

STRATEGY FOR RIIO-ED1

SUPPLEMENT TO THE NORTHERN POWERGRID RESPONSE TO THE

OFGEM CONSULTATION

ANSWERS TO QUESTIONS RAISED BY OFGEM

23 November 2012

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INTRODUCTION

1. In this supplement to the Northern Powergrid response to the Ofgem Consultation on the strategy for RIIO-ED1 we set out our responses to the questions set out in the Consultation.
2. Abbreviations and acronyms used in this supplement follow the usage established in our full response.

OVERVIEW DOCUMENT

Overview, Ch. 3, Q1: Do you have any comments on our stakeholder engagement approach?

3. From Northern Powergrid's perspective, the stakeholder engagement approach has been effective.
4. The RIIO-ED1 working groups have facilitated a dialogue that has resulted in very few surprises for Northern Powergrid in the Consultation.
5. Overall the amount of time devoted to the topics has meant it has been possible to cover everything to a reasonable degree. Although the introduction of other, non-industry, stakeholders to the process has at times meant that matters needed to be discussed for longer, particularly if these stakeholders were less expert in the details of the regulatory system, this has not caused any serious issues.

Overview, Ch. 3, Q2: Do you have any views on how our engagement process or that of the DNOs could be made more effective?

6. Northern Powergrid's experience of Ofgem's engagement process has been positive, with no obvious ways that it could have been made more effective.

Our own stakeholder engagement process continues and has been facilitated by our recent publication of *Your Powergrid* which sets out our emerging thinking for the RIIO-ED1 period, including cost and output projections. We believe that this initiative will enhance the usefulness from our stakeholder engagement.

Overview, Ch. 4, Q1: Do you have comments on the form or structure of the price control?

7. The form and structure of RIIO price controls has been consulted on through the RPI-X@20 review process, the publication of the RIIO handbook, and the consultations that have taken place through the RIIO-GD1 and RIIO-T1 process.
8. The overall approach is one that we welcome and look forward to working within.

Overview, Ch. 4, Q2: Do you agree with our proposed changes to the RIIO-ED1 timetable?

9. Northern Powergrid has no concerns with Ofgem's proposed changes to the RIIO-ED1 timetable.
10. The additional details on process and timetable set out in the Consultation bring clarity which we welcome. Knowing the exact date for business plan submission provides a target to aim for well in advance, although the approximate date had also been signalled for some time.

Overview, Ch. 5, Q1: Do you consider that the proposed outputs and associated incentive mechanisms, taken together with other elements of the price control, will ensure that companies deliver value for money for consumers, and play their role in delivering a sustainable energy sector?

11. Northern Powergrid considers that the proposals meet these objectives.
12. The customer service and connections incentive will encourage good performance in terms of providing connections in a timely manner for all customers, *including* those connecting low-carbon technologies. Ofgem is therefore right to adopt a technology neutral approach to incentive arrangements, as this will ensure DNOs play their role facilitating the low-carbon transition and in delivering a sustainable energy sector.
13. The commitment to total cost benchmarking, which does not discriminate between alternative approaches to delivering at lowest cost and also heightens the focus on efficient *volumes* of work undertaken, also makes a significant contribution to ensuring DNOs provide value for money in undertaking this role.

Overview, Ch. 5, Q2: Do you consider that the proposed outputs and incentive arrangements are proportionate (e.g. do we have too many or too few)?

14. Northern Powergrid considers that the proposed arrangements are proportionate.
15. We welcome the fact that early 'minded to' decisions have been taken in areas where the well-established framework from DPCR5 allowed this, in order to free up more time for dealing with the key areas for the review.

This includes the approach to the IIS and many aspects of the environmental arrangements (excluding network losses).

16. We also consider that the new specific outputs for social and safety related objectives are proportionate. We support the proposed approach to safety as it recognised the established and effective role of the HSE, while building recognition of safety into secondary deliverables. Ofgem is also right to identify that any social outputs should be close to the core purpose of the network and, since major roles are not obvious, devoting significant time to defining up front specific deliverables would not be the best use of the time available.

<p><i>Overview, Ch. 5, Q3:</i> Do you have any views on the proposed outputs and incentives?</p>
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17. Please see the responses to the questions below for full details of Northern Powergrid's position.
18. The key points from our response are as follows.
 - We support the proposed package of output incentives and a summary of our views on each can be found in paragraph 4 of the executive summary to our response to the Consultation.
 - We support the proposed increase in the efficiency incentive rate as this will encourage companies to adopt innovative approaches which will deliver long term benefits for customers through lower costs.
 - We believe that the incentives for fast-tracking, and through the IQI for developing well justified forecasts, should be stronger than those proposed, given the significant benefits that can be delivered for customers through these incentives, and the RIIO aspiration that a well

performing company should be able to earn real equity returns in the double digits.

Overview, Ch. 6, Q1: Is our proposed approach to cost assessment appropriate?

19. Northern Powergrid's full views on the proposed approach to cost assessment are set out in detail in response to the questions on the Cost assessment document of the Consultation.
20. As we set out in our executive summary to our Consultation response at paragraph 6, Northern Powergrid welcomes the strong endorsement by Ofgem of total cost benchmarking. This alternative view of company efficiency takes the customer perspective by assessing what they must actually pay for, and so is an important complement to other approaches to assessing costs.
21. We also welcome Ofgem's commitment to maintain a high bar for company specific adjustments, which can lack transparency, and which should be tested for robustness by inclusion in regression analysis wherever possible.

Overview, Ch. 6, Q2: Do you have views on our proposed use of proportionate treatment?

22. Northern Powergrid welcomes Ofgem's proposed use of proportionate treatment, and its proposals for a three stage assessment process.
23. We especially welcome the commitment to take a fast-track decision alongside the initial assessment. Although Northern Powergrid believed it was appropriate for Ofgem to provide iterative feedback to the transmission companies during their fast-track process, given the fact they were the first companies to go through a new process, requirements should now be clear.

By removing any iterative feedback process, the incentives for the submission of a well justified business plan in the first instance are strengthened.

24. We also support the recognition by Ofgem that there may still be the need for some adjustments to the detail of a fast-tracked company's business plan.¹ While we support the proposal that there should not be a process of iterative feedback, a business plan which meets the overall required standard for fast tracking may still have specific areas that warrant changes.
25. We also agree that well justified elements of slow-tracked plans should be treated proportionately.

<p><i>Overview, Ch. 6, Q3:</i> Do you have any views on the criteria for assessing business plans?</p>
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26. The criteria Ofgem have set out are a useful framework, building as they do on the criteria developed for use in the RIIO-T1 and RIIO-GD1 price control reviews.
27. They also appear to us to be comprehensive.
28. Northern Powergrid has some concerns regarding the criteria for assessing secondary deliverables (paragraph 4.17). We do not believe it is in line with the principles of the RIIO model that a company should be rigidly held accountable for movements in these metrics. Such an approach has the potential to undermine the good incentive properties of the output focussed regime. Primary outputs should remain primary, and secondary deliverables should remain secondary, to be considered as one part of a broader body of evidence when assessing company performance.

¹ The Consultation, Business plans and proportionate treatment document, paragraph 3.10

Overview, Ch. 7, Q1: Do you have any views on the role of innovation in RIIO-ED1?

29. Innovation has an important role to play in RIIO-ED1. In particular, any innovative approaches that are developed and result in lower costs for the transition to a low-carbon economy will deliver benefits in future price controls, since much of the transition is likely to occur beyond the RIIO-ED1 period.

Overview, Ch. 7, Q2: What should the funding threshold for the NIC be? Do you agree with our proposal to review it after two years to reflect learning from the LCN Fund?

30. Providing NIC funding for the first two years of RIIO-ED1, at the levels proposed in the Consultation, is sensible.
31. We also agree it is appropriate to review it after two years. Large amounts of customer money is being spent on innovation, and the opportunity should be taken to maximise value for money.

Overview, Ch. 8, Q1: Do you have any views on the uncertainty mechanisms identified?

32. Northern Powergrid strongly supports Ofgem's proposal to adopt a low-carbon technology uncertainty mechanism. By providing funding based on out-turn, it means companies will be able to respond flexibly to the requirements that do materialise. It should also provide better overall value for customers with no need for upfront investment allowances that may not be required, while mitigating risk that customer service and connections will suffer as a result of insufficient allowances being provided.

33. Beyond this comment, the company's views on individual uncertainty mechanisms are set out below in response to questions in the Uncertainty Mechanisms document of the Consultation.

Overview, Ch. 8, Q2: Are there any additional uncertainty mechanisms required?

34. Ofgem has correctly identified the two key new uncertainty mechanisms required, which are both related to the transition to a low-carbon economy (smart meter roll-out costs, and allowance driver).
35. Beyond these, there are no additional uncertainty mechanisms that are required.

Overview, Ch. 8, Q3: Are there any mechanisms that we have included that are not necessary and why?

36. Northern Powergrid believes that all the proposed uncertainty mechanisms are appropriate.

Overview, Ch. 9, Q1: Do you consider that our proposed package of financial measures will enable required network expenditure to be effectively financed?

37. The overall approach is welcomed, especially the early range on cost of equity which helps maintain certainty for investors in the closing stages of the DPCR5 period. The approach taken to gearing in the RIIO T1 and RIIO-GD1 price control reviews is broadly appropriate.
38. We also support the fact that companies will be allowed to propose how best to manage the transition to longer asset lives through their business plans,

including the possibility that transition will take place over more than one price control period.

Overview, Ch. 9, Q1: Do you have any views on our proposed approach to assessing the cost of equity and the associated range of 6.0-7.2 per cent (real post-tax)?

39. Northern Powergrid supports the proposed approach to assessing the cost of equity, and the adoption of a reasonably tight range at an early stage of the review which will help underpin investor certainty in the closing stages of the DPCR5 period. Full details are set out in our responses to chapter 2 of the Financial issues document of the Consultation, at paragraphs 292 to 294 below.

Overview, Ch. 9, Q1: Do you have any views on the other elements of our financeability proposals?

40. On the cost of debt, although there is nothing inherently wrong with an indexed approach the index does not provide on-going funding for issuance costs, or recognise costs of efficiently incurred debt from times that predate the index when prevailing interest rates were higher. Our evidence on these two, distinct, points is set out in our detailed answer to question 3 of chapter 5 of the Financial issues document of the Consultation, at paragraphs 273 to 291 below.

OUTPUTS, INCENTIVES AND INNOVATION DOCUMENT

Outputs, incentives and innovation, Ch. 2, Q1: We welcome respondents' views on the approach we have taken to develop the outputs framework.

41. As set out above in our response to Q1 of chapter 3 of the overview document of the Consultation, the working group process has been a success in that it has devoted time to all the major issues, and limited the number of surprises in the Consultation.

Outputs, incentives and innovation, Ch. 2, Q2: Do any of our proposed output measures present potential difficulties in ensuring the submission of accurate and comparable data?

42. The time to connect incentive in particular will require significant volumes of work to ensure that data is provided in a comparable way.
43. If a telephone response rate incentive were to be re-introduced, there would also be significant data comparability issues, given there are already known reasons for differences between companies in terms of the data their systems can track.

Outputs, incentives and innovation, Ch. 2, Q3: Should we use a percentage of allowed revenue or £m set using basis points of return on regulatory equity (RORE) to set caps and collars?

44. Caps and collars on outperformance should be set in relation to the effect on rate of return companies can achieve depending on their performance. The overall package should ensure that top performing companies can achieve double digit returns on equity, while poorly performing companies achieve a low return on equity.
45. Caps and collars should therefore be set in millions of pounds using basis points of RORE, since this can help make it transparent that the settlement is calibrated in such a way that achieves these principles. If a percentage of

allowed revenue were to be used, the read across to returns on equity would not be as transparent.

Outputs, incentives and innovation, Ch. 2, Q3: Should we use a percentage of allowed revenue or £m set using basis points of return on regulatory equity (RORE) to set caps and collars?

46. There are no aspects of the proposed outputs framework where reporting arrangements are clearly likely to lead to disproportionate regulatory costs.
47. However, we do note that there are some areas where the proposals will create additional costs. For example, this will be the case for the proposed time to connect incentive, as it is likely that DNO systems will require varying degrees of change in order to measure activity in a comparable way.
48. If the HI secondary deliverables were to be extended to an inappropriate level of detail, this would also drive disproportionate regulatory costs. Full details are set out in our answers below to Q4 and Q5 of chapter 6 of the Reliability and safety document of the Consultation.

Outputs, incentives and innovation, Ch. 3, Q1: Do you agree that a specific output or incentive focussed solely on the connection of low-carbon technologies is not necessary?

49. Northern Powergrid agrees that there is no need for a specific outputs focussed solely on the connection of low-carbon technologies.
50. The low-carbon technology volume driver proposed by Ofgem should ensure that DNOs have the allowances necessary to undertake the investments required to facilitate these technologies.

51. The BMCS and time to connect incentive are just as appropriate for connecting low-carbon technologies (both demand and generation) as they are for all other technologies. Likewise, the behaviours encouraged by the IIS benefit both the users of traditional and low-carbon technologies.
52. Overall, this technology neutral approach ensures that there should be no distortion, either to hold back or favour, low-carbon technologies, and reflects the role of the DNO as a facilitator of customer needs.

Outputs, incentives and innovation, Ch. 3, Q2: Do you agree with our proposals on the level of detail DNOs will be required to submit on the different scenarios in their business plans?

53. Through the working groups, Northern Powergrid advocated that DNOs should propose a low-carbon uncertainty mechanism based on pounds per MW. This would effectively be equivalent to a requirement to provide a forecast cost for each plausible level of low-carbon technology uptake.
54. We therefore have no objection in principle to the proposal that DNOs should present an appropriate level of information regarding their view on the costs of five scenarios (or four, if the DNO's best view is the same as one of the four DECC scenarios) in their business plans.
55. However, mandating the level of detail on each scenario could lead to business plans that become unwieldy for stakeholders to read and interpret. Northern Powergrid therefore believes that it should be for companies to determine the overall balance required.

Outputs, incentives and innovation, Ch. 3, Q3: Do you agree that an uncertainty mechanism is required to manage the uncertainty around the penetration of low-carbon technologies?

56. While traditional technologies are relatively predictable, allowing network reinforcement allowances to be largely fixed in advance, the uptake of low-carbon technologies is subject to significant uncertainty.
57. A revenue driver is therefore required for low-carbon technologies to cover the associated reinforcement costs that are not covered in base allowances or covered by customer contributions. Its purpose should not be to incentivise the deployment of low-carbon technologies.
58. Northern Powergrid advocated such revenue drivers in its initial issues consultation response. The company believes that any such framework should:
- be simple and easy to implement and understand;
 - relate directly to the take-up of low-carbon technologies by end-users, rather than network interventions that may occur because of other factors;
 - ensure that customers pay only for assets or other technical or commercial solutions that they actually require; and
 - maintain the strongest possible incentives for DNOs to innovate and achieve cost savings during the transition to the low-carbon economy.
59. The second of these two points is particularly important; indeed, it is one of the fundamental reasons for the RIIO approach to regulation. Although we have already undertaken significant work to develop a workable mechanism based on these principles, we expect to undertake further work with the industry and Ofgem to develop the approach further in time for the strategy decision. In particular, we expect that it should be possible to develop a revenue driver based on pounds per MW of installed low-carbon technology that avoids potential boundary issues with the connections funding arrangements. For example, for existing class 1-4 customers who are installing low-carbon technology, the socialisation of connection charges will

mean that the only funding route is via the price control uncertainty mechanism.

Outputs, incentives and innovation, Ch. 3, Q4: Do you agree with the three tier approach we propose to introduce for the recovery of the DNOs' costs during the smart metering roll-out?

60. Our views on the three tier and pass-through elements of the proposals are set out below in response to Q3 of Chapter 3 of the Uncertainty mechanisms document of the Consultation. In short, we support the three tier approach but believe it could benefit from greater clarity, although we expect this is being addressed via the working groups. We also support the proposed pass-through treatment for mandatory DCC fees, although we believe this should be widened to include data which is necessary in the discharge of our licence duties.
61. In terms of costs of the data systems necessary to utilise smart meter data, the estimates which can be provided in the business plan may need to be high level, based on an understanding of similar systems-related projects, as a fully scoped estimate would depend on information that may not be clear when business plans are submitted. Perhaps the most appropriate solution would be for companies to indicate in their business plans whether they are prepared to take this risk or whether they envisage an uncertainty mechanism and, if so, the nature of that mechanism.

Outputs, incentives and innovation, Ch. 3, Q5: Should costs of load and generation growth for existing customers in profile classes 1-4 be socialised, until smart metering data is available?

62. Northern Powergrid agrees with Ofgem that connection charges play an important role in sending locational signals, so that customers take into account the full costs of their decisions.
63. But equally it would be practically difficult to impose connection charges on new installations of technology by individual domestic or small business (class 1-4) customers. We therefore support Ofgem's proposal to 'socialise' the costs associated with these existing customers installing low-carbon technologies (in the same way it would in practice be socialised at present if their installation of an additional washing machine or fridge freezer were enough to trigger reinforcement requirements) and they were not exceeding the normal capacity considered appropriate for domestic premises.

Outputs, incentives and innovation, Ch. 3, Q6: Should DNOs retain the ability to charge existing customers in profile classes 1-4 who install equipment which poses significant power quality issues for the network?

64. Northern Powergrid supports the proposal that DNOs should retain the ability to charge customers in profile classes 1-4 where they install devices which, in and of themselves, cause power quality issues.
65. We also support the proposal that DNOs would retain the ability to charge for changes to connections where a third party (such as a housing association) triggers widespread installations of new technology.
66. These proposals are broadly in line with current arrangements, and that they should therefore be implementable through existing industry arrangements. The power quality exemption should act to incentivise the sale and installation of devices which meet industry accepted standards, while the carve out for organisations triggering multiple installations in a particular area reflects the fact it is significantly more practical to levy connection charges in such circumstances.

Outputs, incentives and innovation, Ch. 3, Q7: If we socialise costs of existing profile classes 1-4 customers, will the use of system charging methodology need to be changed in order to protect IDNO margins?

67. Independent network operators have a price restriction that prevents them from charging for use of system to profile class 1-4 customers any more than the incumbent DNO would charge.
68. If the costs of low-carbon technologies were to be socialised, the DNO charging model for these customers should reflect this in the allocation of costs and therefore the prices that would be charged to suppliers of these customers would rise accordingly for both DNOs and, therefore, IDNOs². It is therefore not anticipated that margin squeeze would occur for IDNOs with a portfolio of networks.
69. Furthermore, DNOs are obliged to keep their charging methodologies under review and IDNOs are able to participate in the review process and propose changes to the charging methodology at any time should they consider the methodology has deficiencies.
70. As part of the review, or following on from it, Ofgem may consider whether the current regulation of IDNOs is still appropriate.

Outputs, incentives and innovation, Ch. 4, Q1: What are your views on the primary outputs and secondary deliverables for reliability and safety? In particular: (a) Do you agree that these are appropriate areas to focus on? (b) Are there any other areas that should be included?

² Assuming the IDNO price control method remains unchanged.

71. Full details of Northern Powergrid's views are set out below in our responses, to the questions in the Reliability and safety document of the consultation.
72. In summary, we believe that the appropriate areas are being focussed on, and that there are no other areas that should be included.

<p><i>Outputs, incentives and innovation, Ch. 5, Q1: Will our proposed approach ensure effective losses reduction actions?</i></p>
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73. The new losses arrangements are the best that can be done in a challenging area. Quality problems with losses data mean that the existing losses arrangements could not be retained, and we welcome the fact that this has been recognised by Ofgem in its proposals.
74. Changing patterns of use of the network also have scope to increase levels of losses while overall carbon intensity is reduced (for example due to the deployment of distributed generation). Setting rigid targets in this environment would either expose DNOs to significant penalties, or create a perverse incentive for companies to fail in facilitating their deployment. This outcome would not be appropriate.
75. Ofgem should therefore be congratulated in drawing together elements from several proposals to put together a comprehensive package of measures, which does not suffer from the problems described above.
76. The position taken by Ofgem is even stronger than set forth in the Consultation. In a move towards a lower carbon economy it may be both efficient and environmentally desirable for electrical losses from the network to rise if that increase is the necessary consequence of the increased deployment and use of low-carbon technologies.

Outputs, incentives and innovation, Ch. 5, Q2: Will our proposed losses discretionary reward provide the required incentive on DNOs to reduce losses? Should this be awarded twice during ED1 or more frequently?

77. The overall package of losses incentives, not just the discretionary reward, provides the incentives required for DNOs to reduce losses. However, this aspect of the proposals is the one that provides a strong incentive for the development of innovative approaches which reduce network losses.
78. At £32m the reward appears to be calibrated to a sensible level, giving scope for significant rewards where any individual DNO is able to make significant contributions to future best practice.
79. Northern Powergrid also believes that awarding the incentive twice during the RIIO-ED1 period also reflects the appropriate balance between ensuring companies do not need to wait too long for rewards, and also retaining the incentive as a mechanism through which significant rewards can be provided where DNOs take exceptional actions.

Outputs, incentives and innovation, Ch. 5, Q3: Should DNO actions to identify and address electricity theft be encouraged through an approach outside of any losses reduction mechanism? Do you have any views on the proposed approach, or any alternate proposals, that we should consider?

80. Northern Powergrid supports the proposed approach.
81. The link between the supplier and customer, based on the supplier hub principle, should be retained as it leaves responsibility for the overall supply relationship with end users with a single organisation. It is appropriate that any shortcomings to current supplier based arrangements are addressed

through changes to supplier licences, rather than wholesale changes to the underlying principles.

82. It is also appropriate for DNOs to maintain current levels of support for suppliers until more robust arrangements are put in place (which may of course still entail DNOs providing services to suppliers).
83. Finally, arrangements that make DNOs responsible for tackling theft where suppliers are 'not responsible' would be appropriate, provided as Ofgem states that reasonable costs associated with this activity can be recovered.

Outputs, incentives and innovation, Ch. 5, Q4: Do you think that further guidance should be provided with regard to the use of the "10% allowance" for undergrounding? If so, what form should this guidance take?

84. No further guidance is necessary. The examples given in paragraphs 5.41 and 5.42 of the Outputs Incentives and Innovation document should provide a 'steer' while not becoming overly prescriptive, or constraining the flexibility that the 10% allowance is intended to confer.

Outputs, incentives and innovation, Ch. 5, Q5: Are National Scenic Areas (NSAs) sufficient to allow for effective use of the scheme in Scotland in the protection of visual amenity?

85. The inclusion or not of NSAs in the scheme should depend on their characteristics. Provided the designation is comparable to areas of natural beauty it would seem inappropriate to exclude them from the scheme.
86. Ofgem should however consider providing additional funding for the scheme to ensure the addition of NSAs does not dilute funding available for undergrounding in other areas. Based on the view that the addition of NSAs will result only in small changes in allowances, the additional funding

required would be relatively small amount of additional funding but would ensure no third party stakeholders perceive themselves to have been made worse off by the change. Given that Ofgem's survey which established willingness to pay for undergrounding considered only areas of natural beauty and national parks, this would not be inconsistent with the allowance setting approach.

Outputs, incentives and innovation, Ch. 5, Q6: Do you agree with our proposals with regard to DNO assessment and stakeholder engagement within the undergrounding scheme?

87. The approach to publication of a policy setting out a DNO's approach to assessment of potential schemes, for use by relevant stakeholders, is reasonable. While we agree with Ofgem that the policy should set out how competing factors will be assessed, and, potentially, provide helpful examples (like the peat bog case cited by Ofgem) the intention should not be to spell out every single factor that will be taken into account and provide a manual for applications. This would constrain applicants from innovating making it likely that DNOs fail to take into account all relevant factors on a case by case basis.
88. The requirement to publish a policy on how stakeholders will be supported is also reasonable, although this should not constrain diverse approaches to interacting with stakeholders. For example, there are different ways that support can be provided to stakeholders to assist them in making best use of the undergrounding scheme. This could include providing project support, establishing discussion forums, making sure communication channels are easy to use, or simplifying internal process.

Outputs, incentives and innovation, Ch. 5, Q7: Do you agree with our proposed approach for BCF? Do you consider there are any additional elements that should be included within the BCF reporting scope?

89. Northern Powergrid supports the proposed approach for business carbon footprint (BCF) reporting.
90. It is appropriate that there will be no financial incentive, given the lack of comparability of the data across the DNOs.
91. It is also appropriate for Ofgem to strengthen the reporting requirements to include actions undertaken to reduce a company's carbon footprint. This reduces the risk of any reputational incentive being based on an incorrect interpretation of data, given the lack of data comparability.

Outputs, incentives and innovation, Ch. 5, Q8: Do you agree with our proposed approach to SF6 monitoring, reporting and management?

92. Northern Powergrid supports the proposed approach to SF6 monitoring and reporting.

Outputs, incentives and innovation, Ch. 5, Q9: Do you agree with our approach for fluid filled cables?

93. Northern Powergrid supports the proposed approach to fluid filled cables. We agree that there is no need to put in place any additional incentives given that the Environment Agency has put in place an operating code. Calibrating such an incentive in a way that was fair as between DNOs would be difficult because of the widely differing endowments of each DNO in fluid-filled cables.

Outputs, incentives and innovation, Ch. 5, Q10: Do you agree with our approach to noise reduction?

94. Northern Powergrid supports the proposed approach to noise reduction. We agree with the removal of the reporting requirement, as compliance with the policy set by the Department for Environment, Food and Rural Affairs should be part of normal business operations and requires no special arrangements.
95. On a point of detail, Ofgem will need to clarify how to cover consistently across all DNOs the reporting of projects undertaken for the primary purpose of reducing noise. However, we expect this to be relatively straightforward and should not prevent this proposed approach.

Outputs, incentives and innovation, Ch. 5, Q11: Do you agree with our assessment of the need for an additional environmental discretionary reward?

96. Northern Powergrid agrees with Ofgem's assessment that there is no need for an additional environmental discretionary reward at RIIO-ED1.
97. Ofgem's proposals for arrangements in relation to specific environmental objectives give DNOs appropriate incentives to manage their broad environmental impact. The losses discretionary reward will also provide a significant incentive in the area where DNOs can have the biggest potential impact on low-carbon goals.

Outputs, incentives and innovation, Ch. 6, Q1: Do you agree with our proposal to retain the Broad Measure of Customer Satisfaction (BCMS) and increase the maximum revenue exposure?

98. Northern Powergrid supports Ofgem’s proposal to retain the BMCS.
99. The increase in incentive exposure is correctly judged given we are now developing experience of the arrangements in the DPCR5 period.
100. The change to the survey Ofgem is considering, to distinguish between major and minor customers, is also a sensible development. Northern Powergrid’s full views on this issue are set out below in response to Q3 of chapter 8 of the Outputs, incentives and innovation document of the Consultation.

Outputs, incentives and innovation, Ch. 6, Q2: We seek views on the approach to setting targets for the RIIO-ED1 period, including whether these targets should be fixed for the price control period or should be responsive to changes in industry performance.

101. The current arrangements derive incentive outputs annually based on comparative performance of the various DNOs. The drawback of this approach is that it weakens the ability of companies to fund improvements in customer service through the incentive scheme, since better performance may not lead to higher allowed revenues if the benchmark moves.
102. A set of arrangements that fix targets for the duration of the RIIO-ED1 period, as is being implemented in the RIIO-GD1 price control, would solve this issue, and ensure that companies can plan their customer service improvements based on a judgement of whether the improvements targeted are worthwhile under the incentive scheme.

Outputs, incentives and innovation, Ch. 6, Q3: We seek wider stakeholder views on whether interruption customers that have been proactively contacted by the DNO via new methods of communication (e.g. social media) should be included in the customer satisfaction survey.

103. Northern Powergrid believes that, where individual contact is made with a specific customer (proactively or otherwise), those customers should be included in the survey sample. This includes examples such as where a customer makes specific contact via social media, and changes to the survey to reflect this should remove any potential distortion for DNOs to concentrate only on traditional routes of communication (when there may in fact be customer demand for other routes as well).
104. Northern Powergrid also believes that the same approach should be applied to outbound communications, provided that specific contact is being made with individual customers. This would include outbound calls by DNOs to customers (or potentially communications via other routes). For example, best practice might be to contact customers suffering an intermittent fault as soon as a DNO knows that they have been interrupted again, by calling or texting, to let them know the company is aware they are off power and working to solve the problem. At present, however, these customers would not be captured in the sample. There are of course a number of design issues that would be addressed in incorporating outbound communications but we believe they should be possible to address. In particular, 'broadcast' messages should not be included (whether via social media, text, or telephone campaign) to ensure they do not swamp the sample, as Ofgem notes would be a possibility in the Consultation.

Outputs, incentives and innovation, Ch. 6, Q4: Should the provision of information to connections customers be taken into account when calculating the score of the customer satisfaction survey?

105. Northern Powergrid believes that giving additional weight to this would be worthwhile.
106. At present, only those customers who take forward a quote are surveyed, while good information can actually benefit a much wider pool of customers.

In particular, if customers receive good information that allows them to take a decision not to go ahead with a connection before they have received a quote, they may be very happy that their time has not been wasted. However, the current arrangements would not capture the views of these customers.

107. An easy adaptation to the arrangements, to increase the weighting on the information provision component of the questions for customers whose details are available, would balance this current shortcoming in the survey's design.

Outputs, incentives and innovation, Ch. 6, Q5: Should the number of unsuccessful calls be taken into account when calculating the score of the customer satisfaction survey?

108. Northern Powergrid believes that this would lead to several issues, and care would need to be taken to avoid perverse incentives if unsuccessful calls are included.
109. The removal of unsuccessful calls from the DPCR5 arrangements once the BMCS was active was a deliberate choice, and any move to reintroduce it would need to give serious consideration to how the following problems could be dealt with.
- Firstly, the data across DNOs is not comparable (due to differing capabilities of telephone systems for monitoring dropped calls).
 - Secondly, an incentive to maximise the answer rate (and minimised 'dropped calls') creates a perverse incentive to try and keep customers on the line *even when they may be better served by another route*. For example, giving customers in a telephone queue the option of a call back, or a text update service on a power cut, would be penalised under a simple response rate incentive as the number of dropped calls would increase.

Outputs, incentives and innovation, Ch. 6, Q6: What indicators should we use to measure complaints performance? How should these be weighted?

110. Ofgem is correct to maintain the principle established in the implementation of the DPCR5 BMCS that the absolute number of complaints should not be incentivised. This is the case since ensuring comparability of data across DNOs is likely to be challenging, and since the response to customer complaints is likely to be as relevant to the customer experience as whether a complaint is necessary in the first place.
111. Ofgem's proposal to adjust the way in which referrals to the ombudsman are weighted is also appropriate. At present, the DNOs overall results on the metric can be highly sensitive to a single decision against them at the ombudsman. This creates a significant incentive for DNOs to avoid any cases being taken to the ombudsman. This is inappropriate, given that the ombudsman has a legitimate position within the arrangements.
112. A more proportionate penalty for DNOs being unsuccessful in a case at the ombudsman would be more closely aligned to the financial sanctions that can be imposed by the ombudsman, at an order of magnitude of around £5,000 per lost case. The preferred approach amongst Ofgem's suggested approaches to weighting such cases would be the one which most closely attains this appropriate level.

Outputs, incentives and innovation, Ch. 6, Q7: How should we calculate the BMCS complaints metric target for RIIO-ED1? How should we calculate the score at which the DNO incurs their maximum penalty exposure?

113. Northern Powergrid supports Ofgem's statement that the maximum exposure on the complaints metric incentive will be maintained at 0.5% of allowed

revenue, at paragraph 6.34 of the Outputs incentives and innovation document of the Consultation.

114. As a general point, Northern Powergrid believes that complaints metric targets that are fixed for the duration of the price control period are also appropriate.
115. These targets could be calculated by taking an average of the upper quartile performers; this would form the 'cut-off' for no penalty.

Outputs, incentives and innovation, Ch. 6, Q8: Do you agree with the proposed approach to assessing stakeholder engagement?

116. Northern Powergrid agrees with Ofgem's proposed approach to assessing stakeholder engagement.
117. Where fixed rules are going to be imposed in Ofgem's assessment, these should be set out clearly in guidance to the process. However, we also believe that this guidance should not be a rigid straightjacket for Ofgem's assessment, particularly if this would rule out innovative approaches taken by companies to the bidding process.

Outputs, incentives and innovation, Ch. 7, Q1: Are there additional social issues that the DNOs should address?

118. Northern Powergrid supports the position Ofgem has adopted on social outputs, including the fact that any outputs should be closely linked to the network.
119. Where a DNO's unique position gives it access to information on the needs of network users that others do not have, it is correct that it should make use of this information where possible, and undertake actions where these are

closely linked to the network. If what is instead needed is a programme of subsidy for purely social reasons, without close links to the distribution network activities of DNOs, the price control is not the appropriate mechanism through which to provide this.

Outputs, incentives and innovation, Ch. 7, Q2: Are there any specific [social] outputs that the DNOs could be responsible for delivering?

120. It is not easy to identify specific outputs that are closely linked to the network. This makes the establishment of a fixed output through the price control process challenging.
121. Innovative approaches are likely to be needed to identify areas where there may be a role for DNOs, such as greater collaborative working with other parties. This output area therefore lends itself to qualitative, not mechanistic, measurement of outputs, such as a discretionary reward.

Outputs, incentives and innovation, Ch. 7, Q3: Should a separate funding allowance be provided to enable DNOs to carry out activities in response to social issues?

122. Although there are currently no specific outputs in this area that can be easily identified, it is possible that DNOs may be best placed to undertake some direct actions that result from better use of information in future.
123. Given this is not part of the established business as usual requirements for the network, Ofgem is right to consider whether a separate source of funding is needed as part of the Consultation.
124. If any such mechanism were to be put in place, strict eligibility criteria should be included that mean its use is limited to actions that are closely linked to the core purpose of the network. These eligibility criteria should

include a requirement that the action gives good value for money. The cost benefit analysis approach Ofgem is suggesting for other areas of the price control would be one tool which might be suitable for ensuring this.

Outputs, incentives and innovation, Ch. 7, Q4: Are DNOs adequately incentivised to engage with social issues as part of the BMCS Stakeholder Engagement Incentive?

125. Northern Powergrid believes that DNOs are adequately incentivised to engage with social issues as part of the BMCS stakeholder incentive.
126. The use of this mechanism to incentivise engagement on social issues also has the additional benefit that the administrative burden would be minimised.
127. However, while this gives DNOs an incentive to innovate, it may not provide on-going incentives for other DNOs to adopt best practice (which may already have been the subject of an award to another DNO), especially if there are costs associated with rolling out the approach.

Outputs, incentives and innovation, Ch. 8, Q1: Do you consider that our proposed package will drive the appropriate behaviour for connecting both demand connections and generation connections?

128. Northern Powergrid considers that the technology neutral approach Ofgem is taking to incentivising appropriate behaviours, while providing funding that responds to the level of low-carbon technology uptake, is well judged.
129. Specifically in terms of the proposed connections incentives we believe the following.
 - The time to connect incentive must be implemented carefully in order to avoid potential perverse outcomes.

- Ofgem is right that connections incentives should be removed from market segments that are competitive, although this needs to be done proportionately, and the proposed arrangements (based on number of market segments) may not achieve this.

Outputs, incentives and innovation, Ch. 8, Q2: Is it appropriate to remove the DG incentive?

130. The purpose of the Distributed Generation (DG) mechanism was primarily to provide a pot of funding to cover the network costs associated with efficient connection of DG.
131. The proposal to extend the provision for demand connections to generation connections seems reasonable, but will require a separate revenue driver for DG high-volume low-cost connections. The low-carbon technology revenue driver we have proposed may be appropriate for this purpose. The extended range of incentives Ofgem proposes for timely connections that are provided with good customer service should also benefit customers who require a connection for any reason (including DG).
132. Northern Powergrid therefore agrees with Ofgem that there is no need for the existing DG incentive to remain in place.

Outputs, incentives and innovation, Ch. 8, Q3: Do you agree that we should split the BMCS customer satisfaction survey into major and minor connections customers? If not, why not?

133. Northern Powergrid agrees that it makes sense to separate major from minor connections.
134. This is because these two customer groups have very different needs, and because major connections customers spend very sizeable amounts of money

but at present will receive very little weight in the survey outcomes (since the value of each connection they undertake will be much higher than that of the average customer, but they will only have an average likelihood of being chosen).

135. As Ofgem notes, the survey may need to be more qualitative in nature, since the current 'one size fits all' approach may not adequately reflect their requirements, and as a result it will need careful attention to design appropriately.

Outputs, incentives and innovation, Ch. 8, Q4: How should we set targets for the BMCS customer satisfaction survey?

136. Northern Powergrid's response above to Q2 of chapter 6 of the Outputs, incentives and innovation document of the Consultation sets out our views in full.

137. In short, we support the use of fixed targets set for the duration of the price control period. Provided they are appropriately set, this will allow DNOs to fund improvements to their customer service via the incentive.

Outputs, incentives and innovation, Ch. 8, Q5: We invite views on our proposals for the Long Term Development Strategy (LTDS), Distributed Generation (DG) Connection Guide and Information Strategy (IS).

138. Northern Powergrid understands that Ofgem believes that strengthening BMCS reduces the need for prescriptive direction on how DNOs should assist customers interested in connecting to our network. However, we note that our customers have indicated the benefit of a published Long Term Development Strategy (LTDS), Distributed Generation (DG) Connection Guide and Information Strategy (IS) that they can access easily prior to any

discussions with us. We will therefore continue to support and develop this framework of guidance and support in light of customer feedback.

Outputs, incentives and innovation, Ch. 8, Q6: Are additional or alternative incentives required to encourage the DNOs to provide better information to connection customers upfront? If so, what would these measures and incentives be?

139. Northern Powergrid believes that additional incentives are required to encourage DNOs to provide better information to connection customers upfront. This could be achieved by placing specific weighting on the survey question regarding information quality.

140. Our views, including our reasons, are set out in full above in response to Q4 of chapter 6 of the Outputs, incentives and innovation document of the Consultation.

Outputs, incentives and innovation, Ch. 8, Q7: We seek stakeholders' views on the introduction of a new Average Time to Connect Incentive.

141. Ofgem is correct to note that the speed of a connection is only one aspect of customer service. The overarching connections customer service incentive should itself incentivise companies to provide faster connections.

142. Based on the results of our own stakeholder engagement we also agree with Ofgem that speedy connections are an important customer demand that require special focus. We therefore agree with Ofgem's ambition to increase the degree of focus on this area in general.

143. Accordingly, we agree with Ofgem that the incentive strength should be limited, in order to ensure it does not outweigh the direct incentives for good

customer service already provided through the BMCS. This should help the BMCS to balance the risk of perverse responses to the time to connect incentive (although this is not a substitute for careful incentive design).

144. Ofgem should also consider retaining the option of reviewing the time to connect incentive at the mid-period review of outputs to evaluate whether it is delivering on customer requirements.
145. Our comments in relation to incentives in potentially competitive market segments above also apply, in that they should be withdrawn once competition is established, and that this should be done in a proportionate way.

<p><i>Outputs, incentives and innovation, Ch. 8, Q8:</i> We seek views on which aspects of service should be measured, the approach used for target setting and whether any exemptions should be applied under the Average Time to Connect Incentive?</p>

146. Northern Powergrid believes that any time to connect incentive must be designed carefully in order to avoid the potential for perverse incentives.
- It should be as broadly based as possible, to avoid encouraging DNOs to favour fast delivery of one type of activity over another. It should therefore cover all connections activities undertaken by DNOs (in non-competitive market segments), including activities such as service alterations.
 - ‘Stop the clock’ provisions could create an incentive to find a reason to pause the connection for any reasonably plausible cause, thereby giving DNOs more time without impacting the average time to quote or deliver. Stop codes would also remove the incentive for DNOs to work to try and resolve the issues with the customer as soon as possible. They should therefore be avoided.

- Equally, if companies have the ability to cancel quotes in the event that customers have filled in forms incorrectly, this could create an incentive to place customers 'at the back of the queue' in order to manage the pipeline of work, rather than develop forms that are easier for customers to fill in correctly in the first place. Any such carve outs should therefore be avoided.³

147. In implementing a time to connect incentive, we also expect that there will be significant work required to ensure data comparability across the DNOs.

148. As a general point on target setting, Northern Powergrid believes that targets which are set for the duration of the RIIO-ED1 price control period, for example based on historic performance (if it can be measured), have advantages over other approaches. In particular, fixed targets would provide a funding pot against which commercial decisions to pursue improvements could be judged.

149. In the case of a time to connect incentive, such targets could be set for the first four years of the RIIO-ED1 period, with the expectation that the incentive scheme may be significantly modified at the mid-period review in the event that the arrangements need to be re-designed to better deliver on customer requirements.

<p><i>Outputs, incentives and innovation, Ch. 8, Q9:</i> Do you agree with our proposed approach for the treatment of connection customer contributions by the DNOs during RIIO-ED1?</p>
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150. Northern Powergrid supports the proposed approach.

151. DNOs should be broadly neutral between recovering costs via connection and Use of System charges. However, Ofgem needs to ensure that this

³ While a system that has no stop codes could itself encourage companies to 'rush' customers through the process even when they want to go slowly, we believe that this would be a significantly less perverse outcome than the myriad of problems that could result from the use of stop codes.

reinforcement is efficient and that DNOs do not invest in a significant amount of reinforcement where connections never materialise.

Outputs, incentives and innovation, Ch. 8, Q10: Are additional incentives needed to encourage the DNOs to provide high-quality, timely non-contestable work? If so, what incentives should be applied?

152. Northern Powergrid believes that the provisions of SLC 15 have worked reasonably well since October 2007. Recent developments in relation to the extension of contestability are likely to make a significant impact in this area as it allows the customer to control more of the works, reducing the amount of non-contestable services that the DNO is required to provide. Taken in combination with the proposed changes to the BMCS Northern Powergrid does not consider that any other measures are necessary.

Outputs, incentives and innovation, Ch. 8, Q11: We seek views on the financial exposure and scope of incentives for those market segments that have/have not passed the Competition Test.

153. Ofgem is right to propose that both the BMCS and the time to connect incentives will be withdrawn from connections market segments that have passed the competition test.
154. Once competition is known to be effective, the incentives would no longer be required (since competition provides a customer based incentive that balances good customer service and low prices). Once the test is passed, continued incentives could serve only to distort the market (even if they are penalty only, since DNOs may be encouraged to take actions to avoid the risk of a penalty that they would otherwise not pursue).

155. The arrangements should be designed in a way that ensures that incentives on any remaining market segments are proportionate. The Consultation suggests reducing the scale of the incentive depending on the *number* of market segments that have not yet passed the test. It would be more proportionate to scale the incentives back based on the proportion of activity *by value* that takes place in the respective market segments.
156. In Northern Powergrid's experience the difference can be significant. For example, across the company's two licensees in 2011-12, we estimate that the two largest market segments account for around 80% of activity by value. If these market segments passed the test, it would be appropriate for about 80% of the incentive strength to be withdrawn (to reflect the scale of the remaining segments). However, if the number of market segments were used to scale back the incentive, 75% of the incentive strength would be concentrated on only 20% of the activity. This would be a disproportionate incentive on a small proportion of transactions (by value).
157. Since market value can only be estimated by DNOs (where other companies have undertaken work), and can change from year to year, a practical way of recognising this issue would be to establish, either for each DNO or for the whole of GB, the approximate value of each market segment, and establish a basket of weights for the withdrawal of the incentive based on this.
158. The same principles should also apply to the strength of the incentive placed on each individual market segment when the incentive is in operation.

<p><i>Outputs, incentives and innovation, Ch. 9, Q1:</i> Do you agree with our proposed range for the efficiency incentive rate?</p>
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159. We support Ofgem's proposal to uplift the efficiency incentive rate range, when compared to the range used at DPCR5.

160. Firstly, it comes at a time when a higher incentive rate will pay dividends for the long term, given increasing expenditure on electricity networks both during ED1 and beyond, meaning that any new ways to sustainably reduce costs will have significant benefits over coming decades.
161. Secondly, it is also necessary because it is more difficult than ever to find efficiency savings in electricity distribution, over two decades after privatisation, when many of the easy efficiency gains have already been found.
162. Thirdly, we also support the proposal to place the efficiency incentive rate on a post-tax basis. If this were not the approach, it would result in the perverse outcome that companies in the gas distribution sector would face a stronger efficiency incentive than electricity distribution, even though they have been subject to comparative efficiency incentives for significantly less time, which (all else held constant) will mean on-going cost reductions are more challenging in electricity distribution.

<p><i>Outputs, incentives and innovation, Ch. 9, Q2:</i> Do you agree with our proposed approach to the calibration of the IQI?</p>

163. Ofgem is right to set the bar very high for fast-tracking. This means that there should be no shame in companies being assessed through the traditional slow track route. Even where companies are not fast-tracked, perhaps for reasons unrelated to whether their forecasts are challenging, those that submit challenging forecasts should be rewarded for the information this provides Ofgem in assessing the costs of others.
164. The proposed IQI calibration would not achieve this, as it is punitive across the board where Ofgem's benchmark is even slightly below a company's forecast, and experience from several price control reviews has shown that the majority of companies would therefore expect a penalty through that mechanism.

165. Although the rewards should not be as high as for those companies which are fast-tracked, there should still be positive rewards for those companies which submit a forecast which Ofgem believes should be accepted with no adjustment. The 2.5% allowed for meeting this standard in DPCR5, and in the RIIO-GD1 review, would be more appropriate. It would also be perverse if companies in the gas distribution sector were to be provided with a more rewarding IQI settlement than electricity distribution, which has been subject to strong comparative efficiency incentives for significantly longer, making cost reductions more challenging.

Outputs, incentives and innovation, Ch. 9, Q3: What are your views on the indicative IQI matrix?

166. Northern Powergrid's views on the indicative IQI matrix are set out in the response to Q2, above.

Outputs, incentives and innovation, Ch. 9, Q4: What do you consider are the appropriate rewards for fast-track companies compared to non fast-track companies? Should we have a differential between the two?

167. Ofgem has consulted on whether fast-tracked companies should be given a reward for achieving this status. Northern Powergrid believes that there should be significant rewards for such companies.

168. Firstly, these are likely to be the companies that set the benchmark against which the costs of other companies will be assessed. Provided their example is worthy of emulation, this process could create significant benefits for customers.

169. Secondly, those companies that have been fast-tracked will have submitted the most challenging cost forecasts, and therefore beating the expenditure

levels set out in their plan (while still delivering the associated outputs) will be extremely challenging. In order for the best performing companies to be capable of achieving good returns on equity (potentially double digit, to balance the potential for poorly performing companies to achieve equity returns at the cost of debt), an adequate reward should be provided for having been fast-tracked.

170. Thirdly, fast-tracking under the RIIO framework also depends on an assessment of past performance, so the purpose of the fast-track is partly to reinforce and strengthen the incentives for long term good performance, between review periods (not just within them). It therefore makes sense to offer a significant reward for those companies that meet the very high standard required.
171. Given the significant benefits from companies achieving the standard required to be fast-tracked, the reward should be higher than the 2.5% of allowed expenditure mentioned in the consultation. Rewards of 4%-5% would be more appropriate.
172. There should also be a commitment that, in the unlikely event that a slow-tracked company receives an IQI assessment that grants it a larger reward, or an overall more favourable package, the fast-tracked company should also qualify for that amount. This would help maintain the strong incentives that Ofgem has always had in place for companies to submit cost forecasts that are more challenging than Ofgem's own benchmarks (historically achieved by setting allowances at the level of the benchmark, not the company's forecast). As Ofgem notes in the Consultation, it is unlikely that companies will find themselves in this position, and as a result it would not represent a significant commitment, but would remove a valid concern of companies seeking to be fast-tracked.

Outputs, incentives and innovation, Ch. 9, Q5: Do you agree with our proposals for the same efficiency incentive rate to apply to all areas of expenditure that will be included within the IQI?

173. Northern Powergrid supports this proposal.
174. We believe equalisation of incentives across closely competing costs in DPCR5 was an important step, and although those boundaries that remain are less problematic, full equalisation of incentives across all costs is a logical conclusion to the process. It ensures that companies have an incentive to pursue the least cost solution, regardless of what category the costs fall in.
175. In equalising incentives, it is also important that Ofgem should ensure differential incentives on different categories of cost do not creep back in through the cost assessment approaches applied.

Outputs, incentives and innovation, Ch. 9, Q6: Do you agree with our proposed treatment of DNOs within a single ownership group? If you disagree with our proposals in these areas, please explain the basis for an alternative approach.

176. Northern Powergrid supports the proposed approach.
177. This was the one which was adopted at DPCR5, and is appropriate since it avoids any risk that differential incentive rates between companies within the same ownership group could lead to distortions.
178. In the event that a group with more than one licensee finds at least one licensee is fast tracked, and at least one is not, this would mean the efficiency incentive rate would not be established for the fast tracked licensee until the outcome of the review for the slow-tracked company was

known. However, given that the two processes would be independent, this does not represent a major drawback.

Outputs, incentives and innovation, Ch. 10, Q1: Do you agree that the cap on funding for the electricity NIC should be within the range of £60m and £90m for 2015-16 and 2016-17? Please provide evidence to support your suggested level of funding.

179. Northern Powergrid is an active participant in the DPCR5 Low-carbon Networks (LCN) Fund, and is implementing the largest project approved under the arrangements to date.
180. The range proposed by Ofgem reflects a continued strong commitment to funding innovation that should assist in containing network related costs in the transition to a low-carbon economy. In advance of a full review of the value for money of the LCN Fund projects, the significant on-going demand reflected by applications to the LCN Fund supports this on-going high level of support.

Outputs, incentives and innovation, Ch. 10, Q2: Do you agree that the level of funding for the rest of the ED1 period should be reviewed in 2016 following a review of the LCN Fund?

181. Northern Powergrid agrees with this proposal. A large amount of customer money is being invested through both the LCN Fund and the NIC. It is therefore appropriate that Ofgem should want a full value for money appraisal of the scheme to inform the future approach.
182. Providing Network Innovation Competition (NIC) funding for the first two years of RIIO-ED1, at the levels proposed in the Consultation, is sensible. This should allow time for the benefits of the DPCR5 LCN Fund to be assessed

through a full review conducted in 2016, while in the meantime allowing levels of electricity distribution funding to continue at or reasonably close to DPCR5 levels (depending on levels of demand relative to transmission).

Outputs, incentives and innovation, Ch. 10, Q3: What are your views on the information DNOs should provide in their innovation strategies? How can DNOs best demonstrate that their approach to innovation is sufficiently well justified and robust?

183. Northern Powergrid believes that DNOs should determine the information provided in their innovation strategy based on their own stakeholder feedback and their own experiences under the LCN Fund and wider innovation driving business improvement. In addition to providing a compelling set of proposals for future innovation, justification should be provided through the use of specific examples from the current price control period in order to establish a DNO's credentials.

Outputs, incentives and innovation, Ch. 10, Q4: Do you agree that it would be valuable for DNOs to consult and update their innovation strategies regularly during the price control period?

184. All strategies, innovation or otherwise, should be flexible to changing demands such that it may not be necessary to update them, if they remain appropriate.
185. However, this does not mean that they will not change, and in determining whether an update is required, companies should listen to their stakeholders to ensure the strategies remain appropriate and do not lead to a waste of customers' money.
186. This should not require an overly prescriptive process.

Outputs, incentives and innovation, Ch. 10, Q5: Are there any aspects of the innovation framework for ED1, which you think should differ from the arrangements from RIIO-T1 and GD1? If yes, please explain why.

187. We have identified no aspects of the innovation arrangements from RIIO-T1 or RIIO-GD1 which would clearly be inappropriate for RIIO-ED1.
188. As with any new process, issues could potentially come to light once the governance arrangements go live. The latter stages of the RIIO-ED1 review could provide the opportunity to review the arrangements in light of experience gained by that date. This should, however, only be undertaken if the potential improvements appear to be material.

BUSINESS PLANS AND PROPORTIONATE TREATMENT DOCUMENT

Business plans and proportionate treatment, Ch. 3, Q1: Do you have any comments on the timing and stages of the assessment process?

189. The additional details on process and timetable set out in the Consultation bring clarity which we welcome. Knowing the exact date for business plan submission provides a target to aim for well in advance, although the approximate date had also been signalled for some time.
190. The process should also involve DNOs having the opportunity to address the Authority at all relevant stages of the price control. Ofgem is right to propose that all DNOs should have the opportunity to address the Authority upon submission of their initial business plans. For any slow-tracked DNOs, this should also include upon submission of their revised business plans, and upon publication of Ofgem's draft determination. This opportunity to address the Authority after publication of the draft determination is a vital element of due process, since at this stage slow-tracked companies will, for the first

time, have had sight of the settlement Ofgem is proposing to make, which may well differ from the settlement they had proposed in their own business plans.

Business plans and proportionate treatment, Ch. 3, Q2: Do you agree with the three stage assessment process for RIIO-ED1?

191. Northern Powergrid supports Ofgem's proposals for a three stage assessment process.

192. Our full views are set out above, in our response to Q2 of chapter 6 of the overview document of the Consultation.

Business plans and proportionate treatment, Ch. 3, Q3: Do you think the additional reward for fast-tracking is appropriate?

193. Northern Powergrid's response is set out above, in our response to Q4 of chapter 9 of the outputs incentives and innovation document of the Consultation.

Business plans and proportionate treatment, Ch. 4, Q1: Does the categorisation of the assessment criteria remain appropriate?

194. Northern Powergrid's response is set out above, in our response to Q1 of chapter 4 of the overview document of the Consultation.

Business plans and proportionate treatment, Ch. 4, Q2: Are there any criteria which we should add or amend in the context of RIIO-ED1?

195. Northern Powergrid's response is set out above, in our response to Q3 of chapter 6 of the overview document of the Consultation.

Business plans and proportionate treatment, Ch. 5, Q1: Is there anything else, in the context of the presentation and structure of the business plan, which we should provide guidance on?

196. Northern Powergrid believes that, as a general rule, DNOs are best placed to determine the presentation and structure of their business plans, to fit with the requirements that they perceive their stakeholders to have.

197. The feedback provided both by Ofgem and other stakeholders on the presentation and structure of the RIIO-T1 and RIIO-GD1 business plans has provided guidance that DNOs should take into account in their development of their own plans, where relevant.

198. We also welcome the fact that Ofgem has highlighted its views on the key lessons to be learned from the RIIO-T1 and RIIO-GD1 process in the Consultation.

Business plans and proportionate treatment, Ch. 5, Q2: Should we require DNOs to conform to the proposed document structure (set out in figure 4.1), some other prescribed structure, or let the DNOs structure the plans as they see fit?

199. Northern Powergrid believes that companies are best placed to determine the structure and content of their business plans to suit the needs of their varied stakeholders, which include diverse groups such as network end-users, consumer bodies, energy supply businesses and DNO employees.

200. However, if there is a strong demand from stakeholders for consistency, Ofgem's proposed overarching structure strikes the right balance without becoming prescriptive.

Business plans and proportionate treatment, Ch. 5, Q3: Should we set a page limit for the executive summary of the plan? How long should it be? Are there other areas where we should consider setting page limits?

201. As set out in response to the previous questions, Northern Powergrid believes that companies are best placed to determine the structure and content of their business plans.

202. There is no need for page limits on the executive summary, as DNOs should be capable of striking the right balance between detail and length, based on stakeholder feedback. Arbitrary limits may also not lead to the desired outcome, as it would be relatively easy to work within them without meeting the underlying stakeholder requirement for clear and easy to digest information.

Business plans and proportionate treatment, Ch. 5, Q4: Do you agree with the information that we are proposing should be required in each DNO's executive summary? What other information would be useful.

203. As set out in response to the previous questions, Northern Powergrid believes that companies are best placed to determine the structure and content of their business plans.

204. However, it is difficult to see how a company could prepare an executive summary to a business plan that does not contain most if not all of the information listed by Ofgem.

205. However Northern Powergrid does not believe that it is necessary to present information on secondary deliverables in the executive summary (although companies may wish to do so). Secondary deliverables should not be elevated to the status of primary outputs, and should not be used as a definitive indicator against which to assess company performance.
206. Having a view on customer pricing impacts is clearly necessary, although the exact methodology should be developed carefully, and communicated clearly, to avoid the potential for confusion.

Business plans and proportionate treatment, Ch. 5, Q5: What should be the common metric, calculation and assumptions for determining the impact of the DNOs' proposal on consumer's bills?

207. As set out in response to the previous questions, Northern Powergrid believes that companies are best placed to determine the structure and content of their business plans.
208. However, we can see that stakeholders may value a common metric for comparison across business plans. We believe that any such metrics should be both high level and simple. They should also reflect factors within companies' control. And they should also include a frame of reference that makes them more meaningful.
209. The metric Ofgem used in its impact assessment for the RIIO-T1 and RIIO-GD1 *Initial proposals* (the change in allowed revenue per customer by the end of the price control period) should provide an appropriate starting point. However, proposed costs are also likely to matter to stakeholders, since over the long term they will ultimately have to pay for all the proposed expenditure (including through capital costs and depreciation). The change in costs proposed for the RIIO-ED1 period, relative to allowed costs in the DPCR5 period, would therefore also be an appropriate complement to a measure based on revenue. Ofgem may wish to publish a common set of

parameters for WACC and transitional arrangements solely to facilitate comparison between companies, bearing in mind that companies may have chosen to adopt different assumptions for these items in their business plans.

Business plans and proportionate treatment, Ch. 6, Q1: Do you agree with our proposed approach to cost benefit analysis?

210. We welcome the opportunity to develop cost benefit analysis with Ofgem. It represents another useful decision tool, since the formalised approach being developed should help clarify the rationale for taking certain courses of action over others.
211. Through the development of cost benefit analysis, the industry and Ofgem should also work to understand areas where it may provide different answers to currently accepted decision making tools on areas of costs that are not discretionary in meeting obligations under the Act. Rigid implementation of the findings of the analysis would also constrain companies to a decision making framework that was developed for the public sector. The proposals in the consultation imply that other factors or analysis could only be used in marginal situations.⁴ This could be inappropriately restrictive, and should not be confirmed until a proper understanding of the results of this approach to cost benefit analysis is developed. And while we agree with Ofgem that benefit cost ratios could *help* prioritise projects where there are many with a positive NPV, this position should not be made more rigid.
212. Finally, cost benefit analysis should be applied to programmes of similar activities in cases where this is possible, rather than individual projects, in order to ensure that it remains proportionate as an assessment tool. If there are no significant distinguishing features between such projects, then further disaggregation would be inappropriate.

⁴ The Consultation, Business plans and proportionate treatment document, paragraph 6.36.

213. Ofgem should also be cautious about specifying particular values to be used in such cost benefit exercises, where those values might relate to matters such as the value of a human life. Such parameters have their place in an informed process of cost benefit analysis, but they need to be used in a way that balances their methodological advantages alongside well-established conventions with respect to the tolerability of risk.

Business plans and proportionate treatment, Ch. 6, Q2: Do you agree with our proposed approach to have a threshold level of expenditure to determine whether cost benefit analysis is required?

214. Northern Powergrid agrees that there should also be a *de minimis* threshold below which cost benefit analysis is not expected, although companies should be allowed to undertake the analysis below this threshold where it would be helpful (for example in appraising an innovative pilot project).

Business plans and proportionate treatment, Ch. 6, Q3: What level of expenditure do you believe should be used as the threshold for determining when cost benefit analysis should be provided as part of the business plan submission?

215. The standard *de minimis* threshold used for re-openers, of 1% of base demand revenues (after the application of the efficiency sharing factor on proposed costs) would be reasonably proportionate while ensuring consistency across different elements of the price control.

Business plans and proportionate treatment, Ch. 6, Q4: Have we identified all of the relevant parameters to ensure consistency in how cost benefit analysis is undertaken?

216. In monetising the risk reductions, for example safety, performance, legal and so on, not only do we need to establish a consistent basis for monetising the reduction but we may also need to understand whether the methods for calculating the reduction in risk are consistent.
217. It is unlikely to be appropriate to attempt to force a standardised approach to calculating such reductions in risk, as this could lead to unintended micro management of company decision making. Further details on these issues are set out in our response to Q2 of chapter 6 of the Reliability and safety document of the Consultation. However, in understanding any material differences in results of cost benefit analysis across different companies, an understanding of this issue is necessary.

Business plans and proportionate treatment, Ch. 6, Q5: What are your views on the levels the parameters should be set at?

218. Northern Powergrid supports the adoption of the Spackman approach with its 'real world' approach to valuing the capital costs of the DNOs responsible for implementing (and funding) the investments. Northern Powergrid also supports the adoption of the Green Book recommended social time preference rate in discounting real costs and benefits.
219. Caution should however be adopted in accepting the results of analysis which depends on very long term benefits from specific investments (or classes of investments), given that the impact of the low-carbon transition is a major unknown, and could mean the assets have a shortened useful life. This fits with Ofgem's recommendation that companies should consider the potential impact of uncertainty in establishing prospective benefits, and the fact that Ofgem considers there may be a requirement to limit the assumed economic life.
220. We also have some concerns about how monetising safety might read across to current performance in what is considered a reasonably safe industry. In

particular we would have concerns if projects generally considered necessary for safety reasons fail to produce a positive net present value via this CBA process. Although the confirmation that a lower discount rate can be used for safety related benefits may help mitigate this, the materiality of any potential issue will not be evident until the cost benefit analysis has been undertaken using the standard template.

UNCERTAINTY MECHANISMS DOCUMENT

Uncertainty mechanisms, Ch. 2, Q1: Are there any additional criteria that we should take into account to guide the appropriate use of uncertainty mechanisms?

221. The criteria Ofgem sets out for companies to use in justifying additional uncertainty mechanisms are sensible and appear comprehensive.

Uncertainty mechanisms, Ch. 3, Q1: Do you have any views on the design of the proposed high-volume low-cost connections volume driver?

222. Northern Powergrid supports the proposed approach.

223. The proposal is broadly in line with the current mechanism that operates in the DPCR5 period. Due to uncertainties in forecasts of future volumes or connections it is appropriate to maintain this uncertainty mechanism into RIIO-ED1.

Uncertainty mechanisms, Ch. 3, Q2: Do you have any views on the design of the proposed low-carbon technologies volume driver?

224. While customers' behaviour with respect to traditional technologies is relatively predictable, allowing network reinforcement allowances to be largely fixed in advance, the uptake of low-carbon technologies is subject to significant uncertainty.
225. A revenue driver is therefore required for low-carbon technologies, to cover the associated reinforcement costs that are not covered in base allowances, or covered by customer contributions. The purpose of this revenue driver should not be to incentivise the deployment of low-carbon technologies but to allow DNOs to be remunerated where this occurs.
226. Northern Powergrid advocated such revenue drivers in its initial issues consultation response. The company believes that any such framework should:
- be simple and easy to implement and understand;
 - relate directly to the take-up of low-carbon technologies by end-users; rather than network interventions that may occur because of other factors;
 - ensure that customers only pay for assets or other investments that they actually require; and
 - maintain the strongest possible incentives for DNOs to innovate and achieve cost savings during the transition to the low-carbon economy.
227. Northern Powergrid's views on the appropriate revenue driver to adopt are fully set out in our paper, presented to the flexibility and capacity working group in August 2012. This paper is attached as a supplement to this consultation response. Since that time we have continued to work on developing these proposals and in light of more recent discussions we propose to update the paper and submit to Ofgem for its consideration.

228. Our view remains that the £/MW of connected low-carbon technologies revenue driver has significant advantages over the other proposal set out in the Consultation, in that it maintains stronger incentives for companies to innovate and find ways of reducing costs during the transition to a low-carbon economy, one of the key objectives of the RIIO framework.
229. Although we have already undertaken significant work to develop a workable mechanism based on these principles, we expect to undertake further work with the industry and Ofgem to develop the approach further in time for the strategy decision. In particular, we expect that it will be possible to develop a revenue driver based on pounds per MW of installed low-carbon technology that avoids potential boundary issues with the connections funding arrangements. For example, for existing class 1-4 customers who are installing low-carbon technology, the socialisation of connection charges will mean that the only funding route is via the price control uncertainty mechanism.
230. The choice of revenue driver is also independent of whether there is any fixed *ex-ante* allowance for low-carbon technology, whether or not the baseline assumes a certain level of low-carbon technology uptake, or how a re-opener mechanism could be designed to cater for the potential that outturn costs may be materially different to those assumed in the volume driver. On these other issues Northern Powergrid's views are as follows:
- There should be no fixed *ex-ante* allowances, as there may be no customer requirement for assets funded this way. Assets should only be funded as and when the uptake of low-carbon technologies requires them.
 - Given the two year lag for the adjustment of allowed revenues within the price control period, it would be appropriate to include allowance for the DNOs 'best view' of likely low-carbon technology uptake, with in period revenues flexed upwards and downwards from this depending on actual uptake.

- The load-related expenditure re-opener that Ofgem has proposed means that there is no need for a low-carbon technology volume driver specific re-opener.⁵ We still believe that the factors listed in our paper as relevant to the re-opener should be taken into account.
- Finally, Northern Powergrid believes that the threshold proposed as part of option 2, which would only see allowances adjusted once volumes varied by 20% relative to the assumed 'best view', would be inappropriate.

Uncertainty mechanisms, Ch. 3, Q3: Do you have any views on the design of the proposed smart meters volume driver?

231. Northern Powergrid believes that Tier 1 (i.e. making an allowance for business as usual costs) is appropriate.
232. Some aspects of tiers 2 and 3 may however benefit from greater clarity, although we expect this is being addressed through the working groups. There is also uncertainty over the mix of different types of work that will be undertaken in response to call-outs during the smart meter roll-out. It would therefore be appropriate to establish a basket of volume drivers, with different costs associated with each (for example attendance on site, normal hours cut-out change or out of hours cut-out change).
233. We also believe that the scope of the proposed pass-through items is also too limited. While it is appropriate that mandatory DCC fees should be pass-through, the cost of any data which DNOs must make use of in order to discharge their duties under their licences should also be pass-through. Once the cost of such data has been established through experience, it may be possible to set an *ex-ante* allowance at future price control reviews.

⁵ Consultation Uncertainty mechanisms document, paragraph 3.30.

Uncertainty mechanisms, Ch. 3, Q4: Do you have any views on the design of the proposed street works re-opener?

234. Northern Powergrid believes that the factors the proposed street works re-opener would protect against, set out in table 3.2 of the Uncertainty mechanisms document of the Consultation, are appropriate.
235. The approach to assessing one off set up costs also appears appropriate, although comparability of the data (both between companies and across sectors) must be ensured for the results to be informative.
236. We do however believe that DNOs should be able to include costs related to street works permitting or lane rental schemes even where they do not have 12 months of data, provided the cost estimates they have are sufficiently well justified.

Uncertainty mechanisms, Ch. 3, Q5: Do you have any views on the design of the proposed enhanced physical site security re-opener?

237. Northern Powergrid supports the principles of the proposed design of the enhanced physical site security re-opener. The retention of the DPCR5 approach is appropriate and proportionate.

Uncertainty mechanisms, Ch. 3, Q6: Do you have any views on the design of the proposed load-related expenditure re-opener?

238. Northern Powergrid supports the broad approach being adopted in the design of the load-related expenditure re-opener. This includes the fact that the threshold will apply to any connections, general reinforcement, or low-carbon technology related expenditure.

239. We also believe that the re-opener should be assessed in such a way that would leave open the prospect of high returns for relatively risky investment in smart technologies that deliver cost savings related to low-carbon technology deployment. Full details are set out in Northern Powergrid's paper on the low-carbon technology volume driver, which is included as a supplementary paper.

Uncertainty mechanisms, Ch. 3, Q7: Do you have any views on the design of the proposed high value projects re-opener?

240. Northern Powergrid supports in principle the design of the proposed high value projects re-opener.

Uncertainty mechanisms, Ch. 3, Q8: Do you have any views on the design of the proposed innovation roll-out mechanism re-opener?

241. Northern Powergrid supports the proposed innovation roll-out mechanism. We believe that additional funding should be provided for the roll-out of innovative approaches that facilitate the low-carbon sector and help deliver enhanced outputs, represent value for money for customers, but where the commercial benefits are not sufficient to justify its deployment.

242. It is also appropriate that funding should only be provided for net requirements, i.e. after any commercial benefits the DNO from roll-out have been taken into account.

243. A *de minimis* materiality threshold may also be appropriate, to limit potential administrative costs. However, the materiality threshold described in the Consultation, at paragraph 3.41 of the Uncertainty mechanisms document, is not clear enough to implement (as it could be taken at the extremes to mean either any project with insufficient commercial benefits, or any project that

is large enough to cause a DNO difficulties in financing its functions if it were implemented).

Uncertainty mechanisms, Ch. 3, Q9: Do you have any views on the design of the proposed pension deficit repair mechanism re-opener?

244. The move to truing up pension deficit repair allowances on a three yearly basis has been well signalled by Ofgem. Northern Powergrid agrees with the proposal to adjust revenue allowances during the price control period in light of updated information on pension deficits. We also agree that these adjustments should be made every three years to coincide with the timing of the triennial valuations.
245. We believe that this strikes a fair balance between existing and future consumers by not delaying any adjustments to allowed revenue until the next price control period.

Uncertainty mechanisms, Ch. 3, Q10: Are there any additional mechanisms that we should be considering? If so, how should these be designed?

246. Northern Powergrid does not believe that any additional uncertainty mechanisms are required. The mid-period review of changes in required outputs provides sufficient cover for unanticipated issues. However, companies should have the option of including such mechanisms in their business plans, where they are sufficiently well justified.
247. While we believe it is appropriate that the RIIO-T1 and RIIO-GD1 price controls should include a specific re-opener related to the potential changes to the measurement of the RPI in 2013, for RIIO-ED1 it should be possible to ensure that the price control is set on the same basis as the on-going

measurement of the RPI. No specific re-opener would therefore be required for this issue in RIIO-ED1.

Uncertainty mechanisms, Ch. 4, Q1: Do you have any views on the proposed RPI indexation of allowed revenues mechanism?

248. RPI indexation of allowed revenues, coupled with a real allowed rate of return, is a cornerstone of the established UK framework for network utility regulation. It should be retained.
249. The proposed change to the approach for implementing the indexation of allowed revenues is more complex, compared to the elegantly simple approach adopted since the development of the first index linked price controls. However, it does lead to a more technically correct view of the impact of inflation on allowed revenues over the period, and Northern Powergrid believes the principles of the new approach can be implemented at RIIO-ED1.
250. As the consultation notes, the ONS is currently consulting on potential changes to the RPI. The inflation measure which is used for indexation of revenues within the price control period should be consistent with the one on which it is set.
251. If the RPI is effectively brought into line with the lower CPI index as a result of this consultation (or at a similar expected level), then all those 'real' parameters that have been calibrated relative to historic RPI relationships will need to be increased by an offsetting amount. This includes the cost of equity, cost of debt, and real price effects.
252. Failure to take this into account correctly would mean that allowances would be established that are too low to cover actual costs. More significantly, it would also add to regulatory risk, as it would be evidence that real terms

price control regulation in the UK can be seriously undermined by the potential for further future changes to how inflation is measured.

Uncertainty mechanisms, Ch. 4, Q2: Do you have any views on the proposed cost of debt indexation mechanism?

253. Northern Powergrid believes that the cost of debt indexation is one of several valid ways to establish a cost of debt allowance, and can therefore accept the principles of the RIIO approach.

254. However, it must be set at a level that makes allowance for issuance costs of debt and ancillary costs of liquidity facilities, and reflects the long term efficient cost of financing the business. At present it does not meet these objectives, and this must be addressed. The analysis supporting this conclusion is set out in our response below to Q3 of chapter 2 of the Financial issues document of the Consultation.

Uncertainty mechanisms, Ch. 4, Q3: Do you have any views on the proposed pass-through of Ofgem licence fees and business rates?

255. The continued pass-through of Ofgem licence fees is appropriate.

256. Business rates are effectively fixed between revaluations. We note Ofgem's desire to suspend pass-through during revaluations. This is a similar approach to DPCR5, where DNOs undertook collaborative work that demonstrated that appropriate effort had been undertaken. Provided that Ofgem sets out a clearly defined process which ensures a reasonable assessment of actions DNOs take to reduce business rates at the revaluation, the approach is acceptable.

Uncertainty mechanisms, Ch. 4, Q4: Do you have any views on the proposed tax trigger mechanism?

257. Northern Powergrid believes that the DPCR5 tax framework remains appropriate, and so the company welcomes Ofgem's proposal to retain it at RIIO-ED1. This includes the tax trigger mechanism, which remains a fair way of sharing with customers the benefits and disadvantages of any changes to taxation.

258. We note that there are proposed changes to detailed modelling, and believe that some of these may require a carefully managed transition between the old and new approaches in order to ensure they are equitable.

Uncertainty mechanisms, Ch. 4, Q5: Do you have any views on the disapplication of the price control process?

259. Northern Powergrid supports Ofgem's proposal to retain the process for disapplication of the price control, notwithstanding the changes required to bring the drafting up to date with the chosen route to implementation of the European Union Third Package.

Uncertainty mechanisms, Ch. 4, Q6: Are there any additional mechanisms that we should be considering? If so, how should these be designed?

260. Northern Powergrid's views in response to this question are set out above, in response to Q10 of chapter 3 of the Consultation's Uncertainty mechanisms document.

Uncertainty mechanisms, Ch. 5, Q1: Do you agree with the scope of the mid-period review? If not, what changes to the scope are needed?

261. If the mid-period review were given too wide a scope, there is a risk that the price control could effectively collapse into two four year mini-review periods. This would undermine Ofgem's move to an eight year price control period as part of the RIIO framework.
262. We therefore agree with Ofgem that the mid-period review of outputs should be limited to clear changes in government policy or network user requirements that lead to changes in Ofgem output requirements (including the need for new outputs).
263. There is however one situation that we believe should potentially be covered by a mid-period review, but which might not be covered by Ofgem's existing wording. This situation is where an existing output measure is not properly capturing consumer requirements (which could for instance be the case under the newly introduced time to connect incentive, due to potential unintended consequences that could arise depending on the design of the mechanism which is adopted). Any such ability to vary an incentive would have to be limited tightly to situations where customer requirements were manifestly not being delivered so as to avoid potential that it could be perceived as a rebasing mechanism for incentive targets. Alternatively, if Ofgem prefers to keep this out of scope of the mid-period review in order to avoid any perceived potential for the scope to creep to other better understood and established incentives, a specific re-opener, or governance arrangements that allow for changes in how time to connect will be measured within the period, should be considered.

264. We also agree with Ofgem that:

- the mid-period review should not be used to adjust any other parameters, such as incentive mechanisms, allowed return or other price control parameters;
- any change to allowed revenues should be justified entirely by the change in outputs being implemented;
- there should be no changes to allowances on account of lower or higher costs of delivery for existing outputs being experienced by DNOs; and
- that there should be no retrospective application of any changes made at the mid-period review, so as not to undermine regulatory certainty.

265. Finally, we note that in some circumstances a change in an existing output due to government policy could entail higher or lower volumes of delivery than built into the existing price control. In these cases, the additional volumes (or reduction) should be costed at the level being experienced at the point the mid-period review. This would ensure that companies do not gain unexpected windfalls, or suffer penalties, relative to the position that they could reasonably have expected to be in at the end of the price control period if there had been no mid-period review.

266. Care will be needed to ensure that when this assessment is made there is no violation of the principle that there should be no changes to allowances because the outturn costs of meeting the outputs set at the start of the RIIO-ED1 period have turned out higher or lower than expected. This will need careful handling because delivery of the new outputs may have some impact on the costs of meeting existing outputs that may not be changing at all. At this point the costs of meeting the existing outputs will be different from the expected costs when the price control was set. Establishing the marginal impact of the change in outputs may require an assessment that is rather

more subtle than a with/without assessment of the change in outputs and we recommend that further thought is given to this issue.

Uncertainty mechanisms, Ch. 5, Q2: Do you agree with the indicative process and timetable? If not, how could the process and timetable be improved?

267. Northern Powergrid agrees with the indicative process and timetable for the mid-period review of outputs.

Uncertainty mechanisms, Ch. 5, Q3: Do you have views on when we should make licence changes as a result of any actions taken at the mid-period review? If a threshold to make a licence change is seen as appropriate, what should this be?

268. Northern Powergrid believes that any licence modifications resulting from the mid-period review should be made as soon as reasonably practicable following its completion, and in any event no later than 1 April 2019. In the event that the licence modification process can be completed sooner, it should be. Consideration in the process should also be given to potential impacts on charging volatility, and any issues material enough to affect electricity supply businesses should be addressed through the timing of when any adjustments to allowed revenues are implemented.

269. Northern Powergrid also agrees with Ofgem that it is not possible to capture the consumer interest with a quantitative threshold as to whether a potential output change is sufficiently material.

FINANCIAL ISSUES DOCUMENT

Financial issues, Ch. 2, Q1: Is our approach for setting the allowed return appropriate, particularly in the context of an eight-year price control?

270. Northern Powergrid's views on Ofgem's approach to setting the three components of the allowed return (the cost of equity, gearing, and the cost of debt) are set out in response to the questions below.

Financial issues, Ch. 2, Q2: What considerations do we need to take into account when setting the notional gearing level?

271. The approach for companies to demonstrate the appropriate level of gearing using an assessment of risk exposure, scale of investment programmes, cash flow and financeability analysis is also appropriate. The RIIO-T1 and RIIO-GD1 processes have already clarified Ofgem's expectations in terms of the range for notional gearing, along with the evidence which can support it in business plans.
272. Along with the rest of the sector, we also expect to continue working with Ofgem over the coming months to develop a relative risk framework that can be used to assess electricity distribution in comparison to transmission and gas distribution.

Financial issues, Ch. 2, Q3: Is our proposed mechanism for annually updating the cost of debt assumption based on an index appropriate?

273. Northern Powergrid believes that a mechanism that annually updates the cost of debt assumption based on market data is one of several valid ways to establish a cost of debt allowance. The company can therefore accept the

principles of the RIIO approach. However, the index must be set at a level that covers the cost of efficiently incurred debt over the long term. This necessitates a recognition of the cost of issuing debt and an adjustment to reflect the fact that a ten year trailing average does not reflect the efficient financing of a network business.

274. Our analysis suggests that 25-30 bps in addition to the chosen index is needed to account for the costs that are necessarily incurred when issuing debt. We are sure that Ofgem does not intend to encourage companies to finance their activities to match the ten year trailing average of the chosen index and we suggest that each year another year should be added to the dataset until the trailing average reflects a longer run of data that is commensurate with the asset base. In the meantime, some adjustment would be needed to achieve the same policy objective as debt rates in the years prior to the advent of the index were higher than in the years presently covered by the index.

275. Our analysis supporting these conclusions is set out below.

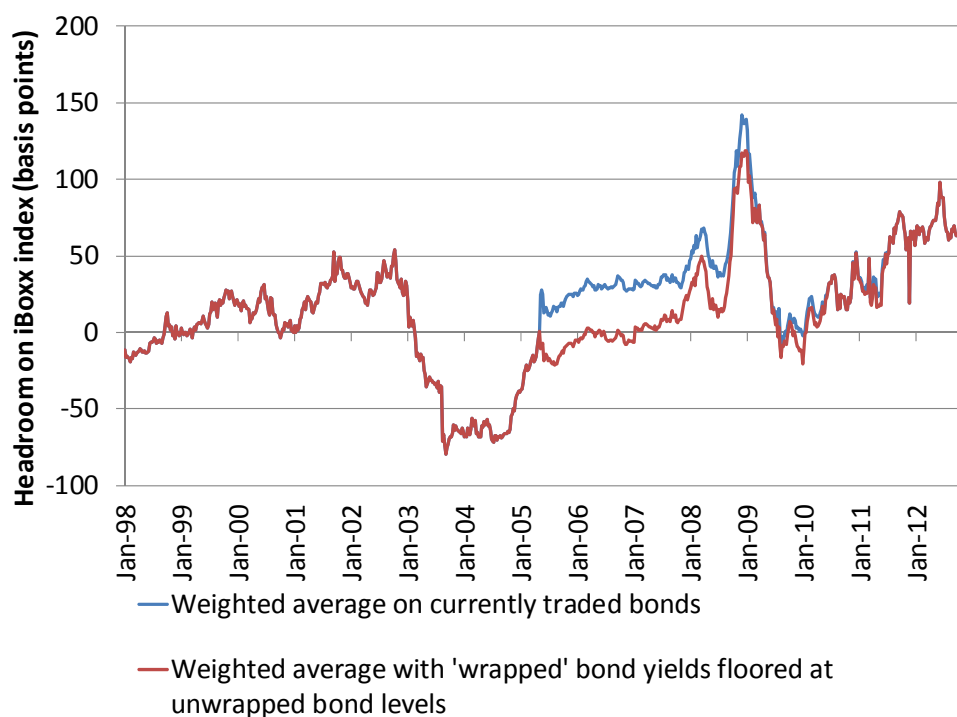
Analysis on issuance costs

276. The headroom Ofgem believes existed when it established and calibrated the policy is not apparent in our own costs.

277. We also believe that the evidence presented in the Consultation on the coupons at which debt has been issued misses two relevant factors. Firstly, Northern Powergrid's experience in issuing debt is that bonds trade at slightly cheaper rates than the rate actually achieved on sale of the bonds. Secondly, most bonds issued in the mid-2000s were 'wrapped', and so the analysis Ofgem presents reflects the credit strength of third parties which could only be acquired through significant payment. The fact that the so-called mono-line insurance has not survived as a business model underlines the extent to which those lower coupons (which were being paid for separately in any case) were not sustainable.

278. Overall this means that, once issuance costs are accounted for, network companies could only just match the index in the mid-2000s by taking advantage of an arbitrage opportunity that no longer exists. To cover issuance costs on an on-going basis, 25-30 basis points on top of the index would be required.
279. To support our point that Ofgem ought to make an allowance for issuance costs over and above the value that arises from the index, we have undertaken two pieces of analysis.
- First, we have analysed market yields on Northern Powergrid's debt portfolio to assess headroom against the index.
 - Second, we have assessed the key piece of evidence which supports Ofgem's position that the index includes headroom, figure 2.2 of the Financial issues document of the Consultation.
280. Our findings from the first of these pieces of analysis are shown in figure 1 below, adjusting for the fact that some of Northern Powergrid's debt benefits from a third party guarantee, which has been paid for in fees, and so has not always traded at yields that reflect the underlying credit strength of Northern Powergrid.

Figure 1: The yield on Northern Powergrid's traded debt relative to the iBoxx index



Source: Analysis based on Northern Powergrid's publically traded bonds at August 2012, based on Reuters data on traded yields.

Note 1: The sample contains two bonds which benefit from a 'wrap' to boost their credit rating, for which significant fees have been paid. To adjust for this, the yields on these bonds have been 'floored' based on the closest comparator bond in the sample.

Note 2: We understand the Reuters yield data on which this analysis is based to assume a semi-annual coupon, meaning we have slightly over-estimated the level of headroom (since the price control assumes an annual coupon, which would be higher).

281. The analysis shows that under pre-debt crisis market conditions, during the era of 'cheap money' from 2005 to late 2007, and during the period of relative debt market stability during mid-2009 to late 2010, the iBoxx index would have only just covered the market interest rate on debt issued by Northern Powergrid.
282. And while the Reuters data we have access to does not include matured bonds, the data we have on bonds currently outstanding suggests that, over the period 1998 to 2005, there was on average slightly negative headroom between the index and traded debt costs.
283. Only during periods when the impact of the financial crisis has been most severe has the index included noticeable headroom relative to the rates at

which Northern Powergrid's debt has been traded. These include spikes in headroom when Bear Stearns collapsed in March 2008 and a longer period later in 2008 following the collapse of Lehman Brothers and the subsequent financial difficulties of several banks including RBS and HBOS. They also include a recent period as headroom has steadily built during the progressive emergence of the Greek crisis in 2011 and 2012.

284. The conclusion is therefore that, in practice, during more normal periods in debt markets, regulated companies will be unable to recover their efficient debt costs because there will be no headroom between the index and their headline coupon rate, leaving no allowance for issuance costs such as fees and costs of carry. Based on the amounts that we are quoted and charged when we issue debt, we believe that the use of the index to cover the cost of debt throughout the price control period should be accompanied by a premium that we estimate to be about 20-30 basis points if this mechanism is going to give a reasonable proxy for the true cost of corporate debt.

285. Our findings from the second piece of analysis (referenced at paragraph 279 above), an assessment of figure 2.2 in Ofgem's financial issues consultation, are twofold:

- Although the chart makes it appear that there was significant headroom in the years running up to the 2008 financial crisis, most of the data points actually reflect the credit rating of third party, non-network companies.
- All of the coupon points on the chart are likely to be slightly below the actual cost of debt achieved by companies.

286. The first of these two points is the most significant. A major contribution to the headroom identified by Ofgem before the 2008 financial crisis is a cluster of bonds issued between 2004 and 2008. However, this finding is a financial illusion. There was no headroom pre-crisis, once issuance costs are accounted for. Moreover, the only reason it was possible to issue at these

levels no longer exists. In fact, it was one of the root causes of the crisis itself, and so is unlikely to reappear.

287. The reason for this finding is that the majority of network company debt issued from 2005 to 2007 was 'wrapped', guaranteed by insurance companies with a higher credit rating than the issuer, thereby improving the creditworthiness of the bond and value to the issuer. Some of the earlier debt issues were also wrapped. This means that the coupons in figure 2.2 of the Financial issues document of the Consultation do not reflect the underlying credit ratings of the network companies, but the better (often AAA or AA) rating of monoline insurance companies.

- Northern Powergrid issued £350m of bonds wrapped by Ambac Assurance in 2005.
- Scotia Gas Networks issued £1,637m of bonds wrapped by a combination of Syncra Garnte, Assured, and Ambac Assurance in 2005.
- Northern Gas Networks issued £505m of bonds wrapped by FGIC in 2005.
- National Grid has confirmed to us that over £2,500m of its issuance during the 2005-2008 period was wrapped by various counterparties.

288. This accounts for over 70% (by value) of the energy network issuance Ofgem has identified during the period 2005 to 2007, and over 75% of the data points in the chart in the Consultation over that same time period.

289. Northern Powergrid's experience of issuing wrapped debt in 2005 was that the wrapping costs alone amounted to over 25 basis points. Taking into account all the other issuance costs (25-30bps), it was possible to issue debt at levels closely approximating the index. However, this was only because of the arbitrage opportunity that the monoline insurance companies created. We now know that they were under-pricing risk, and given the catastrophic impact this had on the monoline sector this is unlikely to be repeated. In fact, it was a similar under-pricing of risk applied to mortgage debt that was

one of the reasons for the financial crisis itself. Overall this means that the historic (pre-2007) evidence suggests the index does not make allowance for issuance costs in normal market conditions, like those which can be expected in the RIIO-ED1 period.

290. The second of our findings, referenced at the second bullet point in paragraph 285 is less significant but nevertheless relevant. Northern Powergrid's experience is that bond coupons are almost always below the actual yield achieved in the market (the re-offer yield), whether measured against the face value or the bond or against the yield on issue. In other words, the investors who purchase bonds pay less than the face value. Investors buying a new bond issue will always expect to pay less than the bonds subsequently trade at. The 'new issue premium' is universal in the bond market and may vary as the bond market moves. With the recent strength in the bond market, this premium has fallen as low as 10bps, but has previously been in the 15bps-30bps range for creditworthy utilities.
291. Overall, these findings suggest that the index does not make allowance for on-going issuance costs.

<p><i>Financial issues, Ch. 2, Q4:</i> Does our range for the cost of equity capture the DNOs' probable cost of equity in RIIO-ED1?</p>

292. The range on the cost of equity, from 6.0% to 7.2%, is a credible evaluation of the geared equity returns required by investors making decisions to invest in long term assets.
293. By setting this relatively narrow range at this stage in the review, and through the proposals recently made for RIIO-T1 and RIIO-GD1, Ofgem has provided the certainty necessary to underpin the continued elevated levels of investment that are being undertaken as part of the DPCR5 review.

294. Northern Powergrid believes that the approach set out for companies to demonstrate the cost of equity in their business plans is appropriate, being based on accepted financing theory in the form of the capital asset pricing model and various cross checks.

Financial issues, Ch. 2, Q5: Is the ex-ante approach to the cost of raising notional equity appropriate for RIIO-ED1?

295. Northern Powergrid supports the *ex-ante* approach to the cost of raising notional equity.

296. It is appropriate that the arrangements for remunerating equity issuance should not favour a particular approach or ownership structure over another. By proposing to set an *ex-ante* allowance, Ofgem has avoided these potential issues.

Financial issues, Ch. 3, Q1: Have we identified the correct equity and credit metrics?

297. Northern Powergrid believes that Ofgem has correctly identified the relevant equity and credit metrics.

Financial issues, Ch. 3, Q2: Do the rating agency credit metric levels quoted provide the most appropriate levels?

298. Ofgem has correctly quoted the rating agency credit metric levels. These are the appropriate ones to focus on.

Financial issues, Ch. 4, Q1: Do you agree with our approach for the calculation of the percentage of totex allowed into RAV?

299. As a starting point we would agree that Ofgem should use the company specific capitalisation rate and that it would be appropriate to use blend of the historical and future rates.

300. However, Ofgem should also recognise that the capitalisation rate provides another tool to ease financeability issues, should the need arise.

Financial issues, Ch. 4, Q2: Do you agree with our revised approach to Totex and with the costs that are included and excluded?

301. Northern Powergrid agrees with the revised approach and the costs that are included and excluded. We note however that traffic management costs are excluded, including any fines or penalties. This creates a boundary with other operational and business support activities. At the margin, it will incentivise DNOs to spend more money avoiding such fines that the fine itself justifies. Since these fines are an unavoidable cost of doing business, if they are intended to send a price signal in relation to how street works are conducted this is inappropriate. While it is not a major issue, since the removal of boundaries is being substantially completed at RIIO-ED1, logically traffic management costs should be included in the definition of totex.

Financial issues, Ch. 4, Q3: We invite views on whether the definition of related parties should exclude captive insurance companies and whether our proposed approach is proportionate.

302. Northern Powergrid agrees with Ofgem's proposed approach.

Financial issues, Ch. 5, Q1: Do you agree with modelling tax under the ASB proposed accounting frameworks for financial reporting in the UK with any changes to be subject to the tax trigger?

303. These proposals are compatible with how Northern Powergrid calculates its actual liabilities to HMRC.

Financial issues, Ch. 5, Q2: We invite views on the calibration of the [tax] dead-band.

304. Northern Powergrid's main concern has always been ensuring symmetry for both DNOs and customers. We therefore support Ofgem's proposals for the calibration of the tax dead-band.

Financial issues, Ch. 5, Q3: Do you agree that clawback of the tax benefit of excess gearing in DPCR5 should be spread over the eight years of the RIIO price control? If not, which alternative option do you prefer?

305. Northern Powergrid believes that a consistent approach across all incentives and adjustments would be appropriate under RIIO. The approach adopted should therefore depend on the approach adopted for other similar items.

306. Ofgem should also consider the interaction between the approach taken and any proposed profiling.

Financial issues, Ch. 5, Q4: Do you agree that the revenue adjustment for tax clawback should be applied annually as part of the annual iteration process?

307. Northern Powergrid believes that a consistent approach across all incentives would be appropriate.

Financial issues, Ch. 5, Q5: Do you agree with our treatment of expenditure for tax modelling including the cash flows of corporation tax payments?

308. Northern Powergrid agrees in principle with the proposed change, given that it would simplify the regulatory arrangements.

309. However, the transition between the old approach and the new approach must be implemented in a way that ensures equity between DNOs and customers.

Financial issues, Ch. 5, Q6: Do you agree with modelling of expenditure subject to capital allowance and capital allowance pool balances?

310. Northern Powergrid believes that it is inconsistent that Ofgem is using generic industry average allocations for direct costs but company specific for indirect costs.

311. Northern Powergrid believes that company specific allocations should be used for all areas of costs.

Financial issues, Ch. 5, Q7: Do you agree with our proposal for funding business rates?

312. Northern Powergrid's views on the proposal are set out above in our response to Q3 of chapter 4 of the Uncertainty mechanisms document of the Consultation.

Financial issues, Ch. 6, Q1: Do you agree that the fast money true-up adjustments for DPCR5 should be spread over the eight years of the RIIO-ED1 price control if they exceed £1m per DNO? If not, which alternative option do you prefer?

313. Northern Powergrid believes that a consistent approach across all incentives and adjustments would be appropriate under RIIO. The approach adopted should therefore depend on the approach adopted for other similar items. Ofgem should also consider the interaction between the approach on paying out incentives and ant proposed profiling.

Financial issues, Ch. 6, Q2: Do you agree with our proposals for the basis for the first and subsequent reset adjustments?

314. Northern Powergrid agrees with the proposed timing, and the items to be adjusted.

315. However, we have significant concerns regarding how any reset adjustments would be arrived at, and do not support any change in the basis from an efficiency review to a reasonableness review.

Financial issues, Ch. 6, Q3: We invite views from interested parties on how we conducted the latest pension reasonableness review, with a view to understanding what elements of the review were conducted well, what could be improved and what should be done differently in future reviews.

316. The process set out in the DPCR5 *Final proposals* has not been followed and the deviations are unacceptable.
317. In particular, the DPCR5 *Final proposals* established a two-stage review process where an initial 'high-level' review would be carried out by an expert independent body, the Government Actuary's Department (GAD). If that review indicated any cause for concern an 'in-depth' review would follow. Only when that in-depth review had been carried out would there be any prospect of any deduction from the established deficit as at 31 March 2010 being made.
318. The GAD review that was carried out did not indicate any inefficiency in any of the schemes that were reviewed. That being the case, no in-depth review could properly be carried out consistently with commitments given by the Authority at DPCR5. Insofar as there has been any second stage review, no report has been issued justifying the deductions that Ofgem is currently proposing. We have been advised that for Ofgem to proceed on the basis of such a flawed process would be unlawful.
319. This unsatisfactory position must be urgently reviewed if it is not to undermine faith in future promises by the Authority to stand behind efficiently incurred pensions liabilities, and the established deficit. Moreover, there is a danger that this issue will wrongly impact upon Ofgem assessment of company business plans. The issue should therefore be taken outside the RIIO-ED1 process. We are confident that a proper assessment outside the RIIO-ED1 process will enable this matter to be resolved satisfactorily.

Financial issues, Ch. 6, Q4: We invite views on which of the options for pension scheme administration costs and Pension Protection Fund levies we should adopt; and, if our preferred approach were adopted, the methodology itself, and the level of the *de minimis* thresholds.

320. Northern Powergrid would prefer an approach that combines features both of the options set out on in the Consultation in sections 6.26 and 6.27.

321. Our preferred approach would comprise the following components.

- Include the pension scheme administration costs and PPF levy within the cost efficiency sharing mechanism, as per the DPCR5 arrangements. This would recognise the fact that, while there are uncertainties associated with these costs, some of them can be influenced through the performance of the company to a degree, an example being the credit scoring used within the PPF levy framework.
- Provide a mechanism to adjust for significant changes in the levy, if a threshold of £1m is exceeded. This would continue to incentivise companies but would allow security if major unforeseen events occurred that change the PPF levy, such as major changes to the framework (over which DNOs have no influence).

322. While we understand that the proposed approach at RIIO-T1 and RIIO-GD1 includes the second of these two components, we also understand that it does not include the first. This carve out from the normal cost efficiency sharing arrangements does not appear to have any justification.

323. We also believe that the proposed materiality threshold is disproportionate. The £1m annual exposure means that each licensee would be exposed to costs of £8m over the RIIO-ED1 period. This is inconsistent with the standard materiality threshold used in other adjustment mechanisms. This exposes licensees to 1% of base demand revenue (defined using revenues for the first year of the price control), after the application of the sharing factor. A threshold at roughly half the £1m level proposed by Ofgem would be required for approximate consistency with this standard.

324. Finally, in the event that Ofgem establishes a £1m threshold, Ofgem would also need to pay careful attention to ensuring that it does not set the allowances at a level that is too low. Otherwise, there would be no

mechanism for recovering the additional costs, up to the level that would in fact be reasonable, beyond any costs covered by sharing factor.

Financial issues, Ch. 6, Q5: 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?

325. Northern Powergrid addressed this question in its response to the RIIO-T1 and RIIO-GD1 *Initial proposals*. Our views remain the same in response to the current Consultation, and are reproduced below.
326. We firstly note that it is the trustees of a pension fund that determine its investment approach, and not the companies as the question incorrectly states. This is a matter of pension law. We are concerned that this may be more than merely imprecision in drafting. Whilst we accept that it is appropriate that the Authority should seek to hold the licensees accountable for their managerial activity in relation to pension costs, it is essential that Ofgem ensures that it bases its assessments on the reality of the situation, in particular on the level of influence that management actually has on pension schemes that are specifically protected by law and are governed strictly by the regulations and legal obligations that stem from pensions regulation. It is unhelpful that Ofgem, from time to time, appears to presume that the schemes are run by the licensees and that a company's management has more influence over scheme rules, investment decisions and deficit valuations than it actually has.
327. The principled approach to assessing the established deficit was set out in the June 2010 decision on the price control treatment of pension costs. Provided that the rigorous, two-stage process envisaged when this approach was developed is followed, customers should be protected from poor stewardship of pension schemes. There is no reason that additional tests should be

required regarding demonstrating benefits to customers, and we believe that implementation of any such tests would be a material departure from commitments made by Ofgem at previous price controls. We believe that it is very important that Ofgem is not seen to be re-opening any element of its pension commitments. Failure to observe the process that has already been set out or the introduction of additional tests casts doubt upon that commitment. This increases investors' perception of risk and makes it harder for them to have confidence in regulatory stability.

328. We do however appreciate that Ofgem may be concerned that the maturing age profile of many network operator defined benefit schemes may be causing trustees to pursue de-risking strategies at precisely a time when customers may stand to benefit if higher risk (e.g. equities based) investment strategies are pursued. If Ofgem believes that such potential benefits for customers outweigh the risk associated with such investments (coupled with the need to make payments to pension scheme members regardless of investment performance), trustees may be willing to adopt such strategies if Ofgem makes firm commitments to fund pension provision even if riskier investments perform badly. Both the rewards and risk from the investment strategies could then be transferred to customers, which would better balance the incentives on trustees to seek advantageous returns.

<p><i>Financial issues, Ch. 6, Q6: Do you agree that the costs of contingent assets be funded if clearly demonstrated to be in consumer's interests?</i></p>
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329. Northern Powergrid addressed this question in its response to the RIIO-T1 and RIIO-GD1 *Initial proposals*. Our views remain the same in response to the current Consultation, and are reproduced below.
330. The *Initial proposals* do not provide details of the costs of contingent assets proposed by NGET, making comment difficult.

331. However, as a general point, and as noted above, the principled approach to assessing the established deficit agreed as part of previous price control reviews should be used to determine if the stewardship of schemes is reasonable and efficient. Additional tests for whether the costs associated with particular assets should be allowed are not necessary.

Financial issues, Ch. 6, Q7: We invite views on whether the revised guidance to our pension principles and the methodology is comprehensive and adequate for DNOs and stakeholders to understand how the principles will be applied in RIIO controls and for network companies to prepare their business plan.

332. Before it is possible to address the RIIO-ED1 principles, and any commitments of Ofgem, it will be necessary to understand the degree to which Ofgem intends to stick by commitments made as part of DPCR5. Until uncertainty over that issue is resolved, it is impossible to know what value to place on commitments Ofgem makes as part of the RIIO-ED1 review.

333. We do, however, have three concerns with the guidelines as drafted:-

- The guidelines do not state who will perform the triennial reasonableness review. It is important that this should be undertaken by an independent expert body such as GAD in line with the process established at DPCR5.
- The guidelines now refer to a 'reasonableness review' rather than an 'efficiency review'. It is not clear whether the change in nomenclature is intended to be significant. If the intention is to broaden the scope of what may be disallowed from the established deficit this would be an important and unacceptable departure from the DPCR5 commitments. We note that the relevant pension principle is worded in terms of 'efficient and economic' rather than 'reasonableness'.

- The guidance should include the definition of regulated and non-regulated activities as included in the Pension Deficit Allocation Methodology. The correct distinction is whether the activities are licensed activities rather than a distinction based on the price control treatment of those activities. The DPCR5 commitment on the established deficit was clear that it was non-distribution activities (rather than non-price controlled activities) that were excluded. Accordingly, metering and connections activities were included in the Authority's commitment.

Financial issues, Ch. 7, Q1: We invite views from interested parties on the proposed annual iteration process.

334. The annual iteration is 'proposed to take place by 30 November each year. On or before that date, or if that is not possible, as soon as is reasonably practicable thereafter'.
335. Northern Powergrid believes that there should be a firm commitment to provide the direction by a specific date, which we would prefer to be earlier than 30 November for charge-setting purposes.

COST ASSESSMENT DOCUMENT

Cost assessment, Ch. 2, Q1: Do you consider our overall approach to cost assessment appropriate and what changes, if any, would you propose?

336. Northern Powergrid's views in full are set out below.
337. We welcome the emphasis placed on total cost benchmarking. Ofgem should maintain its commitment to use this view of company efficiency as part of its

tool kit, especially since it gives a different perspective of cost efficiency compared to more disaggregated, or unit cost approaches.

338. We also welcome Ofgem's commitment to ensure that differential incentives on different categories are not re-introduced by the benchmarking process, and note that total cost benchmarking is one route to achieve this.

Cost assessment, Ch. 2, Q2: Do you think Ofgem should take into account poor historical performance in its assessment of business plans, and if so, how?

339. Northern Powergrid agrees with the principles of the approach outlined in paragraph 2.16 of the Consultation's Cost efficiency document.

340. The RIIO principles set out three broad requirements for a company to be fast-tracked: cost efficiency; business plan justification; and performance in the most recent price control review. Past performance can therefore matter in two ways.

- it has direct relevance, as one of the three key requirements for fast tracking; and
- it has indirect relevance, for instance where past performance may matter in assessing future cost efficiency or the justification of a business plan.

341. In terms of assessing the first of these, the critical factors are whether past performance gives information about the credibility of a company's plans for the RIIO-ED1 period, and whether that performance in and of itself is something that might merit reward through fast-tracking. For example, whether it has or has not delivered on commitments it made in the previous price control to deliver asset improvements will be relevant to whether its plans at RIIO-ED1 can be fast-tracked. In undertaking this assessment it will

however be important not to conflate primary output levels too closely with delivery, particular where incentive schemes are designed to encourage companies to deliver *efficient* levels of output for customers based on the associated costs. There is no reason to assume that a good decision on behalf of customers will always involve more outputs being delivered. It might involve a lower level of output delivery at lower costs, where the benefits directly feed through in terms of lower customer bills.

342. In terms of assessing the second route through which past performance can matter to fast-tracking decisions, the key issue is likely to relate to the interplay between historic and future investment decisions. For example, future costs may justifiably be high if they have been low in the past (to the extent that has benefited customers). Likewise, low future costs may be less impressive where this is because the necessary expenditure has already been undertaken (and customers are paying for it).

<p><i>Cost assessment, Ch. 3, Q1:</i> Do you agree with the use of totex benchmarking for RIIO-ED1 and what are your reasons?</p>

343. The use of total cost benchmarking to assess costs is a principle that was established as part of the RIIO framework, as set out in the handbook.
344. There are two key reasons that we agree it should be a significant consideration in the assessment of cost efficiency at RIIO-ED1. Firstly, it avoids the risk of inadvertently favouring different solutions through the cost assessment process (e.g. capital versus operating cost). Secondly, it takes into account all factors that determine the amount customer must pay for a network, including for example the volume of activity being proposed.
345. The 'high level' view it provides of overall cost efficiency means it is ideally suited to fast-tracking decisions. But it should also be used even where more detailed assessment is being undertaken, as it provides a perfect complement to other approaches (such as unit cost benchmarking, which is valuable

analysis but suffers from the serious weakness that it cannot assess whether an efficient volume of activity is being proposed).

346. We therefore agree with Ofgem's position in the Consultation that it intends to use this methodology as one of the principal ways it will assess past and forecast cost efficiency. We will continue to work with the industry and Ofgem to ensure the analysis can be robustly deployed in the short time available for fast-tracking decisions, to which it is ideally suited.

<p><i>Cost assessment, Ch. 3, Q2:</i> Do you agree with the use of a capital expenditure as opposed to capital consumption approach for measuring total costs?</p>
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347. There are practical issues with the measurement of capital consumption that can make its use as a measure challenging. These must be recognised.
348. However, the capital consumption version of total cost regressions are used to perform a cross check on future plans, for the reasons set out above. Insofar as a reasonably robust capital consumption model can be developed, it should be used as a cross check to the model Ofgem proposes to use.
349. As with all benchmarking results, the results from benchmarking using capital consumption should be used to inform a balanced efficiency judgement (rather than arrive at an answer mechanically). Additional care would need to be taken in this case, since any mechanical implementation to ratchet capital consumption down to an 'efficient' level could amount to expropriating past investments, which undermine one of the cornerstones of RAV based regulation.

Cost assessment, Ch. 3, Q3: Do you agree with using a similar approach to the top-down model used in RIIO-GD1, considering the adjustment for regional factors, the use of a composite cost driver, and the use of the upper quartile (UQ) to determine efficient costs?

350. We do not comment on whether the model used in the RIIO-GD1 review is appropriate for the gas distribution sectors, as the companies in that sector will be better placed to review whether the chosen inputs to the model reflect their the environment in their industry.
351. The cost drivers used at RIIO-ED1 should be direct measures of the fundamental reason that energy networks incur costs at all: this is to deliver energy to customers. Other cost drivers representing refinements to these factors (such as density of customers) would also be appropriate to take into account in addition. However, the composite variable used in the RIIO-ED1 model does not appear to meet this standard. It is constructed from components that suffer from flaws, which are described in our response to Q2 of chapter 8 of the Cost assessment document of the Consultation.
352. Ofgem is right to state that it is minded to implement a high bar for company specific adjustments.⁶ Such adjustments can easily lack transparency or robust justification, and as such should be avoided unless there is a very clear and strong case supporting their inclusion. The significance of the adjustments made prior to data being used in the RIIO-GD1 model means they do not appear to meet this standard.
353. Furthermore, where a specific factor might warrant an adjustment, Ofgem should also assess its robustness as a cost driver. This is best undertaken by including it as a potential explanatory variable in regression analysis, so that all inter-relationships can be taken into account. If company specific

⁶ The Consultation, Cost assessment document, paragraph 10.3.

adjustments are made at an 'off model' stage in assessment it is impossible to be certain that a robust cost driver has been identified. This does not appear to be consistent with the approach adopted at RIIO-GD1.

354. In terms of the other aspect of the RIIO-GD1 approach that the question references, upper quartile is a commonly adopted assumption to determine efficient costs, and so may well be appropriate in this case.

355. Given these points, the top-down model being developed specifically for RIIO-ED1 by Frontier Economics should be adopted, rather than the approach used in RIIO-GD1, as it takes all of these factors into account.

Cost assessment, Ch. 3, Q4: Do you believe it is appropriate to use a middle-up totex model and if so, do you agree with following the principles of the GD1 approach?

356. The middle-up model was not used at RIIO-GD1, although this may have been because it was based on the same approach as the top-down model, applied to three sub-categories of costs rather than one.

357. Provided that the middle-up model remains sufficiently distinct from the top-down and bottom-up models, it would appear appropriate for Ofgem to retain this in its toolkit. However, the value would be limited if it was constructed as a summation of the results of more detailed bottom-up analysis.

Cost assessment, Ch. 3, Q5: What level of disaggregation do you believe is appropriate for the middle-up model to provide a useful comparator to the top-down totex model?

358. Northern Powergrid expects further work to be undertaken on the middle-up model through the working groups. However, our initial views on the approach are set out below.

359. The level of disaggregation proposed in paragraph 3.24 of the Consultation's Cost assessment document appears broadly appropriate, certainly at the level of the of five major cost categories, which are broadly similar to the cost categories used at DPCR5.
360. Some of the subcategories may however need to be considered in detail before they are adopted, potentially based on an assessment of whether it is possible to construct a robust model using them. For example, the intercept in a regression model captures the concept of fixed costs, and so there may be no need to disaggregate closely associated indirect costs according to subjective judgement. Similarly, splitting non-load related expenditure between output driven and non-output driven costs may not be necessary, provided that an appropriate cost driver can be identified for the category as a whole.

Cost assessment, Ch. 3, Q6: How do you believe lumpy expenditure should be treated in totex modelling?

361. The approach to lumpy expenditure will presumably depend on the model specification. However long run models should be able deal with the issue. In particular, because the RIIO ED1 period is eight years long, this should provide sufficient data to undertake a variety of approaches to deal with any potential problems.
362. We would also not advocate a company specific adjustment approach to dealing with the issue, unless a very high bar of evidence is met, as set out in our response below to Q1 of chapter 10 of the Cost assessment document of the Consultation.

Cost assessment, Ch. 4, Q1: Do you believe it is appropriate to use a bottom-up, disaggregated model to compare with the totex model results?

363. It is appropriate for Ofgem to use different views of efficiency that provide different information, and to contribute to an overall balanced view of whether companies are efficient.
364. The disaggregated unit cost model being developed by Western Power Distribution (WPD) could therefore form part of the assessment tool kit, although its weaknesses as well as its strengths should be noted.
365. The strength of unit cost modelling is that it can provide an indication whether companies have achieved efficient unit costs. The results must be carefully interpreted to do so, bearing in mind that measurement error due to limited comparability of individual costs and activities will become more acute when smaller cost categories are being assessed.
366. The significant weakness of the approach, which means it is impossible for the analysis to be the primary view of company efficiency, is that unit cost modelling provides no view on whether efficient volumes are being undertaken, which is a significant determinant of what customers must ultimately pay for the network.
367. A more regression based bottom-up model should therefore be developed, as a robustness check on the result of the WPD model. The strong commitment from Ofgem to total expenditure benchmarking is also vital, to ensure that adequate account is taken of volumes of activity, and ensure that focus is maintained on minimising what customers must pay.

Cost assessment, Ch. 4, Q2: Do you agree with our approach to the disaggregated, bottom-up model?

368. Northern Powergrid agrees that the bottom-up model needs to be at a more disaggregated level than the middle-up model if both are to be used.

369. The commitment not to benchmark at the upper quartile for individual activities (to avoid the danger of cherry picking) is important.

Cost assessment, Ch. 5, Q1: Do you agree with our proposed approach to how the specific building blocks that make up load-related expenditure interact as well as which categories are proposed to be included in a load-related re-opener?

370. Northern Powergrid supports the principles of the approach.

Cost assessment, Ch. 5, Q2: Which of the three options set out for assessing connection-related costs within the price control do you feel is the most appropriate and why? Please reference the following in your answer: (a) the gross cost assessment adjusted for net-to-gross ratio or just on the Distribution Use of system (DUoS) funded reinforcement costs (b) the most appropriate cost driver for connection reinforcement costs: Meter Point Administration Numbers (MPANs) or number of connection projects (c) the most appropriate approach for assessing cost of low volume high cost (LVHC) connections.

371. Northern Powergrid supports the combination of approaches set out in Option 3 at paragraph 5.31 and page 30 of the Tools for Cost Assessment document.

372. This option will enable the gross cost assessment to be undertaken. In order to calculate the net costs Ofgem will have to use DNOs' own forecasts, noting that there will be true-up at the end of the period for actual contributions received from customers.

373. Northern Powergrid remains supportive of the use of Meter Point Administration Numbers (MPANs) as the most appropriate cost driver as it is

this that drives the need for reinforcement and not the number of connection projects undertaken by a DNO.

374. Option three uses the £ per MVA of capacity to calculate the level of the low volume high cost allowance. We are supportive of this approach. However, Ofgem needs to be aware that the last five years have been significantly impacted by the recession and the loss of market share to competitors; therefore these factors need to be incorporated in the assumption used to set allowances at RIIO-ED1. At this time we have completed no low-volume high-cost connections involving reinforcement during the DPCR5 period. This is predominately because of the current economic climate. We are happy that these costs should be benchmarked with allowances set based on the upper quartile.
375. We would also like to highlight that we believe there are inconsistencies between 'sole' and 'shared' and 'reinforcement' and 'new network' categorisations. We believe the definition of 'sole' and 'shared' needs to be aligned with the reinforcement and new network categories.

<p><i>Cost assessment, Ch. 5, Q3:</i> Which of the three options set out for assessing wayleaves and diversionary-related costs within the price control do you feel is the most appropriate and why?</p>

376. We do not think that it is necessary to depart from the normal principles governing price controls for this category of costs. Developing an appropriate revenue driver for wayleaves and diversionary-related costs would be problematic because of the wide range of costs that are incurred across the range of schemes. Bearing in mind that it is usually preferable to keep price regulation simple, and taking account of the relatively low materiality of these costs in the overall scheme of things, we recommend option 2, i.e. an *ex-ante* baseline based on historical data and forecast developments.

Cost assessment, Ch. 5, Q4: For all general reinforcement, is it feasible for the DNOs to provide specific scheme lists based on commonly agreed demand scenarios in RIIO-ED1?

377. It is feasible to indicate the likely EHV reinforcement schemes. These may however be influenced by a number of factors within the price control period. The schemes will therefore vary by the end of the period in both the total volume and the exact schemes undertaken.

378. It is unlikely to be feasible to provide specific scheme lists at HV and LV.

Cost assessment, Ch. 5, Q5: For all general reinforcement, do you think that reinforcement specifically relating to generation should be separately assessed from demand-related reinforcement?

379. By the nature of reinforcement it will be necessary to assess demand and generation both separately and interactively.

380. For example in an area where both network uses see significant activity the overall maximum demand might be little changed; however the network security situation (engineering recommendation P2/6) might be compromised as might the fault level or reverse power flow characteristics.

381. This is an area we expect to see develop over the RIIO-ED1 period, particularly as much of the generation growth is likely to come through low-carbon generation, and would therefore be covered by the low-carbon technology volume driver.

Cost assessment, Ch. 5, Q6: Do you agree with our proposed modelling approach to cost assessment of n-1 reinforcement schemes, specifically in relation to the two proposals for the Load Index (LI) delivery as outlined in Chapter 4 in the “Supplementary annex - Reliability and Safety”?

382. Northern Powergrid supports the proposed approach to cost assessment of n-1 reinforcement schemes in principle. We also believe that the DPCR5 approach was superior to the DPCR4 approach, although the Consultation states that the same approach was used at both. For the avoidance of doubt, the DPCR5 approach should continue to be used.

Cost assessment, Ch. 5, Q7: Do you agree that expenditure on secondary network reinforcement is no longer highly correlated with localised economic growth?

383. While there are factors that might reduce the correlation at RIIO-ED1 compared to other periods, notably the deployment of low-carbon technologies, it is not necessarily clear that this will be the case.

- Firstly, there will be an element of secondary network load growth, and therefore secondary network reinforcement, which is related to economic activity, as has always been the case. There can be a time lag within the system.
- Secondly, it is possible that some low-carbon technology uptake may be correlated with localised economic growth (for example consumer uptake of electric vehicles).

Cost assessment, Ch. 5, Q8: Do you believe that it is feasible and appropriate to set definitions and unit cost(s) for the following: a) the conversion of wayleaves to easements and injurious affection payments; b) load-related interventions on the secondary network; and c) fault level reinforcement?

384. The appropriateness of establishing any of these unit costs will depend on the use to which they are put.
385. For the reasons set out in our answer to question 4 above we do not think it is feasible or necessary to introduce a complicated revenue driver for these items. Reporting to Ofgem according to clear cost definitions is feasible.
386. Defining a load-related intervention is likely to be fraught with problems, given the associated boundary issues between linked activities, and we do not believe it is likely to be feasible. However the WS3 model might be used to calculate a unit cost for the weighted average interventions expected for any given amount of connected low-carbon technology load.
387. It might be possible to set unit costs for fault level reinforcement, provided that separate unit costs are set for 'make' and 'break' fault level remedial actions, (given that the costs will differ significantly across these two categories).

Cost assessment, Ch. 5, Q9: What is the most appropriate funding mechanism for load-related expenditure on the secondary network?

388. There should be two routes through which this expenditure should be funded:
- an *ex-ante* allowance based on assessments similar to those undertaken at DPCR5 should cover the underlying economic activity elements; and

- an uncertainty mechanism based on the volume of low-carbon technology connected should cover the low-carbon load growth elements.

Cost assessment, Ch. 6, Q1: Do you agree with our approach for assessing NLRE in the companies' business plans?

389. We support Ofgem's approach for assessing non-load related expenditure in principle.
390. We agree with Ofgem that there should still be scope to use 'non-modelled costs' although we also agree that it is likely to be smaller than at DPCR5.
391. The 'assumption that industry asset lives can either be maintained at the levels achieved in the past or longer lives can be achieved in the future through improved asset' may, however, not be appropriate. While it is an understandable starting assumption, it may not be true over varied time periods and geographical areas. For example, one cohort of assets (installed say in the 1970s) may have a shorter life than assets installed previously (e.g. in the 1950s or 1960s) due to differences in how they were manufactured.

Cost assessment, Ch. 6, Q2: In light of our proposals, do you agree with our selection of risk removed as the primary output of the mains replacement programme?

392. Our views on asset related risk in relation to electricity distribution are set out in response to the Reliability and safety document, below.

Cost assessment, Ch. 6, Q3: Do you agree with our approach to remove non-modelled costs in RIIO-ED1?

393. Northern Powergrid agrees that work over the last few years will mean that non-modelled activity will be reduced relative to DPCR5.

394. However, we do not believe that any model that attempts to compare detailed asset investment plans between companies can remove the need for these. We therefore support Ofgem's statement (at paragraph 6.9 of the Cost assessment document of the Consultation) that while the use of such adjustments will be minimised, some are still expected to be required.

Cost assessment, Ch. 6, Q4: Do you agree with our proposed approach for assessing the DNOs' plans for expenditure on Legal and Safety? If not, what changes would you propose?

395. Northern Powergrid supports Ofgem's proposed approach.

396. In terms of potential changes, the consideration of preventive measures to address potential metal theft might also be appropriate.

Cost assessment, Ch. 6, Q5: Do you agree with our proposed approach for assessing the DNOs' plans for expenditure on ESQCR? If not, what changes would you propose?

397. Northern Powergrid supports the proposed approach, although it will have to be implemented carefully.

Cost assessment, Ch. 6, Q7: Do you agree with our proposed approach for assessing the DNOs' plans for expenditure on flooding? If not, what changes would you propose?

398. Northern Powergrid supports the proposed approach, although it will have to be implemented carefully.

Cost assessment, Ch. 6, Q7: Do you agree with our proposed approach not to fund Quality of Service (QoS) improvements during RIIO-ED1?

399. Northern Powergrid supports an approach to quality of service that allows companies to fund investments via the incentive rate, as this places a commercial incentive on them to undertake only investments that are worthwhile, based on the incentive rate.

400. The assumptions regarding improvements made in the approach to target setting, particularly the 1.5% per annum assumption for CI, are however inappropriate. Full details are given in our response to the relevant question in the Reliability and safety document.

Cost assessment, Ch. 6, Q8: Do you agree with our proposed approach to change Black Start and Rising and Lateral Mains (RLM) from re-opener mechanisms to *ex-ante* allowances?

401. Northern Powergrid supports the proposed use of *ex-ante* allowances for expenditure on RLM.

402. We would prefer an *ex-ante* allowance approach for Black Start expenditure, although the feasibility of this will depend on the national papers being produced in time for them to be taken account of in business plan submissions.

Cost assessment, Ch. 6, Q9: Do you agree with our approach to assessing enhanced physical site security costs?

403. Northern Powergrid supports the proposed approach in principle.

Cost assessment, Ch. 7, Q1: Do you think that our proposals for the Trouble Call are proportional given the materiality of the area and do you have any preference between the options? Please separate your response by the following categories: low and high voltage overhead faults; low and high voltage underground faults; EHV and 132kV faults; ONIs (formerly non-QoS faults); third party cable damage recovery; pressure assisted cables; and submarine cables.

404. Northern Powergrid is generally in favour of the methods proposed.

405. We have a preference for the separate treatment of unit costs and volumes where a volume driver is justified.

406. Our concern over the use of a highly detailed disaggregation and upper quartile benchmarks also applies here, given that different DNOs facing different topologies will naturally face different efficient levels of trouble call costs. However, if the upper quartile is based on an aggregated performance this issue is less significant. Alternatively, benchmarking at the median level based on disaggregated result may also limit potential problems of cherry picking.

Cost assessment, Ch. 7, Q2: Do you agree with our approach to assessing Severe Weather 1 in 20 Events and do you have any preference between the options?

407. Northern Powergrid supports Ofgem's continued allowance for 1 in 20 storm related costs, which are unlikely to be included through other routes.

408. Provided that the methodology achieves this objective, Northern Powergrid supports its retention at RIIO-ED1.

Cost assessment, Ch. 7, Q3: Do you agree with our proposed approach for assessing the DNOs' plans for expenditure on Inspection and Maintenance (I&M)? If not, what changes would you propose?

409. Given the length of maintenance cycles relative to the length of the regulatory period, care should be taken in comparing volumes proposed by DNOs particularly at higher voltages. Comparing the maintenance cycles might give a more meaningful understanding.
410. Benchmarking unit costs is acceptable, provided work is first undertaken to prove the comparability of the work content. Companies may adopt different maintenance strategies (for example, regular homogeneous maintenances versus long intervals between major overhauls with minor functional checks more frequently). As a result a consideration of the overall long term costs may be more appropriate.

Cost assessment, Ch. 7, Q4: Do you agree with our proposed approach for assessing the DNOs' plans for expenditure on Tree Cutting? If not, what changes would you propose?

411. Northern Powergrid supports the proposed approach in principle.

Cost assessment, Ch. 7, Q5: Do you agree with our approach to assessing NOCs Other and do you have any preference between the options? Please separate your response by the following categories: dismantlement, remote location generation, and substation electricity.

412. Northern Powergrid has no comment on the approach to dismantlement as it is not a material cost category for the company. Similarly, we have no comment on remote location generation.

413. Substation electricity is, however, a larger category of costs (although still relatively small). We agree that some form of benchmarking of usage rather than just price per unit should be performed. DNOs estimate their usage, and since this data will no longer be used as part of the losses reduction incentive, there will no longer be any incentive not to overestimate usage unless it is benchmarked.

414. However, we note the need to refine further the approach. It may be beneficial to compare the estimates applied within the usage calculation with a view to standardising them.

<p><i>Cost assessment, Ch. 8, Q1:</i> Do you agree with our proposed approach to assess CAIs? In particular, do you agree with our groupings of activities?</p>

415. Northern Powergrid expects that further work will be undertaken on this issue in the working groups. However, our initial comments are set out below.

- Identification of a cost driver for group A will be a challenge as this should reflect the volume of work, but not the cost of performing the work.
- The movement of EMCS to group B seems illogical, although it is possible that it should sit somewhere between the two groups.
- We do not agree in principle with placing vehicles and transport in group A, as it is likely that significant increases in volumes of work would be achieved using contractors, not direct labour, therefore group B would be more appropriate.

- The approach to IT appears reasonable, and is similar to the approach adopted at DPCR5.

Cost assessment, Ch. 8, Q2: Are there any views as to which cost drivers would be most appropriate?

416. Northern Powergrid expects that further work will be undertaken on this issue in the working groups. However, our initial comments are set out below.
417. Measures of company costs are not appropriate as cost drivers, due to the obvious problem of circularity. It is also acute with respect to costs relating to other areas of the company's business. If a company were 10% inefficient in both areas of the business, the regression would tend to show that it was efficient. And if an efficient level of costs in a particular category is first estimated and then used as a cost driver, the compounding of regression errors is also likely to damage the statistical properties of the regressions (i.e. there will be significant measurement errors in the explanatory variables).
418. Where volumes of the activity are used as a cost driver, the implications depend on which volumes of activity are being used.
- If the volume relates to the same activity as the cost, the regression decomposes to an analysis of unit costs. While this may be an informative exercise, it provides no information on whether an efficient volume of activity is being undertaken, and so fails to assess a fundamental determinant of the costs that customers must pay.
 - If the volume relates to a different activity from the cost, any inefficiency in volumes of activity across the board will tend to lead to an incorrect finding of efficiency.

419. As a general rule, cost drivers should be chosen that most closely reflect the actual underlying reason for the existence of the network. This would include factors such as customers connected, and their density.

Cost assessment, Ch. 8, Q3: Do you believe our approach to assessing Workforce Renewal is appropriate? In particular, do you believe it is appropriate to consider Workforce Renewal allowances both in isolation and also as part of wider training and do you believe Workforce Renewal should include or exclude the training of contractors?

420. Northern Powergrid believes that Ofgem is right to continue to provide workforce renewal allowances, which play an important role in allowing companies to train new employees to replace their ageing workforce.
421. The general approach of setting allowances based on the number of expected retirements is appropriate.
422. Northern Powergrid does, however, believe that the way in which workforce renewal allowances are set should not distort company decisions, and that the proposed approach creates a boundary that favours one operating model over another. Even if contractors were including workforce renewal in their unit rates, the approach to benchmarking is likely to remove this allowance, especially given that the benchmark for unit costs may be set by a company which runs an in-house model. There should therefore be allowance for contractors in how workforce renewal allowances are set.
423. In terms of whether to assess workforce renewal separately from wider training, it may make sense to assess this separately because it is a clearly defined activity, whereas wider training is likely to be subject to more significant boundary issues between companies.
424. Finally, we note that paragraph 8.28 of the Cost assessment document of the Consultation states that any planned under-recruitment in the DPCR5 period

would be taken into account at RIIO-ED1. This does not appear appropriate, given that DPCR5 allowances were provided on a 'use it or lose it' basis so that customers would only ever have to pay for the workforce renewal that took place within the period. This means companies should not be penalised in RIIO-ED1 if they have under-recruited in DPCR5 (since customers will not have paid). Equally, if companies have not taken advantage of their DPCR5 'use it or lose it' allowance this should not be seen as a compelling reason to grant higher allowances at RIIO-ED1.

Cost assessment, Ch. 9, Q1: Do you agree with our general approach to assessing BSCs? If you disagree with any particular areas can you please specify what these are and your reasons?

425. In general Northern Powergrid supports the appropriate use of other network companies' data and external benchmarking as part of the assessment of business support costs.
426. However, we have concerns over how the level of costs arising from the necessarily higher level of regulatory costs and governance in a regulated utility sector will be reflected in the assessment, especially when comparing against non-network companies.
427. We also have material concerns over the proposed use of a composite benchmark for the CEO and Finance and Regulation activity, the use of revenue as a cost driver, and the potential for cherry picking of external benchmarking.
428. We do, however, support the inclusion of non-operational capex in the analysis, to recognise the potential trade-off between opex and capex in the IT&T and property categories.

Cost assessment, Ch. 9, Q2: With regards to the non-fast-track benchmarking, for those DNOs that report lower than the benchmark costs which of the three options for setting cost allowances to you think is most appropriate and why? The options are: increasing allowances to the benchmark level of costs, giving the DNO their submitted level of costs, and taking an average between the benchmark and the submitted costs.

429. Northern Powergrid believes that the first option, to increase the allowance to the benchmarked level of costs, has the strongest rationale in an incentive-based system of regulation.
430. Historically this approach has been used in several electricity distribution price control reviews as it reinforces incentives for companies to improve costs below benchmark and submit challenging forecasts. Any approach which uses the DNOs' submitted level of costs weakens long-term incentives for low cost delivery, and also for developing challenging costs forecasts as part of a business plan submission.
431. It especially important to adopt this approach in disaggregated benchmarking where an upper quartile target is set at the granular level (rather than median), simply because the sum of upper quartiles is unlikely to be achievable for any company. We note, however, Ofgem's commitment to set the benchmarks at the aggregate level, which may mitigate this concern to a degree.

Cost assessment, Ch. 9, Q3: Do you agree with the cost drivers set out for each of the categories of Business Support Costs? If not, can you please suggest an alternative?

432. Northern Powergrid expects that these cost drivers will be discussed further in working groups. However, our initial thoughts are as follows.

- The HR & non-op training cost driver is number of direct employees, but an inefficiently high number of direct employees could result in a misleading finding of inefficiency.
- The use of 'cost as a per cent of base revenue' as the metric for Finance and Regulation, CEO and Property Management is a crude measure, although we accept that a high level measure would need to be used when comparing with non-network companies (due to lack of availability of detailed cost driver information and problems identifying cost drivers for these activities). The results should be treated with some caution, particularly when forming a view of the upper quartile level of costs. For example, companies who have a higher level of RAV and associated cost of capital related revenues, for historical reasons (efficient or otherwise), are more likely to appear efficient, but this may not be justified.
- The IT and telecoms suggested metric of 'cost per end user' is also a crude measure. We accept that a high level measure would be required if comparisons with non-network companies are to be made, however the results of this assessment should be treated with caution. It is important to utilise it in conjunction with some form of expert review, which can take into account industry specific factors.

433. These issues with cost drivers also mean that it is important to use the analysis as part of a tool kit, rather than as the only, or primary, form of assessment.

Cost assessment, Ch. 9, Q4: Do you agree with the proposed use of expert review to assess IT&T and property costs?

434. Northern Powergrid believes that expert review should be part of the tool kit for the assessment of IT, telecoms and property costs. This should however

not replace the use of appropriate benchmarking, and expert review should instead provide further understanding of the results.

Cost assessment, Ch. 10, Q1: Do you agree with our approach to regional and company specific adjustments?

435. Ofgem is right to state that there will be a high bar for company specific adjustments. Such adjustments can easily lack transparency or robust justification, and as such should be avoided unless there is a very clear and strong case supporting their inclusion.
436. Where a specific factor might warrant an adjustment, Ofgem should also assess its robustness as a cost driver. This is best undertaken by including it as a potential explanatory variable in regression analysis, so that all inter-relationships can be taken into account. If company specific adjustments are made at an 'off model' stage in assessment it is impossible to be certain that a robust cost driver has been identified.

Cost assessment, Ch. 10, Q2: Which regional and company specific adjustments do you think we should consider in RIIO-ED1? Please give a rationale for your suggestions.

437. As set out above, Northern Powergrid agrees that there should be a high bar for regional and company specific adjustments.
438. Any such adjustments should be made through the inclusion of the relevant cost drivers in regression analysis so that their robustness can be tested. This should be possible in the total cost benchmarking analysis, and likewise in the middle-up regression analysis.
439. Any adjustments that cannot be tested for robustness through inclusion in regressions should not be made; consequently adjustments would generally

be inappropriate for bottom-up analysis. This would include variables like wage rates, since it is not clear that there will be major regional differences given the predominantly skilled labour that DNOs utilise.

440. Some very specific categories of asset related costs, such as island generation or submarine cables, may appear to warrant exclusion. However, they should not be credited if they are not material enough to significantly impact the result. It is likely that all DNO networks will have costs driven by historical asset related quirks, so these issues will average out. However, the majority will not be apparent as they will not have their own regulatory reporting line, so no small items should be adjusted for.

<p><i>Cost assessment, Ch. 11, Q1:</i> Are there any additional analytical techniques that we should consider beyond those we have used at past price control reviews to assess RPEs and on-going efficiency?</p>

441. The analytical techniques used to assess RPEs at DPCR5 were broadly appropriate, and no materially different techniques are required.
442. The one specific point to note is that, if there is a change in how RPI is measured as a result of the current ONS consultation, this may require adjustments to the RPE methodology. Any such changes may mean that the expected level of RPI inflation may change for a given level of underlying inflationary pressure (which is driven by exogenous factors and by the Bank of England's inflation targeting policies, neither of which are expected to be materially different, on average, during the RIIO-ED1 period). If this were to happen, and changes to the RPE methodology may be required to account for the fact that historic relationships between RPI and factor input inflation variables will no longer be expected to hold.

Cost assessment, Ch. 11, Q2: Are there any additional data sources that we should be aware of to assist with our analysis of RPEs and on-going efficiency? Are there some that you think we should rely more on than others?

443. We have one specific comment on the approach used in the RIIO-GD1 and RIIO-T1 *Initial proposals*.
444. Ofgem states at paragraph 2.29 of its RPE appendix document to those *Initial proposals* that it has not used commodity price indices in developing materials RPEs as 'the network companies do not purchase raw materials but the final manufactured good', and since it has concerns that the indices will not reflect the cost of the final goods actually purchased. This appears 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. Input PPI measures capture only the costs of fuel and materials purchased by manufacturers. Since this issue does not apply to the machinery and plant output PPI (which is also included), it is not clear why additional weight has been placed on a sub-set of manufacturing input costs.
445. For the avoidance of doubt, Ofgem's logic that output indices should be used appears reasonable, and so this logic would suggest that only the machinery and plant output PPI should be used.

RELIABILITY AND SAFETY DOCUMENT

Reliability and safety, Ch. 2, Q1: What are your views on the primary outputs and secondary deliverables for reliability and safety? In particular: (a) Do you agree that these are appropriate areas to focus on? (b) Are there any other areas that should be included?

446. Northern Powergrid agrees that Ofgem is focussing on the correct areas, in particular:

- Meeting the requirements of relevant legislation is the correct output for safety.
- The IIS remains the correct output for reliability.
- LI and HI remain important secondary deliverables for reliability, and the framework should be developed to include safety.

447. There are no other areas that we believe should be included.

448. Our detailed views on the proposals are set out below.

<p><i>Reliability and safety, Ch. 3, Q1:</i> What are your views on the proposed primary output and secondary deliverables relating to safety?</p>
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449. Northern Powergrid agrees that compliance with the safety requirements set out in legislation and monitored by the HSE is an appropriate primary output for RIIO-ED1. We also agree that that there should be no financial or reputational incentives under RIIO-ED1 given that safety output delivery is already appropriately incentivised by the existing framework. The fundamental purpose of the *economic* regulation of networks is to correct for market failure. There are no particular *safety* related problems that arise from the dominant position of an electricity network and, therefore, there is no reason why an economic regulator should seek to apply direct incentives to this aspect of the business. However, it is also true that the Authority must have due regard to safety matters in exercising its functions. The approach proposed in the Consultation properly reflects the remit given to the Authority by statute.

450. We also agree that the scope of the output should specifically be compliance with all relevant legislation, not just existing, named, items.

- As Ofgem notes, this would ensure that the primary output remains relevant if new requirements are introduced.
- It would also have the added advantage of ensuring that any such new requirements are clearly under the scope of the tightly defined mid-period review, since they would entail a change to existing outputs due to clear changes in government policy.

451. Safety performance reporting is also already addressed under the existing framework, so no new requirements are necessary for RIIO-ED1.

Reliability and safety, Ch. 3, Q2: Are these appropriate areas to focus on and are there any other areas that should be included?

452. The appropriate areas have been focussed on. No other areas should be included.

Reliability and safety, Ch. 3, Q3: Do you agree with our proposal not to place a financial incentive on the primary safety output?

453. Northern Powergrid agrees with Ofgem that there should be no financial (or reputational) incentive placed on the primary safety output. Safety output delivery is already appropriately incentivised by the existing framework. Any additional incentives implemented by Ofgem would create a risk of distorting this established approach.

Reliability and safety, Ch. 3, Q4: Do you agree with our proposal to create an incentive framework for secondary deliverables for electricity distribution safety?

454. The incorporation of safety as a consequence of asset failure in the criticality element of the secondary deliverables for reliability should be possible, and we therefore agree with this proposal.
455. As set out below in response to Q3 of chapter 6 of the Reliability and safety document of the Consultation, Northern Powergrid believes that, if a company has not met its reliability related secondary deliverables, that is the time for a more detailed investigation to understand whether under-delivery has actually occurred. If this is found to be the case, Ofgem should be able to take this into account at future reviews, including through adjusting the value of the future settlement to reflect justified over-delivery, or unjustified under-delivery.

Reliability and safety, Ch. 4, Q1: Do you agree with our proposal to align the IIS incentive rates with those proposed as part of RIIO-T1?

456. The incentive rate used in the DPCR5 period has proven itself to be a level capable of funding significant improvements in DNO performance. There is therefore no strong reason to change the incentive rate significantly for RIIO-ED1.
457. We recognise Ofgem's desire to maintain consistency with the incentive rate used in the RIIO-T1 settlement. However, the wide range for willingness to pay established by Reckon and used as the basis for business plans in that sector is also likely to contain the DPCR5 value. This suggests that there is no need for any significant change in the electricity distribution arrangements. Moreover, if consistency with the reliability aspects of the RIIO-T1 outputs was viewed to be especially desirable, then there could be no justification for Ofgem's proposed cap on outperformance in RIIO-ED1, since the RIIO-T1 incentive has none (other than the natural 'cap' at zero energy not supplied).

Reliability and safety, Ch. 4, Q2: What are your views on applying the efficiency incentive rate to the IIS incentive rates?

458. Northern Powergrid accepts that, given the IIS incentive is a route through which company improvements in performance can be funded, based on customer willingness to pay in principle, it would be appropriate to take the efficiency incentive rate into account.
459. However, this is not the only factor which should determine the IIS incentive rate. This is because company expenditure is not the only determinant of performance under the scheme. From year to year there is also significant volatility due to prevailing weather conditions. Any increase in the incentive rate would therefore increase cashflow volatility and thus impact on the cost of capital (through the gearing rate under the RIIO approach to establishing financing parameters). Therefore, any reason to increase the IIS incentive rate for the RIIO-ED1 period is mitigated, at least to some degree, by the additional capital cost which would be imposed by such a change.
460. The potential implications for the continuation or variation of the existing DPCR5 IIS rates should be reviewed once the efficiency incentive rates at RIIO-ED1 are known. Given that efficiency incentive rates are increasing at RIIO-ED1, there may be a case for increasing the IIS incentive rate. If, however, the DPCR5 rate remains within the range from the Reckon willingness to pay study, then it may be appropriate to leave it unadjusted, to maintain continuity with the DPCR5 incentive, and avoid any increase in the costs of the scheme to customers associated with the risk driven by the incentive rate (in combination with the potentially higher collar on performance).
461. Moreover, it is important not to become too mechanical in setting IIS incentive rates based on customers' willingness to pay as revealed by surveys. Our own experience is that not only does willingness to pay for improved

quality of supply vary markedly between customers, it also varies significantly over time. This being the case it would be silly to rely too heavily on data derived from polling customers about their preferences. Regulators should use their judgement in these cases.

Reliability and safety, Ch. 4, Q3: Do you believe we need to introduce a rolling incentive mechanism for IIS, along the lines of the shrinkage rolling incentive proposed in RIIO-GD1, and if so outline your views on the merits of this approach for the IIS?

462. We believe that Ofgem's established approach to setting fixed IIS targets from the outset of the price control, has proven itself to be effective. Much work has been done to develop workable IIS targets for the RIIO-ED1 period, and
463. Rolling incentive mechanisms, however, have some merits that mean that they are worth considering.
- Firstly, they set targets based on the historic performance of the DNO, and so reflect the effect of any intrinsic differences between the regions they operate in. They can therefore better take into account the starting position of the company than a benchmarking based approach, allowing it to fund improvements in network performance relative to that position, up to the point they are no longer justified by the incentive rate (and customer willingness to pay).
 - Secondly, they maintain a constant incentive rate across the whole of the price control period, rather than giving an incentive that becomes weaker over the period (as is the case where targets are re-set to the company's existing level of performance at the start of the next period).
464. Rolling incentive mechanisms do not suffer from the same acute problems as the rolling benchmarking approach also proposed in the Consultation (two of

the four options set out at paragraphs 4.35 and 4.39 of the Reliability and safety document). This is primarily because they base targets on company specific historic performance, and so companies cannot lose funding for IIS improvements that they had expected to receive, due to other companies also making improvements.

465. If Ofgem has a strong concern that incentives will not be strong enough in the final years of the DPCR5 period, a rolling incentive mechanism would be a solution to that issue. However, this would be a change to the approach previously expected by the industry. Allowing companies to retain the benefits of improvements (or the incentive cost of reductions) in DPCR5 period IIS performance that they have already implemented could confer windfall gains (or penalties) in addition to those that were clear when the incentives were set.

466. It would however be possible to take steps now to maintain strong incentives without conferring any windfall penalties or gains, and then implement a rolling incentive in future. The following steps would achieve this.

- Finalise the RIIO-ED1 targets for all companies at the time of the strategy decision in February 2013.
- Commit to implementing a rolling incentive for RIIO-ED2, which would base the targets in that period on the actually achieved performance levels in RIIO-ED1.

467. The first step would ensure that companies have a strong on-going incentive to make IIS improvements in the remaining years of the DPCR5 period. They would know that (regardless of whether they are fast-tracked or not) improvements they make in performance in the remaining years of the DPCR5 period would not affect their targets for the RIIO-ED1 period.

468. The second step would ensure that incentives to improve performance do not diminish throughout the RIIO-ED1 period. As part of this decision, the parameters of the rolling incentive would also need to be established. An

eight year rolling incentive would have the advantage of aligning with the length of RIIO price controls, and the approach used in the RIIO-GD1 shrinkage incentive. However, it would also increase the effective incentive on companies, by allowing them to retain benefits for longer than is currently the case. Since the IIS still remains effective at funding improvements in performance there is no need to do so - the 'within year' IIS incentive rate should therefore be reduced by a similarly offsetting factor (although this would not be a genuine reduction in incentive strength).

469. In the event a rolling incentive was introduced, care should be taken in how it is implemented. In particular, the logic known as '5xE' in the DPCR5 losses rolling incentive (which, in simplified terms, collapsed rewards or penalties under a five year roller to five times those in the final year of the scheme, with targets in future based on that year) placed too much emphasis on performance in a single year, which is problematic where there is data volatility (as is the case with IIS because of weather-related factors). Alternative approaches to a rolling incentive should however be possible that mitigate this issue.
470. The experience of the losses incentive in the DPCR4 and DPCR5 period also highlights the importance of the proposed mechanism to re-base the IIS incentive targets if the smart meter roll-out causes a material discontinuity in the data. This mechanism is important regardless of whether fixed or rolling targets are adopted, but may be more important under a rolling incentive.

<p><i>Reliability and safety, Ch. 4, Q4: What are your views on the level of revenue exposure and do you believe we need to reintroduce a cap on outperformance?</i></p>
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471. In terms of potential rewards or penalties, the re-introduction of a cap on out-performance under the scheme would be reasonable if Ofgem wishes to implement this aspect of its proposals. Although it could potentially limit the

incentive for companies to seek further improvements, it would provide greater certainty for customers of the potential levels of improvement in performance that might be funded. It should however be set at a level that allows for the investments that support the improvements to the network that are required in order to meet the target. We see no significant issue with the cap suggested by Ofgem.

472. However, the level of RORE downside exposure proposed (250-300 basis points) undoubtedly increases the level of downside risk relative to the DPCR5 settlement. Ofgem would need to take this into account in calibrating the overall RIIO-ED1 settlement.

Reliability and safety, Ch. 4, Q5: Do you agree with our proposal to set separate planned and unplanned interruptions and minutes lost targets under the IIS?

473. Northern Powergrid supports Ofgem's proposal that companies should be able to propose their own planned interruptions targets through their well justified business plans, based on a compelling case.

474. There is also no reason why this should be limited to fast-tracked companies. If a slow-tracked company provided a sufficiently compelling case, it may be an area of their plan that could be subject to proportionate treatment. However, even if a slow-tracked company's proposals are not sufficiently well justified for proportionate treatment, any concern that they may have over-forecasted the number of planned interruptions could be addressed by benchmarking of the number of planned interruptions relative to volumes of work being undertaken. This was part of the DPCR5 period approach (referenced at paragraph 4.22 of the Consultation's Reliability and safety document).

475. Any potential increase in volumes of planned interruptions due to the uptake of low-carbon technologies could be handled through the proposed low-

carbon technology mechanism. This would involve companies being allowed funding to cover additional planned interruptions associated with the volumes of work expected to be required under a given level of low-carbon technology, either implicitly or explicitly.

- An implicit approach would involve setting the £ per MW so it includes the 'cost' of the associated planned interruptions through the IIS;
- The explicit approach would involve providing additional funding (or adjusting planned interruption targets) to reflect an assumed 'planned interruptions per MW'.

476. Under such an approach, there would also be no need to halve the incentive rate on planned interruptions. This would have the benefit of transparency and simplicity, and allow fixed targets to be retained. It would also ensure strong incentives to minimise the number and duration of planned interruptions due to the low-carbon technology roll-out.

477. If the proposal for a rolling target approach is adopted, the interaction with the low-carbon technology uncertainty mechanism would need to be taken into account. The residual exposure of companies to the roll-out (taking into account the halved incentive rate) should be allowed for through the uncertainty mechanism. However, moving targets would complicate the relationship between the two mechanisms.

<p><i>Reliability and safety, Ch. 4, Q6:</i> Do you have a preference amongst the options which we have outlined for planned interruptions and minutes lost target setting in RIIO-ED1?</p>

478. Of the four options set out in detail (excluding the potential to mirror the GD1 shrinkage incentive), Northern Powergrid supports the fixed targets approach.

479. The methodology that has been used to establish the draft targets is well understood across the industry. This was therefore one area of the price control that we flagged up in our response to Ofgem's initial issues consultation, which included a question about which areas it should be possible to agree with relatively little time investment. Although some work will be needed to fine tune calculations underlying the proposed targets, Ofgem's expedited treatment of this area is therefore welcomed as being proportionate.
480. However, while we support the fixed targets approach, our one significant issue with the proposed approach relates to the use of improvement factors. These reduce the ability of companies to fund improvements via the mechanism (since a certain degree of improvement is assumed to occur 'for free'). The level assumed for customer interruptions (CI) where company performance is worse than benchmark (1.5% annual) in particular is inappropriate. Improvements on this aspect of performance require more fundamental and expensive changes to the network, while at LV the Consultation recognises that companies have limited ability to influence the number of customers interrupted.⁷
481. We also note that, if cut out failures are included in the IIS mechanism, targets would need to be adjusted to reflect this change. Since the roll-out of smart meters is likely to have a particularly significant impact on this area of interruptions performance, it would be appropriate to wait before making this change until RIIO-ED2 when more robust and stable data is available.
482. The other three approaches to target setting detailed in the Consultation are inappropriate. A rolling downwards only ratchet mechanism is inappropriate because of the volatility of the data due to weather patterns, while a relatively short term ratchet (e.g. three years) would reduce the funding companies can utilise for service improvements to levels that are well below

⁷ The Consultation, Reliability and safety document, paragraph 4.54.

the value suggested in willingness to pay surveys. Likewise, targets that are regularly re-set based on comparative performance make the ability of companies to fund improvements through the mechanism far less certain, and companies could find that having improved reliability they end up without the funding that pays for the improvement. Although it could be argued that uncertainties like this are common in competitive markets, they are not compatible with the low cost of capital assumed by Ofgem for network companies.

483. Our views on the fifth option (a rolling incentive similar to the RIIO-GD1 shrinkage incentive) are set out in our response to Q3 of chapter 4 of the Consultation's Reliability and safety document, above.

Reliability and safety, Ch. 4, Q7: Do you have a preference amongst the options which we have outlined for unplanned interruptions and minutes lost target setting in RIIO-ED1?

484. Northern Powergrid's views are set out in response to Q6, immediately above.

Reliability and safety, Ch. 4, Q8: Do you agree with our proposals on exceptional events?

485. Northern Powergrid supports the proposed approach to severe weather exceptional events. The retention of an established, well understood, and effective mechanism without modification is appropriate.

486. We also support the removal of the guaranteed standards exemption for one-off exceptional events provided that Ofgem implements its proposed arrangements to recognise, and make allowance for, the costs to DNOs associated with this change. This would mean that there is no increase in risk associated with the move, provided that the materiality threshold for the

independent IIS one-off exceptional event audit is set at an appropriate level, given the exposure of DNOs in the event that they fail.

Reliability and safety, Ch. 4, Q9: Do you agree with our proposed approach to smart electricity meters?

487. The mechanism Ofgem proposes for re-basing of the targets if the roll-out of smart meters causes a significant discontinuity in the dataset is an important aspect of the proposals that Northern Powergrid supports. Otherwise the roll-out of smart meters has the potential to create significant windfall gains or penalties through the IIS. This would increase the risk of the settlement with no offsetting benefit for customers.

Reliability and safety, Ch. 4, Q10: Do you agree with us not incentivising short interruptions in RIIO-ED1?

488. Northern Powergrid agrees with Ofgem's proposal for the following reasons.

- Evidence gathered from our own Stakeholder engagement thus far has shown that reducing the duration of power cuts is more important to customers than reducing the number.
- The incentive mechanism would have to be designed in a way that takes into account the interaction with the IIS, and this would increase the complexity of any proposals.
- In practical implementation terms, the accuracy of the short interruptions data currently collected is not sufficiently robust or reliable enough for it to be used as the basis of an incentive mechanism.

Reliability and safety, Ch. 5, Q1: What are your views on our proposals on load indices (LIs)?

489. We agree with the position taken by Ofgem on load indices for RIIO-ED1.
490. The DG index for generation dominated substations should be developed, although its implementation at the mid-period review should be dependent on the volume of DG dominated substations at that point in time, rather than being automatic. As a general point, we also believe that load indices are not appropriate at low voltage.
491. We believe that the arrangements proposed (including the low-carbon technology volume driver) provide appropriate incentives for capacity while ensuring value for money. Appropriate funding would be made available via the low-carbon technology and connections volume drivers once the capacity is required. DNOs would then be assessed against a secondary deliverable that tracks an absolute level of loading (provided this is the option that is implemented).
492. Finally, we believe it is important to avoid any potential for creep into micro-management through the framework which is implemented. Secondary deliverables such as these indices are well suited as an indicator for whether more detailed assessment of under- or over-delivery is well justified, but any financial incentive should not be mechanistic. Likewise, the more that delivery against these indices is rigidly interpreted, the less incentive companies will have to innovate or improve their data. Although we appreciate that Ofgem still wants companies to take these actions, relying too heavily on these indices (or mechanistic financial consequences based upon them) will have a damaging impact on incentives, at a time when the opposite is needed. We do however welcome the fact that Ofgem has made clear its intent that over-delivery of outputs could be given financial reward. In this case (as in the case of under-delivery) detailed case specific scrutiny

would be required to decide that a reward was justified, and that customers were receiving a benefit proportionate to the reward enjoyed by the over-delivering company.

Reliability and safety, Ch. 5, Q2: Do you agree with our proposed common LI bandings?

493. We support the common bandings provided that technical definitions can be agreed in the working group to ensure a level of consistency in approach across DNOs.

Reliability and safety, Ch. 5, Q3: Of the two options outlined for determining the LI deliverable, which do you think is the most appropriate?

494. We believe that the second option is the most appropriate. This would involve maintaining load risk within a tolerance band around a target loading level, as defined in company business plans.

495. Given the uncertainty over low-carbon technology uptake within the RIIO-ED1 period, and the fact there will be a volume driver for allowances relating to this uptake, committing to a specific level of loading risk (within a tolerance band) is appropriate. This avoids the need to change the 'risk delta' DNOs have to target to take into account additional funding they receive through a low-carbon technology uncertainty mechanism.

496. Ofgem is correct to stress its intention that there will be no in-period financial incentives attached to moving outside the bands. To implement such an approach would constrain DNOs from taking decisions to re-profile expenditure and work programmes in ways that could otherwise have significant benefits for customers, for example through achieving lower costs.

Reliability and safety, Ch. 5, Q4: Where significant numbers of substations that predominantly cater for demand arise, do you agree that the development of a Distributed Generation (DG) index for generation-dominated substations would be feasible and appropriate to implement at the mid-period point of RIIO-ED1?

497. Northern Powergrid agrees with the need to develop an appropriate index.
498. However, its implementation at the mid-period review should be dependent on the volume of DG dominated substations at that point in time, rather than being automatic. If the issue is not material at the point of the mid-period review, implementation should be left until the RIIO-ED2 review (if required at that stage).
499. The proposed mid-point review arrangements, which make allowance for new outputs required by new customer requirements, are also sufficient for these purposes. No specific re-opener is necessary.

Reliability and safety, Ch. 6, Q1: What are your views on our proposals for health indices (HIs)?

500. Northern Powergrid is in broad agreement with Ofgem's proposals.
501. Our detailed views are set out in response to the questions below.
502. Our views set out above in response to the equivalent question on LI also apply to HI.

Reliability and safety, Ch. 6, Q2: Do you agree with our proposals to introduce criticality into the HI framework?

503. Northern Powergrid agrees that criticality will be a useful addition to the HI framework.
504. We believe this should cover safety, environmental and network impacts.
505. Difficulties do however exist in the calibration of consequences between different asset types and in the derivation of a correct picture of absolute asset risk. Therefore we believe that the criticality of asset failure should be calibrated in a relative rather than absolute manner.
506. Any move to harmonise the industry onto a single metric that quantifies all of its components on a common basis, would effectively lock the industry into a set of assumptions that may be flawed, and outcomes based on those decisions would reflect these flaws. It is therefore important that the implementation of HI at RIIO-ED1 avoids this.

Reliability and safety, Ch. 6, Q3: Do you agree with our proposals for applying financial consequences in the case of material under or over delivery?

507. We accept that financial consequences should apply in the case of material under- or over-delivery as determined by Ofgem assessment that is informed by the secondary deliverables. However, the way in which they are implemented should avoid weakening incentives for actions that could otherwise reduce costs for customers, or any risk of micro-management.
508. If a company has not met its secondary deliverables, that is the time for more detailed investigation to understand whether under-delivery has actually occurred. If this is found to be the case, Ofgem should be able to take this into account at future reviews, including through adjusting the value of the future settlement to reflect justified over-delivery, or unjustified under-delivery.

509. The indices are not, however, well suited to *mechanistic* financial incentives or comparison across companies. Put simply, they do not measure an output, and should only ever be treated as a means to an end. Likewise, the more that delivery against these indices is rigidly interpreted, the less incentive companies will have to innovate or improve their data. Although we appreciate that Ofgem still wants companies to take these actions, relying too heavily on these indices (or mechanistic financial consequences based upon them) will have a damaging impact on incentives, at a time when the opposite is needed.

510. We do, however, welcome the fact that Ofgem has made clear its intent that over-delivery of outputs could be given financial reward. In this case (as in the case of under-delivery) detailed case specific scrutiny would be required to decide that a reward was justified, and that customers were receiving a benefit proportionate to the reward enjoyed by the over-delivering company.

Reliability and safety, Ch. 6, Q4: Do you agree with our proposals to require greater consistency in the types of assessments that the DNOs should feed into the calculation of the asset health indices?

511. Northern Powergrid believes that a common set of principles could be derived against which a DNO could publish a formal methodology statement every year. This would explain and demonstrate how its processes meet the high level common principles.

512. The common principles would allow a level of consistency to be achieved across the DNOs. These principles would include, but not be limited to:

- the types of condition data to be included in the DNO assessment as a minimum;
- use of inspection and maintenance data;

- use of static information on asset type;
- the types of additional factor that could be included e.g. reliability factors;
- a requirement to explain the degradation mechanisms being applied;
- the definitions of the HI bands that will enable similar calibration between DNOs;
- specification of the factors to be included in the criticality assessment; and
- details of any criticality matrices including weightings between safety, network and environmental drivers.

513. This framework would allow DNOs to utilise their existing investment and maintenance (I&M) regimes without any changes to data collection specifications. It would also encourage DNOs to continue to develop their asset management systems as it only specifies the minimum level of required information. Additionally the framework allows DNO specific calibration of the input factors and degradation algorithms based upon their experience, asset types and operating context.

514. Applying commonality at a lower level of detail than this would involve costly business change for an unclear amount of additional benefit.

Reliability and safety, Ch. 6, Q5: What are your views on the suggestion that we would mandate DNOs to develop and maintain HIs in specified asset classes?

515. In general Northern Powergrid does not consider it appropriate to expand health indices to low value assets or those where it is not possible to collect meaningful condition data.

516. The suitability of a measure of asset health to an asset category is also determined by the asset replacement strategy and knowledge of asset degradation mechanisms.

517. We therefore believe that HIs should cover all of the asset types described by Ofgem apart from:

- LV switchgear where investment in link boxes and feeder pillars is not a material issue; and
- HV and LV cables where condition data is not collected, in which case the index is not an assessment of asset health rather a view on asset failure rates and asset age, both of which are already monitored in existing Ofgem reporting.

Reliability and safety, Ch. 7, Q1: What are your views on our proposals for the guaranteed standards?

518. Northern Powergrid's detailed views are set out in response to the questions below.

519. The most significant aspect of the proposals is the move in the guaranteed standards threshold from 18 hours to 12. This is not a change which our own stakeholder engagement has suggested. However, if Ofgem believes it should be implemented, recognition should be made of the costs that meeting the standard would entail.

Reliability and safety, Ch. 7, Q2: Do you feel that we should conduct a mid-period review of the guaranteed standards?

520. Northern Powergrid does not believe there is any particular need for a specific re-opener for guaranteed standards.

521. In the event that a review is warranted under the mid-period review, then the proposed arrangements would allow this. However, no aspect of the mid-period review needs to be automatic.

Reliability and safety, Ch. 7, Q3: Do you agree with our proposal to remove the potential double exemption of one-off exceptional events under the IIS and the guaranteed standards?

522. As set out our response to Q8 of Chapter 4 of the Reliability and safety document of the Consultation, Northern Powergrid support the removal of the guaranteed standards exemption for one-off exceptional events provided that Ofgem implements its proposed arrangements to recognise, and make allowance for, the costs to DNOs associated with this change. This would mean that there is no increase in risk associated with the move, provided that the materiality threshold for the independent IIS one-off exceptional event audit to be set at an appropriate level, given the exposure of DNOs if they fail.

Reliability and safety, Ch. 7, Q4: Do you agree with our proposal to remove all of the Highlands and Islands customer exemptions?

523. Northern Powergrid does not have a strong view either way as we do not operate in these areas and we have no experience of conditions that apply there. As a general regulatory principle it is better to avoid carve outs, however they can be an important tool when they are justified.

Reliability and safety, Ch. 7, Q5: What are your views on our proposal to reduce the normal weather standard from 18 to 12 hours, the associated changes to payment levels and options for funding?

524. While we can accept the change to GS from 18 hours to 12, we must however be clear that this move is not costless. We have not identified this move as a priority from our own stakeholder engagement, and therefore believe that there would be better ways to spend the money this will drive into our business plan. In particular, we think that improving the service to new connections customers is a better use of resources
525. We will have either to incur costs to meet the new standard, or we will have to make the GS payments that would flow if we do not. If we perform as we currently do, making payments to our customers who have a power cut that lasts between 12 and 18 hours long will cost £1.4 to £1.9m in additional payments per annum across Northern Powergrid's distribution services areas (depending on the level the payment is set at). The costs of meeting the new standard are ones which we will have to include in our business plan, although we would have preferred not to do so.
526. One simple way to mitigate the cost impact would be to reduce the financial value of each guaranteed standard payment, calibrated in such a way as to broadly offset the potential for an increase in the number of payments. This should therefore be considered as an alternative to the proposals for payment levels which only consider uprating them for inflation.

<p><i>Reliability and safety, Ch. 7, Q6:</i> Do you agree with our proposal to keep non-domestic customers in the guaranteed standards?</p>

527. We support Ofgem in the proposal to keep non-domestic customers in the GSs for equality purposes. However, in doing so it is important to continue to recognise that the payment is effectively made to recognise that customers are inconvenienced during a power cut, and it does imply that consequential losses should be compensated.

Reliability and safety, Ch. 7, Q7: What are your views on the feasibility and practicality of making payments to all customers automatic?

528. As stated in Ofgem's strategy consultation paper, until new technology solutions are realised (i.e. smart metering) along with the systems to translate the data into meaningful business processes, the ability accurately to identify those customers affected by a power cut is limited, primarily due to lack of phase records and network connectivity inaccuracies.
529. However, once the new technology solutions are available, the degree to which customers affected by power cuts can be accurately identified will increase.

Reliability and safety, Ch. 7, Q8: Do you agree with our proposal to make payments to Priority Service Register customers automatic?

530. Northern Powergrid believes this is an objective that is worth pursuing, since priority register customers are likely to be those most inconvenienced by a power cut, or who may value the payment the most.
531. There will however be a number of issues to overcome in making this a practical reality. In particular, whether or not customers are classed as a priority can vary over time due to changes in their circumstances, and this could lead to difficulties in maintain real time accurate data. The ability to offer automatic payments against a fluid data set will be a procedural challenge, with the potential to lead to customer dissatisfaction.

Reliability and safety, Ch. 8, Q1: What are your views on the proposed options that we have outlined for the worst served customers scheme? Please include what you see as the pros and cons of each of the options, whether you have a preferred option and why.

532. Northern Powergrid supports option 1, to retain and improve existing mechanism. This mechanism is already in place and can be improved incrementally with relatively little time effort, allowing more time to be spent on other aspects of the review, which are likely to yield more significant customer benefits.
533. We do not support option 2, a points based incentive, since it does not target worst served customers over a period of time, but instead the highest number of multiple fault instances in any one year on a points methodology type basis. Thus worst served customers would change annually. However, measuring the data relevant to this option on a trial basis could be worthwhile to allow on-going assessment of whether this would be a suitable approach for RIIO-ED2.
534. We do not support option 3 (the implementation of an additional guaranteed standard of performance). We believe the current standard in this area is sufficient, and a further standard could lead to customer confusion and disappointment they attempt to claim both sets of payments.

Reliability and safety, Ch. 9, Q1: What are your views on our proposals for network resilience?

535. Northern Powergrid does not believe a high impact low probability event resilience metric is necessary.

536. A flood resilience metric could however be a useful indicator for stakeholders, and is readily available. However, there is no need for any financial incentive based upon it. Ultimately DNOs could also be found in breach of Electricity, Safety, Continuity and Quality Regulations (ESCQR) obligations, which should be the primary output in this area.
537. Monitoring of progress on black start resilience could be undertaken on a volumetric basis. Moreover, the as noted in our response to Q8 in Chapter 6 of the Consultation's Cost assessment document, establishing robust estimates of the work required in well justified business plans depends on completion of the national papers in time.

Reliability and safety, Ch. 9, Q2: Do you think that our proposals cover the right areas or are there other areas that you think we should be considering?

538. Northern Powergrid's stakeholder engagement process has not identified any additional resilience areas so far.

IMPACT ASSESSMENT DOCUMENT

Impact assessment, Ch. 2, Q1: Have we correctly identified the impacts that RIIO-ED1 will have on consumers, competition, sustainable development and safety?

539. The impacts listed in the document are correct.

Impact assessment, Ch. 2, Q2: Are there any additional impacts that RIIO-ED1 may have?

540. The section of the Consultation on the impacts on consumers does not mention the potential increase in the IIS incentive rate. As well as affecting the incentives companies face to undertake investments to improve reliability, the cashflow volatility due to random variations in weather patterns would also increase, raising the required cost of capital and hence costs to customers.
541. The section of the Consultation on the impacts on competition misses a further significant area where competition can deliver benefit to customers - which is through the DNOs achieving the lowest possible costs by competitive tendering of work, where this is possible. We note, however, that the approach to proportionate treatment in the RIIO-T1 price control review helps encourage these benefits being released for consumers, since the fast-tracking decision recognised the potential importance of competitive tendering in giving Ofgem confidence that low costs have been achieved.

Impact assessment, Ch. 2, Q3: Are there any specific areas in which we should seek to quantify the impacts of implementing RIIO-ED1 in a later IA?

542. We do not currently believe there are specific areas where this is necessary based on the contents of the strategy Consultation.
543. However, if the proposals finalised in the strategy decision are likely to lead to significant systems or network monitoring implementation costs across DNOs, then it would be appropriate to revisit this issue before the post-implementation review. Provided that the decision maintains the position Ofgem expects, that there will be no significant costs of this type (as described in paragraph 4.3 of the Impact assessment document of the consultation), this will not be necessary.

Impact assessment, Ch. 3, Q1: Have we correctly identified the risks associated with implementation of RIIO-ED1?

544. The risks listed in the document are correct.

Impact assessment, Ch. 3, Q2: Are there other risks that implementation of RIIO-ED1 may have?

545. While the impact assessment covers potential impacts of uncertainty mechanisms in terms of damaging efficiency incentives, it does not specifically address one risk which Northern Powergrid believes is significant.

546. The revenue driver for low-carbon technologies involves a choice which is central to the rationale for RIIO. If strong incentives are provided (due to a mechanism like the £ per MW driver) this should identify cost saving routes which could save large amounts of money during the transition to a low-carbon economy, and also ensure only well justified investments ahead of need go ahead. Other potential mechanisms which lack strong efficiency incentives, such as a £ per intervention approach, could therefore undermine one of the key objectives of the RIIO framework.

547. The Impact assessment document also does not mention a number of other factors which Northern Powergrid covers in response to specific questions of the Consultation, although these are typically associated with proposals that Ofgem has not stated it is likely to implement, or with how specific proposals might be implemented. These include:

- the potential problems associated with any reintroduction of a telephony answer rate incentive;
- distortions associated with the use of stop codes and a narrow definition of connections under the time to connect incentive; and

- the risks of increased micro management and system costs depending on how rigidly network secondary deliverables are implemented (health and load indices).

548. These issues are covered in detail in our responses to the relevant sections of the Consultation.