RIIO-ED1 DRAFT DETERMINATION FOR THE SLOW-TRACK ELECTRICITY DISTRIBUTION COMPANIES

THE NORTHERN POWERGRID RESPONSE TO OFGEM'S CONSULTATION ISSUED ON 30 JULY 2014

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EXECUTIVE SUMMARY

- The cost allowances proposed by the Office of Gas and Electricity Markets (Ofgem) for Northern Powergrid are inconsistent with the outputs we need to deliver in the ED1 period.

- It is unprecedented in price control reviews in the energy network distribution sector for a cost assessment methodology to be applied that takes no account of the proven relative efficiency of the companies as they enter the next period.

- An analysis of the proven track-record of the companies would shed light on the efficiency of the plans offered by the companies for the next period.

- Our proven track record in cost-efficiency is complemented by the delivery of our DPCR5 period outputs.

- The final determination should be consistent in the efficiency targets that Ofgem requires across the sector.

- Companies that are presently at the forefront of efficiency (Scottish and Southern Energy (SSE) and Northern Powergrid) should not be expected to make the same level of cost reductions in their base costs as less efficient companies.

- Ofgem has created a gap between Western Power Distribution (WPD) and the other companies that goes far beyond the intended rewards in the fast-track settlement.

- The materially favourable treatment of WPD will create an outputs gap in the performance that can be expected in the ED1 period. This will distort the setting of output targets in the ED2 period unless Ofgem acts to address this.

- A material disallowance in costs for Northern Powergrid comes from errors, inconsistencies, and unsupported disallowances in the disaggregated model. These disallowances should be reversed in the final determination.

- Ofgem has provided no response to the justification that we have provided for our costs. Where Ofgem is persuaded by the justification we have provided, it should

make an adjustment to the modelled costs; where it is not persuaded it should say so and give its reasons.

- The use of volume ratchets and a flawed regional wage adjustment has also materially disadvantaged Northern Powergrid relative to every other distribution network operator (DNO).

- Ofgem has failed to apply its own real price effects (RPEs) methodology properly and has ignored the relevant precedent set by the Competition and Markets Authority (CMA) in this area.

- Ofgem's expectations of input price movements are inconsistent with our current experience and Ofgem's assumptions for RPEs are much more ambitious than any of the forecasts of the DNOs.

- The proposed adjustment for smart grid benefits shows unmistakable signs of hasty improvisation and the justification provided by Ofgem is inadequate. A mid-period review of the potential savings may be the best solution for this uncertainty.

- Ofgem must take care to ensure that its approach to the *ex ante* specification of network asset secondary deliverables is consistent with the RIIO principles and the well-established principles of UK regulation. Where Ofgem agrees with a company's plan, taken in the round, the deliverables should be those that the company has committed to in its plan rather than those that Ofgem may have assumed in order to conduct its cost assessment modelling.

- The cost of debt allowance under the proposed index will be too low. Ofgem is targeting an allowed cost of debt that is lower than Ofgem's expectation of the cost of debt of the sector as a whole.

- To enable the sector's cost of debt to be recovered, the cost of debt index should be extended so that it starts with a 13-year index, with another year being added to the index each year.

- There is no headroom in the cost of equity that can be used to cross-subsidise the inadequate cost of debt allowance. Moreover, to do so would be betray the

commitment of the Gas and Electricity Markets Authority (the Authority) to stay within the range indicated in the *Strategy decision* of March 2013.

- An acceptable settlement requires significant changes to the *Draft determination* in the areas of:
    - cost allowances (including modelled costs, regional labour adjustments, smart grid savings and RPEs);
    - the cost of debt index; and
    - Ofgem's response to the unintended effects of the fast-track decision.

PART ONE – OVERVIEW OF NORTHERN POWERGRID'S RESPONSE TO THE DRAFT DETERMINATION

INTRODUCTION

1. This is the response from Northern Powergrid Holdings Company and its two subsidiaries, Northern Powergrid (Northeast) Ltd (Northeast) and Northern Powergrid (Yorkshire) plc (Yorkshire)[1] to the Ofgem consultation: *RIIO-ED1: Draft determination for the slow-track electricity distribution companies* issued on 30 July 2014 (the *Draft determination)*.

2. This response is structured in the following manner.

   Part One: Overview of Northern Powergrid's response to the *Draft determination*.

   Part Two: Responses to the questions posed by Ofgem in the *Draft determination*.

   In this response we have focussed on those parts of the *Draft determination* that need to be changed in order to deliver a set of proposals that is acceptable. These are the areas of cost assessment and modelling, real price effects, smart grid solutions and the cost of capital.

THE DETERMINATION OF ALLOWED COSTS

The allowances proposed by Ofgem are inconsistent with the outputs we need to deliver and take no account of our efficient starting point

3. All previous network distribution price control reviews have proceeded from an assessment of the current relative efficiency of the companies. The RIIO-ED1 price control review is unique in that, to date, Ofgem has not conducted any review of the relative efficiency of the companies as they enter the ED1 period.

4. The disregard of the evidence of historical (i.e. proven) efficiency does not appear to us to be a deliberate policy decision of the Authority. Rather it seems to be the case that Ofgem has developed a suite of models that takes no account of history and so the Authority does not have available to it the historical results.

[1] Together we refer to Northeast and Yorkshire as 'Northern Powergrid' or 'NPg'.

5. An assessment of where each of the companies starts from in terms of cost-efficiency would enable Ofgem to ground its assessment of the company plans in the current reality. This would bring an important balance to any assessment that relies on the benchmarking of forecasts. It would be reasonable to suppose that the plan of a company that is already efficient may be more credible than the forecast of a company that aspires to reach the frontier of efficiency in the next period. This is particularly true if a company that is not yet efficient has not justified *how* it will deliver its aspirations.

6. Northern Powergrid's starting position in terms of proven cost-efficiency is strong. This is shown by the totex models used by Ofgem in its cost assessment and by the disaggregated cost assessment model model developed by WPD for Ofgem's Cost Assessment Working Group (CAWG).[2]

7. Northern Powergrid and SEE are the two companies with the strongest track record of proven efficiency. This is shown in Table 1 below. Yet under Ofgem's proposals, Northern Powergrid is set allowances that are 5% below its DPCR5 levels of expenditure while SSE is allowed an increase in expenditure in both of its licensees.

8. It is unreasonable and disproportionate to expect a company, that is currently at the frontier of efficiency, such as Northern Powergrid, to target further reductions in its expenditure that are commensurate with the reductions expected of other less efficient companies, given that there is no shortfall in outputs being delivered in the DPCR5 period or proposed for the ED1 period.

Table 1: Comparative historical efficiency of companies under different models

DNO	Totex Historical	Totex (2) - Historical	Disaggregated Historical
SSE	88.8%	90.0%	87.0%
NPg	88.8%	88.7%	91.6%
ENW	96.9%	94.0%	97.9%
SP	99.8%	98.8%	96.5%
WPD	100.6%	100.8%	102.5%
UKPN	102.1%	101.7%	110.4%

[2] Ofgem's disaggregated cost assessment model cannot be readily used to assess historical efficiency, so we have used the WPD model as the nearest equivalent.

Our proven track record in cost-efficiency is complemented by the delivery of our DPCR5 period outputs

9. The evidence that Ofgem already had when it prepared the *Draft determination* confirms that Northern Powergrid is performing well in terms of the outputs we are delivering in the DPCR5 period. We are on-track to achieve or exceed all of our outputs and we are beating Ofgem's targets for the key measures of customer interruptions (CI) and customer minutes lost (CML).

10. Furthermore, the outputs that we proposed for the ED1 period were praised by stakeholders and rated highly by Ofgem.

11. There is therefore no outputs gap that offsets the proven cost efficiency of Northern Powergrid.

The final determination should be consistent across the sector

12. If we were treated in a similar manner to the other DNO which is currently cost efficient (SSE) our cost allowances would be almost identical to those proposed in our plan. This allowance would be significantly less than is implied by the WPD fast-track settlement. The impact of alternative treatments of Northern Powergrid is shown in Table 2 below. We propose that the final determination should allow us the costs in our plan.

Table 2: Alternative treatments of Northern Powergrid

Scenario	NPg impact	
	Costs (ED1 total)	Revenues (p.a.)
Ofgem's current view	-£244m	-£15m
NPg plan	0	0
Equivalent to SSE implied target	£3m	£0m
Equivalent to WPD implied target	£357m	£21m

Ofgem has created an irrational gap between WPD and the other DNOs which has consequences that reach beyond the ED1 period

13. Ofgem's presentation of the data in the *Draft determination* implies that there is a gap of about £1bn between Ofgem's treatment of WPD at fast-track and the treatment that

company would have received under the slow-track assessment set out in the *Draft determination*.

14. Although the *Draft determination* suggests that this gap results from the resubmission of leaner forecasts by the slow-tracked companies, and that this was to be expected under the fast-track/slow-track approach, it is clear that very little of this gap is due to more ambitious slow-track forecasts having been submitted. A re-run of the fast-track cost submissions using Ofgem's slow-track method shows WPD to be 10% inefficient, and in fourth place (on a DNO group basis). This is shown in Table 3 below which shows the efficiency scores for the companies under the various Ofgem approaches and using the fast-track and slow-track forecasts of the companies.

Table 3: Efficiency scores, after upper-quartiling and including real price effects

DNO	FT costs in FT models	FT costs in ST models	ST costs in ST models
ENW	102.4% (2)	104.0% (1)	104.1% (1)
NPg	106.9% (4)	108.5% (3)	108.4% (3)
WPD	99.3% (1)	109.4% (4)	111.6% (5)
UKPN	113.7% (5)	113.1% (5)	111.8% (6)
SP	123.5% (6)	124.5% (6)	109.1% (4)
SSE	102.4% (3)	106.6% (2)	106.3% (2)

15. Moreover, it is not the case that WPD was unable to participate in the slow-track process of providing additional justification for the costs in its plans. In fact it had every incentive to participate actively, thanks to the financial benefit it could have received under Ofgem's 'no-loser' commitment to fast-track companies in the event they would have secured a more favourable treatment under the slow-track process.

16. The fast-track reward and the cost of equity boost of 0.4 percentage points enjoyed by WPD relative to the slow-track companies were intentional (if unjustified with hindsight) and the additional interruption incentive scheme (IIS) and customer service broad measure (CSBM) rewards that will accrue to WPD in the ED1 period merely from performing at its current level (which we estimate to be worth about £185m) may also have been intended by Ofgem. However, the allowance for excess modelled costs (£176m) cannot properly have been intended by the Authority since the majority of this difference is not due to slow-track DNOs modifying their plans or an inability of WPD to

provide additional justification for the costs in its plan. Ofgem's figures in the *Draft determination* suggest that WPD would have received £645m less if its cost allowances had been set at slow-track. [3]

17. Ofgem has undoubtedly over-estimated the savings that are possible relative to DNOs' plans in the areas of RPEs and smart savings. Correcting these issues with Ofgem's slow-track cost assessment would partially close the gap between WPD's actual allowances and those Ofgem now judges to be appropriate. But this would still leave an unjustifiable gap that arises primarily from the extremely favourable assessment of WPD at fast-track. This matters now not just because the Authority is required to treat licensees fairly with respect to one another – although that is important – but because it raises an important question for the future regulation of the network companies.

The materially favourable treatment of WPD will create an outputs gap in the ED1 period (and potentially beyond)…

18. Proportionate treatment is a principle that has been central to the introduction of the RIIO model. The essence of that principle, working through the review process as a whole, is simply that the outcomes for slow-track companies should not be out of proportion with those that accrue to a fast-track company *if the slow-track process reveals that to be justified*. The cliff-edge that results from the disproportionate treatment of the fast- and slow-track companies undermines a regulatory regime that relies on comparative performance in outputs (as well as costs) because it threatens to destroy our ability to compete with WPD on a level playing field for at least eight years – and potentially beyond.

19. In finalising the treatment of the slow-track DNOs, the Authority should have regard to its treatment of WPD. If WPD's fast-track treatment survives – and we offer no guidance here on how the Authority should respond to any calls for the fast-track decision to be re-run – the Authority must consider what assurance it can give to the other companies about how they will be treated in future comparative assessments and in the setting of customer service targets compared to a company that Ofgem's own assessment indicates has been conspicuously over-funded.

[3] This comprises £176m of excess modelled costs, £364m of excess RPEs and £105m of smart grid savings.

A £95m disallowance for Northern Powergrid comes from errors, inconsistencies, and unsupported disallowances in the disaggregated model…

20. Ofgem used three models to assess the efficiency of DNOs' plans. Two of these models were 'totex' models and one was a disaggregated cost model. The two totex models combined receive a 50% weighting. The sole disaggregated model also received a 50% weighting. Our plan performed well under both of Ofgem's totex models. One of the totex models indicated that we should be allowed £114m more than our plan and the other totex model indicated a £120m increase.

21. However, the disaggregated model, queried £148m of our costs.[4] Ofgem invited us to provide additional justification for any cost disallowance and we responded by providing justification for a £315m improvement in the result of the disaggregated model. Part of this justification arises from simply correcting errors and inconsistencies, but our justification also demonstrates that particular cost lines are in fact efficient in themselves or are part of a total cost efficient solution that is simply not captured in a disaggregated model. If the justifications we have provided were to be accepted by Ofgem this would bring the results of the three models into alignment.

22. Although we have provided substantial justification for the costs in our plan, we cannot tell from the *Draft determination,* or from the discussions that we have had with Ofgem - both prior to and after publication of the *Draft determination* - which of these justifications Ofgem finds persuasive. We believe that this degree of disclosure does not meet the public law duties of the Authority to 'give reasons' for its decisions. This point has greater force because Ofgem asked us to submit the additional justification for our plan and for any disallowances it was proposing, and we therefore have a legitimate expectation that the material we have submitted will be considered and that reasons will be given where the Authority decides that the costs are not justified.

23. In short, the errors, inconsistencies and unjustified cost disallowances should be corrected or adjusted before the final determination is made. Where our justifications are not accepted Ofgem should set out its reasons for rejecting the justification.

[4] After consolidations of the results of the models and applying upper quartiling Northern Powergrid were disallowed £83m of our costs pre-IQI or £62m post-IQI.

…while the use of volume ratchets, a flawed regional wage adjustment and the approach to company specific and qualitative adjustments has disadvantaged Northern Powergrid relative to every other DNO

24. Ofgem's approach to cost assessment uses ratchets in the disaggregated cost model. These ratchets have the effect of denying a DNO that is efficient in the volume of work that it proposes to do the benefit of that efficiency. This distorts the assessment of relative efficiency, particularly for a company like Northern Powergrid that has a total cost approach to its business.

25. There are two serious flaws with Ofgem's regional wage adjustment in the cost assessment.

26. The first is that, while Ofgem has (correctly) arrived at the conclusion that wages are flat across most of the country, it has implemented this via detailed bottom-up calculations that have the opposite effect when it comes to setting allowances. This means that Northern Powergrid receives a more disadvantageous wage adjustment than any other company, despite Ofgem's conclusion that any adjustments for regional wages should be restricted to London and, to a lesser extent, parts of the South East. This unintended consequence of the over-complicated bottom-up modelling approach distorts DNOs' incentives to optimise across cost boundaries and should be replaced with a top-down adjustment based on a fixed percentage of totex (which would then need to be properly allocated across cost categories in the disaggregated model).

27. The second flaw is that the regional wage adjustment itself for London and the South East is implausibly large. It amounts to 12% of totex for operating in London for example or around 25% of region-specific labour costs. In the RIIO Handbook Ofgem set itself a high bar for making company specific adjustments. The evidence supports a view that a much smaller adjustment as a proportion of totex, around 4%, would be appropriate for operating in London, while no adjustment is appropriate for operations based in any other part of the country.

28. Of all the DNOs, Northern Powergrid has received the lowest value of qualitative adjustments to the model. This treatment cannot be reconciled with the evidence that we have provided for the efficiency of our plan.

29. A number of companies have received company specific adjustments including SSE Hydro, UKPN LPN and SP Manweb. The RIIO Handbook rightly states that a high bar should be maintained for this type of adjustment. But the LPN adjustment appears to double count the regional labour cost adjustment. And the Manweb adjustment disregards the fact that other companies also have unique network design features (such as Northern Powergrid's 20kV network) and the fact the Manweb network should deliver better reliability for the extra cost.

Ofgem has failed to apply its own real price effects methodology properly…

30. In order to arrive at appropriate cost allowances for DNOs, Ofgem has to reach a view of how input costs are likely to move relative to the retail prices index (RPI). The difference between the movement of these two factors is known as real price effects (RPEs).

31. Most of the methodology used by Ofgem to determine RPEs in the *Draft determination* was used at the transmission (T1) and gas distribution (GD1) reviews (albeit with some differences in the chosen indices).

32. However, at this review Ofgem has added an RPI adjustment for a technical factor relating to the way price data is gathered. This technical issue was known when the T1 and GD1 reviews were settled. There was therefore obvious headroom in the RPEs treatment used in those settlements (and indeed in other aspects of those settlements) that would have offset other elements of the RPEs treatment that were less favourable to the companies under the Ofgem methodology. Acceptance of Ofgem's RPE methodology by other companies in previous price control reviews therefore gives no indication as to whether the methodology proposed at ED1 is appropriate.

33. Looking specifically at the methodology proposed in this review we have identified some technical errors in Ofgem's approach that can easily be corrected. These range from a simple formula error to misuse of company submission on the weights given to specialist labour. We have notified Ofgem of these errors and we expect them to be corrected.

34. There are also some serious illogicalities in the Ofgem RPEs methodology. For example, one of the indices used by Ofgem is a subset of manufacturer input costs, whereas DNOs buy finished goods and so that index is not appropriate as a surrogate for our costs. We have pointed this out to the Ofgem team and expect that Ofgem will correct this in the final determination.

35. Also, Ofgem has accepted that there is a premium attached to specialist labour, but it has failed to apply that premium to 2014-15 and 2015-16. This makes a material difference to the calculation. We also expect this error to be corrected.

36. Moreover, while Ofgem has justified its inclusion of the full impact of the recent prolonged 'depression' on its long-term RPE estimates on the basis that all the available data should be used, it has omitted to include earlier data which is available for a number of data series. We expect Ofgem to adopt a more balanced approach to the data series in the final determination.

… and has ignored the relevant precedent set by the Competition and Markets Authority

37. It is important to note that the CMA has used a different approach to the calculation of RPEs. It used benchmarked data on DNO pay deals where these were available, with a small downwards adjustment to place a limited weight on evidence from wider benchmarks.

38. We set out in Table 4 below the data insofar as we have been able to gather it.

Table 4: DNOs' pay deals and inflation in the DPCR5 period

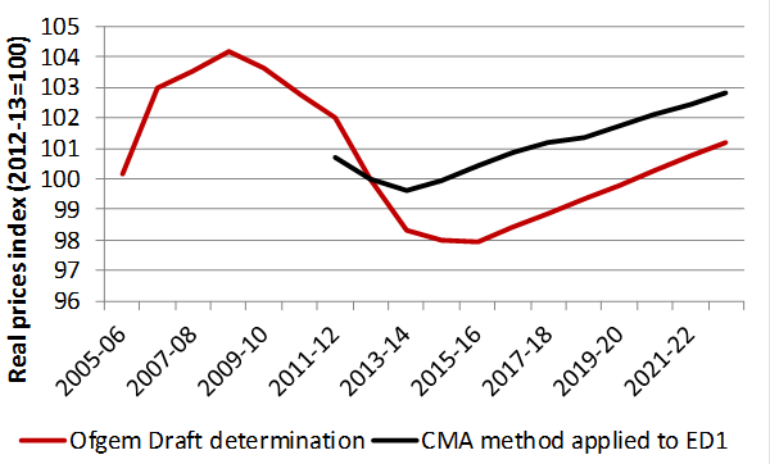
Scenario	Nominal increase		
	2010-13	2013-14	2014-15
RPI inflation	13.4%	2.9%	2.2%-3.4%
Average DNO pay award[5]	10.4%	3.6%	3.2%
CMA methodology benchmark	10.25%	3.45%	3.05%
Ofgem benchmark	5.1%	1.9%	2.3%

39. The CMA approach results in an outcome that is much closer in the near term to our actual experience.

40. Moreover, it will be noticed from Figure 1 below that the slopes of the alternative lines from about 2015-16 are roughly the same. Ofgem's difference with the CMA (and with us) is principally about the starting point for the ED1 period rather than the trajectory within that period.

[5] Pay deals sourced from Income Data Services for SP, SSE, and WPD, from UKPN's business plan for UKPN, and from company settlements for Northern Powergrid. We do not have any data for ENW. For 2013-14 we only have available data for four companies, while for 2014-15 we only have data for three.

Figure 1: Ofgem's disagreement with the CMA on RPEs[6]



41. Ofgem has not explained why it felt obliged to have regard to the CMA's view of the cost of equity, but not to follow the precedent set by the appeal body with respect to the estimate of RPEs. No reasons have been advanced by Ofgem in support of the implied contention that the appeal body is wrong in this respect.

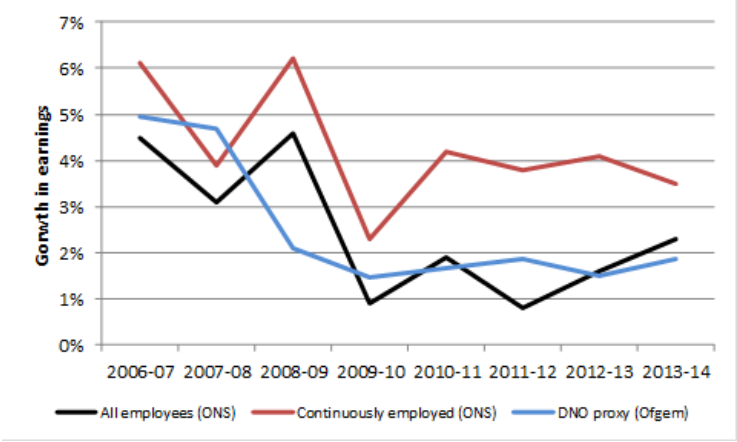
Ofgem's expectations of price movements are inconsistent with our current experience…

42. In order to determine RPEs for the ED1 period Ofgem has looked at historical patterns of changes in average pay across the wider economy. However, the recent wider economy data has been affected by structural change in the wider economy and so this data understates the average pay in sectors that have not been affected by structural change.

43. The Office for National Statistics (ONS) has highlighted this issue and published data which demonstrates it to be a material factor. This data is shown in Figure 2 below, which contrasts the ONS figures with those used by Ofgem in its calculation of RPEs.

[6] The top end of the range adjusts the CMA's input data to remove an over-estimate of the change in RPI, while the bottom end of the range uses no such adjustment.

Figure 2: Pay rises for all employees versus those in continuous employment[7]



44. The graph shows that, for employees who have been in continuous employment (and so have by definition been less badly affected by economy-wide structural change than the average worker) post-recession pay increases have remained at around 4%, which is the bottom end of the range seen in the pre-recession dataset. However, pay increases for all employees – and consequently the estimates used by Ofgem – have plummeted to well below the levels seen before the onset of the recession. In other words, DNOs are being expected to match real reductions in average pay in the wider economy that reflect the effect of many employees losing jobs and having to accept new jobs at lower pay. This does not reflect the realities faced by the sector in the labour market in which DNOs operate, given the role of DNOs has not seen a major structural change.

45. Moreover, our experience in tendering for services is consistent with this pattern. Since 2012-13 we have awarded 13 major service contracts worth £56m annually. In all of these contracts we have had to recognise the market realities that have enabled the service providers to secure real-terms price increases. Since 2012-13, the average annual real-terms price increase under these contracts has been 3.5%.

… and Ofgem's assumptions are much more ambitious than any of the DNOs' forecasts

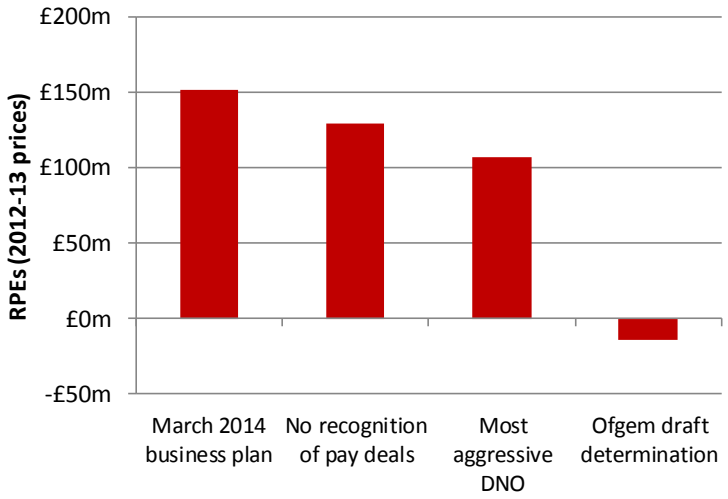
46. It is also noteworthy that Ofgem's assumption in the *Draft determination* for Northern Powergrid is over £100m more aggressive than the most ambitious of the DNOs' forecasts, which itself is broadly consistent with the methodology of the CMA once it is properly aligned with the revenue timing assumptions in the ED1 price control, and

[7] Source: ONS figure taken from the ONS Annual Survey of Hours and Earnings, 2013 Provisional Results, page 25. Other figures based on Northern Powergrid replication of Ofgem calculations.

once the inflation forecasts used in that methodology are brought in line with the latest available data.

This is shown in Figure 3 below.

Figure 3: Northern Powergrid's RPEs under various approaches



47. We therefore propose that Ofgem reviews its approach to RPEs, corrects its errors and reaches a position that is closer to the approach of the CMA. For Northern Powergrid this warrants an Ofgem view of RPEs that is approximately £100m higher than that set out in the draft determination.

The proposed adjustment for smart grid benefits shows signs of hasty improvisation…

48. In the *Draft determination*, although not in the fast-track assessment, Ofgem has made a material adjustment to the costs of the DNOs to reflect Ofgem's views of the smart grids savings that it considers are possible but which, in Ofgem's view, have not featured in the fast- or slow-track DNOs' plans.

49. Ofgem has offered no explanation for making this adjustment in the slow-track assessment when the same information was available to the Authority when it made its fast-track decision. This appears to be discriminatory as between the fast- and slow-track companies.

50. In our case this adjustment leads to a reduction in our allowed costs of £81m[8] over the period.

… but no justification has been provided

51. However, it is already clear that Ofgem's assessment of this disallowance is not backed by a clear and robust justification.

52. The explanation given by Ofgem is the *Draft determination* is opaque and lacks justification. In particular:

- the description in the *Draft determination* is not consistent with the data Ofgem has presented to us;
- we cannot verify how customer-funded connection cost savings have been taken into account;
- benefits that will flow in the ED2 period may have been mistakenly assumed to arise in the ED1 period;
- Ofgem is assuming that savings can be achieved from day one despite the fact that the smart meter data will not start to become available until 2016; and
- the enabling investment associated with smart solutions has not been made in the DPCR5 period.

53. We conclude that this adjustment has been hastily improvised for the *Draft determination* and as such is not sufficiently robust for the purposes of setting *ex ante* allowances.

54. Nevertheless, we recognise that if Ofgem has reason to suppose that DNOs have systematically failed to take account of material potential savings, it would be appropriate to take some action to protect customers. However, to date, Ofgem has not explained why the benchmarking of plans, on which it is content to rely in respect of other costs and efficiencies, is not sufficient for smart grid savings.

A re-opener for the potential savings may be the best solution for this uncertainty

55. If Ofgem concludes that there is a special problem with smart grid savings under the RIIO process of well-justified plans revealing efficient forecasts, this problem is one of uncertainty. No one knows what the level of low-carbon technology uptake will be and no one knows how much of the conventional costs that would arise from that uptake are

[8] Pre-IQI £81m post-IQI £61m

going to be avoidable by adopting smart solutions. The obvious answer is a properly designed uncertainty mechanism that could supplement the sharing factor and the load related re-opener that already offer some protection for customers and for companies from this uncertainty.

56. One possible solution that Ofgem may consider is a specifically designed re-opener window after four or five years that would be able to take account of the development of smart responses in the first half of the period. This has some drawbacks, but it should be possible to design the terms of reference for such a re-opener and to ensure that these are incentive-compatible. This would be preferable to a civil servant's guess, which is the basis on which the *Draft determination* proposes to proceed.

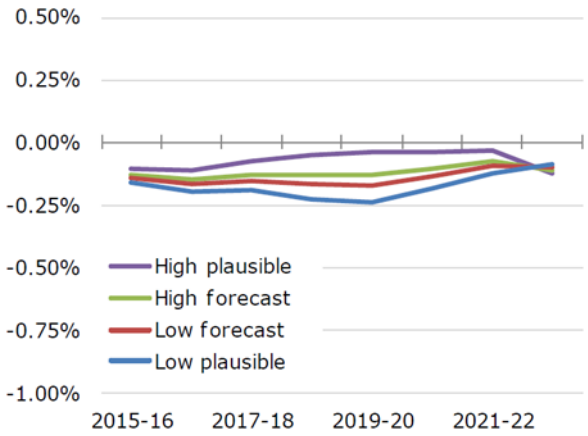
THE COST OF CAPITAL

There can be no doubt that the cost of debt is being set too low…

57. In the RIIO Handbook published in October 2010 Ofgem committed to using a debt index that provides 'a reasonable estimate of the cost of debt.'[9]

58. However, the index proposed in the *Draft determination* will underfund the sector's cost of debt as shown by Figure 4 below.

Figure 4: 10-20 year trombone trailing average under-funding[10]



[9] *RIIO Handbook*, p109 paragraph 21.16.

[10] *Draft determination*, financial issues document, page 12

59. In justifying this degree of underfunding Ofgem referred to a 'halo effect' that it had supposed to be a feature of DNO-issued debt. However, we have examined the evidence for there being such a halo effect and found that the claim does not stand up to scrutiny. We have presented this evidence to Ofgem already and subsequent discussions with Ofgem suggest that it is no longer convinced that there is a significant halo effect.

60. The evidence in fact confirms that the halo effect is insufficient to cover the cost to DNOs of issuing new debt, meaning that the underfunding will actually grow as more new debt is issued.

61. Moreover, an 'inflation risk premium' factored into the calculations also means that the cost of debt index will systematically under-provide for the cost of any newly issued nominal debt (which is the predominant form of finance for the industry). The long-term value of inflation risk premium does not accrue to equity holders because price control re-sets will prevent it from doing so (i.e. Ofgem can be expected to claw-back any obvious outperformance being secured by DNOs on nominal debt costs in the event inflation does move to a long-term, higher, level).

62. Although Ofgem has committed to using an index that is a reasonable estimate of the sector's cost of debt, it is clear that the proposed index will not achieve this because Ofgem is deliberately targeting an allowance that is below Ofgem's estimate of the sector's cost of debt. This contrasts with the approach of the CMA that allows *individual* companies to recover their efficiently incurred debt costs. Once again Ofgem is disregarding the precedents of the appeal body without any discussion of the strengths and weaknesses of the precedents set by that higher regulatory authority.

… whilst there is no headroom on the cost of equity

63. Furthermore, in the *Draft determination* Ofgem stated that any remaining disallowance of debt costs implied by the proposed index was legitimate because it was offset by headroom in the cost of equity proposed by Ofgem, compared to the CMA precedent in the case of Northern Ireland Electricity (NIE).

64. However, the assertion that there is headroom in Ofgem's cost of equity is not well-founded. In particular, compared to NIE, we face:

- higher interest rates;
- higher cost and output risk;
- a longer price control period; and

- only slightly less financing risk compared to a fixed allowance with five-yearly resets.

65. Moreover, even if there were any headroom in the cost of equity, it would not be possible to use this to offset an inadequate cost of debt allowance without reneging on the commitment that Ofgem has explicitly made to stay within its 6.0% to 7.2% range for the cost of equity.

66. We conclude, therefore, that Ofgem should make a small adjustment, to the proposed 'trombone' index, so that it begins with a 13-year trailing average, extending to 20 years. This would more closely match the sector's actual cost of debt and allow it to honour the two commitments that it has made publicly, namely to provide a reasonable estimate of the cost of debt and to award a base equity return from within its published range. Failure to satisfy both of these commitments would represent a very serious departure from all previous precedent in terms of investors being able to rely on Ofgem policy commitments.

67. It is important to note that Northern Powergrid would still be a material loser (£20m) from the application of an identical cost of debt across the sector that aimed to allow the sector as a whole to recover its debt costs. In principle, we believe it to be wrong that a company will be unable to recover its efficiently incurred costs. The gap between our actual debt costs and the index arises purely from timing: our debt was issued when debt was more costly; it was efficiently incurred at the time.

68. Moreover, we note that Ofgem's preference for an indexed approach to the cost of debt has not been favoured by the CMA. For the present, although we are prepared to accept a 13-year trombone index, we must reserve our position on this element of the financial package with respect to any appeal that we may bring should the overall settlement not be acceptable.

CONCLUSIONS

An acceptable settlement requires significant changes to the Draft determination

69. In conclusion, we consider that the settlement proposed in the *Draft determination* is flawed: we would not be able to deliver the outputs required by stakeholders with the proposed cost allowances.

70. In particular, under the *Draft determination* every other DNO will receive higher levels of funding to deliver equivalent outputs. This disproportionality arises principally because of Ofgem's discriminatory approach to adjustments to company costs and

because the disaggregated cost model has been applied in a discriminatory way. The justification that we have provided for our costs has not been disputed, but it has had little or no effect on the outcome. The results of the disaggregated model (which does not capture trade-offs between cost categories) are at variance with the results of both of the totex models (which do capture such trade-offs).

71. The consequences of this unfair cost assessment are exacerbated by Ofgem's approach to smart grids and RPEs where all the slow-track DNOs are being penalised by an approach that does not stand up to scrutiny.

72. The underfunding of our costs is made worse by the application of an assumed weighted average cost of capital (WACC) that is unacceptable to our shareholder.

73. Under such a set of proposals we can see only the prospect of being a sector laggard in the service that we provide to our customers and the returns that we will generate for the providers of capital. That prospect is neither fair nor acceptable, and it would not be consistent with Ofgem's duties to safeguard the interests of current and future consumers while ensuring companies can properly finance their functions.

Changes are needed to our cost allowances, the debt index and a response to the long-term problem created by the fast-track decision

74. That said, we still believe that an acceptable set of proposals is within reach, but it would require significant changes to the following elements of the *Draft determination*:

- *Modelled costs* –There are errors and unjustified comparisons in the benchmarking. We have provided compelling, detailed justifications for these costs, none of which has been rebutted in discussions with Ofgem. Where our justification is compelling, this needs to be factored into the assessment and Ofgem should make changes to its regional labour adjustment and the use of ratchets that penalise volume efficiency. Where Ofgem does not find our justifications persuasive it should give its reasons.
- *Real price effects* – Ofgem's position includes errors and inconsistencies, is at odds with the CMA and is not consistent with the actual evidence. These adjustments are essential to achieving a defensible outcome.
- *Smart solutions* –Ofgem's position needs to be completely reworked based on a transparent methodology and a suitably rigorous process. The best answer may be an uncertainty mechanism based on a mid-period review.

- *Cost of debt* – Ofgem should target a zero underfunding position for the sector as a whole. This could be achieved simply by starting with a 13-year trailing average for the index.
- *The cliff-edge* – The adjustments summarised above will still leave a cliff-edge between WPD and the rest of the sector that will distort the assessment of comparative performance as well as shareholder returns in the ED1 period and has implications beyond that. It is important that the Authority considers how to restore proportionality and secure the credibility of the regime in the interests of customers. The appropriate response to this problem will depend on whether or not the Authority recalls the WPD settlement for further consideration. Assuming it does not and the WPD settlement stands, it will be necessary for the Authority to set out how it proposes to deal with the outputs gap that will emerge as a result of its unintended and unduly favourable treatment of WPD relative to the slow-track companies.

PART TWO – RESPONSES TO QUESTIONS POSED BY OFGEM

Summary of assessment – Chapter 2, page 11

1.1 Do you think our assessments for each of the five criteria are appropriate?

75. No, we do not think the assessments against the criteria are appropriate. In particular, we do not agree that the 'Resources – efficient costs' and 'Resources - efficient financing' merit an 'amber' score for Northern Powergrid. Ofgem defines amber as appropriate 'where some work is needed to produce acceptable proposals in the business plan submitted at slow-track.' We believe our business plan proposals in both respects merited a 'green' assessment. We have demonstrated this in our business plan and in our subsequent submissions to Ofgem providing the additional justification that Ofgem invited.

76. In particular, Ofgem's conclusion that Northern Powergrid's planned costs may not be efficient is derived from a flawed cost assessment methodology that denies us the credit for our total cost approach, ignores the extensive justification that we have provided and includes material errors and inconsistencies in several areas.

77. Ofgem must take care to ensure that its approach to the *ex ante* specification of network asset secondary deliverables under the proposed licence condition governing the *ex post* assessment of these deliverables is consistent with the RIIO principles and the well-established principles of UK regulation. Where a company has proposed a plan that, taken in the round, is efficient and appropriate for the needs of stakeholders, the secondary deliverables should be those that the company has committed to in its plan rather than those that Ofgem may have assumed in order to conduct its cost assessment modelling. Any other approach would distort the behaviour of management and give primacy to the regulator's view of the needs of the network which would be inconsistent with the focus on outputs and total costs that are central to the RIIO approach. By contrast, where a company has proposed a plan that, taken in the round, is inefficient or inappropriate to meet the needs of stakeholders, it will be necessary for Ofgem to determine both the cost allowances and (at least some of) the secondary deliverables that will form part of the settlement that will be imposed.

78. With respect to the financing package that we proposed, Ofgem's assessment is wrong because it deliberately targets an underfunding of the sector's cost of debt and proposes a cost of equity that is too low and is discriminatory with respect to the fast-tracked licensees.

Assessment of efficient expenditure – Chapter 4, page 24

2.1 Do you agree with our totex benchmarking?

79. Broadly, we agree with Ofgem's approach to totex benchmarking

80. However, we have identified two errors in Ofgem's models, which must be corrected:

- There is a data entry mistake for customer numbers, which is one of the cost drivers in the calculation of the composite scale variable in the top-down model.
- Ofgem has failed to use the data on customer numbers from DNOs' IIS submissions for the year 2013-14, even though it has moved to use these submissions for all previous years.

81. We also consider that Ofgem's two totex models are specified in a very similar way, i.e. they are both heavily driven by modern equivalent asset value (MEAV), which means that they do not give a 'different' way to looking at totex. Further, Ofgem appears to have moved away from using 'output-based' cost drivers in its modelling. We would support Ofgem in restoring the top-down model to being a more 'output-based approach' – at least to the fast-track top-down model, but we remain of the view that the Frontier totex model would be a superior 'output-based' approach.

2.2 Do you agree with our disaggregated benchmarking?

82. We do not agree with Ofgem's approach to disaggregated modelling.

83. There are some serious problems with the disaggregated models that Ofgem used in its *Draft determination*:

- We have found a number of modelling discrepancies and errors in the individual models that Ofgem used to assess costs on a disaggregated basis.
- Ofgem has used a volume ratchet down in the detail of a number of models. We understand that Ofgem is concerned that its model should not over-compensate DNOs. However, the ratchet is unnecessary in a framework which incorporates upper-quartiling, as the application of the upper-quartile ensures that the DNOs are not over-compensated at the macro level. Further, the volume ratchet distorts the relative efficiency of DNOs – while in some cases DNOs are rewarded for efficiency, for example in the unit cost assessments, DNOs are not rewarded for volume efficiency in models where the ratchet is used.

- Ofgem has made £690m of qualitative adjustments to the industry as a whole, but has not been transparent about why it has made these adjustments. We have the lowest qualitative adjustments in the sector (as a proportion of totex), and see no reason why this should be the case given that our plan was widely regarded as one of the best in the sector and Ofgem has not challenged our detailed justifications.

84. The solution is:

- We have discussed the details of the solutions to the modelling discrepancies with Ofgem; these are summarised in later sections of our response.
- Ofgem should switch the ratchet off in all of its disaggregated models.
- Ofgem should properly review the evidence we have provided in support of qualitative adjustments. Where it finds that evidence persuasive, it should make the adjustment. Where it does not, it should give reasons for its decision.

2.3 Do you agree with our forecast of RPEs?

85. We do not agree with Ofgem's forecast of RPEs, largely because the starting point is wrong.

86. Ofgem's forecasts of RPEs fail to properly recognise the input price pressures that we are facing as an industry. A sense-check to the approach used by the CMA used in the NIE inquiry suggests that Ofgem's forecasts of RPEs are too low. Frontier Economics has undertaken an independent assessment of the approach the CMA used in the NIE case. Aligning this approach to the way inflation will be factored into allowed revenues in the ED1 period, and using actual RPEs up to 2013-14 (and forecasts beyond this), the CMA's approach would result in allowances for slow-track DNOs that are £343m higher than those assumed by Ofgem. Factoring in the 2014-15 actuals for pay settlements (which are already known, and which the CMA's methodology would treat as actuals by the time any DNO appeals are heard) would increase this figure further, as would correcting an obvious overstatement of RPI inflation in the Office for Budget Responsibility (OBR) forecasts relied on by the CMA (which we can only assume it was not aware of at the time).

87. By far the most significant problem with Ofgem's assessment of RPEs is that it has not recognised the realities of the labour markets in which DNOs operate, and has instead imposed labour RPEs calculated using external benchmarks.

88. But these external benchmarks have been acutely affected by the economic conditions experienced recently. In particular, where structural change has dragged down average pay growth across the economy due to highly paid jobs being lost from some sectors and replaced with lower paid jobs, a pattern accompanied by low economy-wide productivity growth. ONS statistics published in December 2013 show that private-sector employees in continuous employment have continued to receive pay rises at the low end of the pre-recession range (4%) in every year since 2010-11, while average pay rises taking into account all private-sector employees have been 1-2 percentage points below the bottom end of the pre-recession range.[11] Ofgem's benchmark mirrors the average for all private sector employees, and so is unrealistic for a sector of the economy which has not been affected by significant structural change.

89. There are also a number of less significant, more technical, issues with Ofgem's forecast of RPEs in its *Draft determination*, which can be categorised into two groups:.

- Errors:
  i) There is a straightforward spreadsheet error (in the calculation of RPI inflation forecasts which acted to reduce proposed allowances).
  ii) Ofgem has adopted the principle that the longest available data series should be used, but made an error in implementing this principle by omitting some data for certain series.
  iii) The benchmarks for specialist labour weights have been calculated excluding the data from UKPN and WPD despite there being no good reason to exclude data provided by these companies.
- Methodological flaws:
  i) No specialist wage growth premium is applied in 2014-15 and 2015-16 (despite the fact it would be easy to develop a robust forecasts).
  ii) The specialist labour weights submitted by some companies (SSE and ENW in particular, but also to a lesser degree NPg and UKPN) are inconsistent with the definition of specialist labour Ofgem has used in its calculation of RPEs.

90. The solution is:

- ***Most crucially*** – set actual labour RPEs (for 2013-14 and 2014-15) using a benchmark based on the average pay settlements actually achieved by DNOs, thus breaking the link to data from the wider economy and other sectors, in

[11] Source: ONS, Annual Survey of Hours and Earnings, 2013 Provisional Results, page 25

light of compelling evidence from the ONS that this data is materially affected by structural change that the electricity sector has not been undergoing.

- Correct the three errors in how Ofgem has implemented the other parts of its methodology.
- Remove the methodological flaws relating to specialist labour – by applying a specialist premium to the near-term labour RPE forecasts and by aligning the specialist proportion for all DNOs with the proportion of DNO labour which is in occupations with SOC codes 21, 31, 52 and 53 (weighted to reflect average pay in different occupations).

2.4 Do you agree with our assessment of potential smart savings?

91. We do not agree with Ofgem's assessment of potential smart savings.

92. DNOs have already included significant savings in their plans. These costs are included in Ofgem's general cost assessment, which means that these smart grid savings - as submitted by the DNOs - have been comparatively benchmarked against each other.

93. We accept that if Ofgem has good reasons to suppose that there is a significant set of savings that has been left out of all the DNOs' plans it might need to make some arrangement to evaluate this and accommodate it within its assessment. But this cannot simply be assumed or asserted when there is ample evidence that the smart savings have already been factored into companies' plans.

94. The additional clarification notes about the derivation of the smart savings that have been provided to us since the *Draft determination* are illustrative of the weakness of the justification for this significant cost disallowance and reinforce our view that this disallowance has been hastily put together and is insufficiently robust to serve as a basis for setting *ex ante* (dis)allowances. The smart grids disallowance neither reflects evidence-based policy making, nor the strong incentives on the DNOs to hunt for and reveal these potential savings under the RIIO approach. Ofgem's claim that the savings against company plans it proposes can be justified based on Low Carbon Network Fund bids fails to recognise that those bids would (quite properly) have quantified the potential ED1 benefits assuming much higher uptake of low carbon technology (and so higher baseline network costs) than has actually been factored into the risk-accepting slow-track DNO business plans. And as a result of using these figures, Ofgem has erroneously assumed that the LCN Fund investment will generate an implausibly high rate of return for customers.

95. Since the profile of smart benefits is very likely to be one of relatively little benefit at the start of the period, perhaps growing throughout the later years, this seems to be an example of where there could be a re-opener to assess the available benefits once robust estimates can be developed.

2.5 Do you agree with our approach to combining the cost assessment models?

96. We have no concerns with the way that Ofgem has calculated its combined efficiency score.

97. In particular, we support the decision to apply a 50:50 weight to the totex and disaggregated models prior to calculation of the upper quartile – this weighting is much more consistent with the principles of RIIO than the one used in Ofgem's fast-track cost assessment, and the application of an upper quartile after the benchmarks have been combined reinforces this by ensuring that the plausibility of the results of each model also informs the overall results.

98. However, we do not agree with the way that Ofgem has used its results from the models to determine final allowances.

- Ofgem has failed to take account of historical efficiency performance.
- Relative to the totex results, we are hardest hit on the disaggregated models.
- However, our strong performance on totex and the historical models can give Ofgem the confidence that we should be allowed qualitative adjustments in the disaggregated model.
- Our strong totex performance on forecasts is despite the fact that Ofgem's approach to regional labour costs and company specific adjustments discriminates against Northern Powergrid in every one of Ofgem's models.
- The fact that we have the lowest qualitative adjustments in the industry in the disaggregated models is at odds with the high quality of the justifications that we have submitted to Ofgem to support our plan (over 1,800 pages of detailed, bottom-up justifications have been submitted to Ofgem since the fast-track assessment).
- For two specific cost items – namely smart grids and RPEs – Ofgem decided to jettison the DNOs' cost forecasts in favour of its own analysis. Neither assessment has been carried out on a robust basis, nor are they reflective of the evidence available to Ofgem. We therefore do not agree with Ofgem's approach for these two cost items.

99. The solution is:

- The results of the disaggregated model should not be used mechanistically and the adjustments that Ofgem makes to the results should be well-justified.
- The justification provided by companies for their cost forecasts should be properly considered, wherever the model suggests a different outcome.
- Ofgem should also use the totex results and historical performance as a sense-check of the results from the disaggregated model.
- If Ofgem is persuaded that a company has justified its forecast where the disaggregated model suggests a disallowance, then Ofgem should make that adjustment. Where Ofgem is not persuaded it should give its reasons for rejecting the justification provided.
- Our proposed solutions for the assessment of RPEs and smart grid savings can be found in response to question 2.3 and 2.4 respectively.

2.6 Do you agree with our design of the IQI?

100. We agree with the direction of the redesign. The original proposal featured a significant discontinuity of potential returns for efficient slow-track DNOs relative to the 2.5% of totex reward for fast-track companies. This discontinuity is inappropriate. Ofgem has therefore, at least partially, remedied a design flaw which our previous consultation responses had highlighted.

101. Under the revised matrix a slow-track DNO which is judged to just meet Ofgem's cost benchmarks will receive a reward equal to 1.7% of its totex. This level of reward is closer to the 2.5% of totex made available for a fast-track DNO. We do, however, still believe that this leaves too large a gap to the potential returns available to fast-track DNOs – a recalibration of the reward at 100% efficiency to 2.0% of totex would bring Ofgem's view into line with the approach Northern Powergrid advocated in its slow-track business plan submission.

102. This would send an important signal that at future reviews there would not be a cliff-edge in the intentionally awarded returns between fast-track and slow-track companies, helping to avoid distorting incentives for accurate forecasting.

Assessment of efficient finance – Chapter 5, page 38

3.1 Do you agree with our cost of equity proposals?

103. We do not agree with Ofgem's cost of equity proposals

- Our assessment of the fundamentals supports a higher cost of equity than 6.0%.
- Both the CMA's decision in the NIE inquiry and the recent Water Services Regulatory Authority (Ofwat) determination support this judgement, once those assessments are suitably adjusted to reflect relative risk.
- We are taking on more cost and output risk than WPD, whose plan was judged to merit a 6.4% cost of equity.
- There is no headroom in the cost of equity, and it would be wrong in principle for Ofgem to fund industry debt costs through the equity allowance. This would push the *de facto* cost of equity below the 6.5% threshold, which would undermine investor confidence and regulatory credibility and would be inconsistent with Ofgem's commitment to stay within the cost of equity range that it had established.

104. The solution is:

- Ofgem should revert to using an allowed cost of equity of 6.4% for Northern Powergrid.

3.2 Do you agree with our cost of debt proposals?

105. We do not agree with Ofgem's cost of debt proposals.

106. We take issue with three aspects of Ofgem's proposals:

- Ofgem has identified that the industry has been underfunded on the cost of debt, but that this is balanced by headroom in the cost of equity. It would be wrong in principle to borrow from the cost of equity to fund the cost of debt because this would undermine Ofgem's commitment to remain within the 6.0% to 7.2% cost of equity range, and damage investor certainty.
- Ofgem has not properly measured the scale of the underfunding. It has stated that the 'halo effect' reduces the amount of underfunding, but Ofgem has overestimated the size of the 'halo effect' (and therefore underestimated the scale of the underfunding). Further, the 'halo effect' is not sufficient for issuance costs on new debt, meaning the lack of a halo effect adds to the underfunding.

- Ofgem provides a real cost of debt allowance which it calculates mechanistically based on market data but companies predominantly finance themselves using nominal fixed rate debt (with only 8% of existing debt issued on index linked terms) and have limited opportunities to issue further index linked debt. This means Ofgem makes no allowance for the currently elevated inflation risk premium that must be paid on nominal debt.

107. The solution is:

- Ofgem should use a 13-20 year trailing average, starting at 12/13 years in 2015-16 and extending to 20 years at the end of the RIIO-ED1 period. This would close the industry funding gap, but maintain a range of winners and losers within the industry (within which we would be one of the losers).

3.3 What are your views on our assessment of financeability?

108. We have two comments.

- Ofgem has introduced a newly-designed credit metric, which it terms $PMICR_g$, to the analysis. Although this is theoretically interesting it does not add to the assessment of financeability, since ratings agencies do not use the measure, and since any use of it is contingent on developing ratings thresholds which are, by definition, hypothetical and not tested against actual experience in real world financeability assessments.
- The financeability assessment assumes that DNOs finance 25% of their debt using index linked bonds. This assumption is not appropriate, since NERA analysis on behalf of slow-track DNOs has shown that only 8% of existing DNO debt is index linked, and since DNOs may not be able to issue additional index linked debt in the ED1 period (which was the assumption made by the CMA in the NIE case). The financeability analysis should reflect these facts and adopt a notional figure below 8% (or reflect each company's actual expected proportion).

3.4 Do you agree with our proposals to modify the three financial policies?

109. This question relates specifically to proposals to modify policies in relation to directly remunerated services, capital allowances pools and disposals. Our response on each in turn is set out below.

- ***Directly remunerated services*** – we have been working with Ofgem for some time to correct this acknowledged issue with arrangements for top-up and standby revenues. We therefore support the policy change.
- ***Capital allowance pools*** – Ofgem's proposal to use company specific allocations to pools is an improvement on existing proposals and in line with the policy position Northern Powergrid had previously proposed. The proposal to roll-forward capital allowance pools at the end of the RIIO-ED1 period is a natural consequence of using company-specific tax pools.
- ***Disposals*** **-** Ofgem proposes to deduct the proceeds of disposals from expenditure for calculation of the totex efficiency incentive, while at the same time strengthening regulatory safeguards to prevent disposals which damage long-term network development. As a general rule Northern Powergrid supports the equalisation of incentives across different cost categories and so does not oppose this policy change.

Uncertainty and risk – Chapter 6, page 47

4.1 Do you agree with our acceptance of the DNO specific uncertainty mechanisms?

110. Yes.

4.2 Do you agree with our proposal to give all DNOs an uncertainty mechanism for rail electrification?

111. Yes, we agree with Ofgem's proposal to give all DNOs an uncertainty mechanism for rail electrification. We observe that Ofgem has not justified why the mechanism for WPD should be different from the mechanism applied to other DNOs, bearing in mind that WPD did not propose an uncertainty mechanism in its plan and the mechanism that it has been given (which is more favourable) was devised by Ofgem. The rail electrification projects currently known about are all scheduled to be completed in the early years of the ED1 period, so it is not obvious that WPD could be more certain of the costs it will face than, say, Northern Powergrid.

Normalisations and other adjustments – Chapter 4, page 26

5.1 Do you agree with our approach to regional labour cost adjustments?

112. We do not agree with Ofgem's approach to regional labour cost adjustments.

113. There are two problems with the regional wage adjustments in Ofgem's *Draft determination*:

- Despite adopting the position that there is no evidence for regional wage differences outside London and the South East, Northern Powergrid is disadvantaged by the adjustment relative to every other DNO.
- The London and South East weightings calculated by Ofgem are implausibly large.

114. The solution is:

- An equalisation of the wage adjustment across the non-London, non-South East DNOs at the same level, which can be achieved by calculating the labour cost adjustment on a top down basis as a set percentage of totex and then allocating this across cost lines.
- A change to the London premium to reflect a more accurate regional labour cost premium of 10%, and the removal of the South East premium to reflect the strength of evidence which suggests there is no such premium.

5.2 Do you agree with our approach to adjusting for company specific factors?

115. We agree in principle with Ofgem's policy on company specific factors but we do not believe the proposals in the *Draft determination* adhere to this policy.

116. Ofgem's stated policy is that there will be a high bar for company specific adjustments and we agree with that policy. 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.

117. 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.

118. However, we are concerned in that in practice the adjustments may be double-counting the London labour cost adjustment and that there is inconsistency in including asset design differences as company specific adjustments rather than through the qualitative adjustment process.

119. There are no details provided for the increase in the accepted company specific adjustment claim of UKPN from 32% at fast-track to 41% at slow-track so it is difficult to comment on this change. But from the information provided at fast-track the descriptions of the additional costs seem to be more related to regional labour adjustments, particularly in relation to third party contractor costs. Any such double-counting of labour costs in the adjustment should therefore be disallowed from UKPN's proposals.

120. We note that Ofgem is proposing to accept company specific factors based on network design. We do not think it is appropriate to make adjustments at this level for such factors. Each network has its own characteristics. For example, we are the only company to have a 20kv network. The current approach will either;

- lead to many more claims of company specific factors for elements of their networks that are unique, which probably balance out or carry with them trade-off benefits for that characteristic (for instance SP Manweb's different network design should carry reliability benefits); or
- discriminate against companies that did not make such claims based on the legitimate expectations created by Ofgem's RIIO Handbook that a high bar would be maintained by Ofgem against such claims.

121. We believe that if adjustments are to be made, these should be restricted to the disaggregated model where justifications for different unit costs or volumes could be provided. Ofgem needs to ensure that the award of qualitative adjustments across the companies are reasonable, relative and proportionate. There should therefore be no company specific adjustment for differences in SP Manweb's network design.

122. Alternatively, if Ofgem wishes to make adjustments for such company-specific factors, we would expect special recognition of our own special factors, such as our 20kV and 66kV assets which have no equivalent in other DNOs. However, for reasons stated above, we do not recommend this approach, but if Ofgem wishes to adopt it, we necessarily require notification in order that we can submit our claims.

5.3 Do you agree with the costs excluded from our totex assessment?

123. We would propose to slightly amend the principle of Ofgem's approach to cost exclusions and propose that Ofgem re-tests the principle against the costs excluded in Table 4.1.

124. Ofgem states that it excludes costs because either they are incurred only by a small number of DNOs or are subject to separate treatment. The concern is that the test of only being incurred by a small number of DNOs should not mean that those that have a different approach to delivery of the output have their costs included in the benchmarking whereas those with another approach do not. For example DNOs have different levels of BT 21st century costs depending on the delivery solution.

125. Moreover, we do not think Ofgem has applied this test consistently to all the items in Table 4.1 and would suggest Ofgem re-tests (some of the stated rationale does not appear to be in line with the principle). We counsel against extending this list at final determination, for instance to Electricity Safety, Quality and Continuity Regulations (ESQCR) costs since we believe boundary issues affect this category, and also note that rising mains and lateral costs are excluded so it is appropriate to maintain the position of excluding the asset volumes from any scale variable utilised in the cost assessment.

Load-related expenditure – Chapter 6, page 38

6.1 Do you agree with our approach to assessing primary reinforcement and n-1 primary reinforcement?

126. We have concerns over the model's ability to cope with some of the more complex reasons for reinforcement at these voltages, particularly P2/6, however Ofgem appears to have shared these concerns and also considered the individual scheme papers. We are content that this has been properly undertaken in the *Draft determination*.

6.2 Do you agree with our approach to assessing secondary reinforcement (both low carbon technology (LCT) reinforcement and non-LCT reinforcement)?

127. With regard to LCTs, Ofgem is generally benchmarking the output of a standard model. Given wherever the DNOs have used the Transform model, that model simply calculates the effect on the existing system of transparent inputs in a standard manner, we believe the results of the Transform model should be allowed to stand. For the DNO which did not use the Transform model results (WPD), the benchmarked result is appropriate.

128. We do not agree with modelling that uses HV and LV MEAV as a cost driver for HV and LV reinforcement. This both ignores actual network requirements (current loading, growth hotspots) and rewards past inefficiency. We note however that Ofgem has done much to correct the output of the model by qualitative adjustment and on balance we accept the result.

6.3 Do you agree with our approach to assessing transmission connection point (TCP) charges?

129. We support the qualitative assessment of these costs.

6.4 Do you agree with our approach to assessing connections?

130. We have no comment on Ofgem's approach to cost assessment in this area.

Asset replacement, refurbishment and civils – Chapter 7, page 47

7.1 Do you agree with our approach to assessing asset replacement costs?

131. We do not agree with Ofgem's approach to assessing asset replacement costs.

132. In a number of instances Ofgem's assessment overlooks both the nature of our network and the fact that we have adopted a strategy to minimise total costs:

- The costs associated with some of our bespoke programmes are not recognised by the asset replacement model.
- We sometimes use better (but more expensive) equipment to optimise the overall cost and Ofgem's models do not reflect that this is more efficient.
- We have some unusual types of equipment – Riley & Neate masts for example – which do not match the fundamental characteristics of the Ofgem asset category into which they have been placed. The effect is that the unit costs for replacing that equipment appear to be high when, in fact, it is merely a case of an inadequate comparison within the model.

133. The solution is;

- for Ofgem is to review the justifications within our business plan, and subsequent correspondence and presentations, and make qualitative adjustments to correct the limitations of the modelling.

7.2 Do you agree with our approach to assessing refurbishment costs?

134. We do not agree with Ofgem's approach to assessing refurbishment costs.

135. In a number of instances Ofgem's assessment overlooks both the nature of our network and the fact that we have adopted a strategy to minimise total costs:

- We apply a condition and risk based refurbishment strategy that is efficient at a totex level. For example, our overhead line strategy focuses on refurbishment rather than full rebuild solutions, allowing us to address a greater amount of circuit length at a more efficient cost.
- Our plan for tower refurbishment was developed based on analysis of each individual tower. Ofgem has disregarded this and relied on its own modelling, which is less accurate.
- We have high volumes of transformer refurbishment because we do a lot of mid-life refurbishment. This is efficient at a totex level - Ofgem's approach fails to take this efficiency into account.

136. There are some clear discrepancies in the assumed work content within categories amongst the DNOs – e.g. switchgear refurbishment – which distorts the modelling.

137. It is a matter of concern to us that we have provided extensive justification for these items of cost and to date we have had no engagement with Ofgem that enables us to determine whether that justification has been considered.

7.3 Do you agree with our approach to assessing civil works costs?

138. We do not agree with Ofgem's approach to assessing civil works costs.

139. Ofgem's assessment does not take into account the nature of our network. Around 85% of Britain's 66kV network lies in Yorkshire and the Northeast. We therefore have a far greater proportion of 66kV in our EHV category compared to other DNOs. Switchgear at 66kV tends to be outdoor open busbar and the networks tend to be rings, which require switchgear at each substation. At 33kV, switchgear tends to be housed indoors, and the network tends towards transformer feeders which require far less switchgear. This distorts the cost assessment for the associated civil works in two ways:

- The volume of civil works, particularly plinths, is considerably higher on 66kV networks than on 33kV.
- The unit cost of civil works tends to be higher because the sites are necessarily physically bigger to accommodate the larger footprint of outdoor open busbar

designs. Larger switchrooms at 3311kV/HV substations than 66kV/HV substations net off against smaller control rooms.

7.4 Do you agree with our approach to assessing high value projects (HVPs)?

140. We do not agree with Ofgem's approach to assessing high value projects.

141. We have only one high value project in our plan. Ofgem has accepted the unit cost and volume for this project. Ofgem has then, elsewhere, made an arbitrary reduction which has the effect of disallowing the costs associated with the high value project.

142. The unit cost and volume have been deemed to be efficient and therefore the costs should be allowed. We have explained this to Ofgem and we expect this error to be corrected in the final model.

Non-core expenditure – Chapter 8, page 58

8.1 Do you agree with our slow-track approach for assessing:

- ***operational IT&T costs***
- ***diversions costs***
- ***ESQCR costs***
- ***legal and safety costs***
- ***quality of service (QoS) costs***
- ***flooding costs***
- ***BT21C costs***
- ***environmental costs***
- ***black start costs***
- ***rising and lateral mains (RLM) costs?***

143. Overall, we have a number of issues with Ofgem's assessment of non-core expenditure

144. We have shared the details of these issues with Ofgem. In summary:

- Ofgem has allowed some DNOs to report certain costs as ESQCR costs, even though these particular costs would not be defined as ESQCR costs in the Regulatory Instructions and Guidance (RIGs). As such, Ofgem's assessment of ESQCR costs is inconsistent with its RIGs.
- In its assessment of legal and safety costs, Ofgem has not properly taken account of the specific nature of the work that we are required to carry out (for example, work in relation to the removal of asbestos).
- There is a methodological flaw in Ofgem's analysis of flooding risk, and therefore in its assessment of flooding costs.

- In relation to environmental costs, Ofgem has not properly accounted for the benefit that our installation of oversized underground cable at low-voltage will have in terms of reducing electrical losses.
- Ofgem has not made like-for-like comparisons in its unit cost assessment of black start costs.

145. The solution is:

- In some cases, Ofgem should correct the inconsistencies in its models; and
- In others it should make qualitative adjustments that appropriately reflect the issues that we have identified. We have provided detailed justifications to Ofgem to support these qualitative adjustments.

Network operating costs – Chapter 9, page 77

9.1 Do you agree with our approach to assessing troublecall and occurrences not incentivised (ONIs) costs?

146. We do not agree with Ofgem's approach to assessing troublecall and occurrences not incentivised (ONIs) costs.

147. Ofgem's assessment disregards total cost optimisation. In addition to this:

- There are modelling inconsistencies between street lighting and all other categories which distorts the assessment.
- In respect of plant and equipment:
  - the mix of unit types across DNOs is not recognised; and
  - implausible forecasts distort the assessment.
- Ofgem has failed to take into account the fact that fault volumes are not something a company can reduce in the short term (despite its recognition of this principle in the main faults assessment).

9.2 Do you agree with our approach to assessing the costs of tree cutting (ENATs 43-8)?

148. We do not agree with Ofgem's approach to assessing the costs of tree cutting.

149. The data in Ofgem's regression is based only on forecasts for the ED1 period, which is inconsistent with its approach to regressions elsewhere (i.e. totex regressions) that use data from all 13 years. It is also inconsistent with its approach at fast-track which included data from historical years only.

150. We have an efficient tree-cutting programme. This is demonstrated by an assessment of historical costs.

151. We have been proactive in tree clearance programmes and furthermore we have concentrated first on the lower voltages where there is a greater safety risk and where n-1 redundancy does not ensure supplies are uninterrupted for loss of one line. This is well demonstrated by our performance during the high wind events of 2013-14.

152. As a further guide, considering the total DNOs' submission for tree trimming of £866m and apportioning that by each DNO's overhead population shows our £74m submission to be lower than might be expected; this is because we are ahead of the general position in terms of our clearance programme.

153. We do however have the higher voltage lines to clear, which are more costly.

154. Using only the forecast period in the assessment makes our costs appear inefficient due to the efficiency of our previous actions and the work mix they lead to; considering the full 13 year period shows us to be significantly better than benchmark efficiency.

155. This solution is that Ofgem should include data from all thirteen years in its regressions.

9.3 Do you agree with our approach to assessing the costs of severe weather – atypical, inspections and maintenance, NOCs other, and tree cutting (ETR 132 activity)?

156. We accept Ofgem's approach to assessing the costs of severe weather - atypical, inspections and maintenance, NOCs other and tree cutting activity.

9.4 Do you agree with our approach to assessing smart meter costs?

157. Ofgem's Draft determination has significant issues in this area. The description of the cost assessment approach for unit costs per smart meter intervention does not appear to match Ofgem's cost assessment model or the unit cost allowance that is proposed for use in the price control.

158. The unit cost proposed in our business plan took into account the costs associated with asbestos meter boards throughout our distribution services areas and our legal obligations with regard to these (as well as other costs). We consider that any disallowance would be inconsistent with our duties.

159. We do not agree that the pass through arrangements for smart meter data costs should cease in the last two years of the control when no allowance has been made for the costs we shall incur.

Closely Associated Indirects, Business Support and Non-op Capex – Chapter 10, page 88

10.1 Do you agree with our overall assessment of closely associated indirect (CAI) costs?

160. Broadly we are in agreement with Ofgem's overall assessment of CAI costs

161. Ofgem's assessment of CAI costs results in modelled costs of £234m for Northeast and £300m for Yorkshire. We are broadly in agreement with the approach that Ofgem has taken in its assessment. However, we have a two issues with the regressions of CAI costs, which we discuss in response to question 10.2. If Ofgem were to accept our proposals, this would increase our modelled costs by £16m.

10.2 Do you agree with our approach to assessing:

- ***the eight aggregated categories of CAI costs***
- ***vehicles and transport (for both CAI costs and non-operational capex)***
- ***operational training and workforce renewal***
- ***streetwork costs?***

162. We have the following issues with Ofgem's assessment of the eight aggregated categories of CAI costs.

    - We believe that the workload driver in the regressions of CAI costs (i.e. the eight aggregated categories of CAI costs) is poorly specified. Ofgem's chosen cost driver only covers asset additions, which does not fully reflect the activities that drive these categories of CAI costs. It is therefore an inappropriate cost driver.
    - Ofgem has only used eight years of data in its CAI regressions but 13 years of data in its totex regressions. We believe that Ofgem should seek to use a consistent time period across the regressions in its cost assessment.

163. We accept the approach Ofgem has used to assess vehicles and transport (both CAI costs and non-operational capex), operational training and workforce renewal, and streetwork costs.

164. The solution is:

    - Ofgem should use submitted direct costs as its workload driver in the regressions of CAI costs. The use of our proposed cost driver would negate the need for a special adjustment for UKPN (which is required under Ofgem's current model specification).

- Ofgem should use all 13 years of data in its CAI regressions. We understand that Ofgem is not currently using regressions based on 13 years of data in its assessment of CAI costs, because these regressions fail Ofgem's statistical tests. Our analysis has shown that models using 13 years of data and our proposed cost driver do not fail Ofgem's statistical tests.

10.3 Do you agree with our approach to assessing business support costs (BSCs)? Please consider the four aggregated areas and IT&T costs separately.

165. We accept Ofgem's assessment of the four aggregated areas of BSCs, but we have an issue with its assessment of IT&T costs.

- Ofgem's approach to assessing IT&T costs is split 50:50 between a qualitative assessment and a quantitative one. The narrative which accompanies the qualitative adjustment states that it was done in a way that kept costs in line with the quantitative analysis. However, in practice the two approaches are not aligned – the qualitative analysis was done on a DNO specific basis, while the quantitative assessment was done at a group level.

166. The solution is:

- If Ofgem's objective is to make the qualitative analysis in-line with the quantitative assessment, then it would in fact be more appropriate to apply a 100% weight to the quantitative assessment.

10.4 Do you agree with our approach to assessing non-operational capex costs? Please consider each of the two categories of IT&T and property and small tools, equipment, plant and machinery (STEPM) separately.

167. We have two issues with Ofgem's approach to assessing non-operational capex:

- Ofgem uses a ratchet in its assessment of non-operational property (i.e. DNOs are awarded the lower of their forecasts and the industry lower-quartile cost). As we set out in our response to question 2.2, in principle we do not agree with the use of ratchets as they distort the relative efficiency of DNOs – while in some models DNOs are rewarded for efficiency, DNOs are not rewarded for efficiency in models where a ratchet is used.
- Ofgem's assessment of tools and equipment is based on non like-for-like unit cost comparisons. For example, we have included some of our fault location equipment in this category and it is clear that other DNOs have not, resulting in non-comparable unit costs.

168. The solution is:

- Ofgem should remove the ratchet in its assessment of non-operational property.
- Ofgem must take account of the fact that DNOs have not reported costs for tools and equipment on a consistent basis. We have provided a complete and detailed justification to Ofgem of our costs in this area – if an adjustment is not made to this assessment, we will not be able to meet our output commitment in relation to the new guaranteed standard for restoring power supplies.

Real price effects (RPEs) and ongoing efficiency – Chapter 12, page 110

11.1 Do you agree with our approach to assessing ongoing efficiency?

169. We do not agree with Ofgem's approach to assessing ongoing efficiency because the assessment separates RPEs from productivity and in doing so it fails to recognise the links between productivity and RPEs.

170. Productivity and RPEs cannot be viewed in isolation, since productivity growth is the principal reason that positive labour RPEs are seen across the whole economy over the long run. It is the net effect of the two, net-RPEs, which matters to customers in terms of the bills they pay.

171. There are therefore two major issues with Ofgem's approach:

- If one DNO assumed a high productivity and high RPE combination, this would be identical (from a total cost) perspective to a low productivity and low RPE combination. But Ofgem's approach, which separates RPEs from the assessment, risks cherry picking pre-RPE unit costs set by DNOs which assumed high productivity and high RPEs.
- Ofgem has coupled these DNO benchmarks for unit costs, including productivity, with an RPE estimate for labour taken from wider economy benchmarks. But productivity growth in the wider economy has been low since the recession (as acknowledged by the Bank of England). This low productivity growth, which appears to be linked to structural change in the wider economy, explains the low labour RPEs observed since the recession in the series Ofgem has used to benchmark DNO labour costs. In effect, Ofgem

has cherry picked the low labour RPEs seen in the wider economy, and combined these with the relatively high productivity growth DNOs are continuing to achieve, creating a combination which cannot be achieved on a sustainable basis.

172. There are a number of possible solutions:

- Calculate benchmarked labour RPEs that are internally consistent with the ongoing efficiency assumptions baked into DNO plans – by using an industry average benchmark of actual pay settlements for 2013-14 and 2014-15.
- Adjust the DNO business plans to remove any productivity assumed to be achieved in 2013-14, 2014-15, meaning that pre-RPE costs from 2015-16 onwards would be higher by two years' worth of achieved productivity. This would restore internal consistency with Ofgem's RPE benchmarks, which are taken from the wider economy.
- Return the approach to the assessment of RPEs to the one used in the fast-track assessment – which included any RPE inefficiency prior to the final calculation of the upper quartile benchmark. This would remove the possibility of cherry picking an unachievable high-RPE and high-ongoing efficiency combination.

173. Even if these changes are made, there are still a number of additional technical deficiencies with Ofgem's RPE calculations that should be corrected (such as correcting calculation errors, correcting the weights on specialist labour and applying a specialist labour premium to 2014-15 and 2015-16). These issues are set out in full in response to question 2.3.

Assessment of innovation strategies – Chapter 2, page 8

12.1 Do you agree with our assessment of each DNO's innovation strategy?

174. We accept the assessment of our own innovation strategy in the *Draft determination*.

175. We do not offer comment in respect of other DNOs' strategies.

176. We are disappointed that the assessment of innovation strategies played no part in the fast-track determination – despite innovation being a key feature of the RIIO framework.

12.2 Do you agree with our draft determination of the NIA for each DNO?

177. Similarly, we accept the network innovation allowance (NIA) awarded to us.

178. We have no comment to make on other DNOs' allowances.