Overview Response

Chapter Three Question 1	Do you have any comments on our stakeholder engagement approach?
	Chapter three of the strategy consultation overview document and the associated appendix clearly set out Ofgem's approach. Stakeholders who have taken part in the gas and transmission reviews will be able to give definitive feedback. However, from a WPD perspective, the overall approach appears to have achieved its objectives and so we support Ofgem's proposal to continue using a multi-layered approach involving the Price Control Review Forum, the Consumer Challenge Group and working groups on specific issues.
Question 2	Do you have any views on how our engagement process or that of the DNOs could be made more effective?
	Ofgem and the DNOs will need to incorporate feedback on the stakeholder engagement processes used in RIIO-T1 and RIIO-GD1 to ensure the process for RIIO-ED1 is more effective. At this stage, it would appear to indicate that for those stakeholders who need to become familiar with the business plans of all companies in a short space of time, consistency in presentation and opportunities for collective stakeholder engagement in some areas should help to make the process more efficient. In terms of lessons from our own stakeholder engagement process, it is clear to us that stakeholder engagement needs to be built into on-going business practice to enhance the ability that stakeholders have to influence the service levels we offer. RIIO-ED1 will encourage the development of a more formal methodology and a robust mechanism for recording and capturing the views of stakeholders. We support the inclusion of a reward element in the broad measure of customer satisfaction related to stakeholder engagement. This should encourage continuous improvement. The real test of whether the greater emphasis on stakeholder engagement has been a success or not, will be in how the DNOs incorporate stakeholder views and feedback into their business plans and the outputs they deliver.
Chapter Four Question 1	Do you have comments on the form or structure of the price control?
	We agree with the form and structure of the price control review.
Question 2	Do you agree with our proposed changes to the RIIO-ED1 timetable?
	Yes the proposed changes appear sensible. The timetable is dependent on : • Major policy issues being resolved and primary output measures being fully defined by February 2013 to enable a complete business plan submission in July 2013. Whilst significant progress has been made to date, given the volume of issues raised in this consultation and work there is still to complete the

	timetable is very challenging. • The scenarios required being defined by Ofgem before December 20. • The format and content required for the Ofgem financial model being complete as soon as possible.
Question 3	Do you have a view on the materiality of potential changes in allowed revenues/charges between price controls? Do you have proposals to address this?
	The feedback we have received from suppliers is that they can accommodate changes in allowed revenue/charges between price reviews provided that they are given a sufficient notice period and detail of the magnitude of the change. This can be achieved by Ofgem making decisions on allowed revenues as early as possible during the RIIO process.
Chapter Five Question 1	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?
	WPD is supportive of the output measures proposed. It will be important that the final package balances the potential risk and potential reward so that where incentives related to output delivery are proposed - these are based equally on rewarding delivery and penalising non-delivery rather than an emphasis on penalising none performing DNOs. Including the IIS within the IQI efficiency mechanism will inhibit companies from improving performance and will fail to penalise poor performers. Rewarding top performing companies will encourage a frontier approach to output forecasting and delivery. With respect to delivering a sustainable energy sector the proposed outputs and incentives should be focussed on activities that are controllable by the DNO and impact on their activities e.g. business carbon footprint.
Question 2	Do you consider that the proposed outputs and incentive arrangements are proportionate (e.g. do we have too many or too few)?
	Generally, the output workgroups appear to be developing a number of outputs. We are working within all output workgroups to help ensure the outputs that we ultimately implement, are appropriate to the services we provide and those valued by stakeholders. We do not want to implement a suite of outputs that add no value for stakeholders or DNOs.
Question 3	Do you have any views on the proposed outputs and incentives?
	Ofgem have selected six categories of outputs for RIIO-ED1 which are very close to our own internal monitors and also align with the areas that customers tell us are important to them. In general terms outputs measures should exhibit the following characteristics: • Controllable. • Measurable. • Comparable between networks.

	• Auditable. We will include our view of outputs and incentives within our well justified business plan.
Chapter Six Question 1	Is our proposed approach to cost assessment appropriate?
	Our view is that Ofgem's proposed overall "toolkit" approach to cost assessment is appropriate. However, some changes within the overall toolkit approach should be implemented. Bottom up disaggregated totex benchmarking, produces more reliable results than top down single totex benchmarking. Bottom up disaggregated totex benchmarking incorporates activity/cost drivers that have a causal relationship with specific activities. On the other hand, top down single totex benchmarking must rely on proxy activity/cost drivers that do not have a causal relationship with activities. We propose that: • Bottom up disaggregated totex benchmarking should be used during both the initial assessment of DNOs' business plans and the non-fast track assessment process; and • More reliance should be placed on the outcome of bottom up disaggregated totex benchmarking, with top down single totex benchmarking used as a high level cross check. Please see our response to the annex associated with 'Tools for Cost Assessment' for further comments.
Question 2	Do you have views on our proposed use of proportionate treatment?
	Proportionate treatment aligns with the RIIO framework for price controls and better regulation principles. Ofgem's proposals for RIIO-ED1 provide the right level of response following the assessment of whether business plans submitted by DNOs are well justified. DNOs that are fast tracked should be given financial rewards, as well as having the price control settlement agreed nine months in advance. Our main concerns about the process relate to the time being allowed for the initial stage of assessment of business plans. Current proposals suggest that three to four months will be allowed for the analysis of business plan narratives, cost templates and Price Control Finance Model (PCFM) along with the processing of any supplementary questions. This is an ambitious time-scale and therefore sufficient guidance needs to be given to DNOs to ensure that initial submissions are presented consistently to enable Ofgem to carry out analysis quickly, effectively and efficiently.
Question 3	Do you have any views on the criteria for assessing business plans?
	We agree with Ofgem's approach to assessing business plans that includes the assessment of: • DNOs submissions for RIIO-ED1. • Comparative benchmarking; and • DNOs performance in DPCR5.

	The categorisation of criteria (as described in the 'supplementary annex – Business plans and proportionate treatment') aligns well with the proposed structure of business plans. Each specific criterion is relevant and we only propose one minor change in our response to the detailed questions in the 'Business plans and proportionate treatment' annex.
Chapter Seven Question 1	Do you have any views on the role of innovation in RIIO-EDI?
	Innovation has a role through RIIO-ED1 to prepare us for the expected increase in new technologies forecast for 2020 and beyond and has always had a role in delivering improved performance for customers at lower cost.
Question 2	What should the funding threshold for the Network Innovation Competition (NIC) be? Do you agree with our proposal to review it after two years to reflect learning from the Low Carbon Network Fund (LCNF)?
	The threshold stated is suitable to allow innovation to develop. We agree with the proposal to review after 2 years, when early LCNF projects will have presented their learning and the electricity transmission NIC has commenced.
Chapter Eight Question 1	Do you have any views on the uncertainty mechanisms identified?
	Yes, we have raised some points of clarity in our response to the uncertainty mechanisms paper where further information is needed. In particular the treatment of smart meters costs is unclear. We think that the timing of the reopener window at May 2019 is early, if 12 months data is to be required. However, 30 June 2019 will enable the data to be collected and audited/assured. Where there is a reopener window, then logging up during RIIO-ED1 needs to be allowed.
Question 2	Are there any additional uncertainty mechanisms required?
	Yes, there also needs to be a smart meter reopener mechanism related to costs for DNO systems including data aggregation systems what will enable DNOs to effectively use smart metering data. This should have a 1% of base revenue threshold with a logging up facility.
Question 3	Are there any mechanisms that we have included that are not necessary and why?
	No, we support all of the mechanisms in principle.
Chapter Nine Question 1	Do you consider that our proposed package of financial measures will enable required network expenditure to be effectively financed?
	At this early stage in the RIIO-ED1 process we broadly agree that the proposed

	package of financial measures should ensure that required network expenditure is effectively financed. However, not until well justified plans are completed will companies be able to fully assess financing requirements.
Question 2	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)?
	The cost of equity should be at the top half of the range to reflect the current market cost of equity.
Question 3	Do you have any views on the other elements of our financeability proposals?
	Please refer to our response on the financial issues section for details of our views on the financeability of the package.

Business plans and proportionate treatment

Chapter Three Question 1	Do you have any comments on the timing and stages of the assessment process?
	We have the following comments: Timing of stages Whilst the timings of the some of the stages are challenging (for both DNOs and Ofgem), they are acceptable. Step1 : Initial assessment The initial assessment period is probably the most challenging, as it will be the first time that Ofgem view the DNOs business plans, data templates and price control finance model. Ofgem has allowed three to four months for the assessment and analysis of narrative and data, along with requesting and analysing further information via supplementary questions. This makes it vitally important that sufficient guidance is provided on the structure of business plans and the requirements for data templates so that DNOs can provide consistent information enabling Ofgem to carry out its analysis quickly and efficiently. The consultation states that DNOs will need to be ready for responding to information requests following submission of business plans, but does not make clear when such interactions will take place. Further guidance is required on when supplementary questions will begin so that DNOs can have sufficient resources in place to respond within the tight deadlines.
Question 2	Do you agree with the three stage assessment process for RIIO-ED1?
	Yes, we agree.
Question 3	Do you think the additional reward for fast tracking is appropriate?
	Ofgem propose an additional reward of two and a half per cent of totex. Whilst it is helpful to have an indication from Ofgem of this reward, we are aware that is difficult for Ofgem to determine rewards and incentives until the business plans are received and assessed. Until Ofgem have a clearer view on the business plans, it is more appropriate to have a range for the additional reward rather than a fixed percentage. In our view the range should be between two and four per cent.
Chapter Four Question 1	Does the categorisation of the assessment criteria remain appropriate?
	Yes, the assessment categorisation aligns with the proposed structure for the business plans: • Process.

- Outputs.
- Costs.
- Financing.
- Managing Uncertainty.

This makes it clearer and easier to link the assessment criteria to the expected content of business plans.

Question 2	Are there any criteria which we should add or amend in the context of RIIO-ED1?

We would welcome more detailed guidance against each criterion.

In addition to the guidance reflecting the responses from this consultation, it should also reflect the learning from the consultation on lessons learned from RIIO-T1 and RIIO-GD1 processes.

Where possible, the guidance should provide details on what constitutes a plan being 'well justified'.

Specific comments about certain criteria

Criterion - "Has the company explained the resource implications for delivery of each output identified?"

Within the consultation document, this criterion contains commentary on resourcing, but also includes the forecasting stages for secondary deliverables. It would be clearer if these were split into two criteria with one specifically for assessment of resources and another assessing the adequacy of the forecasting of secondary deliverables.

Chapter Five Question 1	Is there anything else, in the context of the presentation and structure of the business plan, which we should provide guidance on?

Yes, feedback from the RIIO-T1 and RIIO-GD1 processes suggests that plans from different companies were difficult to compare. Whilst standardising the structure of business plans goes some way to improving comparability, additional guidance on the following areas could enhance this further:

- Specification and guidance for specific summary information/tables that would aid comparison across DNOs (e.g. whether costs for asset replacements should be summarised by asset type or voltage and whether cost should be presented for each year, the whole RIIO-ED1 period or an RIIO-ED1 average per annum value).
- The expected number and structure of annexes. Should there be an annex for each individual area requiring further explanation (potentially leading to many) or should issues be grouped and there be one annex per main part of the business plan (e.g. one for all additional information on outputs).

DNOs are being challenged to keep business plans 'as short as possible'. There are also expectations that DNOs will provide adequate (albeit proportionate) details of justification in many areas of the business plans. There is therefore a tension between providing sufficient justification and keeping the narrative concise.

Further guidance should be provided on what constitutes 'as short as possible' with examples of what would be considered excessive.

Question 2	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?
	Yes, DNOs should conform to the proposed high level structure. This provides a framework for comparison across DNOs and allows business plan assessment criteria to be aligned to the individual sections.
Question 3	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?
	We would be happy to work within a page limit for the executive summary. As this is a stakeholder facing document, we will respond to the wider views that stakeholders express in response to this consultation on how long it should be. We want to ensure that stakeholders are adequately informed about our plans in a user friendly way.
Question 4	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.
	Yes we agree.
Question 5	What should be the common metric, calculation and assumptions for determining the impact of the DNOs' proposal on consumer's bills?
	We agree with the Ofgem proposal to use £/customer/year as the common metric.
Chapter Six Question 1	Do you agree with our proposed approach to cost benefit analysis?
	In principle, yes, but there are a number of areas that still need to defined to enable the proposed process of cost benefit analysis to begin. In addition, cost benefit analysis is a tool for choosing between alternative courses of action. Where no alternative exists we will rely on cost benchmarking to justify spend. For example, the proposal suggests that a number of costs should be converted into annual values by using a value of pre-tax Weighted Average Cost of capital (WACC) that could be set at the DPCR5 level. An early decision is required (by December) to enable DNOs to start assessing investment proposals using a consistent and correct assumption for WACC, to avoid the need for repeat analysis that would be caused by a delayed decision.
Question 2	Do you agree with our proposed approach to have a threshold level of expenditure to determine whether cost benefit analysis is required?
	Yes, a core RIIO principle is the use of proportionality in both the provision of supporting information and the assessment of plans. It therefore follows that the use of cost benefit analysis should be proportionate and the use of a financial

	threshold is valid.
Question 3	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?
	1% of base revenue. The majority of uncertainty mechanisms use the 1% of base revenue value to determine materiality. This value is used to avoid detailed assessments of marginal costs. This value can be used to set a minimum requirement for DNOs, with additional flexibility being allowed to DNOs to provide additional CBA where this gives additional justification for investment proposals.
Question 4	Have we identified all of the relevant parameters to ensure consistency in how cost benefit analysis is undertaken?
	Yes.
Question 5	What are your views on the levels the parameters should be set at?
	• We agree with using the STPR discount rate of 3.5%. • We agree with first year benefits being set at 50%. • We agree that health and safety benefits should be derived from the Treasury Green Book. • WACC should be set at the level used in DPCR5. • We agree with the proposal for value of electricity lost and carbon abatement. • We agree that the common base year for discounting should be 2015. • We propose that a positive NPV should be achieved over a 30 year life which takes account of uncertainties over future network use and is 33% shorter that the economic life of assets (45 years).

Financial issues

Chapter Two Question 1	Is our approach for setting the allowed return appropriate, particularly in the context of an eight-year price control?
	Ofgem's approach to setting the allowed return is appropriate.
Question 2	What considerations do we need to take into account when setting the notional gearing level?
	We agree that the level of notional gearing should reflect a company's risk exposure, and therefore cash flow volatility, and that the appropriate level of gearing depends on the credit rating metrics that result. The credit rating metrics are the key determinants of availability of debt capital to DNOs.
Question 3	Is our proposed mechanism for annually updating the cost of debt assumption based on an index appropriate?
	Yes.
Question 4	Does our range for the cost of equity capture the DNOs probable cost of equity in RIIO-ED1?
	The upper half of the proposed range captures the DNOs probable cost of equity in RIIO-ED1, the lower half does not.
Question 5	Is the *ex ante* approach to the cost of raising notional equity appropriate for RIIO-ED1?
	Yes.
Chapter Three Question 1	Have we identified the correct equity and credit metrics?
	Yes, but Earnings before Interest, Tax, Depreciation and Amortisation (EBITDA) to interest coverage should be added because this is commonly used in debt covenants for both bonds and bank facilities.
Question 2	Do the rating agency credit metric levels quoted provide the most appropriate levels?
	Yes, however, please note that that the ratios used by the ratings agencies are adjusted for pension deficit, and that the levels used are adjusted from time to time.

Chapter Four Question 1	Do you agree with our approach for the calculation of the percentage of totex allowed into RAV?
	Yes.
Question 2	Do you agree with our revised approach to Totex and with the costs that are included and excluded?
	Yes we agree.
Question 3	We invite views on whether the definition of related parties should exclude captive insurance companies and whether our proposed approach is proportionate.
	We agree that the definition of related parties should exclude captive insurance companies and that the proposed approach to exclude excess losses is proportionate.
Chapter Five Question 1	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?
	Yes; see response to question 2 below on the tax trigger.
Question 2	We invite views on the calibration of the dead-band.
	If the tax trigger continues to be required in RIIO-ED1 then it is appropriate to keep the dead band at 0.33% per cent of allowed revenues. However, it may be worth revisiting the reasons for the tax trigger as part of the financial modelling process.
Question 3	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?
	Yes we agree that the clawback should be spread over the eight years of RIIO-ED1.
Question 4	Do you agree that the revenue adjustment for tax clawback should be applied annually as part of the annual iteration process?
	Yes we agree.
Question 5	Do you agree with our treatment of expenditure for tax modelling including the cash flows of corporation tax payments?
	Yes as tax is on a cash basis and it smooths over time.
Question 6	Do you agree with modelling of expenditure subject to capital allowance and capital allowance pool balances?

	We disagree with the application of generic attributions to capital allowance pools as the process of the well justified business plan and fast-tracking is to set our own profiles. Ofgem are collecting annual analysis for this through the Regulatory Reporting pack (RRP) return. With regard to the updating of our pools at 1 April 2015 based on submitted returns and provisions, unless we have any significant issues outstanding with HMRC that should not provide big swings. It is too early to predict any effect of this.
Question 7	Do you agree with our proposal for funding business rates?
	It is not clear how long the mechanism to recover the difference between actual and assumed rates will be "switched off" for, or how long the revaluation exercise may take. It would it be more straightforward to keep the mechanism turned on but to make any required downwards adjustments through the annual iteration process. This would mean that re-calculations would only need to be made for companies that were not able to prove that they had taken reasonable actions to minimise the valuations, rather than for all companies.
Chapter Six Question 1	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?
	Yes we agree.
Question 2	Do you agree with our proposals for the basis for the first and subsequent reset adjustments?
	Yes we agree.
Question 3	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.
	The review itself was conducted well. However, it would be inappropriate to draw specific conclusions in respect of any scheme without further detailed consultation given that each scheme's investment and funding strategy is "scheme specific".
Question 4	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.
	Costs incurred by DNOs in relation to the administration of the pension schemes they sponsor (as opposed to the Trustees' administration of the schemes themselves) are mainly driven by legislation and the Electricity Supply Pension Scheme (ESPS) Rules. These costs are relatively immaterial and should be a pass-through unless it can be demonstrated that the DNO's costs of administering the scheme are not consistent with those sponsoring other, similar schemes. Costs incurred in relation to the Pension Protection Fund (PPF) Levy are almost entirely outside the DNO's control as costs are driven by inherited factors (e.g. the size of the scheme), factors outside the DNO's control (e.g. the investment strategy

	and the methodology used by the PPF). These costs should be a pass-through unless it can be demonstrated that the DNO has not taken steps to minimise the PPF Levy driven by factors within its control such as the D&B Score.
Question 5	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?
	Yes.
Question 6	Do you agree that the costs of contingent assets be funded if clearly demonstrated to be in consumer's interests?
	Yes we agree.
Question 7	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.
	Subject to completion of the Pensions Deficit Allocation Methodology (PDAM) along the lines set out in the Energy Network Association's draft dated 4th October 2012 and clarification of the treatment of employers' pension scheme admin costs and the PPF Levy (see Q4 above), it is clear how Ofgem require DNOs to prepare their business plan. However, a detailed spreadsheet template of how the various true-ups will be applied (September 09/Established Deficit, Use of DPCR5 Deficit and on-going Allowances, PDAM, Early Retirement Deficiency Contributions (ERDCs)) would be useful to ensure consistency between DNOs.
Chapter Seven Question 1	We invite views from interested parties on the proposed annual iteration process.
	The proposed annual iteration process appears logical and we welcome the opportunity to recover adjustments to revenue on a timely basis. It is, of course, imperative that the PCFM is tested and agreed well in advance of the start of RIIO-ED1 and we look forward to being involved in this process.

Uncertainty mechanisms

Chapter Two Question 1	Are there any additional criteria that we should take into account to guide the appropriate use of uncertainty mechanisms?
	No. Where any of the uncertainty mechanisms considered in this section meet the required materiality thresholds at any time in RIIO-ED1 they should be eligible for logging and reviewing at RIIO-ED2. However there would be no intention to have any item double counted i.e. where already allowed at the RIIO-ED1 re-opener.
Chapter Three Question 1	Do you have any views on the design of the proposed high-volume low-cost (HVLC) connections volume driver?
	We would like to work with Ofgem on further work to understand the proposed changes to the HVLC shared assets mechanism.
Question 2	Do you have any views on the design of the proposed low carbon technologies volume driver?
	We will work with Ofgem on further work to develop this mechanism.
Question 3	Do you have any views on the design of the proposed smart meters volume driver?
	Ofgem has recognised that there are three main cost impacts of domestic smart meters. Each of these needs a separate uncertainty mechanism: • Additional call-outs related to smart meters installation work - volume driver. • Fees for the use of the DataCommsCo (DCC) communication – pass through. • Additional DNO system costs to enable the use of smart meter data – re-opener. In addition to the volume driver for call-out costs, the annexe on uncertainty mechanisms states that the costs or fees charged for use of DCC services as mandated by their licence will be treated as pass through items. We agree with this treatment. There also needs to be a smart meter re-opener mechanism related to costs for DNO systems, including data aggregation systems which will enable DNOs to effectively use smart metering data. This should have a 1% of base revenue threshold with a logging up facility.
Question 4	Do you have any views on the design of the proposed street works re-opener?
	The table indicates that no logging up at RIIO-ED1 will be allowed. If there are fixed windows of application, logging up does need to be allowed.

Question 5	Do you have any views on the design of the proposed enhanced physical site security re-opener?
	We support this re-opener.
Question 6	Do you have any views on the design of the proposed load related expenditure re-opener?
	With the addition of a truing up mechanism, the timescale for the reopener window will need to be carefully designed, to enable Ofgem to assess data, and the DNO to present their case for reopening. If there is a reopener window, then HVLC will need to be eligible for logging up at RIIO-ED2.
Question 7	Do you have any views on the design of the proposed high value projects re-opener?
	We accept the project threshold of £50m.
Question 8	Do you have any views on the design of the proposed innovation roll out mechanism re-opener?
	We welcome the opportunity to apply for additional funding for innovative projects relating to the low carbon energy sector.
Question 9	Do you have any views on the design of the proposed pension deficit repair mechanism re-opener?
	Yes we support this mechanism in principle. See also comments on Chapter 6 of the Financial issues annexe.
Question 10	Are there any additional mechanisms that we should be considering? If so, how should these be designed?
	Yes, as discussed above there also needs to be a smart meter re-opener mechanism related to costs for DNO systems including data aggregation systems what will enable DNOs to effectively use smart metering data. This should have a 1% of base revenue threshold with a logging up facility.
Chapter Four Question 1	Do you have any views on the proposed RPI indexation of allowed revenues mechanism?
	We support the proposed change.
Question 2	Do you have any views on the proposed cost of debt indexation mechanism?
	We have no concerns in relation to RIIO-ED1 although some further issues may arise in RIIO-ED2.

Question 3	Do you have any views on the proposed pass through of Ofgem licence fees and business rates?
	This should continue as under DPCR5. We would support the additional pass through of smart meter DCC fees. In addition it is not clear how long the mechanism to recover the difference between actual and assumed rates will be "switched off" for, or how long the revaluation exercise may take. It would be more straightforward to keep the mechanism turned on but to make any required downwards adjustments through the annual iteration process. This would mean that re-calculations would only need to be made for companies which were not able to prove that they had taken reasonable actions to minimise the valuations.
Question 4	Do you have any views on the proposed tax trigger mechanism?
	If the tax trigger continues to be required in RIIO-ED1 then it is appropriate to keep the dead band at 0.33% per cent of allowed revenues. However, it may be worth revisiting the reasons for the tax trigger as part of the financial modelling process.
Question 5	Do you have any views on the disapplication of the price control process?
	We agree that there is no need to make any changes in relation to RIIO- ED1 beyond bringing the drafting in line with third package requirements.
Question 6	Are there any additional mechanisms that we should be considering? If so, how should these be designed?
	We are not aware of any additional mechanisms that Ofgem should be considering.
Chapter Five Question 1	Do you agree with the scope of the mid-period review? If not, what changes to the scope are needed?
	We agree.
Question 2	Do you agree with the indicative process and timetable? If not, how could the process and timetable be improved?
	Yes we agree with the indicative process and timescale.
Question 3	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?
	We agree that Licence changes following a mid-period review need to be made in time to take effect by the April of the following regulatory year i.e. April 2019.

Reliability and Safety

Chapter Two Question 1	**Overview of Reliability and Safety** What are your views on the primary outputs and secondary deliverables for reliability and safety?
	Safety We agree that Safety should be a primary output. We also agree with Ofgem's conclusions from the debate within the Reliability and Safety Working Group (RSWG) that safety performance should not be financially incentivised. The requirements to keep staff and the public safe are clearly defined within health and safety legislation. The HSE has the appropriate powers to prosecute and fine companies that fail to meet those obligations. This, along with the negative publicity of a prosecution, means that there is sufficient incentive for companies to adopt safe working practices and reduce the risks for staff and members of the public. There is no need for an additional financial incentive. Reliability We agree that reliability should be a primary output. The use of Interruptions Incentive Scheme (IIS) and Guaranteed Standards of Performance (GSoP) should continue as the primary output measures. Both are based upon established and understood requirements that have been clearly defined and refined over a number of years. IIS incentives have been instrumental in improving reliability for customers. We do not agree that IQI percentages should be applied to the IIS as this would significantly weaken the incentive such that poorly performing companies would not be as incentivised to bring their performance up to benchmark. In addition the ability for good performing companies to continue to improve utilising IIS as a self-financing incentive would be severely limited. The associated secondary deliverables (Health Indices (HI) and Load Indices (LI)) were first introduced in DPCR5 and consequently are less well developed. We agree that greater consistency is required across the industry in how these are measured.
	In particular: (a) Do you agree that these are appropriate areas to focus on?
	Yes, we agree that reliability and safety are appropriate primary output areas.
	(b) Are there any other areas that should be included?
	Health Indices and Load Indices provide secondary deliverables for the main areas of network investment of asset replacement and load reinforcement, accounting for over 70% of expenditure in DPCR5.

	Additional secondary deliverables will represent diminishing proportions of network investment and any new mechanisms introduced should ideally be simple or at least proportionate in their complexity.
Chapter Three Question 1	**Safety** What are your views on the proposed primary output and secondary deliverables relating to safety?
	We agree with the proposed view.
Question 3	Do you agree with our proposal not to place a financial incentive on the primary safety output?
	We agree with this approach.
Question 4	Do you agree with our proposal to create an incentive framework for secondary deliverables for electricity distribution safety?
	We agree with this approach.
Chapter Four Question 1	**Interruptions Incentive Scheme** Do you agree with our proposal to align the IIS incentive rates with those proposed as part of RIIO-T1?
	We have commissioned our own research into customers' willingness to pay for reductions in both the frequency and duration of supply interruptions. The willingness to pay research was undertaken by Accent as an integral part of our stakeholder engagement programme. Accent surveyed 1200 domestic and 400 business customers. The survey results indicated that WPD's customers were willing to pay: • £1.84 each per year, by 2022/23, for a reduction in the frequency of supply interruptions from 80 Customers Interrupted per 100 Connected Customers to 60 Customers Interrupted per 100 Connected Customers. This translates to approximately £10 per customer interrupted, which should be compared with the DPCR5 incentive rate of £5; • £2.28 each per year, by 2022/23, for a reduction from 60 Customer Minutes Lost per Connected Customer to 55 Customer Minutes Lost per Connected Customer. This translates to £0.40 per customer minute lost, which should be compared with the DPCR5 incentive rate of £0.18. We estimate that if the IIS incentive rates were aligned with those proposed as part of RIIO-T1 that the incentive rate per customer minute lost would be in the order of £0.20 (assuming that 1 kWh equates to approximately 40 customer minutes lost). Whilst this broadly aligns with the DPCR5 incentive rate, it is materially lower that the results of our willingness to pay research. We note that there is no incentive rate proposed for RIIO-T1 that corresponds to customers interrupted and therefore there is no basis of aligning a RIIO-ED1 incentive rate with a RIIO-T1 incentive rate. Therefore, on balance, we do not agree with Ofgem's proposal to align the IIS incentive rates with those proposed as part of RIIO-T1. We propose that the following incentive rates should be applied:

£10 per customer interrupted; and

£0.40 per customer minute lost.

Question 2	What are your views on applying the efficiency incentive rate to the IIS incentive rates?

We disagree with this approach. The big success of previous price reviews has been the Interruption Incentive Scheme (IIS) which has driven significant performance improvements for customers in an area they value most. We therefore disagree with the proposal to apply the efficiency incentive rate to IIS as it has the effect of reducing the incentive to improve. More importantly it softens the blow to those companies who are underperforming.

We would support a more penal approach to the underperformers as there is a wide gap between the best and the worst revealed by their normalised performance.

The acquisition of CN by WPD and the improved performance of UKPN has demonstrated that despite the myriad of bogus technical excuses performance in reliability can be significantly improved by competent management. Hence the need to reward and penalise companies effectively. The table below demonstrates the relative performance change in CN over the first 12 months of ownership by WPD.

CML performance against benchmark

- 2010/11 HV CML as % benchmark

WPD South Wales	52%
WPD South West	52%
UKPN London	52%
SP Manweb	83%
SP Distribution	84%
Electricity North West	87%
NPG Northeast	101%
WPD East Midlands	102%
SSE Hydro	104%
SSE Southern	113%
UKPN Eastern	117%
UKPN South East	122%
NPG Yorkshire	136%
WPD West Midlands	136%

- 2011/12 HV CML as % benchmark

WPD South Wales	49%
WPD South West	52%
UKPN London	58%
SP Manweb	78%
WPD West Midlands	79%
WPD East Midlands	79%
UKPN Eastern	80%
UKPN South East	84%
Electricity North West	99%
SP Distribution	102%
SSE Hydro	103%
NPG Northeast	119%
SSE Southern	122%
NPG Yorkshire	128%

1

WESTERN POWER DISTRIBUTION

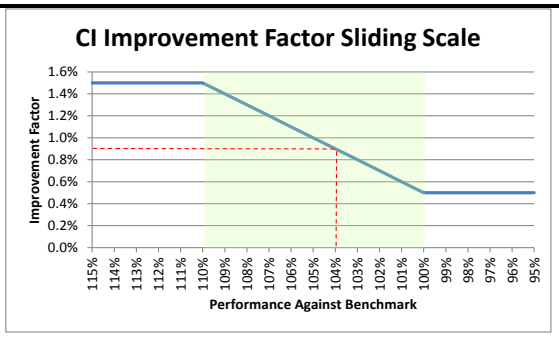
Since DPCR5, Ofgem has not provided ex-ante allowances for network performance improvements, expecting DNOs to evaluate projects by considering the revenue income from incentives. Reducing the value of the incentive will lead to fewer projects going ahead, limiting the scale of benefits for customers.

The proposal will also impact other investment decisions where reliability is factored into risk assessments. For example the secondary deliverable for asset replacement uses reliability as one of the consequences within criticality assessments. Reducing the value of the incentive may lead to less replacement activity being carried out, causing an increase in failure rates and deterioration of service for customers.

In addition, the proposal will destroy incentive value for DNOs that innovate to improve response times.

Question 3	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?
	No, the IIS mechanism has been developed and refined since its introduction in 2001-02 and has a good track record of successfully driving DNOs to make service improvements for customers. It clearly rewards (or penalises) DNOs for the service provided with revenues being adjusted within 2 years. The gas shrinkage rolling mechanism has two elements: an enduring performance that is determined from an end of period position; and non-enduring performance that is determined from the annual volatility in performance. The enduring performance element of the shrinkage rolling mechanism relies upon the performance at the end of the period. This single point assessment is translated into an assumption that the outperformance (or underperformance) represents a sustained position. This can be very misleading and confusing for stakeholders. Even the examples provided in Appendix 3 of the RIIO-GD1 Outputs and Incentives document show that companies with different enduring performance (one outperforming and one underperforming) can result with the same (net zero) rewards from the shrinkage incentive mechanism. The gas shrinkage mechanism could result in a GDN obtaining a net reward for having seven years of poor performance followed by outperformance in the final year. (The GDN would receive 8 years' worth of enduring performance reward that would outweigh seven years' worth of individual year penalties). Whilst this end of period assessment may be appropriate for assessing gas lost, it does not fit with the provision of customer service. Under IIS a DNO would receive seven years of penalties with one year of rewards, netting off to a penalty position. There is no justification for replacing the existing IIS.
Question 4	What are your views on the level of revenue exposure and do you believe we need to reintroduce a cap on outperformance?
	<u>Revenue Exposure</u> The level of revenue exposure is acceptable. <u>Outperformance Cap</u> There should not be a cap on outperformance.
Question 5	Do you agree with our proposal to set separate planned and unplanned interruptions and minutes lost targets under the IIS?
	Yes, the historic approach to deriving targets has evaluated planned and unplanned elements separately, but never presented them as individual targets. The working practices and approaches are quite different and setting separate targets will make it clearer and easier for stakeholders to understand the drivers of network performance. For planned work the targets will drive DNOs to seek innovative ways to reduce the impact on customers, particularly where investment programmes are increasing and targets could be failed.

	For unplanned incidents it will be clearer to identify those DNOs that are improving response and investing to minimise the number of interruptions and duration of faults.
Question 6	Do you have a preference amongst the options which we have outlined for planned interruptions and minutes lost target setting in RIIO-ED1?
	Our preference is for Ofgem to set the target based on a three year average with a two year lag. Whilst our preference would be to have full visibility of targets across the RIIO-ED1 period we accept Ofgem's concerns about generating forecasts over a long period. The rolling target approach for planned interruptions is therefore acceptable.
Question 7	Do you have a preference amongst the options which we have outlined for unplanned interruptions and minutes lost target setting in RIIO-ED1?
	Out of the four methodologies that are proposed by Ofgem we prefer those that define targets up front using the established approach of disaggregation and benchmarking to derive targets. Setting targets up front provides clarity and certainty for the RIIO-ED1 period allowing investment decisions for performance improvement to be balanced against the returns available for outperforming targets. <u>Ofgem Setting Up Front Targets</u> We agree that there should be improvement factors applied to the targets to drive companies to develop efficient approaches to improving performance, but for CIs the current approach to differentiate between companies above and below benchmark is too blunt. For example, a DNO that is just worst and that benchmark at 100.01% gets a 1.5% per annum improvement factor, whilst a DNO just better than benchmark at 99.99% gets 0.5%. The performance of the two DNOs is relatively similar but minor differences, which could be as a consequence of benchmarking statistical error, lead to a significant impact on tightening of targets. We therefore propose that a sliding scale should be introduced. The proposed sliding scale has three elements: • Where performance is at or better than benchmark, DNOs receive an improvement factor of 0.5%. This ensures that as a minimum, DNOs receive a 0.5% per annum improvement factor. • Where performance is worse than 110%, DNOs receive an improvement factor of 1.5%. • Where performance is between 100% and 110% a sliding scale operates where each 1% of benchmark is equivalent to 0.1% of improvement factor (e.g. a DNO whose performance against benchmark is 104% will receive an improvement factor of 0.5% + ((104%-100%)*0.1) = 0.9%). This is illustrated in the chart below.



Question 8	Do you agree with our proposals on exceptional events?

Yes we agree.

Severe weather exceptional events

The existing mechanism has worked well to limit the volatility in network performance that is caused by severe storms. We agree that the thresholds should be updated to reflect recent daily average incident rate.

One-off exceptional events

We agree with the removal of the exemption from guaranteed standards for one-off exceptional events, provided that the proposed provision for recovery of payments where a DNO passes a one-off exceptional event audit is implemented. This will allow customers, who have been without power and inconvenienced for long period of time, to receive guaranteed standard payments without undue delay, whilst providing protection for DNOs for incidents beyond their control.

The consultation makes reference to reviewing the thresholds for one-off events without providing any details on what Ofgem is considering. This matter should be debated with the DNOs through the Quality of Supply Working Group in advance of the strategy decision in February.

Question 9	Do you agree with our proposed approach to smart electricity meters?

Yes we agree.

Rebasing Mechanism

As indicated in the discussions at the Reliability and Safety Working group, the introduction of smart meters and the ability to provide more representative interruption data should not have a significant effect on performance reporting and therefore the targets that have been established.

The main potential area of impact is for reporting of LV incidents where currently the number of customers affected by an incident is calculated using a simple assumptions or estimates.

A rebasing mechanism that offers protection for both customers and DNOs is appropriate.

Utilising Smart Meter Data

The roll out of smart meters is due to be completed by 2019, before the end of RIIO-ED1. Prior to the completion of the roll out it will not be feasible to rely upon

	smart meter data as it could under-report the number of customer affected where installation of smart meters in incomplete. There may be a range of DNO benefits that are facilitated by smart meter and therefore it is right that DNOs should develop systems to handle and make effective use of the data during the earlier part of RIIO-ED1, in readiness to utilise the date from 2019.
Question 10	Do you agree with us not incentivising short interruptions in RIIO-ED1?
	Yes, the majority of improvements to the number of customer interruptions have been achieved through the installation of additional protection devices and the application of automatic sequence switching to reduce the impact of faults on customers. These techniques replace long duration interruptions with sub three minute power outages significantly reducing the inconvenience for customers. Reducing short interruptions would require significant network investment over and above that which is used to maintain network risk.
	Additional Response – Cut out failures
	The consultation makes reference to discussions at the RSWG where it has been considered whether cut-out faults should be included in the IIS mechanism. Our preference is for cut-out faults to remain excluded from the IIS mechanism for a number of reasons: • Guaranteed standard EGS1 requires DNOs to respond to the failure of a distributors fuse within 3 hours. When a single customer is off supply it is unknown what the cause is and therefore all single no supply calls are treated in the same manner providing a quick response. Guaranteed standard ESG2 provides a further protection for the customers where supplies need to be restored with 18 (proposed to be reduced to 12) hours. Individual customers therefore have a number of protection mechanisms to ensure that DNOs respond to a supply failure. • Whilst there are several thousand incidents per annum their materiality within the IIS mechanism would be low. • Visibility of the volume of activity is already provided within annual submission of non-IIS trouble call activity. • To be wholly consistent with the IIS target setting mechanism historical performance would need to be incorporated into target setting and benchmarks developed. • The roll out of smart meters will lead to an increase in the volume of call outs to work at the service position. This short term one off activity would not be adequately catered for within benchmarking of historical performance and adjustments would need to be factored into targets. These adjustments would be based upon forecasts of activity where the volumes are uncertain.
Chapter 5 Question 1	**Load Indices** What are your views on our proposals on Load Indices (LIs)?
	The proposals for Load Indices represent improvements to the measures used for

DPCR5.

These improvements should assist in achieving consistency in the assessment of Load Indices, though some further work is required to improve the associated definitions and guidance in order to ensure that consistency across DNOs is achieved. This is discussed further in our response to question 2.

The creation of a Distributed Generation index also seems a sensible development, as discussed further in our response to question 4.

The proposal to establish a mechanism for deriving a single weighted LI risk score and outlining how this shall be used to set the deliverable and evaluate performance will be a significant improvement. This shall ensure that the deliverable is clearly understood and defined, from the outset. This clarity is welcomed.

Question 2	Do you agree with our proposed common LI bandings?

WPD fully supports the principle regarding the implementation of common definitions for the LI bands across all DNOs. There are however a range of issues that need to be addressed in order to finalise common LI bandings.

- A pre-requisite for establishing common LI bandings is the development of consistent definitions for the elements that are used to derive Load Indices, such as firm capacity, transformer ratings, treatment of embedded generation and maximum demand. DNOs do not currently use common definitions for such elements. Without the use of common definitions, the adoption of common LI bandings would misrepresent the loading risk managed by each DNO. If a common set of criteria for LI bands is implemented, without a common set of definitions of Firm Capacity, Maximum Demand etc. loading risk will still not be consistently evaluated across the industry.

- The proposed criteria for the LI4 banding does not appear to be appropriate. The proposed banding for LI4 indicates that a substation should to be classed as LI4, when the maximum demand exceeds 100% of the firm capacity, provided this occurs for less than 24 hours in the year. At many substations peak demand would typically be expected to occur for only for one or two half hours in a day. The proposed criteria for the LI4 band means that it could include substations where the maximum demand exceeds the available capacity up to 48 days in each year. This would appear inconsistent with an LI category for substations where mitigation only 'requires consideration'. We would propose that the duration criteria for LI4 should be up to 4 hours (8 half hours), implying a loading beyond the firm capacity occurring on up to 8 days in a year.

- The selection of criteria for common LI bandings needs also to be consistent with any methodology for derivation of a weighted LI risk score (as discussed in the proposals on 'Setting the deliverable', within the consultation). The Load Indices bandings and definitions need to enable a weighted risk score to applied that correctly reflects the levels of loading risk in the network.

  Loading risk, as indicated through Load Indices, is the risk associated with insufficient capacity to support the network demand, under credible 'n-1' conditions. This would be the risk of damage to equipment through overloading and the potential interruptions to customer supplies that may result etc. The banding of the LIs must be able to distinguish the point that such overloading would be expected, so that a suitable weighting could be applied for such cases in the derivation of the single weighted risk score.

	However, where sufficient capacity exists to meet demand there is **no** risk of overloading under such network running conditions. In such cases, this also needs to be identifiable from the LI bandings and definitions, so that this is correctly reflected in the weighted risk score. This may for example necessitate an equal (and low) weighting being applied to LIs 1 to 3. Further development of the 'overall package' of common bandings and definitions needs to be undertaken for consistent evaluation of loading risk. These should be developed such that they are also suitable for application in the creation of a weighted LI risk score that reflects the actual loading risk.
Question 3	Of the two options outlined for determining the LI deliverable, which do you think is the most appropriate?
	The first option outlined in the consultation paper commits a DNO to delivering a specified LI risk improvement relative to the forecast position without investment at the end of RIIO-ED1 i.e. delivery of a specified delta. This measure is only appropriate where the LI risk can accurately be predicted. Given the uncertainty around demand levels in the low carbon future, and the associated uptake of small scale distributed generation (which also impacts upon Load Indices), this option is not appropriate. In particular, where a forecast increase in LI risk (without intervention) does not materialise, under this option, this would lead to a commitment to an improvement delta that cannot be delivered without making unnecessary investment. It is more appropriate for a DNO to commit to maintaining loading risk around a target level, as per the second option, provided DNO funding levels are amended in response to differences in required levels of risk reduction arising from demand levels that significantly differ from the forecast levels. This provides a more appropriate mechanism for dealing with uncertainty around demand levels. In considering the second option, it needs to be recognised that not all growth in demand requires intervention to be undertaken. For example, moderate demand growth in lower utilised substations (such as those in LI1, LI2 or LI3 categories) does not require intervention to be undertaken. Either the construction of the single weighted LI score, or the width of the upper and lower bounds around the target level, need to be suitable to account for this, and other volatilities in demand levels, without triggering financial penalties.
Question 4	Where significant numbers of substations that predominantly cater for demand arise, do you agree that the development of a Distributed Generation (DGI) Index for generation-dominated substations would be feasible and appropriate to implement at the mid-period point of RIIO-ED1?
	A separate Distributed Generation Index is a feasible and appropriate development, where substations are 'generation dominated'. However, it is important that the term 'generation dominated' is clearly defined, as there are a number of ways that this could be interpreted, particularly as a substation may be 'generator dominated' only at certain points in the year. It is suggested that a 'generation dominated' substation could be considered to be one where reverse powerflow occurs, as a result of distributed generation, at some point within the year. Reverse powerflow occurs where the output from distributed generation connected to a substation exceeds the coincident load connected to the substation, causing power to flow from the lower voltage side of the substation to the higher voltage side. A Distributed Generation Index could reflect the maximum level of reverse

	powerflow relative to the capability of the substation to cope with reverse powerflow (i.e. a reverse powerflow capacity), taking account of 'n-1' conditions. If Distributed Generation Indices are introduced at 'generation dominated' substations, these should not replace the Load Index measures for these substations. Both a Load Index and a Distributed Generation Index should be produced for such substations. This is because these are independent measures, with the maximum 'utilisation' due to load occurring at different times to the maximum 'utilisation' due to generation. The maximum 'utilisation' due to generation may indeed be higher than the maximum 'utilisation' due to load, even if the maximum load is significantly greater than the reverse powerflow due to generation. This is because the rating of the substation assets may be different at these two different points in time due to seasonal or load cycle differences, or substation assets may have different ratings when operating under reverse powerflow conditions (for example, this occurs with the rating of some transformers, where the tapchangers have different capabilities depending upon the direction of current flow). This, along with the requirement to separately forecast load growth and uptake of distributed generation, necessitates separate evaluation of the Load index and any Distributed Generation Index. It should be noted that the requirement for reinforcement in generation dominated EHV 'networks' is often driven by voltage regulation requirements rather than thermal ratings of substation transformer/assets. The measure of this reinforcement requirement may be beyond the ability of a DG Index, and require separate consideration.
Chapter Six Question 1	**Health Indices** What are your views on our proposals for Health Indices (HIs)?
	WPD are generally in agreement with the proposals for development of Health Indices for RIIO-ED1, in particular: • The incorporation of consequence of failure into Health Indices, through the introduction of a Criticality Index, to enable evaluation of risk; and • The introduction of greater consistency between DNOs. These are important developments in improving the Health Indices. More detail regarding WPD's views can be found in our responses to questions 2 to 5 of this chapter.
Question 2	Do you agree with our proposals to introduce criticality into the HI framework?
	Yes we believe that the introduction of a measure of consequence of failure into the HI framework enables the risk based decisions that a DNO makes, in managing the health of the network assets, to be reflected. Management of the level of risk, arising from asset failure, is a key consideration in the derivation of a DNO's proposals for volumes of asset replacement and refurbishment activity. The proposed framework shall assist DNOs in demonstrating this, and commit to an appropriate deliverable. It is essential that the proposed Criticality Index is defined and constructed in such a way that it enables the relative consequences of failure to be understood: between different assets within the same Health Index Asset Category; and between assets in different Health Index Categories.

	This is a fundamental requirement for the framework to be able to reflect risk based prioritisation, particularly where a DNO's actual mix of activity deviates from that agreed in the price control determination. This shall require the magnitude of consequence of failure to be evaluated and visible within the Criticality Index. The consultation document identifies three types of consequence that should be considered within the assessment of Criticality Indices (i.e. System criticality, safety criticality and environmental criticality). A fourth consequence of failure needs to be included, incorporating the costs associated with repair, or for major failures, replacement of an asset. As it proposed that financial consequences shall be linked to performance against the deliverable, it is necessary that there be a reasonable consistency in the assessment of consequence of failure by DNOs. It should, however, be noted that there may be material differences in the magnitude of consequences of failure between DNOs, for the same asset types in the same type of locations, due to different valuations for the impact of failure. For example where network performance consequences are evaluated, it needs to be noted that different DNOs will have different IIS rates, restoration performance etc., leading to different levels of consequence. Also, it shall be necessary to ensure greater consistency, between DNOs, in assessment of Health Indices, themselves. In particular, Health Indices need to be suitable to be combined with Criticality Indices to create a risk measure. This means that Health Indices, used for this purpose, cannot include consideration of factors that will, under the proposal, be incorporated also in the Criticality Indices. This is discussed further in our response to question 4.
Question 3	Do you agree with our proposals for applying financial consequences in the case of material under or over delivery?
	We agree that it would be appropriate for financial consequences to apply, in terms of penalties and rewards, in the case of a material under or over delivery against the Health Indices deliverable. This requires the assessment of under or over delivery to be capable of differentiating between delivery through interventions that only provide short term management of the asset health risk, and those interventions that provide long term resolution. It is feasible that, a DNO could agree to deliver an improvement in Health Index risk that is based upon long term solutions (such as asset replacement), but over delivery of the HI risk improvement could be achieved by performing a higher volume of lower cost solutions (such as refurbishment) that provide the same improvement but have significantly shorter longevity. In such cases, the use of short term solutions may not represent the most effective way of managing asset risk, when the whole life cost is considered. It would not be appropriate for rewards for over delivery to obtained where the over delivery is achieved through inefficient overall investment, when expenditure over a longer timeframe is considered. Also, greater consistency is required, between DNOs, in the categorisation of Health Indices and Criticality Indices, where financial consequences are introduced. This is discussed further in our response to questions 2 and 4.
Question 4	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?

	Yes however it is important that the guidance and definitions, surrounding the assessment of Health Indices are improved to ensure greater consistency between DNOs. The guidance and definitions used for DPCR5 permit a great deal of scope for interpretation within the categorisation of asset health. This area needs to be improved for RIIO-ED1, particularly as penalties and rewards are proposed for under and over delivery. Greater consistency should be developed in the criteria under which assets are categorised within each Health Indices band. This is very important, more so than driving for consistency in the types of assessment that DNOs should use in the calculation of Health Indices, because Health Indices shall act as a proxy for probability of failure, when combined with the proposed Criticality Indices, in the evaluation of risk. The introduction of a consequence of failure measure, through Criticality Indices, means that Health Indices need to be suitable to be combined with Criticality Indices to create an appropriate risk measure. This means that the criteria under which assets are categorised within each Health Index band needs to be reflective of the probability of failure of the asset. The Health Indices should not include consideration of factors such as safety or environmental performance, which may have been included in some DNO's definitions of 'end of serviceable life' for DPCR5 Health Indices. These factors will be represented in the consequences represented by the Criticality Index. The requirement to redefine Health Indices, such that they are suitable to form part of a risk measure in RIIO-ED1, should be taken as an opportunity to improve the consistency in guidance and definition. Improved guidance and definition around Health Indices would facilitate an audit framework for these deliverables, which WPD believe should be established for RIIO-ED1.
Question 5	What are your views on the suggestion that we would mandate DNOs to develop and maintain HIs in specified asset classes?
	WPD agrees that in some Health Index Asset Categories, DNOs should be mandated to develop and maintain HIs. Mandated HIs should not be introduced in asset categories where it is necessary to use generic population models, based on type, to produce Health Indices. In such cases, the generic modelling is suitable to provide an overall view of the health of the asset type, but is incapable of reliably informing any programme of works, or providing a suitable representation of the benefit introduced by any intervention activity, at a localised level. Such Health Indices would therefore be inappropriate to be considered within any secondary deliverables that are subject to financial consequences, or performance measures. In particular, generic models are required for non-pressurised underground cables because reliable condition assessment requires physical examination of the cable (i.e. opening up of the cable), which introduces potential risks to the integrity of the cable, or diagnostic testing that cannot cost effectively be routinely performed. Health Indices should not be mandated for these assets. Similarly, mandated Health Indices for overhead conductor on wood pole lines are also inappropriate. In mandating Health Index Asset Categories for the development and maintenance of HIs, it is probably appropriate to consider: • Assets with high cost of replacement. • Assets where the consequences of failure are high; and

	• Assets where the overall expenditure on the asset type is high.
Chapter Seven Question 1	**Guaranteed Standards** What are your views on our proposals for the guaranteed standards?
	Please see below.
Question 2	Do you feel that we should conduct a mid-period review of the guaranteed standards?
	No, the Guaranteed Standards are sufficiently mature that a mid-period review should not be necessary.
Question 3	Do you agree with our proposal to remove the potential double exemption of one-off exceptional events under the IIS and the Guaranteed Standards?
	We stated in our May 2012 response that we did not object in principle to Ofgem's proposal. The consultation states that "Our current view is that this would require the removal of Regulation 10 (e)." This is not correct as exceptional circumstances would still apply to normal weather incidents not related to exceptional events, and also in severe weather. The requirements to invoke this exemption need to be applied to the circumstances affecting an individual customer, although WPD does not usually invoke this exemption. To achieve Ofgem's intention, the amendment to the Statutory Instrument 2010 698 needs to be made to Clause 6 (Supply restoration: normal conditions – 5,000 or more customers' premises interrupted). Sub paragraph 3 (a) needs to be amended to carve out the exceptional circumstances exemptions (3) The circumstances described in this paragraph are:– (a) each of the circumstances described in regulation 10 (*insert with the exception of 10(e)*); In addition Ofgem should review the caps in CRC8, table A15 and introduce a specific cap for one-off events. The current annual caps are designed for normal and severe weather and are driven by customer numbers. The cap on a one-off incident should be common to all DNOs, to reflect the common 5,000 customer threshold. A cap of £1.08m would equate to all 5,000 customers being off supply for 4 days and receiving the maximum amount of £216 each.
Question 4	Do you agree with our proposal to remove all of the Highlands and Islands customer exemptions?
	Yes we agree.
Question 5	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?
	We support reducing the normal weather standard from 18 hours to 12 hours.

	WPD have undertaken considerable research with customers into their priorities for investment and service improvement in the future. Reducing the duration of power cuts, particularly those of longest length was seen as an important area for focus. Specifically, WPD conducted market research with 1600 domestic and business customers. We explicitly tested whether customers would like to see the guaranteed standard threshold lower from 18 hours. Reducing from 18 hours to 12 hours was strongly supported by both domestic and business customers, with this ranking as a top 10 priority. Lowering the guaranteed standard threshold to 12 hours was also proposed by our expert Customer Panel. In recognition that it would not be possible in all circumstances to restore all customers within the 12 hour window their view was that we should develop and extend the support services provided to customers. This will be incorporated into the social obligations section of our well justified business plan. Through the adoption of customer focused working practices we have virtually eliminated the occurrence of supply interruptions lasting longer than 18 hours in normal weather across our four operating areas. The same working practices have resulted in our 12 hour performance being superior to most other DNOs 18 hour performance. However, we do not anticipate that we will be able to eliminate failures associated with a 12 hour standard. It does not seem logical that the best performing DNOs would be penalised financially due to the tightening of a Guaranteed Standard. Therefore, we propose that an "efficient level" of 12 hour failures should be funded within the price controlled revenue for each DNO. This would then incentivise DNOs to match or outperform that efficient level of funding.
Question 6	Do you agree with our proposal to keep non-domestic customers in the guaranteed standards?
	Yes we agree.
Question 7	What are your views on the feasibility and practicality of making payments to all customers automatic?
	For some of the guaranteed standards it is not feasible or practical to make payments fully automatic. The reason that payments are not automatic is that the DNO may not be aware that they have failed the guaranteed standard – fault restoration, multiple interruptions and planned shutdowns. Without smart metering data systems it will continue to be the case that automatic payment is not feasible or practical.
Question 8	Do you agree with our proposal to make payments to Priority Service Register customers automatic?
	No we do not agree. See answer above.
Chapter Eight	**Worst Served Customers**
Question 1	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.

Option 1 – Retain and improve the existing mechanism

Pros

- The mechanism provides a clear definition of which customers will benefit.
- Allowing alternative spending caps would assist those DNOs that require carrying out more expensive solutions to improve service for worst served customers.
- Allowing alternative performance improvement would assist DNOs to address some worst served customers by making slight improvements to performance (this could be outweighed by the corresponding con).

Cons

- Alternative performance improvement would mean that marginal improvements across all schemes would be acceptable, potentially leading to less beneficial actions being taken.
- Retaining the current definition of worst served customers limits the number of customers potentially benefitting from investment. Lowering the overall threshold to, say, 13 faults with a minimum of two in each year would increase the number of customers classed as worst served and increase the number of projects being carried out.

Option 2 – Incentive scheme

Pros

- It would provide an incentive for DNOs to seek to minimise the total number of faults experienced by customers in any one year.

Cons

- This option would not guarantee any improvements for worst served customers.
- There would not be a direct link between the work and those customers defined as being worst served.
- There is considerable volatility, from year to year, in which customers experience poor performance. It will be difficult to establish whether improvements are due to investment or whether they have just naturally 'gone away', making the incentive scheme outcome subject to chance.

Option 3 – Guaranteed standards

Pros

- Customers who are deemed worst served would receive compensation.

Cons

- As with all guaranteed standards they would be a 'back stop' for performance and would not guarantee significant improvements for worst served customers.
- Ex-ante allowances would need to be provided for DNOs to improve performance because the IIS incentive would not provide sufficient return to make projects viable.

Preference - We prefer option 1.

It provides:

- A clear definition of worst served customer.
- A cap on expenditure per customer to ensure that excessive amounts are not being spent on small numbers of customers, avoiding the risk of cross subsidy concerns.
- A definition of minimum improvement ensuring that projects provide tangible

	and sustainable improvements. • A mechanism for DNOs to recover costs.
Chapter Nine Question 1	**Resilience** What are your views on our proposals for network resilience?
	<u>High Impact Low Probability (HILP) events</u> We agree with the proposals. Providing flexibility to consider HILP investment should the government provide guidance and direction, gives DNOs sufficient scope to re-open the price control where costs are material. Ofgem's proposal to retain the DPCR5 approach (including opportunity for a re-opener) is acceptable. <u>Flooding</u> We agree that a flooding resilience metric could be used as a secondary deliverable for the assessment of delivery of risk mitigation. The proposed mechanism that uses the likelihood of flooding combined with the number of customers at risk is workable. Careful consideration should be given to treatment of substations supplying single critical customers (e.g. hospitals). These should either be excluded or assigned a critical customer weighting to ensure that the provision of flood defences for these customers is adequately accounted for in secondary deliverables. We do not agree that an incentive scheme to promote the timely reduction of risk is necessary. Where necessary time bound deliverables will be dictated by government (e.g. ESQCR). There are many areas of risk that the DNOs manage, with investment decisions being taken on a balanced judgement of priorities. Introducing an incentive for timely reduction of flooding risk will skew the judgments being made. <u>Black Start</u> We agree that a secondary deliverable for Black Start would drive DNOs to complete projects and provide stakeholders with confidence that resilience is being improved. <u>Combining Flooding and Black Start into a composite secondary deliverable</u> The secondary deliverables should not be combined. Whilst both flood defences and Black Start address resilience they are quite different and separate programmes which should address the risks of both issues rather than potentially trade them off against one another.
Question 2	Do you think that our proposals cover the right areas or are there other areas that you think we should be considering?
	We agree that the following areas proposed by Ofgem should be considered under network resilience: • HILP. • Flooding and; • Black Start. There is one additional area that needs to be considered: • Cyber-terrorism.

Cyber-terrorism is the deliberate use of computers and the internet to achieve political or ideological objectives by causing damage to equipment, disrupting processes or obtaining confidential data.

As more dependence is placed upon IT systems for communication and control of distribution networks there is an increasing risk that electricity supplies could be open to an attack. The development of automatic network switching, smart networks and data flows from smart meters will all require further expansion of computer based solutions for network control and customer information.

Adequate defences need to be established and maintained to protect control systems and customer databases. Firewalls and defence systems will need to be regularly refreshed to maintain resilience against increasingly sophisticated modes of cyber-attack.

Outputs, incentives and innovation

Chapter Two Question 1	We welcome respondents' views on the approach we have taken to develop the outputs framework.
	The approach taken by Ofgem to date, building on the approaches from DPCR5 and using the principles established and consulted on as part of RIIO-ED1 is sensible. In most areas Ofgem has developed measures in conjunction with the DNOs to ensure they are appropriate and meet the above criteria. WPD is supportive of all the output measures proposed at this time.
Question 2	Do any of our proposed output measures present potential difficulties in ensuring the submission of accurate and comparable data?
	None that we can think of. There are some areas where the proposed output measures will require new data and definitions that need to be developed. For these the issue is one of timing as framework for reporting accurate and comparable data will not be in place in time for the business plan submissions.
Question 3	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?
	We agree with Ofgem's minded to position to use basis points to set caps and collars on RORE.
Question 4	Are there any aspects of our proposed outputs framework where the reporting requirements are likely to lead to disproportionate regulatory costs?
	At present we do not believe so.
Chapter Three Question 1	Do you agree that a specific output or incentive focussed solely on the connection of low carbon technologies is not necessary?
	Yes, uncertainty mechanisms are needed but not incentives.
Question 2	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?
	Yes, the reference case is needed by the end of 2012 if it is going to be properly assessed. The reference case also needs more information than is contained in the Department of Energy and Climate Change' Smart Grid Forum Work Stream 1 low case forecast. In particular, it needs: • Regionalised data and data on all distribution connected generation. • Clustering assumption to be used as well as new connection forecasts. • Energy efficiency forecasts and the ratio of Low Carbon Technology being installed in new buildings compared to those that are retrofits to existing buildings.

	Without this level of detail there will be little ability to compare the different DNO approaches.
Question 3	Do you agree that an uncertainty mechanism is required to manage the uncertainty around the penetration of low carbon technologies?
	Yes, it will also be appropriate to have a 'deadband' within which the mechanism does not operate to give greater stability in Use of System charges. We agree that the same mechanism should be used for all DNOs and hence a decision on which mechanism should be part of the strategy decision document.
Question 4	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?
	Yes we agree with the approach.
Question 5	Should costs of load and generation growth for existing customers in profile classes 1-4 be socialised, until smart metering data is available?
	Smart metering data may ultimately provide better information to avoid the need for reinforcement in the future. However the penetration of new smart metering devices through RIIO-ED1 will be insufficient to allow accurate network modelling. As costs for applying either smart solutions or reinforcement of networks during this period will continue to be incurred before or at the time additional load is added, we can see a strong argument for socialising the costs of additional demand for profile 1-4 customers. However, we believe that specific charges could apply to customers whose equipment causes power quality issues on the network. Whilst there are difficulties in deciding at what level of power quality impact they should apply, we believe that an appropriate level is where equipment requires source impedance that is lower than that LV networks are currently designed for. However All DNOs include earth loop source impedance in their specifications for ICPs as part of competition in connections; this is not necessarily the same as the source impedance relevant for power quality so there may be variation between DNOs in application of a source impedance limit relevant to control power quality and the value used. WPD impose design limits for both earth loop impedance and source impedance.
Question 6	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?
	See response to question 5 above.
Question 7	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?
	Yes, due to the way scaling works, the current methodology will result in all UoS charges rising and hence costs in the 1-4 profile classes will rise more than charges.

Chapter Four Question 1	What are your views on the primary outputs and secondary deliverables for reliability and safety? In particular:
	See response to Question 1 of Chapter 2 in the response to the Reliability and Safety Annex.
	(a) Do you agree that these are appropriate areas to focus on?
	See response to Question 1 of Chapter 2 in the response to the Reliability and Safety Annex.
	(b) Are there any other areas that should be included?
	See response to Question 1 of Chapter 2 in the response to the Reliability and Safety Annex.
Chapter Five Question 1	Will our proposed approach ensure effective losses reduction actions?
	Yes.
Question 2	Will our proposed losses discretionary reward provide the required incentive on DNOs to reduce losses? Should this be awarded twice during RIIO-ED1 or more frequently?
	Twice would be appropriate as it will ensure that measures implemented are multi-year and give long term benefits.
Question 3	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?
	Loss reduction and theft reduction should be treated separately due to the difference in costs of the activities. The approach proposed appears appropriate.
Question 4	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?
	Yes, guidance should make clear where the 10% allowance could be used and give a few examples. WPD view the 10% as applicable to schemes where at least some of the line to be undergrounded is within the Areas of Outstanding Natural Beauty (AONB)/National Park (NP) area. Guidance should continue to allow flexibility but make clear that in general, a scheme should have the majority of the line within the AONB/NP area but that undergrounding of sections of the same line outside the boundary is ok as long as no more than 10% of overall spend allowance is used for this. How this is split across schemes where this applies should be up to the DNO in consultation with the stakeholder/interest groups. This will allow some schemes that have more than 10% of the cost of that scheme outside the boundary to still be considered against stakeholder preferences. The

	10% rule could equally apply to a DNO line which crosses a boundary to another DNO but is within the AONB/NP on both sides of the DNO licence boundary.
Question 5	Are National Scenic Areas (NSAs) sufficient to allow for effective use of the scheme in Scotland in the protection of visual amenity?
	n/a – matter for Scotland only.
Question 6	Do you agree with our proposals with regard to DNO assessment and stakeholder engagement within the undergrounding scheme?
	WPD agrees with the proposals for DNO assessment as it gives the necessary flexibility to balance various factors for a scheme, which can often be scheme specific. With regards to stakeholder engagement, WPD have found the use of steering groups very beneficial to the effective delivery of the initiative and would see this continuing in RIIO-ED1. We support the use of a published policy to cover stakeholder engagement and support to interest groups.
Question 7	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?
	We agree with the proposed approach. Whilst the scope is correct, DNOs should be given guidance to ensure they include the same activities in their total submissions to allow comparisons to be accurately made.
Question 8	Do you agree with our proposed approach to SF_6 monitoring, reporting and management?
	We agree with the proposed approach.
Question 9	Do you agree with our approach for fluid filled cables?
	We agree with the proposed approach.
Question 10	Do you agree with our approach to noise reduction?
	We agree with the proposed approach.
Question 11	Do you agree with our assessment of the need for an additional environmental discretionary reward?
	We agree that there is no requirement for an additional environmental discretionary award.
Chapter Six Question 1	Do you agree with our proposal to retain the Broad Measure of Customer Satisfaction (BCMS) and increase the maximum revenue exposure?
	Yes.

Question 2	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.
	The underlying principle in setting the targets include the fact that it must be possible for the top industry performer in all components of the BCMS to earn 100% of the incentive available (+1.5%) and vice versa, in terms of penalty. The target setting approach should deliver rewards and penalties that are sufficiently strong to drive performance improvements. Historically, the introduction of incentives has driven a narrowing of the performance range. This may necessitate revising the targets annually if the underlying principle can no longer be met.
Question 3	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.
	Providing it is possible to identify these customers they should be included.
Question 4	Should the provision of information to connections customers be taken into account when calculating the score of the customer satisfaction survey?
	Provision of information is a significant issue for connections customers. It would be better assessed against a set of objective criteria rather than on a subjective response to a survey.
Question 5	Should the number of unsuccessful calls be taken into account when calculating the score of the customer satisfaction survey?
	Yes, there are wide variations in performance when comparing abandoned call rates between companies and the customer satisfaction survey should focus not just on the response a customer receives from a DNO when contacting them by telephone but the ease of access when making that contact in the first place. The approach should be the same as that adopted for the DPCR5 telephony survey and should apply across all enquiry lines (not just no-supply lines).
Question 6	What indicators should we use to measure complaints performance? How should these be weighted?
	The principle of the Consumers Estate Agents and Redress Act is to make it easy for customers to complain and for companies to resolve issues quickly. Where companies cannot resolve complaints in a timely or appropriate way the customer has the right to seek alternative forms of redress via Ombudsman schemes. These principles are embedded in Ofgem's complaint handling standards. To maintain consistency with the legislation and the complaint handling standards, the complaints metric indicators should therefore continue to be based on the number or percentage of complaints not resolved by the end of the next working day, the number that are referred to the Ombudsman and the number that are upheld by the Ombudsman. The current weightings on these indicators should be reviewed and the weighting on Ombudsman complaints reduced reflecting the small number of complaints and the

	disproportionate effect that they can have within the current incentive regime.
Question 7	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?
	The approach should be the same as that adopted for the complaint handling incentive due to be introduced for RIIO-GD1 and RIIO-TD1.
Question 8	Do you agree with the proposed approach to assessing stakeholder engagement?
	Yes we agree with the approach. Early sight of the annual guidance on the assessment criteria and detailed feedback following the review of each DNOs annual stakeholder report will be important to ensure that DNOs are able to deliver a performance that improves over time.
Chapter Seven Question 1	Are there additional social issues that the DNOs should address?
	WPD believes there may be other social issues which it should be addressing and which could be identified as part of the current stakeholder engagement process. WPD will identify any such issues in its business plan submission in July.
Question 2	Are there any specific outputs that the DNOs could be responsible for delivering?
	See response to Q1.
Question 3	Should a separate funding allowance be provided to enable DNOs to carry out activities in response to social issues?
	It would only be appropriate to provide separate funding for specific DNO initiatives where the activity can be clearly identified and is supported by stakeholders.
Question 4	Are DNOs adequately incentivised to engage with social issues as part of the BMCS Stakeholder Engagement Incentive?
	Yes.
Chapter Eight Question 1	Do you consider that our proposed package will drive the appropriate behaviour for connecting both demand connections and generation connections?
	Yes.
Question 2	Is it appropriate to remove the DG incentive?
	We agree that there should be no differentiation between DG and demand. Given that the uncertainty around the forecast of DG affects the DNO in terms of the volume of DNO funded reinforcement, and that this has reopener arrangements should require investment be significantly higher or lower than forecast, then we agree that removal of the incentive is appropriate.

Question 3	Do you agree that we should split the BMCS customer satisfaction survey into major and minor connections customers? If not, why not?
	It is right to ensure that DNOs are focussed on meeting the needs of larger connection customers. The BMCS customer satisfaction survey is already split into major and minor connection customers and it should therefore not be necessary to introduce a further more qualitative survey to achieve the objectives set out in the strategy consultation document. Ofgem's proposed approach at the working group to review the sample size and existing questions with the help of expert input is sensible.
Question 4	How should we set targets for the BMCS customer satisfaction survey?
	The principle should be to reward companies that perform well and penalise companies that perform poorly. The best performing company must have the opportunity to earn the maximum reward within the incentive scheme and vice-versa. Targets should be set on the same basis as the DPCR5 telephony survey where a threshold performance is set and all companies above the threshold are rewarded consistent with the scale of that performance above the threshold.
Question 5	We invite views on our proposals for the Long Term Development Strategy (LTDS), Distributed Generation (DG) Connection Guide and Information Strategy (IS).
	We agree with the proposals.
Question 6	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?
	No, there is a strong incentive to provide appropriate information in advance of formal connection applications as this reduces the volume of applications received and hence simplifies the connection offers particularly where interactive offers apply.
Question 7	We seek stakeholders' views on the introduction of a new Average Time to Connect Incentive.
	We support the introduction of an average time to connect incentive. An average time to connect incentive should encourage DNOs to find ways to improve the overall service delivery timescales on an average basis to new connections customers. RIIO-ED1 proposes to reward DNOs for innovation and improved outputs and this mechanism could form part of that measure. It is however important to ensure that the potential risk and reward values are proportionate with the overall activity relative to a DNO's overall activities.
Question 8	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?
	The overall time to connect should be made up of two principle parts namely the "time to quote" and the "time to complete the physical works". The measurement of duration of these two activities should allow for exemptions as outlined below.

	With respect to target setting, this is clearly an activity where, with appropriate exemption, all DNOs operate on an equal footing and have the same ability to improve performance. Targets should therefore be set on relative basis and based on the DNO average performance with an improvement profile set against the all DNO previous average performance. DNO supplied performance figures need to be quantifiable and auditable, to allow confidence in the current and targeted improvement profile. With respect to exemptions Ofgem need to consider which, if any, are truly outside of a DNO's control. For instance a new connection requiring a wayleave or easement to be agreed with a third party landowner, can incur significant delay due to the third party either holding out for an unreasonable compensation amount or being determined not to allow whatever the new connection proposes to establish (i.e. a new wind turbine). Whilst clearly the DNO can still be proactive and timely in its dealings with such a third party, it is a fact that some third parties will reject a DNO's proposition for siting equipment often in situations where no obvious alternate exists. It is therefore important that a DNO retains the ability to be efficient in its operations and not driven to behaviour that is contra to that purely as a result of an objective of achieving a "time to complete works" in a shorter timeframe.
Question 9	Do you agree with our proposed approach for the treatment of connection customer contributions by the DNOs during RIIO-ED1?
	Yes we agree. There should be no change to the 'shallow-ish' connection charging principles. They provide locational signals to encourage connectees to seek connections where there is network capacity. It also protects connectees from excessive costs by socialising the costs associated with reinforcement at higher voltage levels (two voltages above the connection voltage). It is a fair and balanced approach.
Question 10	Are additional incentives needed to encourage the DNOs to provide high-quality, timely non-contestable work? If so, what incentives should be applied?
	The maximum time to provide quotations is already covered by GSOPs. Coupling this with the proposed 'average time to quote' and 'average time to complete works' will provide sufficient incentive for a DNO to seek to minimise timescales. In addition the BMCS will underpin general customer perception of service delivery. Given the proposed value of these incentives no further incentives are necessary.
Question 11	We seek views on the financial exposure and scope of incentives for those market segments that have/have not passed the Competition Test.
	Compared to the existing DPCR5 position the overall level of DNO exposure proposed is significantly higher in financial terms, than the current risk a DNO is exposed to whilst the potential upside shows only a marginal increase over DPCR5. WPD believe that where market segments pass the competition test, the exposure risk and potential upside gains are proportionately adjusted in line with the average value of those market segments to the specific DNO. For instance, should "HV

	connections with HV extensions" pass the competition test and this segment of work equate historically to 18% of new connection activity by value for a DNO, then 18% of the overall incentive scheme allowance (both reward and risk) should be removed from the 'scheme'.
Chapter Nine Question 1	Do you agree with our proposed range for the efficiency incentive rate?
	We agree that the efficiency rate range should be increased from 45-51 per cent in DPCR5 to 50-70 per cent for company forecasts between 90-130 per cent of the Ofgem baseline in RIIO-ED1.
Question 2	Do you agree with our proposed approach to the calibration of the IQI?
	We agree with the proposed approach to the calibration of the IQI. We recognise that until the business plans are received and assessed it is not appropriate for Ofgem to be precise on how the variables in the calibration are applied.
Question 3	What are your views on the indicative IQI matrix?
	Whilst we agree that the efficiency incentive rate range should be 50-70 per cent, it would be perverse for a fast-track company to receive a lower incentive rate than a slow track company. Therefore, a fast-track company should receive a 70 per cent efficiency rate. The IQI matrix should only apply to slow track companies.
Question 4	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?
	Clearly a fast-track company will receive considerable kudos from being adjudged a very good performer. However, that said, it would be perverse if a fast track company materially lost out financially to the package agreed with a slow track company. A fast- track company therefore should receive: • An efficiency incentive rate at the top of the range; and • An additional reward. Ofgem propose an additional reward of two and a half per cent of totex. Whilst it is helpful to have an indication from Ofgem of this reward, we are also aware that is difficult for Ofgem to determine rewards and incentives until the business plans are received and assessed. Until Ofgem have a clearer view on the business plans, it is more appropriate to have a range for the additional reward rather than a fixed percentage. In our view the range should be between two and four per cent.
Question 5	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?
	Yes.
Question 6	Do you agree with our proposed treatment of DNOs within a single ownership group?

	We agree with the practice of establishing IQI ratios by assessing the sum of all expenditure forecasts of DNOs within a single ownership group. It would be preferable if all DNOs within a group are either fast tracked or slow tracked.
	If you disagree with our proposals in these areas, please explain the basis for an alternative approach.
	N/A
Chapter 10 Question 1	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.
	The threshold stated is suitable to allow innovation to develop. We agree with the proposal to review after 2 years, when early LCNF projects will have presented their learning and the electricity transmission NIC has commenced.
Question 2	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?
	Yes, please see our response to Question 1.
Question 3	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?
	Innovation is a means of delivering solutions for customers. We therefore believe that a robust and well justified innovation strategy would focus on the outcomes from innovation on the core performance of a DNO. Such a strategy would include clear processes to take ideas and concepts, through development, to initial deployment and then full scale adoption. A robust innovation strategy should take into account the views of stakeholders.
Question 4	Do you agree that it would be valuable for DNOs to consult and update their innovation strategies regularly during the price control period?
	Yes we agree.
Question 5	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.
	We expect the framework to be similar to RIIO-T1 and GD1. The challenges of the carbon plan will have an effect on DNOs which is not shared at transmission voltages, and innovation to meet this challenge should be reflected in the arrangements.

Tools for cost assessment

Chapter Two	WPD View
	In addition to our detailed responses to Ofgem's specific questions, we have an overarching comment relating to the identification of which cost assessment technique produces the most reliable results. The proposed use of a range of cost assessment techniques will provide Ofgem with a comprehensive into the comparative efficiency of the DNOs. It is likely that each of the techniques used by Ofgem will produce different comparative efficiency results. Therefore consideration should be given to which of the cost assessment techniques will produce the most reliable techniques. We understand that Ofgem will be using a number of techniques to form their view on costs. It is clear that totex or a 'top down' statistical analysis is not reliable as a tool for setting allowances as confirmed by Frontier Economics the authors of the 'top down' approach. Therefore a greater reliance should be placed on 'bottom-up' approach. Irrespective of which cost assessment tool is used Ofgem should not simply take the lowest unit cost of each line and then summate them to create a hypothetical company that could not function successfully. Analysis of all costs associated with activities should be undertaken irrespective of structural differences.
Chapter Two	**Adjustments to Cost Base Prior to Any Form of Cost Assessment**
	Prior to undertaking any form of cost assessment it will be necessary to make two cost adjustments. These adjustments are required as a consequence of the Regulatory Instructions and Guidance (RIGs) associated with the Regulatory Reporting Pack (RRP). The first of these adjustments relates to the reporting difference associated with Type 3 and Type 4 contractors. Type 3 and Type 4 contractors work effectively as an extension to both the DNO's direct labour and indirect labour force, e.g. delivery of turn key projects. The essential difference between Type 3 and Type 4 contractors is that Type 3 contractors operate on a 'closed book' basis whereas Type 4 contractors operate on an 'open book' basis. In an open book working arrangement the contractors reveal their indirect activity costs. For Type 4 contractors, the RIGs require the contractors' indirect activity costs revealed to be reported as indirect activity costs. For Type 3 contractors, the RIGs require the embedded contractors' indirect activity costs to be reported within direct activity costs. This difference in the treatment of indirect activity costs associated with Type 3 and Type 4 contractors causes a material disturbance which needs to be addressed before any cost assessment is undertaken. We propose that it would be appropriate to report Type 4 contractors' costs in the same way as Type 3 contractors' costs. The second of the adjustments relates to trouble call incidents that have a very high cost of returning to service, for example a fault on a 132 kV pressurised underground cable where the return to service cost is in the order of £1.0m. This adjustment arises because of the different reporting differences that arise depending on the cause of the fault.

If the cable fails in service, without any inference from a third party, and condition assessment identifies that more than the minimum repair is required, then the RRP rules would result in:

- Some minor costs, say £20k, to be reported as Trouble Call; and
- The majority of the costs, say £980k would be reported as asset replacement.

Alternatively, if the cable failed due to third party damage, then with the same physical repairs undertaken, the RRP rules would result in all costs, i.e. £1000k, to be reported as Trouble Call.

Clearly, this is an unintended consequence of the RRP rules, which would have a material impact on cost assessment.

This is not a hypothetical scenario, two instances of third party damage to 132 kV underground cables where repair costs have exceeded £1.0m have occurred in our Midlands area in the last two years.

This issue was raised with Ofgem during the cost reporting visit. Ofgem undertook to investigate the use of additional data tables so that data can be adjusted ahead of any cost assessment.

Chapter Two **Adjustment to Cost Base Prior to Cost Assessment Using Disaggregated Techniques Outlined In Chapters 5 to 9**

There is a material difference across DNOs of the extent of work undertaken by contractors. This leads to reporting differences that need to be addressed when undertaking disaggregated cost assessment.

The underlying problem is that the reported costs for Type 1, 2 and 3 contractors include embedded indirect activity costs. A DNO that makes more use of contractors consequently appears to have lower indirect activity costs and higher direct activity costs. The DNO has essentially moved its own indirect activity costs to the contractor. This is not problematic when any of the three approaches to total expenditure benchmarking proposed by Ofgem are used. However, it is problematic when disaggregated benchmarking as described in Chapters 5 to 9 is used.

Therefore before any cost assessment using the disaggregated techniques outlined in Chapters 5 to 9 it will be necessary to undertake a contractor adjustment.
We have analysed our available contractor cost data in order to identify the level of indirect activity costs embedded in contractors cost. The table below shows the result of that analysis.

Contractor Type	Approximate Percentage of Indirect Activity Costs Embedded in Contractors' Costs
Type 1	10%
Type 2	22%
Type 3	34%
Type 4	Indirects reported separately to direct costs

Question 1	Do you consider our overall approach to cost assessment appropriate and what changes, if any, would you propose?
	We agree that Ofgem's proposed overall 'toolkit' approach to cost assessment is appropriate. However, some changes within the overall toolkit approach should be implemented. Bottom up disaggregated totex benchmarking produces more reliable results than top down single totex benchmarking. Bottom up disaggregated totex benchmarking incorporates activity/cost drivers that have a causal relationship with specific activities. On the other hand, top down single totex benchmarking must rely on proxy activity/cost drivers that do not have a causal relationship with activities. We propose that: • Bottom up disaggregated totex benchmarking should be used during both the initial assessment of DNOs' business plans and the non fast track assessment process; and • More reliance should be placed on the outcome of bottom up disaggregated totex benchmarking, with top down single totex benchmarking used as a high level cross check.
Question 2	Do you think Ofgem should take into account poor historical performance in its assessment of business plans, and if so, how?
	Ofgem should take into account poor historical performance, in terms of both costs and service delivery, when assessing DNOs' business plans. In respect of the assessment of costs we propose that Ofgem should evaluate the comparative efficiency of each DNO for each of the first three years of the current price control period. It would also be feasible to assess each DNO's comparative efficiency for the first three years of the current price control period in aggregate. This will reveal those DNOs that have the greatest scope for achieving efficiency savings during the remainder of DPCR5 and during RIIO-ED1. Ofgem would then be able to verify whether such DNOs have included specific initiatives in their business plans for achieving the necessary efficiency savings. This would aid the fast track selection process. This assessment of historic costs would also reveal the scope for 'P0' reductions in allowed revenues. The consistency of cost and activity reporting across DNOs has improved significantly since the introduction of annual Regulatory Reporting Packs (RRPs). The annual RRPs submitted by DNOs during the DPCR5 period reflect an appropriate level of cost and activity disaggregation. Therefore, when assessing historic cost performance it is appropriate to use DPCR5 RRP data only. In respect of the assessment of service delivery performance, Ofgem should assess each DNO's track record for: • Delivering customer service improvements (reliability, customer satisfaction, complaints). • Implementing long term strategic asset management plans, rather than adopting reactive short term plans; and • The cost effective delivery of network outputs. Whilst the assessment of service delivery performance will be undertaken using a

	combination of quantitative and qualitative approaches. We believe that the emphasis should be on the quantitative.
Chapter Three	
Question 1	Do you agree with the use of totex benchmarking for RIIO-ED1 and what are your reasons?
	We agree with the use of total expenditure (totex) benchmarking for RIIO-ED1. Ofgem have indicated that totex benchmarking will be undertaken using three approaches: • A top down single totex model. • A middle up aggregated totex model; and • A bottom up aggregated totex model. Bottom up disaggregated totex benchmarking produces more reliable results than the other two totex models. Bottom up disaggregated totex benchmarking incorporates activity/cost drivers that have a causal relationship with specific activities. Consequently more reliance should be placed on the outcome of bottom up disaggregated totex benchmarking. With the equalisation of cost saving incentives across the total cost base, the use of bottom up disaggregated totex benchmarking accommodates the trade-offs between activities, such as the range of asset interventions possible to achieve an improvement in the performance of an asset (e.g. replacement, refurbishment, maintenance etc.). The middle up aggregated totex model will produce results more reliable that the top down single totex model. This is due to the incorporation of activity/cost drivers that have causal relationships with specific middle up aggregated activities. The least reliable totex model is the top down single totex model. This is primarily because the top down single totex benchmarking must rely on proxy activity/cost drivers that do not have a causal relationship with activities. Therefore, the top down single totex model should only be used as a high level cross check.
Question 2	Do you agree with the use of a capital expenditure as opposed to capital consumption approach for measuring total costs?
	Yes we agree.
Question 3	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?
	In respect of the top down single totex model we: • Propose that there is only one valid regional factor, i.e. the London weighting associated with salaries. • Agree that composite cost drivers must reflect predominant activities; and • Agree that it would be appropriate to use upper quartile to determine efficient costs.
Question 4	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?
	It would be appropriate to use a middle-up aggregated totex model for RIIO–ED1

	provided that it did not follow the principles of the RIIO-GD1 approach. However, the definition of the activity groupings included in the middle-up model should not be predetermined but should be revealed by analysis and verified by peer review. Furthermore it would be appropriate to use average rather than upper quartile to determine efficient costs as the data is less robust We are continuing to develop the middle-up aggregated totex model and will undertake the analysis required to reveal the recommended activity groupings.
Question 5	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?
	As indicated above, we propose that the definition of the activity groupings for the middle up aggregated totex model should not be predetermined but should be revealed by analysis and verified by peer review. We are continuing to develop the middle up aggregated totex model and will undertake the analysis required to reveal the recommended activity groupings.
Question 6	How do you believe lumpy expenditure should be treated in totex modelling?
	The activity categories where lumpy expenditure is most likely to occur include: • General reinforcement. • Operational IT & telecoms. • Non-operational Capex – vehicles; and • Non-operational Capex – IT & telecoms. The easiest way to accommodate lumpy expenditure is to spread the expenditure over an appropriate number of years. However, the appropriate number of years is variable depending on the type of asset involved. Each incidence of lumpy expenditure would need specific consideration. The treatment of lumpy expenditure is applicable to each of the three totex models.
Chapter Four Question 1	Do you believe it is appropriate to use a bottom-up, disaggregated model to compare with the totex model results?
	We have assumed that this chapter provides an overview of the development of a bottom up disaggregated totex model, which is different to the disaggregated benchmarking described in chapters 5 to 9. It is appropriate to use a bottom-up disaggregated totex model for cost assessment. Bottom up disaggregated totex benchmarking produces more reliable results than the other two totex models. Bottom-up disaggregated totex benchmarking incorporates activity/cost drivers that have a causal relationship with specific activities. Consequently more reliance should be placed on the outcome of bottom-up disaggregated totex benchmarking. With the equalisation of cost saving incentives across the total cost base, the use of bottom-up disaggregated totex benchmarking accommodates the trade-offs between activities, such as the range of asset interventions possible to achieve an improvement in the performance of an asset (e.g. replacement, refurbishment, maintenance etc.). We propose that:

	• Bottom-up disaggregated totex benchmarking should be used during both the initial assessment of DNOs' business plans and the non-fast track assessment process; and • More reliance should be placed on the outcome of bottom-up disaggregated totex benchmarking, with top down single totex benchmarking used as a high level cross check.
Question 2	Do you agree with our approach to the disaggregated, bottom-up model?
	There are two versions of a bottom-up disaggregated totex model that are being developed. We agree with the general principles underpinning the model that is being developed by Ofgem. We agree that it would not be appropriate to use upper quartile to determine efficient costs in disaggregated benchmarking models as this would create a danger of cherry picking. We provide additional comments regarding the details of Ofgem's bottom-up model in the relevant chapters. WPD is developing an alternative bottom up disaggregated totex model. As the development of this model has progressed it has been shared with all DNOs and with Ofgem. The finalised version of the model will be submitted to Ofgem.
Chapter Five Question 1	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 reopener?
	<u>Interaction of Building Blocks</u> We broadly agree with the interaction, but the narrative on the treatment of DG connections (for profile classes 1-4) and reinforcement for LCTs is confused in the narrative, and therefore the interaction is not fully clear. We suggest there is a requirement for greater clarity in the Strategy document. The specific parts of the consultation that lead to the confusion are: Figure 5.1 suggests that reinforcement associated with DG connections for customer profile classes 1-4 is not classified with other connections, but instead forms part of the reinforcement for low carbon technologies. Paragraph 5.17 states that 'Connections, with the exception of any connection of a DG to domestic customer classes 1-4, refer to the provision of new or upgraded network exit points to new or existing customers.' Connection of DG does provide a new or upgraded network exit point and therefore this statement is not wholly correct. Also profile classes 3 and 4 are non-domestic. This statement should be clarified to keep DG connections in profile classes 1-4 as connections, but make it clear that the reinforcement associated with these connections undergoes a different financial treatment. Paragraph 5.9 suggests that any reinforcement costs relating to the connection of any DG by domestic customer classes one to four should be socialised across the full DNO customer base and funded through the price control. Profile classes 3 and 4 relate to non-domestic customers – are these included or excluded?

	Paragraph 5.10 states that 'all installations of low carbon technologies delivered through a specific new or upgraded connection project should be subjected to the connections funding mechanism'. This contradicts paragraph 5.9, 5.17 and figure 5.1 which suggests the reinforcement of connection of DG (which can be classed as Low Carbon Technology) for profile classes 1-4 should be socialised. Paragraph 3.41 of the Outputs and Incentive document suggests that socialising the costs of upstream reinforcement relates to load or generation increase from specific existing customers (profile class 1-4). This is different from the cost assessment document that talks about new connections in profile classes 1-4. <u>Load Related Re-opener</u> We agree with the proposal as illustrated in figure 5.1. This includes: • General reinforcement (N-2) schemes on the primary network. • General reinforcement (N-1) schemes on the primary network. • Low Volume High Cost connections requiring work on the primary network. • General reinforcement on the secondary network. • Reinforcement driven by customers adopting low carbon technology where no new or upgraded connection is required. • Reinforcement associated with new connections of DG for customers in profile classes 1-4. • Fault level reinforcement across all voltages. There are a number of reasons for the inclusion of all these elements within a re-opener mechanism: • Uncertainty about economic recovery and therefore the volume of new build housing and new commercial developments. • Uncertainty about what network issues will be identified once smart meters provide network information. • Uncertainty about the about the scale and timing of uptake of low carbon technology. • Uncertainty about the impacts of future low carbon technology that will be developed and installed on the network (e.g. power quality issues created by certain heat pumps). Uncertainty about future government stimulus to meeting the carbon plan and impact of associated incentives (e.g. reintroduction of enhanced FIT payments leading to another phase of high volumes of DG on the network).
Question 2	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.

Our preference is for Option 3 with the volume driver based on a hybrid of options 1 and 2, however with HVLC connections operating within a volume driver set against number of projects rather than number of exit points.

Low Volume High Cost

For Low Volume High Cost (LVHC) connection projects involving primary network reinforcement – allowances based on a £ per MVA of capacity added as benchmarked through general reinforcement modelling.

High Volume Low Cost

Allowances for High Volume Low Cost (HVLC) metered connections on the secondary (HV and LV) network should be derived from:

- Forecast volume of projects requiring reinforcement.
- The benchmarked gross cost of reinforcement; and
- An assumed net to gross ratio.

The volume driver should adjust for differences in volumes of connection projects and actual net to gross ratio.

In detail this requires:

- Allowances to be derived from the forecast volume of projects requiring reinforcement. This should be determined from a forecast for the total volume of connection projects and an assumption for the proportion of projects that require reinforcement.
- Forecasts of volumes disaggregated by each market segment.
- Benchmark costs to be determined for each market segment.
- Forecast of costs to be provided for each market segment and split between sole user costs for extension assets and reinforcement costs.
- Benchmarks to be based upon the gross cost of reinforcement (excluding fully funded sole user extension costs). Using gross costs eliminates the variability caused by different net-to-gross ratios that would arise by assessing the DUoS proportion alone.
- Cost allowances to be set based upon project costs not the cost per exit point (see illustration of variability below).
- Average benchmarks to be used to allow for the range of different types of reinforcement work (e.g. uprating cables vs. uprating transformers). Upper quartile benchmarks should not be applied as they would base allowances on the lower unit cost of transformer work, adversely affecting companies that need to carry out more cable reinforcement.

- A benchmarked average net to gross cost ratio should be applied to the gross reinforcement cost to determine the proportion to be funded through DUoS.

Allowance = Volume forecast x Benchmark Gross Cost x net to gross ratio

- Volume driver to operate by:

    - Trueing up for the actual net to gross ratio.
    - Adjusting for difference in volumes of projects requiring reinforcement in each market segment.
    - Updating revenue allowances by the net difference between volume driver adjusted value and original allowances.

Elimination of DPCR5 Issues

The proposed project based approach overcomes two issues that arose in the DPCR5 mechanism:

- Where third parties, in particular IDNOs request a point of connection, the number of end exit points is unknown. Assessing allowances at the project level eliminates the need to estimate how many exit points will be provided by third parties, because the only consideration is the cost of network reinforcement; and
- An adjustment for loss of market share was incorporated into the volume driver mechanism to account for exits points lost to and delivered by third parties. This adjustment is no longer required when cost assessment is at the project level.

Illustration of cost variability

For DPCR5 the gross cost per exit point was used to determine the benchmark cost. The table below shows a number of scenarios resulting in a similar action - network reinforcement where a HV/LV transformer is uprated. This illustrates that the gross cost per customer can be quite variable within the same market segment for very similar reinforcement work.

To compare approaches, a range of cost variability is calculated for gross cost, duos cost (after application of the net to gross ratio to the gross cost) and the gross cost per customer. This shows that the variability is narrowest when gross project costs are considered, making project costs more suitable for cost benchmarking.

Project Description	**Reinforcement Requirement**	**Gross Cost**	**DUoS Cost**	**Gross cost per exit point**	**Net (Duos)-to-gross ratio**
50 domestic properties – additional load 100kVA	Change transformer from 500kVA to 750kVA	£10k	£8.7k	£200	87%
1 commercial property - additional load 100kVA	Change transformer from 500kVA to 750kVA	£10k	£8.7k	£10k	87%
100 domestic properties – additional load 200kVA	Change transformer from 500kVA to 750kVA	£10k	£7.3k	£100	73%
100 domestic properties – additional load 200kVA	Change transformer from 750kVA to 1MVA	£11k	£7.2k	£110	80%
Range cost variability	(Max-Min)/Min	10%	21%	100%	

Question 3	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?

Option 3 is most appropriate. This option provides ex-ante allowances derived from historical costs and forecast volumes for conversion of wayleaves to easements, via injurious affection payments and diversions due to wayleave terminations.

	The absence of volume drivers means that perverse incentives, (as described within 5.42 and 5.43) do not arise, because DNOs behaviour is not influenced by seeking to outperform the volume driver mechanism. The cost of injurious affections varies with the asset types, land usages and value of property or business on the land. This leads to a need for detailed disaggregation of costs and volumes to enable a volume driver to work. A volume driver would be overly complex for an area of relatively low expenditure.
Question 4	For all general reinforcement, is it feasible for the DNOs to provide specific scheme lists based on commonly agreed demand scenarios in RIIO-ED1?
	This is not feasible for all general reinforcement. <u>Primary Reinforcement</u> Load forecasts for individual primary substations provide an indication of where reinforcement may be required. These forecasts provide a starting point for more detailed assessment of network running configurations to determine what action is required to mitigate the impact of the change to load. Whilst improvements have been made to load forecasting they cannot account fully for the range of uncertainties that arise, and therefore the forecasts are indicative of which sites may require reinforcement. For primary networks it will therefore be possible to provide lists of sites, but actual reinforcement throughout the RIIO-ED1 period may occur at different locations. <u>Secondary Reinforcement</u> Load information for each secondary location is not readily available and where maximum demand meters are installed on the LV network the readings can be unreliable if faults have occurred on the network, or the site has been used to backfeed another substation during maintenance. Forecasting the impact of low carbon technology is being carried out by using a representative model (developed for Work Stream3 (WS3) of the Smart Grids Forum) that provides the number of interventions required on typical types of network. The model will not provide details of which specific location requires reinforcement. For secondary networks it will therefore not be possible to provide a list of sites, but it will be possible to demonstrate the number of proposed interventions.
Question 5	For all general reinforcement, do you think that reinforcement specifically relating to generation should be separately assessed from demand-related reinforcement?
	No, there are difficulties in separating the reasons for general reinforcement with growth in both distributed generation and load influencing the need.
Question 6	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"?

	We agree with the principle of the modelling approach but it should not be applied mechanistically. Benchmarking MVA added in relation to MVA growth provides an indication of whether excessive MVA is being added where there is little growth. There could however be valid reasons for distortions in this measure. A DNO may have a number of locations where very little load growth will lead to a need for reinforcement. This should be borne out by that DNO having a corresponding high volume of LI4 and LI5 substations that are proposed to be reinforced. Aligning LI bands and assessment of firm capacity across the industry will improve comparability in this analysis. This measure should be informative rather than lead to mechanistic adjustments – it may be valid that a DNO has a high ratio. Assessing the cost of added MVA against network MEAV should ensure that costs of adding new network are in line with the cost of the existing infrastructure. It is therefore important for the network MEAV measure to be based on equivalent assets (i.e. the MEAV costs of the existing primary transformer population).
Question 7	Do you agree that expenditure on secondary network reinforcement is no longer highly correlated with localised economic growth?
	For the majority of RIIO-ED1 this correlation will continue, but the scale of adoption of low carbon technology could lead to some divergence towards the end of the period. Traditionally the drivers of secondary network reinforcement included: • Change to the use of commercial properties. • Changes to production output of factories. • Changes in use of white goods (e.g. tumble dryers). • Changes in use of brown goods (e.g. more TVs per property). • The use of electricity for heating; and • Cost of energy impacting on customer behaviour. Many of these areas are linked to economic prosperity and therefore in times of economic growth there will be a greater usage of electricity leading to higher volumes of reinforcement. Moving into the future the drive to a lower carbon economy will introduce new drivers for the use of electricity networks: • Improvements to home insulation. • Increased volumes of distributed generation. • Increased heating using heat pumps. • Charging of electric vehicles. • Clustering driven by local authority policies, the activity of sales agents or "keeping up with the Jones"; and • Customer behaviour changes influenced by improved energy usage data from smart meters. Whilst uptake of many of the new low carbon technologies will be driven by affordability, this may be skewed by the Government introducing incentives to meet the Carbon Plan that may not correlate with economic prosperity. Whilst in the short term the correlation will continue, at this stage, it is difficult to determine whether reinforcement will continue to be linked to economic growth or

	whether external influences will cause the relationship to drift apart.
Question 8	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?
	a) <u>Conversion of wayleaves to easements and injurious affection payments</u> It is possible to set broad definitions of activities but, without extensive disaggregation, the costs in each category would be variable making benchmarking difficult. The costs of conversion of wayleaves to easements are dependent upon: • Different impacts of LV, HV, EHV and 132 overhead lines. • Types of land use: domestic property, agricultural land or commercial development, and • Property/land values encountered within each type of land use. For example a tower in a garden would lead to a higher valuation than a pole. Likewise a tower on a commercial development would attract a higher valuation that a tower on agricultural land and the costs for a pole in a garden would vary based upon the size of the property. This means that unless many disaggregation levels are created there will be a range of costs within each definition. So even for the following example categories (which take account of asset type and land use) there would remain price variability within each category. Example categories are: • Overhead pole on domestic property. • Overhead pole on agricultural land. • Overhead pole on commercial land. • Tower on domestic property. • Tower on agricultural land. • Tower on commercial land. • LV, HV, EHV, 132kv, line over domestic property. • LV, HV, EHV, 132kv line over agricultural land. • LV, HV, EHV, 132kv line over commercial land. More disaggregation would enable better benchmarking but would make the process overly complex. In addition the absence of historical data at such a detailed level would hamper effective benchmarking for RIIO-ED1. A further consideration is the treatment of 'lumpy' infrequent high costs generally associated with 132kV land over commercial developments. The cost of these in any one year could swamp the remainder of expenditure. For these we propose that DNOs should provide a forecast based upon an annualised average of historic costs, which leads to an ex-ante allowance rather than having a dedicated re-opener or ex-post adjustment. This potentially has a risk for customers where actual costs are lower, but also exposes DNOs to a risk where incurred costs are higher.

b) Load related interventions on the secondary network; and

It is possible to set broad definitions of interventions but there are a wide range of possible future solutions and many of the costs would be estimates.

All DNOs are being requested to use the WS3 model to forecast the investment requirements for different scenarios of growth in low carbon technology. The model utilises a predefined list of interventions and therefore provides a framework for the categorisation of interventions. It would, however, not cater for any unidentified solutions that may be developed during RIIO-ED1.

Across all voltages the model considers twenty types of solution (e.g. splitting a feeder) leading to 96 variants (ways to apply the solutions) of which 30 are specifically for EHV networks. This leaves 66 solutions that could be applied to the secondary network.

The output from the model would enable population of the volume and cost of each solution. Since many of the cost would be estimated, this would need to be taken into consideration for any benchmarking. It is therefore suggested that ex-ante allowances are set using forecast volumes and a weighted average unit cost.

The associated volume driver could adjust for both the actual volumes and the incurred industry wide weighted average costs. This future adjustment to costs would overcome any errors introduced by cost forecasting uncertainty.

To support the level of detail required DNO systems would need to be changed to enable planning and actual, volumes and costs to be recorded for each type of interventions.

c) Fault level reinforcement?

It is possible to set broad definitions of different activities undertaken for fault level reinforcement.

Generally the work to alleviate fault level issues requires circuit breakers to be changed or higher impedance transformers to be installed. This leads to a limited number of solutions that could be defined.

Future volumes are difficult to predict since it is not known where customer will want to connect synchronous generators and large motors.

Question 9	What is the most appropriate funding mechanism for load related expenditure on the secondary network?

Ex-ante allowances with a volume and cost driver to deal with uncertainty.

Traditionally investment in secondary load reinforcement was quite stable. It is forecast to increase due to high volumes of low carbon technology being connected to the network and therefore investment will continue to be required. This makes it wholly appropriate to have an ex-ante allowance.

There is much uncertainty about the scale of the requirements including the:

- Degree of growth in low carbon technology.
- Mix and clustering of low carbon technology.
- Availability of new and different network interventions, and

- The cost of interventions.

In the interest of protecting customers and DNOs a volume driver and cost adjustment should be applied to align allowances with delivery.

As described partly in the answer to question 8, many of the costs for yet-to-be-developed solutions would be estimated. This would inevitably lead to wide variability across DNOs that would need to be reflected in cost benchmarking.

Ex-ante allowances could therefore be set using a weighted average of estimated costs. Due to the uncertainty of costs this value would not necessarily be representative of an efficient cost (it could be too high or too low) so it is proposed that part of the uncertainty mechanism is a cost adjustment to bring the allowances in line with incurred average costs for each category of intervention.

The second part of the uncertainty mechanism would adjust allowances for differences in volume of interventions for each category of intervention.

Chapter Six
Question 1

Do you agree with our approach for assessing NLRE in the company's business plans?

This expenditure covers a number of distinct activities. Our views on the proposals in each of the categories are outlined below:

Asset replacement

We agree with the proposal for assessment of the required volumes of asset replacement interventions, through the use of survivor models, and for unit cost assessment to be undertaken.

Operational Information Technology and Telecoms (IT&T)

We agree with subjecting Operation IT&T to expert review, enabling this area of expenditure to be assessed against the merits presented in the individual DNO business plans.

Legal and safety

The proposed treatment of site security expenditure is not appropriate. Please see our response to question 4, of this chapter, for more detail on our views.
We agree with the proposals for the other areas of Legal and Safety expenditure.

Electricity Safety Quality and Continuity of Supply Regulations (ESQCR)

There is a requirement to recognise that some DNOs, such as WPD (South West), have an agreement, with the Health and Safety Executive, to complete their specific programme of ESQCR works after the end of the DPCR5 period. Please see our response to question 5, of this chapter, for more detail on our views.

Quality of Supply (QoS)

As indicated in our response to question 7, of this chapter, we agree with the proposals for Quality of Supply expenditure.

Non-core ex ante costs

	We agree with the proposals for assessing non-core ex ante costs. Please see our responses to questions 6, 8 and 9, of this chapter, for further detail on our views on Flood Mitigation, Black Start, Rising and Lateral Mains and Enhanced Physical Site Security expenditure. It is important that Black Start resilience of key telecommunications systems is included within the assessment of Black Start expenditure, alongside substation resilience.
Question 2	In light of our proposals, do you agree with our selection of risk removed as the primary output of the mains replacement programme?
	The question does not appear to refer to any of the content of Chapter 6 of the 'Tools for cost assessment' supplementary annex, as there is no mention within the chapter of using risk removed as the primary output of the mains replacement programme. We are unclear about what primary output, and programme of expenditure, is being referred to.
Question 3	Do you agree with our approach to remove non-modelled costs in RIIO-ED1?
	WPD agree with the intention to remove non-modelled costs. We would welcome the opportunity to collaborate with other DNOs and Ofgem to develop the necessary models.
Question 4	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?
	<u>Site security expenditure</u> We do not agree with the proposal to apply a benchmark unit cost to assess DNOs' forecasts for site security expenditure. Site security expenditure can encompass a number of security enhancement activities, such as Smartwater, CCTV, enhanced security fencing etc. These activities can range significantly both in terms of unit cost, and the quantity required to address the security needs of individual sites. It is only appropriate to apply a benchmark unit cost, to DNO volume forecasts, where the unit, itself, is meaningful and can be understood. This applies to both the derivation of benchmark unit costs and also the DNO volume forecasts. Unit costs for site security can only be considered where there is a high degree of disaggregation of the different security initiatives. Such a level of disaggregation is inappropriate. It should be noted that the volumes for site security activity reported in the RRP for each year of DPCR5 indicate the number of sites where a security enhancement activity has been undertaken in the year. This does not differentiate between a single security enhancement activity and multiple security enhancement activities being carried out at the same site, in the same year. Also, as different site security initiatives may be undertaken at a particular site in different years, there is potential for site security works at a single site to be recorded several times within the DPCR5 period. The information collected within the RRP is therefore unsuitable to create a meaningful unit cost for site security activity.

	DNO forecasts for site security expenditure need to be assessed on their merits within each DNO's business plan, rather than through benchmark unit costs. Other legal and safety expenditure categories We agree with the proposed application of high level analysis to the other six areas of legal and safety expenditure. This is appropriate, given the relatively low levels of expenditure in these areas.
Question 5	Do you agree with our proposed approach for assessing the DNOs' plans for expenditure on ESQCR? If not, what changes would you propose?
	ESQCR expenditure, during DPCR5, represents expenditure on a specific programme of works to establish historic clearances in conformance with the Electricity Safety Quality and Continuity Regulations. This volume of works, and the completion dates, has been agreed with the Health and Safety Executive. WPD agree that, once this programme of works has been completed, maintaining clearances should be considered business as usual by DNOs and no catch up allowances should be permitted.
Question 6	Do you agree with our proposed approach for assessing the DNOs' plans for expenditure on flooding? If not, what changes would you propose?
	WPD agree with the proposals for assessment of flood mitigation within RIIO-ED1.
Question 7	Do you agree with our proposed approach not to fund Quality of Service (QoS) improvements during RIIO-ED1?
	There is no requirement for upfront allowances for Quality of Service improvements. The IIS reward mechanism provides an appropriate funding mechanism because it encourages Quality of Service investment to be directed where the DNO's own cost benefit analysis shows value is achieved.
Question 8	Do you agree with our proposed approach to change Black Start and Rising and Lateral Mains (RLM) from reopener mechanisms to ex ante allowances?
	Black start expenditure The 'Black Start Recovery – Substation and SCADA Resilience' report by the Electricity Task Group (ETG) of the Energy Emergencies Executive Committee (E3C) – July 2010, considered that the recovery time for a full Black Start recovery is likely to be in the order of 72 hours. As a consequence, DNO assets (in particular substation battery supplies) need to have suitable resilience to cope with such recovery times. However, the ability to recover successfully from a Black Start event requires resilient operational SCADA networks and voice communications, as these are essential to DNOs for the organisation and coordination of resources. Therefore key communications systems also need to have suitable resilience to cater for a partial or total shutdown of the electricity network lasting up to 72 hours. Engineering Recommendation G91 is currently being developed by the industry through the ENA. It is anticipated that this shall:

	• Introduce a requirement for adequate protection and control systems to be available, during Black Start recovery conditions, to permit safe re-energisation of these core transmission and distribution substations. • Introduce a minimum requirement for resilience of substation protection/ tripping batteries and SCADA batteries to a partial or total shutdown of the electricity network lasting up to 72 hours; and • Provide recommendations for establishing Black Start resilience of substation batteries. WPD agrees that, once this technical standard is agreed, the required works should be funded via an ex-ante allowance. This allowance should be based upon assessment of efficient cost. However, the ex-ante allowance must not be limited to the works covered by the proposed Engineering Recommendation G91. The ex-ante allowance shall also need to provide funding for the works needed to establish Black Start resilience of key telecommunications systems, which have been deemed as outside of the scope of recent drafts of Engineering Recommendation G91, in order to achieve the government objective of improving industry capabilities to respond to a Black Start scenario. The efficiency of the overall package of Black Start resilience expenditure shall need to be considered in setting allowances. <u>Rising and lateral mains</u> WPD have no objections to the removal of an explicit funding mechanism for the identification of ownership of rising and lateral mains. WPD agree that, in the RIIO-ED1 period, an ex-ante allowance is more appropriate for rising and lateral mains issues, than a re-opener mechanism.
Question 9	Do you agree with our approach to assessing enhanced physical site security costs?
	WPD agrees that, for enhanced physical site security expenditure: • An ex-ante allowance should be provided for those projects where a DNO is able to provide detail regarding the expected works and costs in the RIIO-ED1 period, at the time the revenue allowances are set; and • A re-opener mechanism should be provided to cater for those projects where a sufficient level of detail is not available, at the time allowances are set.
Chapter Seven Question 1	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.
	We agree that Ofgem's proposals are proportional given the materiality of the expenditure associated with the Trouble Call activity. Below we outline our preferences in respect of the analysis categories. However, firstly we outline a problem with the current reporting rules associated with faults that have a very high cost of repair.

Problem with current reporting rules

This specific problem relates to faults that have a very high cost of returning to service, for example a fault on a 132 kV pressurised underground cable where the return to service cost is in the order of £1.0m.

If the cable fails in service, without any inference from a third party, and condition assessment identifies that more than the minimum repair is required, then the RRP rules would result in:

- Some minor costs, say £20k, to be reported as Trouble Call; and
- The majority of the costs, say £980k would be reported as asset replacement.

Alternatively, if the cable failed due to third party damage, then with the same physical repairs undertaken, the RRP rules would result in all costs, i.e. £1000k, to be reported as Trouble Call.

Clearly, this is an unintended consequence of the RRP rules, which would have a material impact on cost assessment.

This is not a hypothetical scenario, two instances of third party damage to 132 kV underground cables where repair costs have exceeded £1.0m have occurred in our Midlands area in the last two years.

This issue was raised with Ofgem during the cost reporting visit. Ofgem undertook to investigate the use of additional data tables so that data can be adjusted ahead of any cost assessment.

Third party cable damage recovery

In principle we agree with Ofgem's proposal to use the higher of forecast cost recovery and historic average cost recovery. However, in order to implement the proposal it would be necessary to resolve the issue identified above.

Low and High Voltage Overhead Faults
Low and High Voltage Underground Faults

The options presented by Ofgem for assessing expenditure associated with low and high voltage overhead faults plus low and high voltage underground faults are not wholly mutually exclusive. Our preferred, and proposed, approach is a blend of all three options. Our proposed approach is outlined below.

- The analysis undertaken should be at the lowest level of activity disaggregation possible, i.e. at the level of disaggregation reported in the annual RRPs.
- The analysis can be undertaken for each year that actual cost and volume data is available for DPCR5. The analysis can also be undertaken for the aggregate of the years that actual cost and volume data is available for DPCR5 as this would smooth out any year on year variations.
- For each DNO and for each disaggregated activity a unit cost should be derived.
- The all DNO average unit cost should be derived for each disaggregated activity. The use of average unit costs is preferred as this avoids "cherry picking".
- For each DNO and for each disaggregated activity, the reported activity volume should be multiplied by the all DNO unit cost to derive a predicted cost for each disaggregated activity.

	• The total predicted cost for each DNO should be determining by summing the predicted cost for each disaggregated activity; and • The total actual cost and total predicted cost for each DNO should be compared. The efficiency frontier would be identified at the upper quartile level when total actual costs are compared with total predicted costs. In addition our proposed approach can be used for any forecast year or aggregation of any number of years. Our proposed approach would reveal the all DNO average unit cost for each disaggregated activity. Ofgem can apply this all DNO average unit costs to the activity volumes for each disaggregated activity for each DNO for the RIIO-ED1 period in order to determine allowances. There should be consistency in respect of activity volumes for each disaggregated activity across a range of areas such as Trouble Call, IIS targets and fault rate secondary outputs. <u>EHV and 132kV faults</u> The assessment of EHV and 132 kV faults can only be undertaken reliably using long run data. This is due to the year on year volatility associated with EHV and 132 kV faults. We propose that in order to assess EHV and 132 kV faults it is necessary to aggregate expenditure and activity levels for both DPCR5 and RIIO-ED1, with the objective of smoothing out any year on year volatility. The approach used to assess costs EHV & 132 kV Faults would be the same as that described above for with low and high voltage overhead faults plus low and high voltage underground faults, but using data aggregated over a number of years. <u>Pressure assisted cables and submarine cables</u> We propose that the same approach described above for EHV and 132 kV faults should be used for pressure assisted and submarine cable faults. <u>Occurrences Not Incentivised (ONIs)</u> In principle, the assessment of ONIs should be undertaken using the same approach described above for low and high voltage overhead faults plus low and high voltage underground faults. However, we share Ofgem's concern regarding data quality in this area and propose that further work should be undertaken to reveal appropriate activity drivers.
Question 2	Do you agree with our approach to assessing Severe Weather 1 in 20 Events and do you have any preference between the options?
	We agree with Ofgem's proposal to re-use the DPCR5 approach setting allowances for Severe Weather 1 in 20 Year Events. No allowance for Severe Weather 1 in 20 Year Events should be provided for UKPN (London) as their wholly underground network would not be affected by a Severe Weather 1 in 20 Year Event.
Question 3	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?

	Our proposal for assessing expenditure on Inspection and Maintenance is outlined below: • The analysis undertaken should be at the lowest level of activity disaggregation possible, i.e. at the level of disaggregation reported in the annual Regulatory Reporting Packs (RRPs). • The analysis can be undertaken for each year that actual cost and volume data is available for DPCR5. The analysis can also be undertaken for the aggregate of the years that actual cost and volume data is available for DPCR5 as this would smooth out any year on year variations. • For each DNO and for each disaggregated activity a unit cost should be derived. • The all DNO average unit cost should be derived for each disaggregated activity. The use of average unit costs is preferred as this avoids "cherry picking". • For each DNO and for each disaggregated activity, the reported activity volume should be multiplied by the all DNO unit cost to derive a predicted cost for each disaggregated activity. • The total predicted cost for each DNO should be determining by summing the predicted cost for each disaggregated activity; and • The total actual cost and total predicted cost for each DNO should be compared. The efficiency frontier would be identified at the upper quartile level when total actual costs are compared with total predicted costs. Our proposed approach would require no special consideration for pressurised cables and submarine cables. In addition our proposed approach can be used for any forecast year or aggregation of any number of years. Our experience of operating in major cities such as Birmingham, Bristol and Cardiff indicates that there is no justification for special treatment for urban specific assets such as fire protection equipment in substations and forced ventilation etc. in cable tunnels. In addition, the level of disaggregation reported in the annual RRPs has enabled DNOs to report any Inspection and Maintenance costs associated with urban specific assets.
Question 4	Do you agree with our proposed approach for assessing the DNOs' plans for expenditure on Tree Cutting? If not, what changes would you propose?
	Our proposals for assessing DNO's cost for tree cutting are outlined below. Our proposal differentiates between tree cutting undertaken to meet the requirements of ENA TS 43-08 and tree cutting in accordance with ETR 132 (i.e. resilience tree cutting). <u>Tree cutting undertaken to meet requirements of ENA TS 43-08.</u> The reporting of the tree cutting activity to meet the requirements of ENA TS 43-08 has evolved during DPCR5. DNOs now report, in the annual RRPs, the costs and activity levels associated with the number of: • Spans cut; and • Spans inspected (Tree Cutting). The proposed approach for assessing expenditure on tree cutting activity to meet

the requirements is:

- The analysis undertaken should be at the lowest level of activity disaggregation possible, i.e. by voltage level, spans cut and spans inspected as reported in the annual RRPs.
- The analysis can be undertaken for each year that actual cost and volume data is available for DPCR5. The analysis can also be undertaken for the aggregate of the years that actual cost and volume data is available for DPCR5 as this would smooth out any year on year variations.
- For each DNO and for each disaggregated activity a unit cost should be derived.
- The all DNO average unit cost should be derived for each disaggregated activity. The use of average unit costs is preferred as this avoids "cherry picking".
- For each DNO and for each disaggregated activity, the reported activity volume should be multiplied by the all DNO unit cost to derive a predicted cost for each disaggregated activity.
- The total predicted cost for each DNO should be determining by summing the predicted cost for each disaggregated activity; and
- The total actual cost and total predicted cost for each DNO should be compared.

The efficiency frontier would be identified at the upper quartile level when total actual costs are compared with total predicted costs.

This approach can be used for any forecast year or aggregation of any number of years.

When setting allowances for tree cutting activity to meet the requirements of ENA TS 43-08, Ofgem should use the DNO's forecast number of spans cut and spans inspected. We agree with Ofgem's proposal to include a true up mechanism associated with the ratio of spans cut and spans inspected.

<u>Tree cutting in accordance with ETR 132 (i.e. resilience tree cutting)</u>

The assessment of tree cutting works in accordance with ETR 132 can only be undertaken reliably using long run data.

The reason for this is that DNOs are required to report the amount of expenditure but not the activity level. DNOs are required to report the length of overhead line that has been cleared to resilience standard. Consider a 20 km overhead line circuit. If the circuit is relatively clear of trees and in order to achieve the required resilience standard trees only two spans had to be cut, the DNO would report 20 km of overhead line cleared to resilience standard. However, if the circuit was in close proximity to many trees, then in order to achieve the required resilience standard trees 50 spans had to be cut, the DNO would report 20 km of overhead line cleared to resilience standard. Clearly the cost of tree cutting on 50 spans is materially higher than tree cutting on 2 spans.

We propose that in order to assess DNO's expenditure plans for tree cutting in accordance with ETR 132, it is necessary to aggregate expenditure for both DPCR5 and RIIO-ED1, with the objective of averaging out high cost and low cost circuits. The approach used to assess costs would be very similar to that proposed for tree cutting to meet the requirements of ENA TS 43-08.

Question 5	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.
	We agree with Ofgem's proposed approaches for assessing expenditure associated with dismantlement and remote location generation. In respect of Ofgem's proposal for assessing expenditure associated with substation electricity, it is best to consider separately Ofgem's proposals for quantity of electricity consumed at substations and the pence per unit price. We agree with Ofgem's proposal for determining the upper quartile value of pence per unit price. However, Ofgem's proposal to derive an average consumption per site is problematic because any units not reported as being consumed at substations would ultimately be reported as losses. Depending on the plans for a losses incentive, a DNO would be indifferent to a benchmarked reduction in the quantity of electricity consumed at substations. An alternative approach would be to accept the DNOs forecast quantity of electricity consumed at substations, and use a true up mechanism should the inventory and/or usage vary significantly.
Chapter Eight Question 1	Do you agree with our proposed approach to assess CAIs? In particular, do you agree with our groupings of activities?
	We agree with the overall principle of Ofgem's proposed approach for the assessment of Closely Associated Indirect activities (CAIs). Our views regarding the details of Ofgem's proposed approach are: We agree that: • It is appropriate to split Closely Associated Indirect activities into two groups. • The differentiating characteristic between the two groupings of Closely Associated Indirect activities is whether the cost of the indirect activity would flex with changes in the volume of direct activity undertaken by the DNO; • It is appropriate to assess Closely Associated Indirect activities through the use of cost drivers which are as closely aligned to the activity as possible; • It may be necessary to disaggregate certain Closely Associated Indirect activities in order to reveal appropriate cost drivers; • Assessment of the costs associated with Traffic Management act should be undertaken separately; • Assessment of the costs associated with workforce renewal should be undertaken separately. However, it is important to acknowledge that it will be essential that clear definitions are provided for workforce renewal and Operational Training in order to ensure consistency of cost reporting and forecasting; • The Network Policy indirect activity should be classified as a Group B Closely Associated Indirect activity; • Non-operational capital expenditure – vehicles should essentially reclassified as a Group A Closely Associated Indirect activity and that it should be assessed simultaneously with the vehicles and transport indirect activity; • It is appropriate to smooth out potential lumpy non-operational expenditure associated with vehicles by the use of an annual average; and • It is appropriate to assess Closely Associated Indirect activities both before and after reallocation to non-distribution activities, such as excluded services

and connections.

We do not agree that Non-operational capital expenditure associated with small tools and equipment should be reclassified as a Closely Associated Indirect activity. We are aware that some DNOs have not reported any non-operational capital expenditure -small tools and equipment for at least seven years. Working on the assumption that these DNOs have included such capital expenditure within direct activities operational, we propose that it would be more appropriate to reclassify this category of expenditure as a direct activity.

In order to undertake effective cost assessment it may be necessary to apportion non-operational capital expenditure - small tools and equipment across all direct activities. In paragraph 8.13 Ofgem have acknowledged that non-operational capital expenditure - small tools and equipment is essential to bringing assets into service and is closely aligned to direct activities.

With the exception of non-operational capital expenditure - small tools and equipment we agree with activity groupings proposed by Ofgem.

We propose that wayleave payments should be removed from the engineering management and clerical support activity prior to cost assessment being undertaken. This is because wayleave payments remain a legacy issue that are not uniformly distributed across DNOs, and therefore it has not been possible to identify a reliable cost driver.

Question 2	Are there any views as to which cost drivers would be most appropriate?

The table below list our current view of the cost drivers associated with Closely Associated Indirect activities.

CLOSELY ASSOCIATED INDIRECT ACTIVITY	**ACTIVITY DRIVER**
Network Design & Engineering	
Strategic planning of the distribution network	Network Scale (MEAV)
General and Fault level reinforcement	Gross Network Investment, Connections outside price control, DG connections & excluded services
Demand connections	Gross Network Investment, Connections outside price control, DG connections & excluded services
Relevant Distributed Generation Connections	Gross Network Investment, Connections outside price control, DG connections & excluded services
Other Network Investment	Gross Network Investment, Connections outside price control, DG connections & excluded services
Project Management	Gross Network Investment, Connections outside price control, DG connections & excluded services
Engineering Management & Clerical Support	
Identification and Implementation of Improvement Initiatives	Network Scale (MEAV)

Strategic Network Plan Development and Implementation	Network Scale (MEAV)
Work Planning, Budgeting, Allocation and Control	Network Scale (MEAV)
Health & Safety	Network Scale (MEAV)
Streetworks Admin: Customer Funded	Demand Connections Expenditure
Wayleaves Payments	Exclude
Wayleaves and Easements/Servitudes: Admin Costs	Wayleaves Payment numbers
Clerical Support	Network Scale (MEAV)
System Mapping	Length of LV UG Cable
Control Centre	
Outage Planning and Management	Total network length
Real Time Control and Monitoring	Total network length
Dispatch	Total network length
Major Incidents & Emergency Planning	Total network length
Call Centre	Number of Customers
Stores	Network Scale (MEAV)
Operational Training	Direct FTEs / Gross network investment
Vehicles & Transport	Direct FTEs
Network Policy	Network Scale (MEAV)

Question 3	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?

We agree in principle that Ofgem's proposal to use a mixture of assessment techniques in the fast track and slow track process is appropriate. However, Ofgem appear to be assuming that the level of recruitment will match the number of employees retiring. This assumption is not correct where a DNO needs to increase the level of direct staff due to a sustained increase in direct activity, the number of trainees recruited will exceed the number of employees retiring. DNOs should prepare recruitment plans that cater for both replacing employees retiring/leaving and growing the overall number of direct staff.

It is appropriate to consider workforce renewal allowances both in isolation and also as part of wider training.

Workforce renewal allowances should not cover contractors' costs. We agree that the training costs of contractors should be borne by the contractors and should be embedded in the costs that DNOs pay for those contractors.

Chapter Nine Question 1	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?
	We agree to the general approach proposed by Ofgem for assessing business support costs. However, the metric used for various categories of business support costs in RIIO-T1 and GD1, shown in Table 9.1, are not appropriate for use in RIIO-ED1. In paragraph 9.23, Ofgem have acknowledged the concerns expressed by all DNOs in respect of the use of "cost per end user (defined as employees) as a cost driver for IT&T". Generally, the metrics shown in Table 9.1 do not adequately take into account the high level of fixed costs associated with Business Support Costs.
Question 2	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.
	This question cannot be answered in isolation. Consideration needs to be given to the rewards available to efficient DNOs through the IQI incentive. For non-fast tracked DNOs that report lower than benchmark costs we propose that the most appropriate approach would be to: • Establish a baseline (using the definition applicable for DPCR5) for business support costs at the benchmark level; and • Determine the allowance at a point between the DNO's submitted costs and the baseline. The total baseline costs for all the non-fast tracked DNO's activities should be aggregated and applied to the IQI matrix to reveal any further rewards.
Question 3	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?
	We do not agree with the cost drivers set out for each of the categories as set out in Table 9.1. Generally, the metrics shown in Table 9.1 do not adequately take into account the high level of fixed costs associated with business support costs. For the human resources and non-operational training activity, instead of using direct employees we propose that it would be more appropriate to use total employees. For the finance and regulation costs activity, instead of using base revenue as the cost driver we propose the use of multiple activity drivers that reflect the diverse nature of the tasks with the finance and regulation activity. These drivers include: • Number of customers. • Network scale (MEAV). For the CEO and other corporate functions activity, instead of using base revenue as the cost driver we propose MEAV.

	For the IT&T activity, instead of using end user as the cost driver we propose the use of multiple activity drivers that reflect the diverse nature of the tasks with the IT&T activity. These drivers include: • Total indirect employees; and • Network scale (MEAV). For the property management, instead of using base revenue as the cost driver we propose the use of network length.
Question 4	Do you agree with the proposed use of expert review to assess IT&T and property costs?
	We agree with the proposed use of expert review to assess IT&T and property costs.
Chapter Ten Question 1	Do you agree with our approach to regional and company specific adjustments?
	We agree. See question 2 below.
Question 2	Which regional and company specific adjustments do you think we should consider in RIIO-ED1? Please give a rationale for your suggestions
	It would be appropriate to apply a 'London Weighting' adjustment to direct labour and contract labour costs to certain of UKPN (London)'s cost base. There is a substantial body of evidence that verifies that regional labour and contractor costs do not differ across the UK other than within the greater London area. There is no justification for accommodating a sparsity adjustment. The selection of the correct cost drivers and the toolkit approach adopted by Ofgem negates the need for such an adjustment. There is no justification for using an urbanity adjustment. During DPCR5 UKPN (London) unit costs before the urbanity adjustment was applied were lower that the unit costs associated with UKPN (South East). After the urbanity adjustment was applied, UKPN (London)'s unit costs were even lower than UKPN (South East)'s. This was illogical and demonstrates the misplaced logic associated with the urbanity adjustment. The DNO specific adjustment for SP MANWEB to cater for the extra costs associated with operating an interconnected network should not be applied. The current RRP has been developed so that the specific costs associated with the interconnected network are revealed and to ensure that those costs can be accommodated in the benchmarking process.
Chapter Eleven Question 1	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?
	We agree that for RPEs the analytical techniques used at DPCR5, to examine the historical trends of relevant price indices relative to RPI, are appropriate for continued use for RIIO-ED1. We agree that it is appropriate to identify the scope for efficiency improvements that

	can be achieved by frontier companies.
Question 2	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?
	In addition to the data sources proposed by Ofgem that would be analysed to develop a set of input price forecasts, we suggest that there would be value in reviewing the macroeconomic forecasts developed by the Office of Budgetary Responsibility and the Bank of England.