIIO-T1 which is lower than its capability at the start of RIIO-T1 as a result of forecast thermal, voltage or stability constraints are not reflected in this output figure.

Delivery of outputs in RIIO-T2

3.14. A specific issue raised by National Grid concerned the requirements for funding in RIIO-T1 to ensure the delivery of outputs in the early years of RIIO-T2. We propose to include an additional funding mechanism to provide NGET scope for funding for outputs it intends to deliver in RIIO-T2. We provide the allowance for this in the cost assessment section of this chapter and set out the mechanism for providing funding in the uncertainty section of this chapter.

[29] A system boundary splits the transmission network into two parts across which the capability to transfer electrical power can be assessed. For the avoidance of doubt, system boundaries are not network ownership boundaries and each licensee's network could contain multiple system boundaries.

Overall

3.15. Overall we note that respondents, including National Grid were broadly supportive of the proposed outputs. There were some specific comments on the connections, environmental and wider works outputs. These are summarised in Appendix 1 of this document and discussed in further detail in the Outputs, incentives and innovation Supporting Document.

Innovation

3.16. In its business plan NGET set out a consideration of innovation through its plan as well as providing a specific innovation strategy. NGET requested an annual NIA of 1 per cent of allowed revenue.

3.17. In the Initial Proposals we noted that we did not consider that NGET provided sufficient justification for its requested NIA. We noted that we intended to provide NGET an allowance of 0.6 per cent.

3.18. We note that a number of respondents to our Initial Proposals considered that the level of our proposed NIA was too low for NGET. In light of respondents' views we have further reviewed our proposals against our assessment criteria.

3.19. Based on our assessment criteria we do not consider that there is sufficient evidence to merit a NIA allowance of 1 per cent of allowed revenue. However, we consider respondents have highlighted a number of points which strengthen the case for an increased allowance. These are as follows:

(1) They have demonstrated that the stakeholder engagement undertaken by NGET to inform its innovation strategies was stronger than we had understood in making our initial assessment.

(2) Further evidence has been provided for the use of NIA funding by NGET for SO innovation.

3.20. On balance we consider that it would be appropriate in light of consultation responses, and in line with our assessment framework, to increase the level of NGET's NIA to 0.7 per cent.

3.21. Further detail is set out in the Outputs, incentives and innovation Supporting Document.

Cost efficiency

3.22. There are various costs that NGET incurs as a TO and for which it seeks to recover revenue in its price control. The main costs areas are:

- Load-related capex – the investment required to connect new generators and customers to the network, to upgrade the existing network and to cater for growth in demand. `
- Non load-related capex – the expenditure required to replace existing assets on the network, but also including expenditure relating to network resilience, flooding and physical security.
- Opex – the ongoing costs of running the business, including asset maintenance and support services.

3.23. We apply the Information Quality Incentive (IQI) to incentivise TOs to reveal their efficient costs, and to reward TOs that submit cost forecasts that align with our assessment of efficient costs.

3.24. Tables 3.2 and 3.3 set out the cost parameters we propose to specify for NGET as TO and SO in our Final Proposals to deliver its business plan. All figures reflect the application of the IQI.[30][31]

Table 3.2 – RIIO-T1 total cost parameters for NGET (TO)

Parameter	NGET March 2012 Business Plan	Initial Proposals	Final Proposals	Difference FP vs. BP
	(2009/10 prices) (£/m)	(2009/10 prices) (£/m)	(2009/10 prices) (£/m)	%
Load-related capex	7,831.6	6,839.9	7,335.1	-6
Non load-related capex	5,424.0	4,760.1	4,806.4	-11
Total capex (best view) [32]	13,255.6	11,600.0	**12,141.5**	**-8**
Total opex[33]	2,837.0	2,249.7	**2,418.6**	**-15**
Total expenditure	16,092.6	13,849.7	**14,560.1**	**-10**

Table 3.3 – RIIO-T1 total cost parameters for NGET (SO)

Parameter	NGET March 2012 Business Plan	Initial Proposals	Final Proposals	Difference FP vs. BP
	(2009/10 prices) (£/m)	(2009/10 prices) (£/m)	(2009/10 prices) (£/m)	%
Load-related capex Non load-related capex	312.4	203.2	243.4	-22
Total capex (best view)	312.4	203.2	**243.4**	**-22**
Total opex	699.5	556.3	**629.0**	**-10**
Total expenditure	1,011.9	759.5	**872.4**	**-14**

[30] As part of the IQI mechanism to ensure incentive compatibility we set totex allowances using an interpolation approach, whereby allowances equal 75 per cent of our view of the efficient level of costs and 25 per cent of the company's view of appropriate costs (as adjusted for volumes or outputs to be on a consistent basis).

[31] We do not intend to make any further amendments to our Final Proposals to correct any inaccuracies identified after publication, as we consider our approach to applying the IQI interpolation already adequately accounts for the possibility of residual error.

[32] 'Best view' is the expenditure that we consider the licensees will need to deliver the outputs under their central scenario. It comprises 'baseline' and 'uncertainty mechanism' funding.

[33] Controllable and non controllable costs. Controllable costs are those costs that are broadly in the company's control. Non-controllable costs are outside the company's control which they cannot determine, eg licence fees or business rates.

3.25. Of the £14,560.1m total expenditure we are providing for NGET TO, £2525.7m will be provided through a number of uncertainty mechanisms. These are discussed further below.

Context for proposed cost parameters

3.26. In a number of areas our cost parameters differ from those requested by NGET and those set out in our Initial Proposals. The context for our Final Proposals is set out below. These points are discussed in further detail in the Cost assessment and uncertainty Supporting Document.

RPEs

3.27. In Initial Proposals, we proposed an RPE assumption of 0.8 per cent per year for totex for NGET. Our assumption for ongoing productivity improvements was 0.7 per cent per year for totex for NGET, meaning we expected NGET to absorb expected increases in real prices through productivity improvements.

3.28. National Grid raised some concerns with our assumptions, most notably our assumption for real wages. It considered that we should use labour indices specific to the energy sector, and that our use of comparator sectors understated wage growth in an industry experiencing skills shortages. They also considered that we should use, as the basis for our short-term forecast, a private sector wage growth forecast, as opposed to the HM Treasury consensus forecast for the whole economy. It also set out a number of technical criticisms of our assumptions for ongoing efficiency.

3.29. Our overall approach for Final Proposals remains the same as that set out in Initial Proposals. Our approach ensures that we use a consistent set of indices for the entire price control period, ie consistent with our longer term real wage assumption based on the historical average for the cited independent series.

3.30. We have revised our RPEs for latest actual and forecast data, including incorporating outturn data for 2012-13 into our RPE assumptions. For NGET, we have also included a further labour index for electrical engineering as proposed by it in its responses to Initial Proposals. These revisions have resulted in a slightly more challenging RPE assumption for NGET (totex RPE assumption is 0.8%).

NGET (TO)

3.31. We note that while a number of responses broadly supported our proposed costs at Initial Proposals, National Grid expressed a number of concerns. These were highlighted in Chapter 2 and are set out in further detail in the Cost assessment and uncertainty Supporting Document.

3.32. For Final Proposals we have increased the totex costs for NGET reflecting a number of factors including:

- the addition of a funding mechanism for expenditure incurred by NGET in the second half of RIIO-T1 for outputs it intends to deliver in RIIO-T2 – this results in an increase in the best view of £425m
- the recalculation of our unit cost allowances to reflect construction efficiencies, highlighted in National Grid's response, that we had not accounted for in its unit cost proposals resulting in an increase of £174m
- the updating of our RPEs for labour to include an index for electrical engineers which has resulted in a small increase in the cost allowances
- the correction of errors results in a very slight reduction in costs.

3.33. These increases are partially offset by the recalculation of our allowances for RPEs which represent the expected change in input prices (eg wages) relative to economy wide inflation. In Initial Proposals we had used forecast figures. In Final Proposals we have updated these using actual data for the first half of 2012-13 and updated forecasts for future years. This results in a reduction in the totex allowance of £114m.

3.34. The net result is to increase the totex costs for NGET by £710.4m after the IQI adjustment.

NGET (SO)

3.35. National Grid expressed some concerns with our Initial Proposals. These were highlighted in Chapter 2 and are set out in further detail in the Cost assessment and uncertainty Supporting Document.

3.36. For Final Proposals we have marginally increased the SO cost parameters by providing further funding for costs associated with investment in IT systems of around £74.4m. This results in total SO costs of £872.4m after the IQI adjustment.

Financial proposals

3.37. The financial package comprises a number of elements. These elements combine to determine the total allowed revenue that NGET will be able to recover over RIIO-T1. Table 3.4 sets out the key financial parameters in the Final Proposals for NGET as TO and SO. Table 3.5 sets out the allowed revenues.

Table 3.4 – NGET's key financial parameters for RIIO-T1

Parameter	NGET (TO) Our view	NGET (SO) Our view
Cost of equity (post-tax real)	7.0	7.0
Cost of debt (pre-tax real)	10 year simple average index (2.92% in 2013-14)[34]	10 year simple average index (2.92% in 2013-14)
Notional gearing	60%	60%
Vanilla WACC[35]	4.55%	4.55%
Asset lives transition	8 years	Asset lives already 7 years
Totex capitalisation	85% for both base and uncertainty mechanism Totex	27.9%
Notional new equity	£1.8bn (nominal)	N/A

Table 3.5: Allowed revenues (Best view)

NGET £m Best View	2012-13 per Rollover	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Allowed revenues (nominal)	1,506	1,600	1,801	1,959	2,114	2,190	2,385	2,403	2,452
Allowed revenues (2009-10 prices)	1,332	1,376	1,507	1,595	1,674	1,687	1,787	1,752	1,738
Yr on Yr Change (2009-10)		3.3%	9.5%	5.8%	5.0%	0.8%	5.9%	(2.0%)	(0.8%)
Cumulative Change (2009-10)		3.3%	13.2%	19.7%	25.7%	26.7%	34.2%	31.5%	30.5%

Context for proposed financial parameters

3.38. For the most part our financial proposals reflect those set out in our Initial Proposals. The context for our proposals is set out below. Further details on our proposed financial parameters for NGET are outlined in our Finance Supporting Document.

Cost of equity and notional gearing

3.39. In our Initial Proposals we proposed a package comprising a 7.0 per cent cost of equity and 60 per cent notional gearing.

3.40. We note that National Grid considered that the financial package proposed for NGET did not reflect its level of risk relative to TPCR4 and to the fast-tracked companies. In particular, its response and the report by Oxera highlighted the differences in asset betas between network companies.

[34] The 'vanilla' weighted average cost of capital (WACC) consists of pre-tax cost of debt and post-tax cost of equity, weighted by a notional gearing (ie.ie the relative share of debt) assumption.
[35] The value of the cost of debt index may vary during the price control period. Any changes would be reflected in the allowed return.

3.41. We consider it appropriate to put more weight on the overall cost of equity rather than the unobservable asset beta. Having considered our bottom-up calculations of the cost of equity and additional evidence, we continue to regard a 7.0 per cent cost of equity (the same as provided to SPTL and SHETPLC) as appropriate for NGET. We also continue to propose that as a result of our relative risk assessment a notional gearing level of 60 per cent is appropriate for NGET. This is also supported by our assessment of the return on regulatory equity (RoRE) and financeability analysis.

Cost of debt

3.42. NGET accepted our approach of annually updating the cost of debt assumption based on a 10 year simple trailing average index. However, it and a number of other respondents, expressed concerns with the proposed workings of the index. We note that we addressed the points raised in relation to the index in detail in our Initial Proposals. The consultation responses did not provide new evidence or raise new issues with the index. Our Final Proposals therefore retain the proposal and make no adjustments to the index.

3.43. In Initial Proposals we used the same 3.03 per cent assumption as in the fast-track Final Proposals. For Final Proposals we have updated this value to 2.92 per cent in line with our stated approach.

Asset lives and depreciation

3.44. NGET has accepted our proposal to depreciate new assets over 45 years on a straight line basis rather than the current 20-year profile. However, NGET favoured a 16-year transition period, compared with the 8-year period we proposed.

3.45. In its response National Grid continued to make a case for a 16-year transition period. It argued that doing so would represent a net present value neutral movement and would provide a more favourable profile for equity ratios, which would support the level of notional new equity assumed in our proposals.

3.46. We retain the view that an 8-year transition period is appropriate for NGET to achieve financeability given our proposed package and that it results in an appropriate profile for equity ratios.

Totex capitalisation

3.47. In Initial Proposals we set out a single capitalisation rate across base totex and incremental totex of 85.0 per cent. Changes in the capex and opex allowances impact the level of capitalisation. For Final Proposals we have decided to retain a capitalisation rate of 85.0 per cent. For NGET SO the figure reduces slightly to 27.9 per cent.

Financeability

3.48. In our Initial Proposals we set out the view that our proposed financial package enabled NGGT to obtain a 'comfortable investment grade' rating. National Grid questioned the thoroughness of our financeability assessment and in particular how we took into account the timing of cashflows arising from uncertainty mechanisms or the tax payable on revenues generated from pre-tax incentive schemes.

3.49. In setting the financial parameters we consider financeability over the period as a whole. However, reflecting the concerns expressed by respondents we extended our analysis to take into account the timing of cashflows to ensure the analysis was robust. The resulting financial indicators demonstrated that, under our package of proposals NGET would still be able to obtain a 'comfortable investment grade' rating.

Uncertainty mechanisms

3.50. In our Initial Proposals we set out a range of mechanisms to help NGET manage the potential uncertainty it identified during the eight year RIIO-T1 price control period. In a number of areas these directly reflected those put forward by NGET in its RIIO business plan.

3.51. One key uncertainty mechanism is the efficiency incentive rate which determines the percentage of underspend/overspend, against expenditure allowed at the price control review, that is kept by the company responsible. The remaining savings/losses are passed through to consumers. The efficiency incentive rate is calculated by the application of the IQI mechanism using the companies' updated business plans adjusted for output changes. When calculated for NGET it gives an incentive rate of 47 per cent.

3.52. Table 3.6 sets out an overview of the other uncertainty mechanisms that we propose to provide in the RIIO-T1 price control for NGET in its roles as TO and SO.

Table 3.6 - Uncertainty mechanisms applying to NGET for RIIO-T1

Uncertainty	Mechanism
Volume of new generation connections	Volume driver to adjust baseline expenditure each year for deviations in generation capacity connections from annual baseline profile, including RPEs adjustment.
New demand connections	Volume driver for demand related infrastructure backed by commercial agreements to adjust baseline revenues as delivered infrastructure deviates from baseline profile of investment, including RPE adjustment.
Wider reinforcement works	Volume driver based on delivered wider works outputs (additional transfer capability) that meet NDP criteria and funded using boundary specific unit costs and delivered outputs. SWW (within period determination) mechanism for large reinforcements of greater than £500m or projects not meeting NDP criteria.

Uncertainty	Mechanism
Planning requirements to mitigate impacts of new transmission infrastructure on visual amenity	Volume driver to adjust revenues for cost of mitigation measures required to gain planning consent.
Funding for the delivery of outputs in RIIO-T2	Volume drivers will calculate the funding adjustment for activity in RIIO-T1 related to outputs NGET will deliver in the first two years of RIIO-T2. It will be based on the unit cost allowances agreed for RIIO-T1, pro rated using the spend profile that is part of the volume drivers.
Licence fees, business rates, Inter-TSO scheme payment	Annual pass through.
Financial distress	Disapplication of the price control where outside the company's control.
Material pre-defined events	Reopener for enhancement of physical security, innovation roll-out. Potential reopener for costs related to delivering EMR measures, pre-construction costs for the east coast integrated network.
RPI Inflation (TO and SO)	Indexation of allowed revenues.
Financial (TO and SO)	A number of mechanisms in relation to the financial arrangements. These cover: • cost of debt • tax legislation • pension deficit repair. These are discussed in more detail in the Finance Supporting Document.
Mid-period review (TO and SO)	The areas of uncertainty identified by NGET which we would propose to consider as part of the mid-period review are: • GB or EU market change – cost associated with new market facilitation roles/functions stemming from GB or EU legislation. • Flood and erosion protection - in the event that the Government requires NGET to contribute to flood protection or erosion schemes.

Reopeners

3.53. We propose to retain the principle of reopeners in RIIO-T1 whereby NGET would receive a reopener associated with incurring certain costs. However, we propose to tighten the qualifying criteria such as they will only apply:

- to costs above a materiality threshold of 1 per cent of average annual forecast revenue after the application of the totex efficiency incentive rate
- at specific reopener windows in May 2015 and May 2018 resulting in potential revenue adjustments in April 2016 and April 2019 respectively
- to specific pre-defined categories of events.

3.54. Table 3.7 outlines the uncertainties we propose to treat as reopeners.

Table 3.7 – Categories of reopener for NGET

Area	Context for uncertainty
Enhancement of physical security	NGET are undertaking a programme of work to enhance physical security in conjunction with advice from government. The requirements around this work for the RIIO-T1 period are varying for which we have proposed an uncertainty mechanism.
SO security costs	NGET may have to undertake greater resilience for IT systems for the RIIO-T1 period. At the moment these requirements have yet to be fully determined but Ofgem have proposed an uncertainty mechanism should they arise.
Innovation Roll-out	A revenue adjustment mechanism that enables companies to apply for additional funding within the price control period for the rollout of initiatives with demonstrable and cost effective low carbon or environmental benefits.

Context for proposed uncertainty mechanisms

3.55. In a number of areas our proposed uncertainty mechanisms differ from those set out in Initial Proposals. The key points are set out below. These areas and relevant respondents' views are discussed in further detail in the Cost assessment and uncertainty Supporting Document.

Mid-period review

3.56. Recognising the scope for significant changes in outputs during an eight year price control period, the RIIO framework includes provision for a mid-period review of output requirements. The scope of the mid-period review will be restricted to changes to outputs that can be justified by clear changes in government policy and the introduction of new outputs that are needed to meet the needs of consumers and other network users. For RIIO-T1 the mid-period review would take place in 2016, with any changes being implemented in April 2017.

3.57. In Initial Proposals we set out the high level details of our proposed process for the mid-period review. We had previously provided further information as part of our March Strategy Document. Some respondents requested further detail. In the Cost assessment and uncertainty Supporting Document we have provided this detail.

Delivery of RIIO-T2 outputs

3.58. In Initial Proposals we proposed to disallow the baseline allowances NGET requested in its business plan for generation connections and demand related infrastructure works that deliver outputs in RIIO-T2. We did not consider it appropriate to include baseline allowances for this potential spend in view of the uncertainty about what might turn out to be required.

3.59. In its response National Grid has provided further context for the uncertainty that it faces in this area and also on the benefits to consumers associated with the ability to invest to provide future outputs.

3.60. We consider it necessary to ensure that NGET has the right incentives to efficiently deliver customer driven outputs if needed. In light of this we propose to include an additional funding mechanism for expenditure incurred by NGET in the second half of RIIO-T1 for outputs it intends to deliver in RIIO-T2.

3.61. We propose this will work through the respective volume drivers in each load-related area, which would allow NGET to trigger an adjustment towards the end of the price control period for activity in RIIO-T1 related to outputs it will deliver in the first two years of RIIO-T2. The volume drivers will calculate the funding adjustment based on the unit cost allowances agreed for RIIO-T1 and pro rata this using the construction expenditure profile that is part of the volume drivers. The benefit of this approach is that there will be a much clearer link between the costs NGET has incurred in the RIIO-T1 period and outputs that the company can be held to account to deliver during RIIO-T2. More details about how and when this funding adjustment will be triggered and when it will take effect are set out in the Cost assessment and uncertainty Supporting Document.

Delivery of EMR measures

3.62. NGET may incur costs during RIIO-T1 if it assumes responsibility for the delivery of EMR measures. In the event that NGET assumes this role then we consider it is appropriate for NGET to recover its efficiently incurred costs. We discussed this issue in Chapter 1.

Offshore integration

3.63. NGET has submitted a request for funding through RIIO-T1 to undertake preliminary works related to potential integrated network investment off the East Coast of England. Given ongoing policy development in this area we are reserving

any decision on this specific proposal and more general provisions at this stage.[36] However, we are providing a provision for NGET's east coast proposal by which additional funding could be potentially triggered. Any adjustment will be subject to the outcome of the aforementioned consultation, as well as NGET's justification for these costs including evidence of the outputs that will be delivered. Any further funding of preliminary works related to integrated network investment will be subject to review as part of the mid-period review.

[36] Consultation on a proposed framework to enable coordination of offshore transmission http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=101&refer=NETWORKS/OFFTRANS/PDC/CDR/2012

4. Summary of Final Proposals for NGGT

Chapter Summary

This chapter summarises the Final Proposals for NGGT.

Introduction

4.1. This chapter summarises the key components of the Final Proposals for NGGT in its role as TO and also in relation to its internal SO costs. Further detail on each of the areas set out below is provided in the Supporting Documents.

Outputs and incentives

4.2. RIIO is an output-led framework. It is important that throughout the RIIO-T1 period, the TOs understand what they are expected to deliver and are held to account for delivery.

4.3. Table 4.1 summarises the complete list of outputs that NGGT will be expected to deliver during RIIO-T1. It also outlines the associated incentives. These closely reflect the package of outputs that, following consultation, we set out for NGGT in our March Strategy Document.

4.4. A number of the incentives are linked to the percentage of allowed revenue. To maintain strong output incentives and appropriate revenue allowances for specific activities it is important that the caps and collars on these reflect the opening base revenue allowance. However, it is also important that they adjust in response to ongoing, but uncertain, changes in revenue in order to better reflect the true change in network totex and other in-period adjustments over the price control period. References to 'percentage of allowed revenue' therefore reflect a combination of the opening base revenue allowance plus within period adjustments captured through the annual iteration of the financial model.

4.5. We will generally consider NGGT's performance against its outputs on an annual basis. We will set this out in our RIGs information requirements and monitoring arrangements.

Table 4.1 – NGGT's Outputs and incentive parameters for RIIO-T1

Category	Output	Incentive
Safety	Compliance with safety obligations set out by the HSE. Supported by measures of asset health, condition and criticality with agreed targets and impacts on RIIO-T2 funding.	Statutory requirements. No financial incentive. A penalty/reward of 2.5% of the value of any over/under delivery of network replacement outputs.
Reliability and availability	Compliance with its obligations to convey gas in a reliable and efficient manner as required at system entry and exit points under the network code, NGGT's Transporter Licence and the Gas Act 1986.	Statutory requirements. No financial incentive.
	Keep current lead times for providing incremental capacity and use a permits allowance to manage the associated risk.	First year, £19.0m permits allowance enabling deferrals of delivery times informed by our assessment of NGGT's analysis. Next three years of RIIO-T1 - scope for additional permits based on information provided by NGGT with a requirement on NGGT to demonstrate continued need for those permits on an annual basis. Mid-period review to consider requirement for permits for remainder of RIIO-T1 period if required.
	Constraint management/buy back.	Include a unified incentive scheme across Entry and Exit but retain separate information targets. Align incentive rates. Include an annual collar on constraint management costs of £60m to protect NGGT from low probability high impact costs events and a cap of £20m.
Customer Satisfaction	Develop a customer/ stakeholder satisfaction survey.	Up to +/-1% of allowed revenue.
	Effective stakeholder engagement.	Up to 0.5% of allowed revenue via a discretionary reward scheme.
Connections	Meet new process established under UNC modification 373.	Reputational incentive.
Environmental	Business Carbon Footprint (BCF) – publish BCF business level accounts each year of RIIO-T1.	Reputational incentive.

Category	Output	Incentive
	Venting – to be reduced through the development of innovative techniques.	No formal incentive as separately incentivised through the SO external incentives.
	Compressor replacement – changes for compliance with requirements of the IED.	No formal incentive. Discussed under section on uncertainty mechanisms.

Context for proposed outputs

4.6. Our proposed outputs are largely identical to those set out in our Initial Proposals. The only changes are in relation to the treatment of incremental capacity and the constraint management arrangements. These are discussed below.

Reliability – the provision of incremental capacity

4.7. In Initial Proposals, as a transitional measure, we proposed to keep current required lead times for providing incremental capacity and include an increased permits allowance to provide NGGT with an additional tool to manage the risk it has identified in meeting these, including as a result of planning arrangement changes.

4.8. NGGT expressed disappointment that we did not set out an opinion on its proposed changes and argued that this would impact its level of risk. However, we note all third party respondents supported our proposed approach on the grounds that we should allow industry processes to be taken forward and not prejudice the outcome.

4.9. At the same time we noted NGGT concerns on the need for further clarity on permits from 1 April 2014. We agreed that further clarity would be appropriate in this area and, on 30 October, we published an open letter consultation seeking further views on the treatment of permits from 1 April 2014 and the process for NGGT to calculate revenue drivers where needed. Responses to that consultation were summarised in Chapter 2 and are set out in more detailed in Appendix 1. In light of responses we propose the following approach for RIIO-T1:

- To provide a permits allowance of £19.0m for the first year in line with our Initial Proposals.
- For the next three years of RIIO-T1 (ie until the mid-period review) we intend to provide a notional permits allowance of £40.2m with the annual allocation based on the evidence provided in NGGT's response to our open letter. However, we are placing a requirement on NGGT to provide information on an annual basis to demonstrate the continued need for those permits. The actual allocation of permits will depend on the justification provided by NGGT as part of this process. Further, we understand that good progress is being made in industry discussions regarding future incremental capacity arrangements. On this basis, it is our expectation that NGGT is unlikely to require the volume of permits it has identified beyond 31 March 2014.

- Allow any permits not used in relation to actual projects to be cashed-out at the end of the period or when the new incremental capacity arrangements are introduced.
- To review the requirement for permits for the remaining years of RIIO-T1 at the mid-period review. This review will depend on the nature of any changes to the arrangements for providing incremental capacity that are introduced in the intervening period.

4.10. We consider that this is the most appropriate approach as it provides NGGT with some certainty and adequate protection for the risks it faces in the first year of RIIO-T1 in relation to meeting the requirements of its licence for the provision of incremental capacity. At the same time, given the uncertainty over the future requirement for permits beyond 1 April 2014, the requirement for NGGT to provide updated information on its requirements on an annual basis is designed to ensure that the actual level of permits required more closely reflects NGGT's annual requirements.

Constraint management/buy back

4.11. NGGT uses constraint management tools when insufficient capacity is available or investments are delivered late. We incentivise it to minimise its constraint management costs through a range of incentive mechanisms.

4.12. In Initial Proposals we consulted on two options. These were:

(1) NGGT's proposed option of unifying the multiple existing incentive schemes into a single incentive scheme but removing the caps and collars to fully expose NGGT to the consequences of its actions.
(2) Retaining the existing schemes.

4.13. All third party respondents supported retaining the status quo until a case could be made for amending the existing arrangements. However, they highlighted additional factors, including that combining the incentives into one could encourage better decision making, if the constraints of the current scheme could be removed. NGGT argued that an uncollared constraint management scheme would potentially expose it to open-ended risks over which is has very little control.

4.14. In light of these responses we considered it was appropriate to consult further on the appropriate arrangements to apply in this area. On 30 October 2012 we published a further consultation. This sought views on variants of the approaches set out in Initial Proposals including a more limited model of NGGT's proposed unified incentives retaining the information reporting requirements and an approach based on retaining the existing schemes with potential changes to the caps and collars. Responses to that consultation were summarised in Chapter 2 and are set out in more detailed in Appendix 1. In light of responses we propose the following approach for RIIO-T1:

- To put in place a more limited version of NGGT's proposal involving the unified incentive. Under this approach we will retain the information reporting requirements of the existing schemes and the 100 per cent liability on NGGT for incremental buybacks. We will also provide NGGT with obligations to show where the unified incentive has altered its decision making compared to the existing schemes.
- To include an annual collar on constraint management costs of £60m and a cap of £20m. This is to protect NGGT from low probability high impact costs.
- To include the ability to adjust the constraint management targets upon the release of incremental capacity or the triggering of other uncertainty mechanisms but at the time rather than through an automatic mechanism.
- To review the arrangements at the mid-period review or earlier if there are significant changes to the arrangements for providing incremental capacity (using the SO incentives uncertainty provisions).

4.15. We consider this approach to be appropriate as it combines the benefits of retaining the transparency of the existing schemes that stakeholders seek whilst enabling NGGT to derive benefits from more efficient decision making. It also exposes NGGT to the consequences of its actions but the application of the collar protects it from one-off significant events.

Innovation

4.16. In its business plan NGGT set out a consideration of innovation through its plan as well as providing a specific innovation strategy. NGGT requested an annual NIA of 1 per cent of allowed revenue.

4.17. In the Initial Proposals we noted that we did not consider that NGGT had provided sufficient justification for its requested NIA. However, we noted that it had met the basic requirements set out in our March Strategy Document and exceeded these in the same areas as NGET. On this basis, we also proposed to provide NGGT an allowance of 0.6 per cent.

4.18. We note that a number of respondents to our Initial Proposals considered that the level of our proposed NIA was too low for NGGT. In light of respondents' views we have further reviewed our proposals against our assessment criteria.

4.19. Based on our assessment criteria we do not consider that there is sufficient evidence to merit a NIA allowance of 1 per cent of allowed revenue. However, we consider respondents have highlighted a number of points which strengthen the case for an increased allowance. These are as follows:

(1) they have demonstrated that the stakeholder engagement undertaken by NGGT to inform its innovation strategy was stronger than we had understood in making our initial assessment

(2) further evidence has been provided for the use of NIA funding by NGGT for SO innovation.

4.20. On balance, we consider that it would be appropriate in light of consultation responses, and in line with our assessment framework, to increase the level of NGGT's NIA to 0.7 per cent. This is the same as proposed for NGET. Further detail is set out in our Outputs, incentives and innovation Supporting Document.

Cost efficiency

4.21. There are various costs that NGGT incurs as a TO and as SO and for which it is seeking to recover revenue in its price control. The main costs areas are:

- Load-related capex – the investment required to provide new capacity to meet customers' needs and to cater for growth in demand.
- Non load-related capex – the expenditure required to replace existing assets on the network, but also including expenditure relating to network resilience and physical security.
- Opex – the ongoing costs of running the business, including asset maintenance and support services.

4.22. Tables 4.2 and 4.3 set out the cost parameters for NGGT as both TO and SO in our Final Proposals. All figures reflect the application of the IQI.[37]

Table 4.2 – RIIO-T1 total cost parameters for NGGT (TO)

Parameter	NGGT March 2012 Business Plan	Initial Proposals	Final Proposals	Difference FP vs. BP
	(2009/10 prices) (£/m)	(2009/10 prices) (£/m)	(2009/10 prices) (£/m)	%
Load-related capex	3,743.6	2,276.9	2,412.6	-34
Non load-related capex	1,607.1	1,078.0	964.9	-40
Total capex (best view)	5,350.7	3,354.9	3,377.5	-36
Total opex	1,537.6	1,528.8	1,552.7	0
Total expenditure	6,888.3	4,883.7	**4,930.2**	**-28**

Table 4.3 – RIIO-T1 total cost parameters for NGGT (SO)

Parameter	NGGT March 2012 Business Plan	Initial Proposals	Final Proposals	Difference FP vs. BP
	(2009/10 prices) (£/m)	(2009/10 prices) (£/m)	(2009/10 prices) (£/m)	%
Load-related capex	263.9	222.7	225.7	-14
Non load-related capex				
Total capex (best view)	263.9	222.7	225.7	-14
Total opex	401.3	351.5	378.0	-6
Total expenditure	665.2	574.2	**603.7**	**-9**

4.23. Of the £4,930.2m total expenditure we are providing for NGGT TO, £2034.0m will be provided through a number of uncertainty mechanisms. These are discussed further below.

[37] As part of the IQI mechanism to ensure incentive compatibility we set totex allowances using an interpolation approach, whereby allowances equal 75 per cent of our view of the efficient level of costs and 25 per cent of the company's view of appropriate costs (as adjusted for volumes or outputs to be on a consistent basis).

Context for proposed cost parameters

4.24. In a number of areas our proposed cost parameters differ from those set out in our Initial Proposals. The context for the changes is set out below. Further details on our costs for NGGT are outlined in our Cost assessment and uncertainty Supporting Document.

RPEs

4.25. In Initial Proposals, we proposed an RPE assumption of 0.7 per cent per year for totex for NGGT. Our assumption for ongoing productivity improvements was 0.7 per cent per year for totex for NGGT, meaning we expected NGGT to absorb expected increases in real prices through productivity improvements.

4.26. NG raised some concerns with our assumptions, most notably our assumption for real wages. It considered that we should use labour indices specific to the energy sector, and that our use of comparator sectors understated wage growth in an industry experiencing skills shortages. They also considered that we should use, as the basis for our short-term forecast, a private sector wage growth forecast, as opposed to the HM Treasury consensus forecast for the whole economy. It also set out a number of technical criticisms of our assumptions for ongoing efficiency.

4.27. Our overall approach for Final Proposals remains the same as that set out in Initial Proposals. Our approach ensures that we use a consistent set of indices for the entire price control period, ie consistent with our longer term real wage assumption based on the historical average for the cited independent series.

4.28. We have revised our RPEs for latest actual and forecast data, including incorporating outturn data for 2012-13 into our RPE assumptions. These revisions have resulted in a greater reduction for NGGT (totex RPE assumption is 0.4%). The greater reduction for NGGT is due to the inclusion of the fall in steel prices in 2012-13.

NGGT (TO)

4.29. While a number of responses broadly supported our Initial Proposals, National Grid expressed a number of concerns. These were outlined in Chapter 2 and are set out in further detail in the Cost assessment and uncertainty Supporting Document.

4.30. For Final Proposals the totex allowances for NGGT remain broadly unchanged although relatively more is in the baseline allowances relative to the uncertainty mechanisms. This reflects a number of offsetting factors including:

- increased allowances for unit costs for compressors and pipelines reflecting new evidence provided by NGGT of £130m

- the addition of £400m to our best view, a net increase to forecast incremental capex of £167m, to reflect the increased probability of incremental investment following the recent publication of the Energy Bill and announcement of the UK Government's gas strategy
- the movement of £269m of compressor expenditure from the uncertainty mechanisms to the baseline
- the recalculation of RPEs reflecting the use of actual data for the first half of 2012-13 which results in the reduction of allowances of £112m
- the correction of errors and other changes resulting from further clarifications from NGGT resulting in a reduction of allowances of £391m.

4.31. The net result is that NGGT's total expenditure is marginally higher after the IQI adjustment.

NGGT (SO)

4.32. National Grid expressed some concerns with our proposed SO cost parameters in Initial Proposals. These were highlighted in Chapter 2 and are set out in further detail in the Cost assessment and uncertainty Supporting Document.

4.33. For Final Proposals we have increased the SO cost parameters by providing further funding for costs associated with investment in IT systems of around £58m. This results in total SO costs of £603.7m after the IQI adjustment.

Financial proposals

4.34. The financial package comprises a number of elements. These elements combine to determine the total allowed revenue that NGGT will be able to recover over RIIO-T1. Table 4.4 sets out NGGT's key financial parameters for RIIO-T1. Table 4.5 sets out the allowed revenues.

Table 4.4 – Key financial parameters proposed for NGGT (TO and SO)

Parameter	NGGT (TO) Our view	NGGT (SO) Our view
Cost of equity (post-tax real)	6.8%	6.8%
Cost of debt (pre-tax real)	10 year simple average index (2.92% in 2013-14)[38]	10 year simple average index (2.92% in 2013-14)
Notional gearing	62.5%	62.5%
Vanilla WACC	4.4%	4.4%
Asset lives transition	Already 45 years	Asset lives already 7 years
Totex capitalisation	Base totex 64%; Revenue driver totex 90%	37.4%
Notional new equity	0	N/A

[38] The value of the cost of debt index may vary during the price control period. Any changes would be reflected in the allowed return.

Table 4.5: Allowed revenues (Best View)

NGGT £m Best View	2012-13 per Rollover	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Allowed revenues (nominal)	662	627	651	687	765	923	931	992	1,057
Allowed revenues (2009-10 prices)	586	539	545	559	606	711	698	723	750
Yr on Yr Change (2009-10)		(7.9%)	1.0%	2.6%	8.3%	17.3%	(1.8%)	3.6%	3.7%
Cumulative Change (2009-10)		(7.9%)	(6.9%)	(4.5%)	3.4%	21.3%	19.1%	23.4%	28.0%

Context for proposed financial parameters

4.35. For the most part our Final Proposals for the financial parameters reflect those set out in our Initial Proposals. The context for our proposals is set out below. Further details on our proposed financial parameters for NGGT are outlined in our Finance Supporting Document.

Cost of equity and notional gearing

4.36. Under the RIIO principles the allowed return should reflect cash flow risk. In setting Initial Proposals we proposed that NGGT faces lower cash flow risk than NGET, in part due to it having a lower investment rate (relative to RAV). We retain this view.

4.37. We also consider it can support higher notional gearing than the fast-track companies. Based on our updated assessment of relative risk and financeability, we see no reason to depart from our Initial Proposals position of a 6.8 per cent cost of equity and 62.5 per cent notional gearing.

Cost of debt

4.38. NGGT agrees with our approach to annually update the cost of debt assumption based on a 10 year simple trailing average index but it, and a number of other respondents, expressed concerns with the proposed workings of the index. We note that we addressed the points raised in relation to the index in detail in our Initial Proposals. The consultation responses did not provide new evidence or raise new issues with the index. Therefore, our Final Proposals retain the proposal and make no adjustments to the index.

4.39. In Initial Proposals we used the same 3.03 per cent assumption as in the fast-track Final Proposals. For Final Proposals we have updated this value to 2.92 per cent in line with our stated approach.

Asset lives and depreciation

4.40. Asset lives are currently 45 years for NGGT. We do not propose to change this position. This is in line with our March Strategy Document and NGGT's business plan proposals.

Totex capitalisation

4.41. In Initial Proposals we set out split capitalisation rates between base totex and incremental totex. We proposed a capitalisation rate of 53 per cent for base totex and a capitalisation of 90 per cent for incremental totex.

4.42. For Final Proposals we consider it is appropriate to retain split capitalisation rates between baseline totex and incremental totex. As a result of the higher proportion of capex in the new baseline totex allowances, the capitalisation rate for baseline expenditure increases to 64.4 per cent. The capitalisation rate for uncertainty mechanisms remains at 90.0 per cent.

Financeability

4.43. In our Initial Proposals we set out the view that our proposed financial package enabled NGGT to obtain a 'comfortable investment grade' rating.

4.44. National Grid questioned the thoroughness of our financeability assessment and in particular how we took into account the timing of cashflows arising from uncertainty mechanisms or the tax payable on revenues generated from pre-tax incentive schemes. It questioned whether NGGT was financeable on the basis of the credit ratios derived from our Initial Proposals.

4.45. In setting the financial parameters we consider financeability over the period as a whole. However, reflecting the concerns expressed by respondents we extended our analysis to take into account the timing of cashflows to ensure the analysis was robust. Furthermore, we carried out detailed financeability assessment under a wide range of scenarios. We remain convinced that the resulting financial indicators demonstrate that, under our package of proposals, NGGT would still be able to obtain a 'comfortable investment grade' rating.

Uncertainty mechanisms

4.46. In its updated business plan NGGT proposed a range of mechanisms to help it manage the potential uncertainty it has identified during the eight-year price control period. One key uncertainty mechanism is the efficiency incentive rate which determines the percentage of underspend/overspend against expenditure allowed at the price control review that is kept by the company responsible. The remaining savings/losses are passed through to consumers. The efficiency incentive rate is calculated by the application of the IQI mechanism using the companies' updated

business plans adjusted for output changes. When calculated for NGGT it gives an incentive rate of 44 per cent.

4.47. Table 4.6 sets out an overview of the other uncertainty mechanisms that we propose to provide in the RIIO-T1 price control for NGGT in its roles as TO and SO.

Table 4.6 - Uncertainty mechanisms proposed for NGGT

Uncertainty	Proposed mechanism
Provision of incremental entry and exit capacity	Keep current lead times for providing incremental capacity and, as a short-term measure, use a permits allowance to manage the associated risk. This was discussed in the outputs section above.
Constraint management/buy back	Unify separate schemes but retain separate information targets. Align incentive rates. To include an annual collar on constraint management costs of £60m and a cap of £20m. To review the arrangements at the mid-period review or earlier if there are significant changes to the arrangements for providing incremental capacity. This was discussed in the outputs section above.
Financial distress	Disapplication of the price control where outside the company's control.
Licence fees, Business rates, policing costs, gas conveyed to independent systems	Annual pass through.
Network flexibility	Annual reopener to allow NGGT to propose changes to allowed revenues required to meet changing peak day requirements (1 in 20 obligations), supported by stakeholder engagement. Changes will need to pass a materiality threshold of 2 per cent of average annual forecast revenue after the application of the totex efficiency incentive rate in order to trigger.
Range of material pre-defined events	Reopeners for a number of pre-defined events. This is discussed in further detail below.
Xoserve	Review of allowances following our review of funding arrangements.[39]
RPI Inflation (TO and SO)	Indexation of allowed revenues.
Financial (TO and SO)	A number of mechanisms in relation to the financial arrangements. These cover: • cost of debt • tax legislation • pension deficit repair. These are discussed in the Finance Supporting Document.

[39] Xoserve provides a range of centralised data services to support the operation of the GB gas industry. We have recently undertaken a review of Xoserve's funding, governance and ownership arrangements. The purpose of the review was to examine whether the current arrangements facilitate the provision of an efficient and high quality service, and one that is responsive to network users' needs, and wider industry change.

Mid-period review (TO and SO)	The areas of uncertainty identified by NGGT which we would propose to consider as part of the mid-period review are: • GB or EU market change – cost associated with new market facilitation roles/functions stemming from GB or EU legislation. • Flood and erosion protection - in the event that the Government requires NGGT to contribute to flood protection or erosion schemes. • Network flexibility – costs to increase the flexibility of its network to meet commercial obligations.

Reopeners

4.48. We propose to retain the principle of reopeners in RIIO-T1 whereby NGGT would have a reopener associated with incurring specific costs. However, we propose to tighten the qualifying criteria such that they will only apply:

- to costs above a materiality threshold of 1 per cent of average annual forecast revenue after the application of the totex efficiency incentive rate, for the majority of cost areas
- at specific reopener windows in May 2015 and May 2018 resulting in potential revenue adjustments in April 2016 and April 2019 respectively
- to specific pre-defined categories of events.

4.49. Table 4.7 outlines the uncertainties identified by NGGT which we propose to treat as reopeners.

Table 4.7 – Categories of reopeners for NGGT

Area	**Context for uncertainty**
Pipeline diversion costs (TO)	Liability for costs associated with diverting existing pipeline.
Asset health shocks (TO)	Provides for funding in the event of a low probability, high impact unexpected event such as a material safety notice from the original equipment manufacturer. We have set a higher materiality threshold, than for other reopeners, of 2 per cent of average annual forecast revenue (after the application of the totex efficiency incentive rate).
Quarry and loss of development claims (TO)	Material one-off claims from landowners for compensation due to pipeline developments.
Industrial emissions (TO)	Requirement to comply with the Integrated Pollution Prevention and Control Directive (IPPCD) or the Industrial Emission Directive (IED).

Area	Context for uncertainty
Enhancement of physical security (TO)	NGGT are undertaking a programme of work to enhance physical security in conjunction with advice from government. The requirements around this work for the RIIO-T1 period are varying for which we have proposed an uncertainty mechanism.
SO security costs (SO)	NGGT may have to undertake greater resilience for IT systems for the RIIO-T1 period. At the moment these requirements have yet to be fully determined but Ofgem has proposed an uncertainty mechanism should they arise.
Innovation Roll-out	A revenue adjustment mechanism that enables companies to apply for additional funding within the price control period for the rollout of initiatives with demonstrable and cost effective low carbon or environmental benefits.

Context for proposed uncertainty mechanisms

4.50. Our proposed uncertainty mechanisms for NGGT are largely identical to those set out in our Initial Proposals. We set out the updated arrangements for the treatment of incremental capacity and in relation to constraint management in the outputs section above. The only other change is in relation to the arrangements for the mid-period review. This discussed below.

4.51. Further details on our proposed uncertainty mechanisms for NGGT are outlined in our Cost assessment and uncertainty Supporting Document.

Mid-period review

4.52. In Initial Proposals we set out the high level details of our proposed process for the mid-period review. We had previously provided further information as part of our March Strategy Document. Some respondents requested further detail. In the Cost assessment and uncertainty Supporting Document we have provided this detail.

5. Next steps

Chapter Summary

This chapter sets out the next steps in setting the RIIO-T1 price control for NGET and NGGT.

5.1. The Final Proposals will come into effect through changes to the transmission licences on 1 April 2013. The licence obligations will also be set out in a series of supporting methodologies. In addition we will be publishing a set of Regulatory Instructions and Guidance (RIGs) for RIIO-T1. The RIGs will provide the framework under which we will monitor the performance of the TOs against their price control obligations.

5.2. We intend to publish our Statutory Licence Consultation for all four transmission owners – NGET, NGGT, SPTL and SHETPLC – on 21 December 2012. The consultation will close on 22 January 2013.

5.3. Following the implementation of the Third Package Regulations[40] the procedure for making licence modifications was amended. Under the revised procedure, proposed licence modifications no longer require licensee consent, but can only come into effect at least 56 days after we have published our decision to make those licence modifications.

5.4. We propose to publish our decision on making the licence modifications in late January 2013. This is shortly after the close of the 28 day Statutory Consultation. This is to enable the licence modifications to come into effect from 1 April 2013, ie from the start of the RIIO-T1 period.

[40] The Electricity and Gas (Internal Markets) Regulations 2011.

Appendices

Index

Appendix 1 - Consultation questions and responses

1.1. In our Initial Proposals consultation (RIIO-T1: Initial Proposals for National Grid Electricity Transmission and National Grid Gas Ref: 104/12) Ofgem sought the views of respondents about a number of questions. The questions along with respondents' views are set out below.

1.2. We also summarise the responses we received to two additional open letters we published on 30 October 2012:

- RIIO-T1 (Gas): Further views sought on implementation arrangements relating to the treatment of incremental capacity and constraint management incentives: 140/12
- RIIO-T1/GD1: Office of National Statistics (ONS) review of Retail Prices Index (RPI) methodology: 141/12

List of non-confidential respondees

List	Name
1	B.A. Kibble
2	Broads Authority
3	Cardiff University
4	Chilterns Conservation Board
5	Countryside Council for Wales
6	Campaign to Protect Rural England, Campaign for National Parks, John Muir Trust and Friends of the Peak District
7	CreditSights
8	EDF Energy
9	ENA response - Oxera report
10	Energy UK
11	English Heritage
12	English National Park Authorities Association
13	Essex and Suffolk Coalition of Amenity Groups
14	Gas Forum
15	John Muir Trust
16	National Grid
17	National Grid Electricity Group Trustee Limited
18	National Grid UK Pension Scheme
19	Northern Powergrid
20	Peak District National Park Authority
21	Prospect
22	Renewable UK
23	RWE npower
24	South East and Eastern Undergrounding Steering Group

25	Sedgemoor District Council
26	SP Energy Networks
27	Statoil
28	Suffolk Coast and Heaths
29	Suffolk County Council
30	University of Exeter
31	University of Southampton
32	University of Strathclyde
33	Unite

Summary of responses

1.3. Responses received by Ofgem which were not marked as being confidential have been published on Ofgem's website www.ofgem.gov.uk.

1.4. The following is a summary of those responses which were received to the following questions.

1.5. We received 36 responses to the Initial Proposals consultation. This included a response from National Grid. Three of these responses were identified as confidential.

1.6. In this appendix we summarise National Grid's response separately from third parties.

Questions in Overview Document

Question 1: Do you have any comments on the overall package of proposals for NGET?

1.7. One respondent considered the overall package was reasonable and struck the right balance between minimising costs for consumers and facilitating network investment.

1.8. National Grid expressed a number of concerns with the package. The key views it expressed were as follows:

- Network risk – Proposed treatment of under and over delivery, including refusal to confirm detail of proposals until RIIO-T2 review, exposes NGET to the risk of uncertain asset renewal volume.
- RIIO-T2 outputs – It preferred base funding but regardless considered our financeability assessment must reflect the proposals.
- Capex uncertainty mechanisms – It considered our changes to the generation connection uncertainty mechanism were based on limited scenarios. NGET proposed an alternative mechanism which it considered would address complexity without compromising accuracy.

- Real pay assumptions – It considered our lower pay growth forecasts relative to the fast-track companies did not reflect energy sector pay pressures and would create challenges in recruiting and retaining staff including graduates coming into the industry.
- TO opex – It considered our proposals were inconsistent with the totex approach. Being based on TPCR4 performance, NGET considered it has no regard for top-down delivery, it also considered that errors and inconsistencies give rise to inappropriately low allowances. NGET considered the cumulative impact of these issues was large.
- SO costs – It considered that we had reduced allowances but had not provided mechanisms to manage uncertainty. It also highlighted calculation errors and set out the view that market facilitation had been reduced despite the growing influence of EU policy.
- Physical security costs – It considered that a zero baseline undermines TPCR4 funding promises to fund logged-up costs and perpetuates cash-flow risk.
- TPCR4 efficiency review – It expressed concern with delaying the review until 2013 given review on the basis that it could affect the opening RAV value.
- It set out the following views on the finance package, that:
    - movements in asset beta risk are not credible and not substantiated as we had not undertaken any cash-flow risk modelling
    - the risk assessment omits key risk factors eg SO activities, duration of cashflows, difference between ex-ante and within period determinations, notional gearing and also does not consider the underlying drivers of RIIO risk
    - RORE analysis contains errors
    - the financeability assessment is misinformed given modelling errors and failure to reflect detail of Initial Proposals, insufficient weight given to the needs of equity investors
    - the cost of debt allowance will not fund debt costs and should allow for inflation risk premium
    - the totex capitalisation rate needs updating to match the mix of opex and capex allowances
    - the SO proposals result in less fast money than the operating costs of the business (26 per cent natural rate rather than 31 per cent in plan), the capitalisation rate should be reset to match allowances in Final Proposals rather than set independently
- Overall it considered that the financial package was inadequate and at a minimum notional gearing should be reduced to 55 per cent. It argued that the greater risk relative to SPTL and SHETPLC merited a cost of equity of above 7.0 per cent. It also considered that the package was unlikely to attract equity to fund investments and that transition to new asset life over 16 years may help in this respect.

<u>Question 2:</u> Do you have any comments on the overall package of proposals for NGGT?

1.9. One respondent considered the overall package for NGGT appeared reasonable and reflects the significant uncertainty the gas system faces in the future.

1.10. National Grid expressed concerns with the package in the following areas:

- Pipeline and compressor unit costs – It considered that analytical/data errors (including choice of overseas location for feasibility study) lead to an underestimation of costs as reflected in external benchmarking, need to consider relevant cost drivers and complexity of future projects. NGGT submitted a supplementary document entitled 'NGGT's unit cost'
- IED investment – It set out the view that there needs to be alignment between legal obligations under the IED and allowed funding and needs to be provided in a timely manner to ensure deliverability of IED programme. NGGT note its QC advice supports its view that the IED will apply to NGGT plant, regardless of operating hours.
- Real pay assumptions – It considered our lower pay growth forecasts relative to the fast-track companies did not reflect energy sector pay pressures and would create challenges in recruiting and retaining staff including graduates coming into the industry.
- Incremental capacity – NGGT considered our proposals were inconsistent between documents. It considered most elements of the proposals could be implemented without impacting the commercial arrangements. In the absence of a two stage revenue driver it argued that it would need an ex-ante allowance to ensure it received adequate funding for feasibility works. Overall, NGGT considered that it needed an appropriate balance of risks between its permits allowance, obligation lead times and the constraint management arrangements. It sought our guidance on the future development of the commercial arrangements.
- Charging volatility – It considered the proposals we put forward separately were essential to a proper assessment of the package, in particular the proposed treatment of under/over recovery.
- SO costs – It considered analytical errors had assumed costs were linear to capex and that market facilitation had been reduced despite growing influence of EU policy.
- Capex real price effects – It considered that not including long-term forecasts for steel prices understates the risk of RPE exposure and should be included.
- Business support benchmarking. It set out the view that logic errors and inconsistencies with the benchmarking methodology including a failure to reflect future cost drivers creates inadequate allowances, benchmarking and market testing must be fully incorporated into the assessment. NGGT submitted a supplementary paper on business support.
- Physical security costs – It set out the view that a zero baseline undermines a TPCR4 funding promises to fund logged-up costs and perpetuates cash-flow risk.
- TPCR4 efficiency review – It expressed concern with delaying the review until 2013 given review on the basis that it could affect the opening RAV value.
- Process – It argued that future discussions of policy points in licence drafting needed to be clearly identified and consulted on. It also noted that all errors must be corrected in analysis and that NGGT should not be penalised for a volume differences under IQI in relation to areas of uncertainty eg timing of planning consent approval rather than an alternative view of costs.
- It set out the following views on the finance package, that:
    - it was not consistent with a 'comfortable investment grade' and inconsistent with cost of debt allowance based on average of A and BBB rated debt

  - movements in asset beta risk were not credible and not substantiated as we had not undertaken any cash-flow risk modelling
  - the risk assessment omitted key risk factors eg SO activities, duration of cashflows, difference between ex-ante and within period determinations, notional gearing and also did not consider the underlying drivers of RIIO risk
  - the RoRE analysis contains errors
  - the financeability assessments failed to reflect the detail of Initial Proposals and insufficient weight was given to the needs of equity investors
  - the cost of debt allowance would not fund debt costs and should allow for inflation risk premium.

- Overall it considered that the financial package was inadequate and at a minimum that notional gearing should be reduced to 55 per cent.

Questions in Outputs, incentives and innovation Supporting Document

Question 1: Do you have any comments on our Initial Proposals on NGET's outputs and incentives?

1.11. One respondent welcomed the movement to define outputs but expressed concerns that there were areas where high level output policies were still being developed at Initial Proposals.

Reliability and availability

1.12. Two respondents were supportive of the approach we proposed for monitoring losses in RIIO-T1 and of the use of Energy Not Supplied (ENS). One noted it aligned with the DPCR5 Interruptions Incentive Scheme. Another respondent questioned the use of VoLL for setting the incentive on the grounds that it was difficult and complex to identify and could result in under incentivising some and over incentivising others.

1.13. One respondent highlighted the importance of TO-SO interactions and of us taking a wider view on system costs. Another supported the introduction of the Network Access Policy but considered it should be stronger than a reputational incentive to have a financial impact on the TOs.

1.14. National Grid considered that the treatment of Network Output Measures (NOMs) was incomplete and confused. It argued that we should confirm the details of the proposal that would apply to the assessment at RIIO-T2, as otherwise it created regulatory uncertainty. It submitted a supplementary document setting out a proposal to address our concerns on network renewal performance.

Customer satisfaction

1.15. One respondent supported the introduction of a customer satisfaction survey and believed the reward should also reflect the comparison with other TOs.

Connections

1.16. In relation to connections, one respondent considered that we should give consideration to introducing a requirement on transmission companies to provide information on the composition of costs associated with connection requests as a means of improving transparency.

1.17. National Grid disagreed with the setting of a financial penalty for connection as the obligation was already clearly provided for in the licence.

Wider works

1.18. National Grid considered there were errors in the data for wider reinforcement works such that the data did not reflect the boundary capabilities of baseline wider works. It provided a revised boundary capability table.

Environmental outputs

1.19. One respondent supported the Environmental Discretionary Reward (EDR) and encouraged us to consider how its aims could be supported by a decision on the size of the RIIO-T1 allowance. Another respondent expressed concern that the reduction in costs we had proposed would mean that the necessary skills and resources would not be place to support the delivery of environmental targets.

1.20. Two respondents supported the proposal to set a reputational incentive on losses, on the grounds that the outcome can be significantly affected by the actions of third parties. They also supported the proposed design of the mechanism. Another respondent was concerned that our proposal to calculate SF6 incentive performance based on differences between actual and calculated baseline emissions was inconsistent with the principles of good incentive mechanisms, ie inappropriate to incentivise companies on estimated data.

1.21. National Grid considered there was a lack of consistency between the target parameters for the SF6 incentive across the three TOs. It also noted that the proposal was inconsistent with the March Strategy Document which stated using existing emissions as a starting point for the incentive rather than its inventory multiplied by 1.75 per cent.

1.22. National Grid considered that:

- the treatment of Network Output Measures was incomplete and confused

- the funding of IED requirements was essential for compliance with environmental legislation
- its proposals on the funding of incremental capacity could largely be implemented from 1 April 2013.

<u>Question 2:</u> Do you have any views on our Initial Proposals on setting and expenditure cap for the start of RIIO-T1 in relation to addressing the visual amenity impact of existing infrastructure in designated areas?

1.23. We received 15 responses in relation to mitigation of visual amenity impacts. The key themes were as follows:

- support for an expenditure cap to allow all TOs to mitigate the visual amenity impacts of existing infrastructure in designated areas
- general agreement for proposed baseline funding and uncertainty mechanism to mitigate impacts of new infrastructure on visual amenity.

1.24. The key points on the expenditure cap for existing infrastructure were:

- 12 respondents expressed concern that the Initial Proposals had not included the £1.1bn NGET proposed for the funding pot. In their view the underlying analysis of the proposal is a robust estimate of consumer WTP and was undertaken by a market leading organisation.
- A number of respondents considered NGET's analysis was consistent with the approach we had used in DPCR5.
- Two respondents thought that our alternative proposal of £100m for the start of the price control was appropriate. One considered NGET had not made a convincing case for the higher expenditure cap. The other thought a smaller amount was appropriate given affordability issues and the potential impact on household and business finances.
- Six respondents sought further clarity on our rationale for the £100m expenditure cap and on how the cap could be increased if further evidence was supplied. A similar number considered that our view of consumers' interest was too conservative and could undermine a strategic assessment of potential visual amenity improvements.
- One stakeholder argued the proposed expenditure cap was inherently conservative because it is based on measures of WTP rather than Willingness to Accept (WTA) which are generally higher.
- Several stakeholders considered that the proposed expenditure cap double counted affordability concerns, given that parties would have the chance to review their budgets and take these into account.
- More than half of stakeholders thought the policy should be extended to allow it to be used to mitigate existing infrastructure in areas in close proximity to a designated area.
- Two stakeholders questioned why other designated landscapes such as Heritage Coasts were omitted from the scope of the measure.

- One stakeholder was concerned that Scotland would not receive its fair share of the expenditure cap. It noted that Scotland did not have AONBs but instead had Scottish designated National Scenic Areas (NSAs) and that as these were of the same status as AONBs they should also be included. The respondent also recommended that the funding was allocated and ring-fenced geographically.
- Several stakeholders expressed concern about the 'use it or lose it' nature of the allowance arguing that delivering these works could involve protracted negotiations with landowners.
- Several stakeholders said that affordability was a short term concern and that we would have to balance this against longer term considerations and duties.
- Respondents also set out views on ways of developing the policy and process for selecting and prioritising schemes.
- One respondent considered DNOs were better placed to deliver cost effective improvements in visual amenity than TOs.

1.25. National Grid noted that its independent, best practice research shows a willingness amongst consumers to pay for this mitigation. Based on the research results, that they made a conservative recommendation for a capped national allowance of £1.1billion over the RIIO-T1 period. In their view they have provided us with the information needed to set a final allowance. They also say that the initial cap of £100million we proposed would be insufficient to carry out any meaningful mitigation work or preparations at the start of RIIO-T1.

1.26. The key points in relation to arrangements by which the mitigation required for new infrastructure would be determined were:

- Several respondents said that there was a key role for consumer WTP analysis for undergrounding new transmission infrastructure, and that this would help inform the 'economic and efficient' level of mitigation. They argued that we should require the TOs to undertake this analysis and that it should be done at a national level because it is greater than local significance.
- Several stakeholders also sought clarification on our role as statutory consultee on new transmission infrastructure under the Planning Act. There was also a similar call for further clarification on the interface between regulatory and planning regimes.
- Respondents also considered we should provide more guidance on what NGET's regulatory and legislative obligations under the Electricity Act mean in the context of seeking planning decisions so as to ensure that the company could not prefer solutions based primarily upon their cost as opposed to their sustainability.

1.27. National Grid sought confirmation of our process for reviewing this uncertainty mechanism and considered it should also be able to trigger the review.

<u>Question 3:</u> Do you have any comments on our Initial Proposals on NGGT's outputs and incentives?

1.28. One respondent considered our proposals to be appropriate.

Reliability

1.29. National Grid considered that our proposals for NOMs targets and the treatment of over and under performance against it were unclear.

Environmental impact

1.30. National Grid stressed the importance of funding of the Industrial Emissions Directive (IED) requirements to facilitate compliance with the environmental legislation. It supported our proposed use of an uncertainty mechanism in principle but noted certain associated issues including the risks of delays to funding, the requirement for clarity over the timing of funding, the impact on the calculation of the Information Quality Incentive (IQI) and that if funding was not received in time and the compressor must cease operation then it would have a significant impact on NTS constraints.

Connections

1.31. National Grid set out its view that its proposed changes relating to the provision of incremental capacity could largely be implemented from 1 April 2013. It noted that we had refrained from providing a view on the arrangements given it could prejudge future commercial changes and considered that it was important that we provided early guidance to ensure industry time would be effectively spend in developing these arrangements.

1.32. National Grid also noted its view that the revenue driver information in its licence was out of date and should be removed and replaced by a generic revenue driver methodology. It set out its understanding of the approach that we should consult on at the time of the second informal licence consultation to take this issue forward.

1.33. National Grid welcomed our statement in relation to Fleetwood that we would take steps to protect consumers.

Question 4: We welcome your views on the appropriate permits arrangements from 1 April 2012 if no other changes to the incremental capacity arrangements have been made.

1.34. All five respondents that commented on the arrangements for the release of incremental capacity, supported our proposal to retain the existing arrangements until appropriate changes can be brought forward through industry processes. Two respondents considered that we should actively participate in the relevant industry working groups taking this forward.

1.35. In relation to the associated permits allowance one respondent questioned whether the increased allowance of £19m was justified. Another respondent noted that the allowance would be sufficient for CCGT related investment but that any

storage investment would be in larger increments. The same respondent noted that it would be sensible to consider any allowance that would be needed from April 2014.

1.36. National Grid considered that we had provided an insufficient permits allowance and that combined with an uncollared constraint management scheme would potentially expose NGGT to open-ended risks over which is has very little control. It considered this should be reflected in its cost of capital. It also:

- argued that it should be able to overdraw on permits to protect against unlimited constraint management costs
- disagreed with a separate allowance for Entry and Exit.

Question 5: We welcome your views on the two options on constraint management tools retained in our Initial Proposals.

1.37. Four respondents expressed concern over NGGT's proposal for a single incentive mechanism for capacity constraint management. All supported retaining the status quo until a case could be made for amending the existing arrangements. Three supported the requirement for further analysis on constraint management incentives which give rise to alternative capacity constraint arrangements. Two noted that the products are all sold independently and should be managed as such. They also questioned the impact of bringing the arrangements together on transparency grounds. One respondent noted that combining the incentives into one could encourage better decision making if the constraints of the current scheme could be removed but acknowledged that the impact on shippers/customers were diverse.

1.38. One respondent commented on the proposed removal of caps and collars. It noted that removing caps may incentivise NGGT to manage constraints more efficiently. It noted that the suggested maximum upsides and downsides seemed reasonable, but that the targets should be recalculated to establish a neutral outcome as the starting point.

Question 6: We welcome your views on the proposed level of funding for the licensees' NIA based on the quality of their innovation strategies.

1.39. Ten respondents commented on innovation. Eight of those respondents noted the importance of National Grid's role in leading initiative to drive innovation. In particular on the electricity side and in relation to integrating renewable technologies and delivering truly sustainable development. It argued that it should be allowed the full 1 per cent Network Innovation Allowance (NIA). A number of those respondents provided examples of work in which National Grid was involved. One of the respondents noted that the successful implementation of National Grid's innovation plan was vital for the UK economy.

1.40. One respondent considered that our proposed levels of funding for the NIA and the NIC were appropriate. Another respondent welcomed the innovation funding

being provided but sought details of the criteria which we had adopted to assess the quality of the innovation strategies and determine the size of the allowances.

1.41. National Grid:

- argued that the proposed 0.6 per cent would not provide sufficient stimulus to generate the required rate of innovation over the RIIO period
- welcomed the extension of the scope to cover SO, commercial, operational and IT scheme but noted that this reinforced the case for a 1 per cent allowance
- noted an external review of the innovation strategies concluded that for both businesses it should receive an allowance of 1 per cent
- argued that we had provided limited justification for a lower level of funding and responded by:
    - providing further context for the additional value of enhanced NIA funding
    - expressing disagreement with our view that stakeholder engagement had been lacking by setting out the relevant stakeholder interactions
    - expressing disagreement with the view that it had not delineated between business as usual and scheme funded innovation. It set out that this had been distinguished in the plan with the former highlighted by a light bulb symbol and the latter provided in a separate innovation strategies document.

Question 7: In relation to funding the Gas NIC for 2013-14 do you support either Option 1 or Option 2?

1.42. One respondent noted that our proposals were appropriate. National Grid supported Option 2 as the only viable option which would ensure appropriate socialisation of costs whilst maintaining the aggregate level of funding.

Questions in Cost assessment and uncertainty Supporting Document

Question 1: Do you agree with the assumptions for real price effects and ongoing efficiency?

1.43. One respondent noted that our assumptions for real price effects and ongoing efficiency were appropriate.

1.44. Two respondents commented that our proposed allowances for Real Price Effects would damage the recruitment and retention of staff, especially those with specialist skills. Another respondent argued that not using commodity price indices in developing material RPEs seemed inconsistent with the use of the machinery and plant input producer price index (PPI) as one of the components in determining the RPE for equipment and plant.

1.45. One respondent expressed concern at our proposals to deduct NGET's requested allowance for RIIO-T2 outputs on the grounds that early grid development was important for renewable projects and could be delayed if NGET did not have an allowance to undertake preparatory activity.

1.46. National Grid considered that we had chosen a scenario for efficiency savings that double-counted its built-in construction efficiencies. It considered that there were material errors in our analysis and that the consultants' capex benchmarking process had not met our own standards.

IQI

1.47. One respondent supported the retention of the IQI mechanism and its core features. However, it expressed concern with the use of the 75 per cent catch-up as an appropriate approach to dealing with a lack of confidence in the models.

1.48. One respondent argued that IQI fails to distinguish sufficiently between companies that have submitted challenging cost forecasts and those which have effectively purchased low cost insurance against cost over runs by self-selecting into one of the right hand columns. They note that this behaviour could be discouraged by increasing the financial difference between columns.

Question 2: Do you agree with our proposed materiality threshold of 1 per cent for the majority of costs to be treated under the reopener mechanism?

1.49. One respondent support using a materiality threshold of 1 per cent for the treatment of costs under the reopener mechanism. However, it noted that reopeners should be symmetric and also cover decreases in costs.

1.50. National Grid did not see justification for such a high materiality threshold. It also considered that our financial modelling should take proper account of their materiality threshold and re-opener window proposals.

Question 3: Do you agree with our proposal to restrict the reopeners for the rollout of innovation to the two standard windows?

1.51. One respondent agreed. National Grid also agreed on the assumption that the re-opener will allow the remuneration of both retrospective and future cost forecasts. It also sought confirmation that the SO could access the funding.

Question 4: Do you have any other comments in relation to our approach to uncertainty mechanisms?

1.52. One respondent considered that our proposals were appropriate.

1.53. In relation to uncertainty mechanisms impacting both NGET and NGGT, National Grid made the following points:

- our financial modelling should properly take account of the uncertainty mechanism proposals
- GB and EU market facilitation outputs will always be difficult to qualify and therefore a reopener with specific windows and a materiality threshold would be the most appropriate uncertainty mechanism, rather than the mid-period review
- the general Income Adjusting Event provision should not be removed as:
    - it provides a method to address the increased likelihood of events occurring during and eight year price control period
    - it allows for third parties to questions whether there should be an adjustment to its allowed revenues.

1.54. National Grid made the following points in relation to uncertainty mechanisms for NGET:

- flood and erosion protection will always be difficult to quantify and therefore a reopener with specific windows and a materiality threshold would be the most appropriate uncertainty mechanism, rather than the mid-period review
- if the cost of tower flood protection is disallowed then the flood and erosion protection uncertainty mechanism should reflect these costs.

1.55. National Grid made the following points in relation to uncertainty mechanisms for NGGT:

- the Front End Engineering Design (FEED) phase of IED work should be included in baseline funding with a re-opener for the main construction phase
- we had incorrectly applied the IQI incentive to the movement of NGGT's forecast expenditure eg IED and Feeder 9 from base funding to uncertainty mechanisms.

Question 5: Do you consider that our proposed funding baseline for NGET (TO) has been set at an appropriate level?

1.56. One respondent considered the proposed baseline funding for NGET(TO) was appropriate but noted the significant investment required and the importance of the RIIO settlement not creating a barrier to investment. It thus sought further detail on the SWW arrangements.

1.57. Two respondents generally endorsed our proposed totex figures. However, one argued that NGET's proposed expenditure warranted further debate around alternative scenarios that could deliver 2020 targets whilst minimising asset stranding for consumers.

1.58. One respondent argued that Gone Green should be the baseline scenario behind which all of NGET's activities should be aligned.

1.59. One respondent commented that, based on the ratio of GW per £bn spent, the proposed Mid-Wales scheme represented poor value for money, would cause immense damage to an exceptional and fragile environment and should be removed from the investment programme.

1.60. National Grid argued that the proposed baseline funding had been set at inappropriate levels in relation to the following categories of opex costs: overall opex levels, real pay, efficiency, business support benchmarking, non-operational capex and physical security.

1.61. National Grid argued that the proposed baseline funding had been set at inappropriate levels in relation to the following categories of capex costs: load-related baseline funding, Hinkley-Seabank, DNO mitigation measures, RIIO-T2 outputs and pre-construction works.

Question 6: Do you consider that our proposed uncertainty mechanisms for NGET (TO) are appropriate?

1.62. One respondent considered that the proposed uncertainty mechanisms for NGET(TO) were appropriate. Two respondents agreed with our recommendations in relation to the programme and qualifying criteria for the approval of reopeners. One noted that they could not support the application of user-directed fees for services outside licence activities.

1.63. Two respondents agreed that the provision of market facilitation services was an area where costs are difficult to forecast. One noted that it would need to understand how the EU role interacts with National Grid's current market facilitation activities and whether National Grid would be advancing its own or customers' interests.

1.64. Two respondents supported our view that a specific uncertainty mechanism should not be provided for copper/steel prices on the grounds that it should be a core competency for National Grid. Another respondent noted that they would be concerned about this if it were to jeopardise the delivery of incremental capacity in any way.

1.65. One respondent sought clarification on how comfort could be provided that funds for Strategic Wider Works would be released during RIIO-T1. It sought further information on the process that we would follow.

1.66. National Grid highlighted its separate responses in relation to Critical National Infrastructure (CNI), flood and protection and GB/EU market facilitation uncertainty mechanisms. In addition, it noted the following points:

- Our proposed generation uncertainty mechanism was too simple to reflect the wide range of uncertainty faced over an eight year price control period. It therefore put forward an alternative proposal in a separate supporting document.
- It supported the adoption of its demand-related infrastructure uncertainty mechanism.
- It considered our proposed inclusive conditionality for the Network Development Policy to support the development of Wider Works outputs was too restrictive.
- It challenged the changes we proposed to the wider works uncertainty mechanism – to apply an average UCA to boundary B13 and to introduce bandings for 'above the baseline' on boundaries B14e and EC5 – and suggested an alternative treatment for the Hinkley-Seabank reinforcements.

Question 7: Do you consider that our proposed baseline for NGGT (TO) has been set at an appropriate level?

1.67. One respondent agreed the baseline was set at an appropriate level and supported moving IED compliance costs into an uncertainty mechanism given the legislation has yet to be transposed into UK law and there remains ambiguity over its application.

1.68. National Grid argued that the proposed baseline funding had been set at inappropriate levels in relation to the following categories of costs: pipeline unit costs, compressor unit costs, asset health, network flexibility, appropriate funding for planning activities, capex RPEs, real pay, efficiency, business support benchmarking, direct opex, CAI, non-operational capex and physical security.

Question 8: Do you consider that our proposed uncertainty mechanisms for NGGT (TO) are appropriate?

1.69. One respondent supported our view that a specific uncertainty mechanism should not be provided for steel prices on the grounds that it should be a core competency for National Grid. However, it noted that they would be concerned about this if it were to jeopardise the delivery of incremental capacity in any way.

1.70. National Grid expressed concerns with a number of the proposed uncertainty mechanisms. In particular, it considered that our proposed reopener windows or mid-period review would result in them incurring significant costs before any revenues were received. Its specific concerns included:

- IQI – It expressed concern that movement of baseline funding to an uncertainty mechanism would create a penalty under the IQI eg in the case of the IED and Feeder 9 investment. This is inconsistent with the March Strategy Document and the approach adopted for NGET.

- Enhanced security reopener – It considered that the reopener windows were too late, given costs already incurred and those backed up by value for money audits. It proposed that these costs should be reflected in its baseline.
- Mid-period review –
    - It disagreed that the evaluation of the IED should form part of the mid-period review as this would be too late and instead proposed a mechanism should be triggered at the point a needs case is proven.
    - It considered that delaying network flexibility expenditure to the mid-period review would create a disincentive to act in a timely manner and in turn would increase constraint costs.
- Network flexibility – It welcomed the inclusion of a reopener mechanism but expressed concerns at how it would operate and sought further clarity on this. It supported a single mechanism to ensure NGGT was appropriately incentivised. It expressed concern with the proposed materiality threshold of 2 per cent given that such projects were, individually, of a low value.
- Income Adjusting Event – It considered the general Income Adjusting Event (IAE) provision should not be removed as:
    - it provides a method to address the increased likelihood of events occurring during and eight year price control period
    - it allows for third parties to questions whether there should be an adjustment to its allowed revenues.

Question 9: Do you agree with our proposals to expand the reopener mechanism for NGGT to cover a number of additional cost areas?

1.71. One respondent agreed that the inclusion of these costs seemed reasonable.

1.72. National Grid's key points were:

- Asset Health – It welcomed the inclusion of this mechanism.
- Feeder 9 – It understand the rationale for treating as an uncertainty mechanism but considered that delaying until the reopener windows could delay critical asset health investment and could lead to material constraint costs.
- Pipeline diversion costs – It welcomed the inclusion of this mechanism but considered it needed to be more tightly defined as most diversions are customer funded.
- Environmental legislation – It considered that the proposed use of a reopener window for IPPC Phase 4 projects would not align with the legislative process triggered by the annual network review process and would counteract the strategy agreed with its environmental regulators.
- Quarry and loss of development claims – It did not see the benefits of our proposed approach over the existing pass through approach but supported provided actual historic costs could be considered in the proposed reopener windows.

Question 10: Do you agree with our proposed materiality thresholds of 2 per cent (subject to the efficiency incentive rate) for the reopener mechanism in relation to asset health shocks?

1.73. One respondent noted they had no strong view here. National Grid agreed with the proposed 2 per cent materiality threshold. It sought clarity on whether this threshold level would apply on an annual basis or whether total costs could be carried over from year to year.

Question 11: Do you consider that our proposed baseline for NGET (SO) has been set at an appropriate level?

1.74. National Grid noted the importance of the System Operator in ensuring efficient operation of the transmission network. In this context, it questioned the proposed reductions in allowances in Initial Proposals. It:

- noted that no mechanism was provided to manage uncertainty in contrast to our consultant's recommendation
- noted that there were errors in the calculations for opex allowances which incorrectly assumed these costs were linear to capex
- provided further details of the needs case and rationale for ex ante funding for certain schemes, illustrating the value they delivered to the end consumer
- questioned the proposed reduction in expenditure for market facilitation despite the growing influence of European energy policy.

Question 12: Do you consider that our proposed uncertainty mechanisms for NGET (SO) are appropriate?

1.75. National Grid expressed concerns with a number of the proposed uncertainty mechanisms. Its specific concerns included:

- EU/GB regulatory and market driven changes – It identified significant uncertainty associated with required changes including under the Fourth Energy Package. It considered an extension of the reopener mechanism was a better fit for this risk, given the difficulty in defining outputs related to market change and the incentive to defer change given the higher cash flow risk.
- Capability enhancements towards the end of RIIO-T1 – It noted that our consultants had supported an uncertainty mechanism in this area but that nothing had been provided. It considered that it would end up running its system more conservatively so as to not jeopardise system reliability. It proposed funding should be triggered by changes to its operating environment and that there should be an explicit uncertainty mechanism assessed at the mid-period review.
- SO security enhancement costs – It considered that the reopener windows were too late, given construction of the two new data centres were expected to be completed in 2014-15. It proposed that the reopener window explicitly

considers historical costs incurred including a materiality threshold proportionate to the likely costs.

Question 13: Do you consider that our proposed baseline for NGGT (SO) has been set at an appropriate level?

1.76. National Grid considered the proposed baseline allowance was significantly lower than required to meet its obligations during RIIO-T1. It expressed particular concern that funding in the later part of the T1 period had been disallowed and highlighted PPA's proposal to defer projects with, in its view, no consideration of the consequences. The key points it raised were as follow:

- Comparison to historic funding – It queried why annual funding in the second half of RIIO-T1 was lower than during the relatively less challenging TPCR4.
- Enhanced functionality – It expressed concern with the proposal to reduce funding without the inclusion of an uncertainty mechanism. It noted it would be required to run its system more conservatively so as to not jeopardise system reliability. It proposed that funding should be reinstated or put in an explicit uncertainty mechanism to be reviewed at the reopener windows.
- Asset health – It questioned the reduction in asset health investment in the second half of the period noting it would have implications for system reliability and the costs of ensuring systems were maintained effectively.
- Network security – It expressed concern with the decision to disallowed investment in IT security systems which it considered was necessary given its forecast of an increasing cyber threat. It argued the funding should be reinstated in full.
- Information provision – It argued that the market places value on this information provision and thus that baseline funding should be provided in this area or alternatively that an uncertainty mechanism should be used.
- Regulatory – It considered NGGT should be fully funded in line with its business requirements and that the reopener windows should be used to resolve any material variances from allowances.
- SO opex – It noted two concerns: (1) calculations for opex incorrectly assumed that these costs were linear to capex and thus understates the value; and (2) the reduction in market facilitation costs did not reflect the growing influence of European energy policy.
- Data centres - It agreed with the use of the reopener windows but considers historical costs incurred including a materiality threshold proportionate to the likely costs.

Question 14: Do you consider that our proposed uncertainty mechanisms for NGGT (SO) are appropriate?

1.77. National Grid expressed concerns with a number of the proposed uncertainty mechanisms. In particular, it considered that our proposed reopener windows or mid-period review would result in them incurring significant costs before any revenues were received. Its specific concerns included:

- EU/GB regulatory and market driven changes – It noted there was already significant workload in flight on EU-led codes, our significant code review and financial regulations which will need to be delivered by 2015, two years before the mid-period review and that funding should be provided in full ex ante with the reopener windows used to validate and adjust allowances.
- Capability enhancements towards the end of RIIO-T1 – It noted that our consultants had supported the inclusion of an uncertainty mechanism in this area but that nothing had been provided and that this would prevent them from playing a full part in supporting the decarbonisation of the energy sector. It proposed that funding should be provided in full ex ante with the mid-period review used to validate and adjust allowances.
- SO security enhancement costs – It considered that the reopener windows were too late, given construction of the two new data centres were expected to be completed in 2014-15. It proposed that the reopener window explicitly considers historical costs incurred including a materiality threshold proportionate to the likely costs.

Question 15: Do you agree with our proposals in relation to uncertainty with respect to Xoserve's costs?

1.78. One respondent agreed with the proposed treatment of Xoserve's costs pending a decision on funding arrangements.

1.79. National Grid agreed that funding should be reviewed once the Xoserve review was concluded and welcomed the proposal to provide ex ante funding based on current arrangements. However, it noted that clarity was required on what this funding would include. It also welcomed further discussion with us on the treatment of the costs in the financial model.

Questions in Finance Supporting Document

Question 1: Do you have any comments on our relative risk assessment?

1.80. One respondent sought more justification for the perceived relative risks of the different network companies and expressed surprise at the range of gearing assumptions and WACCs. A third respondent noted that we had used a very simple metric of cash-flow risk as a measurement of the riskiness of the investment programme. It agreed cash-flow was important but noted other relevant factors including the complexity of deliverables, uncertainty of volume and unit cost of investment, real price inflation, and greater interaction with stakeholders. It did not agree that the move to an 8 year control period had a neutral impact on risk.

1.81. National Grid noted that its analysis had demonstrated an increase in risk relative to TPCR4. It therefore questioned the fact that the proposed asset betas for gas and electricity transmission were lower than in TPCR4 and lower than for SPTL and SHETPLC. It argued that we had not performed any detailed modelling of cash-flow risk nor engaged with it on the detail of its own modelling. Consequently, it argued (citing Oxera's report) that the combination of cost of equity and notional

gearing proposed would not adequately compensate equity investors for the risk they faced under RIIO-T1. It argued that this should be addressed by increasing the cost of equity, reducing gearing or both.

Question 2: Do you agree with our proposed elements of the allowed return?

1.82. One respondent noted the published RoRE ranges and considered that the reward package strength must be set to ensure companies can build appropriate business cases to improve service whilst attracting and retaining investors. Consequently, the return of equity must reflect the range of risks. One respondent supported the continuation of the long-term approach for determining the parameters of the cost of equity. On gearing one respondent agreed that the cash flow risk was a relevant consideration which is consistent with a given cost of equity.

1.83. On the cost of debt, some respondents argued that the index, as currently constructed, would not allow the companies to recover efficiently incurred debt insurance costs.

1.84. An Oxera report commissioned by the ENA set out the following views:

- Our proposed risk free rate and equity risk premium were appropriate and were broadly consistent with recent comparable regulatory determinations.
- The differences in asset betas between network companies appeared large compared to relative small differences in the capex to RAV ratios.
- The weight placed on the capex to RAV ratio in the assessment of risk was disproportionately large compared to the small weight placed on this by the credit rating agencies.
- An analysis of a broader range of factor suggests that the evidence does not support the implied differences in business risk. In particular, it highlighted the reductions relative to previous price controls given the longer price control period and increased cash-flow duration.
- It proposed the following measures: to increase the equity betas so implied asset betas reflect TPCR4; to modify equity betas to reduce the implied differences between sectors; and to set gearing no higher than previous price controls.
- In some cases cost of debt indexation can increase risk of error compared to fixed cost of debt allowance. In particular it highlighted the following factors: the risk that issuance yields differ from average of daily yields going into our calculation; that companies are exposed to the risk that the inflation risk. premium in unusually large when the company issues debt and that this risk should be reflected in the allowed return or, where appropriate, through supplementing the debt index with a mechanism to avoid undue exposure to risk eg cap and floor.
- The difference between the cost of debt index and issuance yields has narrowed and regulatory changes are likely to make it more challenging to

achieve lower issuance yields relative to the index in the future. An explicit allowance for debt issuance costs should be considered.

1.85. National Grid expressed concerns with a number of elements of the financial proposals. It considered that:

- the proposed long run values of the risk free rate and equity risk premium used in the Initial Proposals were appropriate
- the proposed cost of equity did not reflect the risks NGET and NGGT faced in RIIO-T1 which it considered were higher than in TPCR4 and, based on the proposed level of gearing, would require a cost of equity above 7.5 per cent
- the proposals could not support a notional gearing of 62.5 per cent either during RIIO-T1 or on a longer term sustainable basis and that a rate of 55 per cent would generate a more appropriately calibrated financial package
- our proposals for NGGT would increase the cost of debt risk as: (1) removing the headroom in the allowances would leave unfunded risks; and (2) a cost of debt index increases the procyclicality of returns which would increase beta, and therefore would generate a requirement to increase the cost of equity
- there are issues with the proposed index based cost of debt allowance:
    - the assessment should consider potential variances in debt costs for the notional network
    - transaction costs eg debt issuance fees, new issue premia etc and may not be fully funded and this could be resolved by the application of an uncertainty mechanism
    - an allowance should be made for the Inflation Risk Premium
    - Basel III and Solvency II could increase utility debt costs relative to the debt allowance
    - the credit ratios from our Initial Proposals were inconsistent with the cost of debt index, which is based on yields on A and BBB rated bonds.
- the proposals need to reflect the ONS consultation on possible changes to the RPI measure of inflation.

Question 3: Do you agree with our proposal for eight-year transition on NGET's asset lives for assets constructed after the start of RIIO-T1?

1.86. One respondent supported our proposed use of changes to the capitalisation rate as a policy tool. It also supported company specific capitalisation rates as reflecting the individual positions of companies.

1.87. National Grid made the following points. It:

- agreed the new asset life should only apply to expenditure incurred from the start of RIIO-T1
- agreed financeability case for change to 45 years life through transition

- did not agree that 8 years is sufficient for reasons of financeability and provided a supporting paper showing the impact on the requirement for equity
- supported 16 years transition to make NGET's equity ratios more acceptable to investors.

1.88. One respondent expressed concerns on the credit ratios, particularly for NGGT. The respondent sought clarity on what metrics we were targeting for a 'comfortable investment grade' rating and expressed concern that we were targeting a BBB rather than an A rating.

Question 4: Do you agree that companies must demonstrate a robust approach as to how their de-risking strategies, especially if aggressive, are protecting future scheme funding and that they should clearly demonstrate the benefits that they expect to flow to consumers?

1.89. One respondent agreed that efficient de-risking was in consumers' interests. It considered carrying forward current levels of pension risk would be inappropriate and could result in large pensions' deficits. It argued that de-risking should be something that we should provide employers with incentives to achieve consistent with good practice in the private sector. Another respondent noted that de-risking strategies were consistent with existing funding arrangements and were aligned with market sentiment and practice. It argued de-risking should take priority over a reduction in pensions' contributions. A third respondent stressed that it was the trustees (not the companies) that determined its investment approach and noted that it was essential that we ensured its assessment was based on the reality of the situation ie the actual level of influence that management has.

1.90. National Grid agreed but noted that networks required funding certainty from us before embarking on innovative or aggressive de-risking strategies.

Question 5: Do you agree that the costs of contingent assets may be allowed if considered to be in consumers' interests?

1.91. Two respondents agreed they should be a necessary cost for consumers to meet as they are in all stakeholders' interests. One of those respondents encouraged us to develop pensions' principles to include a framework for assessing efficient de-risking. Two respondents noted the approach adopted for the 2010 valuation to bridge the gap between conflicting requirements. Both argued that the cost of the contingent asset should be deemed efficient and allowed under the price control. A third respondent considered the test should be rephrased to "a balanced approach, consistent with the pensions' industry in general" on the basis that de-risking was a natural consequence of the membership profile of schemes.

1.92. National Grid agreed with the proposal.

Question 6: Do you agree with the thresholds for pension scheme administration costs and Pension Protection Fund levies?

1.93. One respondent noted that it reviews and assesses the service provided by its advisors and that National Grid actively manages PPF levies. Another respondent reinforced this point by noting that in its experience the pension scheme trustees and sponsors treated the management and administration costs and PPF levies seriously and sought cost efficiencies. A third respondent noted that we should ensure that we do not set the allowances at too low a level, otherwise there would be no mechanism for reasonable and efficient costs above the allowance to be recovered.

1.94. National Grid raised the following points. It considered that:

- administration and PPF costs were largely outside of the networks control
- no rationale had been provided for the proposed true-up
- the threshold chosen was arbitrary and would create very different risks for each licensee.

Question 7: Do you agree with our amended treatment for modelling the cashflows of Corporation Tax payments?

1.95. National Grid agreed with the proposed simplification but considered an additional calculation was required to assess the financeability of the network.

Question 8: Do you agree with conforming the revenue adjustment for tax clawback to be annually in line with the annual iteration process?

1.96. One respondent argued that, to ensure consistency, the same gearing threshold could be applied to tax clawback as is used for notional equity issuance (for those companies that do not receive an allowance). National Grid agreed but questioned our view that there was no need to introduce a tolerance if gearing exceeds the notional rate.

Question 9: Do you agree with our treatment of expenditure for tax modelling?

1.97. National Grid agreed but considered an additional calculation was required to assess the financeability of the network.

Question 10: The annual iteration process does not currently include any adjustment to TIRG values. We propose to add an adjustment. Do you agree?

1.98. One respondent agreed with our proposed approach. It noted that the adjustment would need to cater for the impact of actual spend on debt and capital allowance pool values at transfer date and changes to project phasing/timing. National Grid also agreed with the approach.

Question 11: Do you have any views on the calculations and layout in the financial model?

1.99. One respondent argued that RPI values should be included as part of the annual iteration process on the grounds that not updating the RPI indices would result in incorrect values for debt and capital allowances pool additions.

1.100. National Grid noted the model was generally well laid out, clear and transparent. However, expressed concerns with how the model informed the financeability assessment, the capitalisation rate used for NGGT, the threshold for equity injections, the RPI forecast and the restriction on dividend payments for NGGT.

Question 12: Should the financial model also capture, for presentational purposes only, the revenue from all incentive schemes?

1.101. One respondent considered it was undesirable as the financial model's sole purpose is to calculate the MOD term in the Revenue Restriction Condition. It notes the other are already determined in the licence and to include in the price control model would complicate governance of the model.

1.102. National Grid considered there was benefit in extending the model to cover all of these items but that, if this was done, then revenue reporting rules should be reviewed to avoid duplication of reporting and reduce costs to consumers.

Consultation letter on gas transmission issues – 30 October 2012

1.103. We received five responses to the letter. The key points raised in relation to on incremental capacity were as follows:

- *Method of calculating revenue drivers* - All supported the development of a Generic Revenue Driver Methodology (GRDM).
- *Level of permits in Year 1* - Three respondents expressed concerns with the proposed £19m level of permits for the first year of RIIO-T1. Their specific concern was that it could provide NGGT with a windfall in the event that no incremental capacity needs to be released in the period. They put forward alternative options including an allowance based on where actual incremental capacity release takes place or a 'volume only' allowance ie permits with no cash-out value.
- *Level of permits for the remainder of RIIO-T1* - Three respondents considered that the level should be set later based on updated evidence while National Grid provided data supporting an allowance of £40.2m for the remaining three years until the mid-period review.
- *Cash out arrangements* - Three respondents supported retaining the arrangements whereby any unused permits are cashed-out at the end of the price control. National Grid considered that cash-out should happen at the end of Year 1 in expectation of changes to the incremental capacity arrangements.

1.104. Four respondents commented on constraint management. The key points raised were as follows:

- *Options: Status Quo vs. Unified* - Four respondents supported retaining the status quo but differed on whether this should be capped/collared and the appropriate sharing factor. One of these responses noted that a shadow implementation of a unified approach may be appropriate, one response supported a unified system.
- *Caps and collars* - Four respondents supported the removal of caps and collars on the grounds that it would provide the right incentives. National Grid opposed the removal of caps and collars given concerns over volatility and exposing the right parts to the risk. It proposed rolling over the incremental buyback schemes with cap and collar but updating monthly cap and collar on operational buyback schemes. This was a new suggestion compared to its business plan or response to Initial Proposals.
- *Smoothing of rewards/penalties* - Three respondents supported the adoption of arrangements to provide for an annual smoothing of the scheme to limit significant one-off changes. Another respondent noted it might support this approach but that there was currently a lack of evidence to justify it. National Grid opposed smoothing on the grounds that it may have result in significant one off effects at the end of the RIIO period.
- *Reviewing constraint management targets within period* - All respondents supported having the ability to adjust the constraint management target upon the release of incremental capacity or the triggering of other uncertainty mechanisms.

Consultation letter on potential changes to the RPI methodology – 30 October 2012

1.105. We received eight responses to the letter. The key points raised were:

- The majority of respondents supported the proposal to include a specific reopener on the grounds that the ONS review was an area of uncertainty which network companies could not control. One considered that it would not be appropriate on the grounds that: (1) it would provide networks with greater protection than holders of government bonds; (2) networks have enjoyed windfalls from previous changes to the calculation of RPI and a re-opener would lock in these windfalls; and (3) the overall impact was unclear.
- Of those that supported a reopener there were a range of view on the different parameters but a number considered it would need to be sufficiently flexible given the significant uncertainty around the potential outcomes.

Appendix 2 - Feedback Questionnaire

1.1. 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?

1.2. Please send your comments to:

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