

UR RESPONSE TO PROVISIONAL DETERMINATION

ANNEX DOCUMENT TO UR-147: DETAILED COMMENTS ON DEFERED CAPEX INCENTIVE

Introduction

1. This document sets out our detailed comments on the incentive for NIE T&D to defer capital investment under D3: Measures to tackle risks from deferral of planned network investment.
2. We welcome the continuation of the principle of “no double-funding” from the RP4 composite proposal, in particular its application to deferred network investment. However, we have some concerns about how this will be implemented and monitored in practice. We ask the Commission to carefully consider the design and wording of its Final Determination to ensure that the obvious loopholes are removed.
3. In this document we summarise our understanding of how the mechanism will operate in practice, we provide our opinion on how the deliverables and their subsequent impact on end users of the network can be monitored; we present our estimate of how NIE T&D could defer investment with relative ease and conclude with three case studies to illustrate how this could be to the detriment of customers in ways that are not captured by the “no double-funding” principle.
4. We focus throughout on spend that is in ‘category B’ in the Commission’s classification. The items that are only included within category B are “nice to have” and are not considered to be essential to meet NIE T&D’s obligations. We therefore consider it likely that this work will not take place during RP5, providing a double benefit for NIE T&D’s finances. Firstly it will need to borrow less money to fund the increase in capex during RP5, reducing interest payments, and secondly it receives a cash advance on work to be done during RP6. We agree that measures to protect the interests of customers in the event that NIE T&D under-spends are essential and we accept that the Commission’s proposed “no double counting rule” is better for consumers than the “do nothing” alternative. Our aim in this paper is to assist the Commission with refining its design of this mechanism. Given our experiences of RP4, we naturally have some concerns about the novelty of the D3 mechanism and how it

will operate in practice. In the short time available to us, we have identified three areas where detrimental outcomes are plausible.

5. All mechanisms have the potential for perverse outcomes and this should be recognised in an open and transparent manner within the Final Determination to provide clarity as to mitigation against any perverse outcomes from this proposal which could operate against the public interest in a material way.
6. We are happy to discuss any of the issues raised in this paper at the hearing on 11 December 2013.

Our Understanding of the Mechanism

7. We appreciate the clarity around the mechanism that Commission has provided in response to questions following the publication of its Provisional Determination. The D3 principles overlay the D1 risk sharing mechanism.
8. On 27 November 2013, the Commission described the operation of the D1 mechanism in the following way:

“The calculation for capital expenditure could be implemented in the following way. Suppose for illustrative purposes that NIE has a single RAB. Let $Y1_t$ denote our determination on RAB additions for financial year t (in 2009/2010 prices). Let $Y2_t$ denote NIE’s outturn/actual capital expenditure falling within the scope of that RAB in year t (in 2009/2010 prices). In the formulae and methodologies for the price control building blocks we could specify that the RAB additions for financial year t are calculated as $Y1_t + 0.5(Y2_t - Y1_t)$. This specification of RAB additions would feed into the calculation of the various price control building blocks. The value of $Y2_t$ would not be known before tariffs are set for year $t+2$; this could contribute to potential over- or under-recovery in year t which would, in turn, be addressed through the calculation of the correction factor in year $t+2$ ($K_{D_{t+2}}$).*

Paragraph 5.115(e) of our provisional determination is consistent with this approach under the assumption that in year t , before outturn expenditure data for $Y2_t$ are available, NIE estimates the restriction on its maximum regulated revenue using the assumption that $Y2_t = Y1_t$. However, this need not be the case: NIE could potentially anticipate the extent of over- or under-spend in year t and set tariffs in year t that include some allowance for the cost risk-sharing mechanism without waiting until year $t+2$.”

9. We have used an example to overlay the D3 principle on top of this. In this we assume that 7 110kV transformers (category T14) are included within categories A, B and C in the final determination. Only one of these is in category A and the remaining 6 are in “B only”. NIE T&D defers the “B only” transformers to RP6 and also installs 3 further transformers that are included within the RP6 determination.

Example 1 – 10 transformers requested for RP5 and RP6 - all work complete by end of RP6

Stage	NIE Actions - Hypothetical	NIE Revenue	Impact on RAB
RP5 CC Final Determination		Revenue reflects CC FD of 7 transformers	Projected RAB additions over RP5 reflect: <ul style="list-style-type: none"> 7 transformers added during RP5
During RP5	NIE Board Prioritises work and decides that only 1 transformer needs to be replaced	NIE revenue adjusted in year +2 to reflect lower spend (saving equivalent to -6 transformers)	RP6 closing RAB reflects: <ul style="list-style-type: none"> 1 actual transformer 50% of the value of 6 deferred transformers
	NIE replaces 1 transformer and defers 6 to RP6.		
	Annual reporting shows NIE has spent less on this work		
RP6 Determination	NIE submits BPQ for RP6 showing the 6 deferred transformers plus 3 additional transformers need to be replaced	UR accepts this proposal and agrees that 9 need to be replaced. Revenue based on only the 3 additional transformers	Projected RAB additions over RP6 reflect: <ul style="list-style-type: none"> 3 transformers replaced during RP6
During RP6	NIE Board Prioritises work and decides that 9 transformers need to be replaced	NIE revenue adjusted in year +2 to reflect higher spend (equivalent to +6 transformers)	RP6 closing RAB reflects: <ul style="list-style-type: none"> 1 actual transformer (RP5) 50% of the value of 6 deferred transformers (RP5 under spend) 3 additional transformers installed in RP6 50% of the value of the 6 deferred transformers (RP6 over spend)
	NIE replaces 9 transformers.		
	Annual reporting shows NIE has spent more on this work		

10. We note that if only 3 transformers were installed in RP6, then those would still be added to the RAB in line with the RP6 settlement as the spend would equal the allowance. The 6 pre-funded transformers would carry over into RP7 and be offset against work requested then.
11. This paper is for illustrative purposes only and we are assuming that RP6 will follow a similar format to RP5, with the indirect costs benchmarked against comparator companies and the direct costs assessed separately. However, this assumption should not be seen to bind us to any particular approach.

12. Therefore, for the remainder of this paper we focus only on the direct costs of the deferred capex, and assume that the indirect costs allowed for in both RP5 and RP6 are spent in full and are sufficient to allow NIE T&D to manage its capex programme. Therefore our analysis is a conservative estimate of the rewards available to NIE T&D.
13. If our understanding is incorrect we would appreciate the Commission highlighting this as early as possible as we will be basing our discussions with both NIE T&D and Ofgem on this understanding as we seek to put in place the reporting required to implement both this mechanism and the RIGs.

What does NIE T&D need to deliver?

14. In an email on 25 October, the Commission provided an indication of how it proposes to define the deliverables for each project. We welcome the provision of that information, and have used it as the starting point for our assessment of how we would monitor this aspect of the price control.
15. While some of the information to track these deliverables would be provided within the RIGS, not everything would be recorded at the necessary level of detail. Following the Final Determination, we will need to review further the information required to monitor the price control. We currently expect that we will need to tailor the cost and volume reports to ensure that we can track the both the deliverables and the location of the work in a robust manner. We consider it important that these data are verified before we rely on them to confirm the amount of pre-funded work that NIE T&D requests in RP6.
16. In Appendix A, we have expanded on the Commission's list of deliverables to highlight the reporting that will be required to track the work done and to ensure that it has been done to the appropriate specification (see case study 1 for our concerns in this regard).
17. We have also carefully considered the type of information that could be assessed to ensure that the standards of service have been maintained at a reasonable level, should investment be deferred. These outputs are first step towards the health and criticality indices adopted by Ofgem. We hope that focusing on measurable consequences will assist in the transition to future price controls.
18. These outputs reflect the consequence for customers if NIE T&D deferred the investment. The difficulty we have had quantifying this impact, demonstrates how opaque the impact of deferred capex actually is. However, we consider it important that steps are taken wherever possible to report on these indicators, as it will provide confidence in the sustainability of NIE T&D's investment plan. It will also mitigate slightly the risk of NIE T&D targeting investment below the optimum point in the range identified by the Commission.
19. As the Commission has provisionally determined that financial incentives are not necessary for quality of supply during RP5, we hope that by including some measurable outputs within the reporting under the final determination, the Commission

will use reputational pressure to ensure that NIE T&D maintains its current “acceptable” level of service for the remainder of RP5.

20. NIE T&D has repeatedly stated through this process that it will not be able to report accurately to the RIGS immediately. In addition it has stated that it does not consider it possible to report to this standard for the period between 1 April 2012 and 1 October 2014. The capex reports that NIE T&D has already submitted to us under its licence do not provide the information necessary to identify the work delivered at the level of detail proposed by the Commission.
21. In addition to this the NIE T&D response to UR-145 has raised concerns that the required transparency will not be achieved within the appropriate timeframe.
22. We consider that the simplest way forward is for the Commission to introduce the requirement for compliance to the full Ofgem RIGs whilst allowing a company-regulator consultation. This could include time-limited mechanism to deal with specific data lines, data tables which NIE T&D and/or the Regulator deem as not appropriate to the good functioning of the RP5 Commission’s FD. This will ultimately allows and support the Regulator making the necessary Directions to NIE T&D as regards which elements of the RIGs are exempt, and in particular which recent years might be disproportionate.
23. By following this proposal there will be substantially reduced requirements to define the rules within the Licence and allow for future modifications to keep aligned with GB.
24. We also consider it essential that the Commission should require NIE T&D to provide information to the required standard starting on the 1 April 2012 (on a best endeavour basis with confidence grades) to permit auditing of the reported information back to that date. Without this obligation, the D3 mechanism becomes unworkable and the only alternative way to protect consumers would be to reduce the capex allowance to remove the work that can be deferred without any impact on the level of service provided by NIE T&D.

How NIE T&D Can Defer Capital Investment?

25. The Commission asked BPI to divide NIE T&D's capex request into three categories:
- (a) identify the projects, and planned volumes of work, which need to be undertaken before 1 October 2017 in order to maintain services to customers, comply with applicable network design and planning standards and/or meet any other obligations;
 - (b) identify the projects and planned volumes of work which, whilst not necessary to maintain services to customers, comply with applicable network design and planning standards and/or meet any other obligations, and have been included in NIE T&D's business plan for the period to 1 October 2017 with sufficient justification; and
 - (c) identify any projects or volumes of work within (b) that any reasonable electricity transmission/distribution company would undertake before 1 October 2017 because deferring or cancelling them would undoubtedly increase whole-life costs.
26. The allowance awarded by the Commission is based on all projects in categories A and B. Category C is a sub-set of category B. Based on this, it is clear that, in BPI's opinion, work that falls only into category B and is not included in category C is not necessary during RP5.
27. The best view at the time of writing is that actual necessary capital investment during RP5 will most likely include all of category A, the items in category C that stand up to scrutiny at a later date, plus potentially some items that are only in category B that can be shown to be prudent to smooth delivery into RP6. NIE T&D will determine the optimum point within this range for capital investment.
28. While we do not agree completely with BPI's allocation of projects between the four categories, we will adopt these conclusions for the purposes of this paper.
29. For the purpose of this paper, we have also adopted the Commission's assumption that indirect costs are associated with the size of the network and other factors

reflected in the composite scale variables used in the benchmarking. As the Commission provisionally determined a lower quantum of indirect costs than those included in BPI's final report, we have only focused on the direct cost savings associated with deferral. We believe that the actual savings will be higher.

Table 2: Direct Costs Included in the Provisional Determination¹

	Direct Cost Only £ million			"B only" work £ million
	A	B	C	
Transmission Asset Replacement	£29.9	£64.5	£19.1	£21.7
Distribution Asset Replacement	£75.5	£82.1	£38.4	£43.7²
Distribution Load Related	£13.7	£5.8	£0	£5.8
Subtotal – Within NIE T&D Control	£119.10	£152.40	£57.50	£71.3
Transmission Load Related	£3.6	£9.0	£0	£9.0
Total	£122.70	£161.40	£57.50	£80.4

30. The Commission has identified £43.7 million of direct costs for distribution asset replacement and £21.7 million of direct costs for transmission asset replacement that is not essential (category A) nor required to reduce the whole life cost of the assets (category C). The Commission itself says that this subset of category B projects is "not necessary to maintain services to customers comply with applicable network design and planning standards and/or meet any other obligations". NIE T&D is therefore not obliged to undertake any of these works.
31. We also agree that this £65 million of asset replacement work is not necessary during RP5, and that NIE T&D can defer this without any impact on customers in the short to medium term. Given the delivery pressures that NIE T&D faces during RP5, including the unprecedented demand for connections for renewable generation and increases investment that will be required under the D5 mechanism. We would be surprised if any of this work was considered to be high enough priority during RP5 and we expect an efficient network operator to defer this into RP6.

¹ Only projects assessed by BPI are included here

² We consider the work on the Ballylumford Switchboard essential for security of supply and assume it will take place during RP5, we have therefore not included it in our quantification of "B only" direct capex.

32. We also note that BPI has identified £5.8 million of distribution load related work that is also not necessary during RP5. Given that this is excluded from the “no double-funding” principle, we would be very surprised if NIE T&D undertook this work. They would receive £2.9 million for taking an insignificant amount of additional risk. The ways in which this investment can be avoided and the impact on consumers is illustrated in Case Study 2.
33. As noted below, NIE T&D will no longer have control over transmission load related projects. Based on the Commission’s own analysis, it is able to defer more than £70 million into RP6 without impacting on services. The challenge NIE T&D faces is how to ensure it retains the benefit of this pre-funding for as long as possible after 1 October 2017.

Impact of TSO Certification on Capex Deferral

34. From April 2014 NIE T&D will no longer be deciding which transmission load related projects are required, yet it will still be rewarded for any reductions in investment. We are surprised that the Commission believe this to be in the public interest. The public will fund the costs associated with the transfer of staff to SONI, and they are entitled to receive the benefits of their investment in the independence of the transmission planning function.
35. We note that direct costs of £9 million have been allowed by the Commission for category B transmission load related schemes. BPI has categorised these as “not necessary to maintain services to customers, comply with applicable network design and planning standards and/or meet any other obligations”. Given the statutory obligation on NIE T&D to develop an economic, efficient and coordinated network, we consider clear justification is given as to why these projects have been included in the RP5 allowance.
36. Justification should also be provided for all transmission load related projects that have not commenced construction before 1 May 2014 remaining within the allowance rather than moving from the scope of D3 into D5. The projects where clarity of the appropriate mechanism and reasons for their inclusion within the capital allowance are T27, T30, T31, T34, T39, T36, and T38. Having considered the Commission’s proposals it is our understanding that SONI will need to provide justification of these projects under the new regulatory arrangements and we would not expect this to increase the administrative burden in a material manner. It is important that the RP5 price control design reflects NIE T&D’s sphere of influence and again further clarity would add value in the Final Determination.
37. In Case Study 3, we provide an illustration of how NIE T&D can be required by SONI to defer capital investment, as it will no longer be with its control.

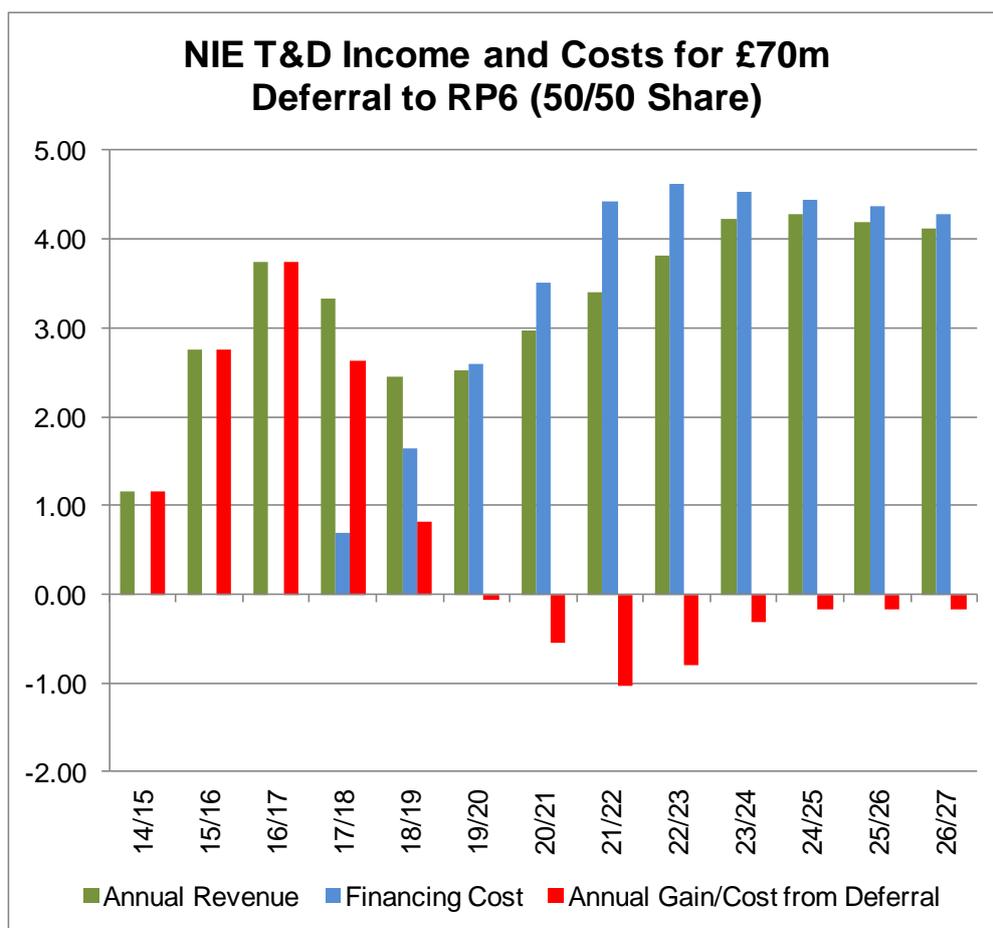
How NIE T&D Benefits From Deferring Capital Investment Under D3(g)

38. Based on the Commission's provisional determination, it would not be difficult for NIE T&D to identify projects that can be deferred and even abandoned. We expect this to equate to at least £70 million over the last three years of RP5.
39. Within this value, we have identified approximately £5.8m that could plausibly be abandoned. The benefit to NIE T&D of this would be the return and depreciation on £2.8 million over 40 years.
40. It is also worth noting that assets that are not upgraded for load related reasons will be refurbished or replaced under other asset programmes to comply with ESQCR or under normal asset replacement programmes.
41. We have assessed the impact on NIE T&D's cash flow of the combination of D1 and D3 mechanisms on the £70 million of direct costs that we believe it is plausible for NIE T&D to defer into RP6. In this analysis we have made a number of assumptions:
 - (a) The RP5 revenue profile assumes that these costs were incurred evenly over the last three years of RP5;
 - (b) The costs are deferred until RP6 and the work is spread evenly over the five years;
 - (c) Adjustments to the RAB are made two years after the over or under spend occurs (we have not adjusted for inflation or discounted the revenue back to the year in which the over/under spend occurred);
 - (d) We have assumed that 50/50 risk sharing mechanism continues into RP6 (for the purpose of this analysis only);
 - (e) We have assumed that NIE T&D's actual financing costs will be approximately equal to the depreciation and return that it would have been entitled to had the actual spend been added to the RAB in the year in which it was incurred;
 - (f) Only cash flows up to end of RP7 are relevant, beyond that the price control format is sufficiently uncertain and revenues cannot be predicted.

42. The analysis has shown that while NIE T&D benefits from deferring cost under this mechanism in the short term, its costs during RP6 will exceed the revenue received through tariffs. Over the period we have analysed, the NPV benefit to NIE T&D of the cash advance funded through tariffs is at least £7.5 million. This is a material benefit.

43. The results of our analysis are shown in Figure 1 below.

Figure 1: Impact of D3 on NIE T&D Cash Flow



44. This £70 million relates to the direct costs of asset replacement programmes which will need to continue in RP6. It could be interpreted that the challenge that the Commission has now set NIE T&D is to find ways in which to rebrand this work within its business plan for RP6, or inflate the volumes of new work required, to ensure that it can retain up to £35 million of that pot, while customers fund the work again.

45. In the context that we have just described, we think it is important to reflect on how much reward the PD is proposing to give NIE T&D for not doing planned work.

- (a) Deferred capex – projects that are deferred to RP6 initially earn NIE T&D reward under the D1 50:50 sharing mechanism, but are then caught by the D3 “no double counting” rule. The combined effect of these mechanisms is that NIE T&D will be pre-paid in RP5 for 50% of work that is eventually undertaken only in RP6. We calculate that this pre-funding gives NIE T&D a reward of approximately 10 pence for every £1 of work that is deferred for five years;³
 - (b) Distribution load-related capex – this category of expenditure is exempt from the “no double counting” rule. If NIE T&D is able to push the start date for planned RP5 projects back to RP6, even if only to the very first day of the new control period, it will retain 50% of RP5 funding through the D1 mechanism and be permitted to claim full funding for the work again in RP6. The extra profit to NIE T&D is therefore 50 pence for every £1 of under-spend; and
 - (c) Other work not carried out – other unspent capex that is not caught by the “no double counting” rule, either because a project is abandoned completely, or because the result of deferral is not visible in NIE T&D’s RP6 plan due to rebranding, or because the Commission does not specify an RP5 deliverable, goes through the D1 50:50 sharing rule and gives NIE T&D 50 pence of profit for every £1 of under-spend.
46. The Commission may wish to run its own ‘stress tests’ so as to understand more clearly the profits that NIE T&D can extract from the regulatory framework from not doing work that it has promised customers to do.
47. The Commission has tools at its disposal to restrict the potential for gaming. These include:
- (a) A change to the 50:50 sharing rule to, say, 30:70;
 - (b) A removal of the exemption that distribution load-related capex has from the “no double counting rule”;
 - (c) A transfer of transmission load-related capex to the D5 method of remuneration;

³ This is equivalent to the net present value of receiving in year $t - 5$ an entitlement to funding worth 50% of projected expenditure in year t .

- (d) Careful definition of the deliverables: as we have stated above, it is essential that the deliverables specified by the Commission are measurable and auditable. We welcome the approach outlined in the email of 25 November 2013, and look forward to the inclusion of the completed list (including number of units and locations where relevant) in the Final Determination. We recommend that this list is unredacted in the public version of the determination to provide transparency for all stakeholders, both current and future.
- (e) Complete reporting: for this mechanism to work, we believe it is essential that the cost and volume reports are back dated to the start of the price control. Without this we have no visibility of the deliverables provided to date and will not be able to verify NIE T&D's claims of pre-funding.
- (f) The use of high level indicators to verify that the deferral has not had an impact on consumers: while the development of these indicators is at an early stage and they would not be as robust as those produced by Ofgem, including a requirement to maintain services at the current standard as part of the D1 mechanism would be a valuable safety net for consumers. This would only be invoked if there was a material decline in the performance of the network between now and the end of RP6. Our proposed interim performance indicators are included in Appendix A. We expect robust performance indicators equivalent to those relied on by Ofgem to be applied from some point in RP6.

Conclusions

48. In this annex we have highlighted the areas where we require further clarity around the intentions and operation of this mechanism. We ask that the Commission reviews the deliverables against each project to ensure that they reflect the funding that is being provided and the value that customers expect. The mechanism will also need to reflect the new arrangements for the transfer of transmission system planning to SONI.
49. We firmly believe that this mechanism cannot operate in the public interest without reporting of costs and volumes back to the start of RP5 (1 April 2012). We accept that the reporting for the early years will be of a lower accuracy, but it should be submitted on a best endeavours basis with confidence grades applied.
50. We consider that the simplest way forward in relation to the reporting under RIGS is for the Commission to introduce the requirement for compliance to the full Ofgem RIGs whilst allowing a public consultation. This could include a time-limited mechanism to deal with specific data lines, data tables which NIE T&D and/or the Regulator deem as not appropriate to the good functioning of the RP5 Commission's FD. This will ultimately allow and support the Regulator making the necessary Directions to NIE T&D as regards which elements of the RIGs are exempt, and in particular which might be disproportionate.

Case Study 1: Change in Specification

Background

52. In the email of 25 November 2013, the Commission stated that the delivery of overhead line work will be measured based on the “number of units” delivered, however these units are not yet defined. The success of the D3 mechanism will depend on how details such as this are specified in the Final Determination.
53. NIE T&D’s request for funding for the refurbishment of overhead lines was based on replacing all of the components that it expects would fail before the next refurbishment cycle in 15 years. Reengineering is based on components that would not be expected to last 45 years. Identifying which specific components actually need to be replaced requires engineering judgement. Opinions can change over time and can be influenced by the corporate attitude to risk.
54. In the long term, it is in customers’ interests if NIE T&D optimises its specifications to ensure that the optimum intervention is made. The RP4 price control only rewarded actual capex interventions, with no gain to the company if it optimised the work. Consequently the RP5 settlement is based on NIE T&D’s current, relatively conservative, view.
55. NIE T&D could significantly reduce the amount of intervention it makes in the short term, while superficially refurbishing the same number of kilometres of circuit. The nature of the assets means that any excessive shortcuts would not become obvious before the end of RP6.
56. We require clarity around what is considered to be a unit of work. For example is it a kilometre of circuit that has been inspected and defects rectified, or is it based on the number of components replaced across the network? NIE T&D’s reporting to us during RP4 has been based on the latter approach and we would favour the continuation of this into RP5. Unfortunately this level of detail will be required to ensure customers receive a reasonable amount of work for their money. If the Commission prefers more high level monitoring (km refurbished), then is it essential that as safety net is in place, for example publically reporting the number of faults on the network to ensure that performance is maintained at the current standard.

57. NIE T&D has identified a substantial amount of investment during RP6 in the overhead line network to comply with ESQCR. We expect that the most efficient approach to implementing this will be to combine it with the reengineering and refurbishment of circuits wherever possible. This will further complicate the identification of pre-funded work unless the units are clearly defined and measured.

Case Study 2: How Deferral Can Increase Costs Elsewhere in the Supply Chain

58. Since 30 April 2013, NIE T&D has a licence condition to consider [get quote] before undertaking any network investment to increase capacity. This obligation was not in place when NIE T&D prepared its business plan, nor when UR assessed the capex plan, nor when we prepared our statement of case. It has therefore not been reflected in any of the decisions made to date.
59. NIE T&D is now obliged to develop an assessment framework that will reduce the capital investment in distribution load related projects while increasing its operating costs by payments to embedded generation and other users for load reduction. If NIE T&D does not do this it will be in breach of its distribution licence. **This change to NIE T&D's assessment of investment is not optional.**
60. We estimate that there is could be 200MW of embedded generation in NI, of which 74MW is already registered as aggregated generator units in the wholesale market. This is approximately 5% of the NI peak demand. Systems could be developed to constrain on generation in specific areas through either the wholesale market or ancillary services contracts. Therefore the costs of operating this generation in response to a local issue could plausibly end up being included within the all-island dispatch balancing costs to avoid double payment of fuel costs to the generator⁴. They are unlikely to find their way into the DUoS tariffs.
61. As this change is due to EU legislation, we would expect the costs to be recovered under the change in law provision. As the change to NIE T&D's licence has not been reflected in the CC determination, any costs associated with setting up the necessary arrangements would be funded in addition to allowances awarded by the CC. These costs are mostly all opex costs (e.g. new legal agreements, changes to the TIA to

⁴ The generator may be scheduled to run in the wholesale market anyway, or be constrained on by SONI for NI security of supply at a macro level rather than NIE's micro issue. Therefore NIE funded fuel costs would be a double count.

allow NIE T&D to request generation to be constrained on, control room IT systems etc.)

62. As the increased opex costs are likely to be outside the D1 mechanism, and may even be incurred by third parties, there is no offsetting benefit to consumers from NIE T&D funding 50% of the additional opex up to the start of RP6. Yet NIE T&D's licence obliges it to follow this path. We ask that the Commission reviews the treatment of distribution load related capex to mitigate against the obvious inequity of this outcome. Including it in the D3 mechanism would produce long term safeguards, although other options should also be considered. We will be happy to provide further detail on the costs that would be incurred outside of the price control to assist the Commission with resolving the issue.

Case Study 3: Deferral of Transmission Load Related Work

63. Project T31 – New Armagh Main 110/33 kV substation was included in the original NIE T&D submission as the Drumnakelly 110/33 kV substation, which has a firm capacity of 111 MVA, was expected to be loaded above firm capacity towards the end of RP5. Based on the information provided by NIE T&D, both BPI and ourselves recommended the inclusion of this new substation in the investment plan.
64. However, the latest All Island Ten Year Forecast Statement now shows that Drumnakelly will now only reach 106 MVA by 2019/20, which suggests that the firm capacity (111MVA) will not be exceeded before 2022/23 i.e. potentially into RP7. Whilst the new substation might be required before that, if demand growth picks up again, it almost certainly isn't going to be required in RP5, and probably not until towards the end of RP6.
65. It is not apparent from the project title that the project was to relieve problems at Drumnakelly rather than in Armagh City, so it would be relatively easy to introduce a new project in RP7 such as Drumnakelly-2 110/33kV substation, and then claim the full cost.
66. This situation is further exacerbated by the fact that it is no longer NIE T&D who will decide if this substation is included in the investment plan, or if the eventual solution involves a new substation in the Armagh area. In this instance, NIE T&D would be

rewarded with the return and depreciation on £1million for decisions that are outside its control. This does not appear to us to be in the public interest and adds significant complexity to the monitoring of the “no double-funding” principle.

67. The new transmission planning arrangements will have been established by the time RP6 commences. We propose that in the short term, any transmission load related projects that have not commenced are moved into mechanism D5. This is a relatively small number of projects and would be limited to the remainder of RP5. We will be able to design RP6 in a way that reflects NIE T&D’s reduced role

Appendix A: List of Deliverables and Outputs

Transmission Projects

Project name	Asset name / further information	Planned deliverable – CC Email 25/11/13	Concerns/Questions	Reporting	Outputs
T6 Transmission Plant Switch Houses	Refurb two 275kV substation buildings and associated works	Specified improvement at specified location(s)	<p>Confirm that both locations should be completed for this amount of funding.</p> <p>Deliverables need to be related to the specification used to develop the BPQ</p>	<p>This work is required to maintain an economic network. There are no alternative solutions, therefore this work is mandatory. Reporting needs to specify progress at both locations</p>	<p>Both buildings should be refurbished and all safety exclusions lifted</p>
T7 Kells 110kV substation	Refurbishment to standard specified in BPQ C3 (28.1.2011). To a fault rating of 40kA	Specified improvement at specified location(s)	<p>This work is at a named location. It is not required to comply with any mandatory duties or standards. Work will also be required in this area to integrate renewable generation.</p> <p>Deliverables need to be related to the specification used to develop the BPQ</p>	<p>Reporting will need to specify all work undertaken at this substation to ensure that funding is not requested under D5.</p>	<p>As this work is not mandatory it is difficult to identify relevant outputs.</p>
T8 Tandragee 110kV Substation	Refurbishment to standard specified in BPQ C3 (28.1.2011). To a fault rating of 40kA	Specified improvement at specified location(s)	<p>BPI has identified that this work is essential to meet NIE's standards and obligations.</p> <p>Deliverables need to be related to the specification used to develop the BPQ</p>	<p>If this project is not undertaken a statement will be required to explain clearly how NIE has been able to comply with its statutory duties.</p>	<p>Substations faults can be recorded.</p>

Project name	Asset name / further information	Planned deliverable – CC Email 25/11/13	Concerns/Questions	Reporting	Outputs
T9 Castlereagh 110kV substation	Refurbishment to standard specified in BPQ C3 (28.1.2011). To a fault rating of 40kA	Specified improvement at specified location(s)	BPI has identified that this work is essential to meet NIE's standards and obligations. Deliverables need to be related to the specification used to develop the BPQ	If this project is not undertaken a statement will be required to explain clearly how NIE has been able to comply with its statutory duties.	Substations faults can be recorded.
T10 110kV switchgear at 3 substations	Replacement 110kV circuit breakers (Ballyvallagh, Dungannon, Lisburn)	Specified number of units	BPI has identified that this work is essential to meet NIE's obligation to maintain an economic network.	If this project is not undertaken a statement will be required to explain clearly how NIE has been able to comply with its statutory duties. Reporting will need to be specific enough to track the work at each location specified.	Substations faults can be recorded.
	Cabling	Linked to associated deliverable			
T11 275kV Plant Ancillaries	Replacement 275kV switchgear and other equipment. As specified in BPQ C2; Cladding is included in project T6		BPI has identified that this work is essential to meet NIE's standards and obligations. Deliverables need to be related to the specification used to develop the BPQ	If this project is not undertaken a statement will be required to explain clearly how NIE has been able to comply with its statutory duties. Reporting will need to be specific enough to track the work at each location	Substations faults can be recorded. Environmental performance should improve (monitored by NIE T&D for compliance with ISO 14001 management systems)
	Catenaries	N/A			
	Cladding replacement	Specified improvement at specified location(s)			
	Protection	Specified improvement at specified location(s)			

Project name	Asset name / further information	Planned deliverable – CC Email 25/11/13	Concerns/Questions	Reporting	Outputs
T11 275kV Plant Ancillaries	Asbestos removal	Specified improvement at specified location(s)	See above	See above	See above
	Concrete structure refurbishment	N/A			
	Transformer Bunding	Specified improvement at specified location(s)			
	Holthum	N/A			
	Security systems	Specified improvement at specified location(s)			
	Generator	Replace 5 standby generators			
	DC Standby systems	Specified improvement at specified location(s)			
	FMJL & Reyrolle Hairpin CTs	N/A			
	Earthing	Specified improvement at specified location(s)			
	AC rewire	Specified improvement at specified location(s)			
	Control room refurb	Specified improvement at specified location(s)			
Drainage	N/A				

Project name	Asset name / further information	Planned deliverable – CC Email 25/11/13	Concerns/Questions	Reporting	Outputs
T12 110kV Plant ancillaries	Replacement 110kV switchgear and other equipment. As specified in BPQ C2, Table 5, p7		BPI has identified that this work is essential to meet NIE's standards and obligations. Deliverables need to be related to the specification used to develop the BPQ	If this project is deferred a statement will be required to explain clearly how NIE has been able to comply with its statutory duties. Specific reporting to track the work at each location	Substations faults can be recorded. Environmental performance should improve (monitored by NIE T&D for compliance with ISO 14001 management systems)
	Protection	Specified improvement at specified location(s)			
	Cable ducts	N/A			
	Structure refurb	N/A			
	Tx Bunding	Specified improvement at specified location(s)			
	Holthum	N/A			
	Generator	Replace 2 standby generators			
	External lighting	N/A			
	DC standby systems	Specified improvement at specified location(s)			
	AC system rewire	Specified improvement at specified location(s)			
T12 110kV Plant ancillaries	Busbars, isolators and VTs	N/A			
	Security	Specified improvement at specified location(s)			
	CO2 refurb	N/A			
	Eathing	N/A			
	Civil	N/A			

Project name	Asset name / further information	Planned deliverable – CC Email 25/11/13	Concerns/Questions	Reporting	Outputs
	Strabane Main transformer refurbishment	Specified improvement at specified location(s)			
T13 275kV/110kV Transformer Replacement	transformers (275/110 kV)	Specified number of units	BPI has identified that only half of this work is required in RP5 to comply with NIE's duty to maintain an economic network. We have concerns about the lead time for ordering these items of plant and are sceptical about NIE's ability to deliver this work before the end of RP5.	If NIE undertakes more than this, we would expect the annual report to specify how this overspend is consistent with NIE's statutory duties.	Substations faults can be recorded
T14 110/33kV Transformers Replacement	110 transformers (110/33 kV)	Specified number of units	We are concerned that NIE is being pre-funded for this work that the Commission has identified as not required to comply with NIE's statutory duties. Clarity around how NIE could undertake this work and still comply with it duties to maintain an economic network would be appreciated.	A specific number of transformers should be identified to allow monitoring. Please note - NIE will also be installing a significant number of these transformers under the D5 mechanism. Auditing will be required to ensure that there is no duplication between funding mechanisms.	As this work is not mandatory it is difficult to identify relevant outputs.
	Installation	Linked to associated deliverable			
	Cables	Linked to associated deliverable			

Project name	Asset name / further information	Planned deliverable – CC Email 25/11/13	Concerns/Questions	Reporting	Outputs
T15 22kV Reactor replacement	22kV Reactor	Specified number of units	Not all of this work is required to comply with NIE's statutory obligations. Clarity around how NIE could undertake all of this work and still comply with its duties to maintain an economic network would be appreciated.	Reporting under the RIGS should be sufficient	The number of faults on the reactors could be tracked
	Installation cost	Linked to associated deliverable			
T16 Transmission Transformer Refurbishment	275kV Buching Refurbishment	Specified number of units	This appears to overlap with the "reactive" work included within the IMF&T category. This may be a double count within the PD. We ask the Commission to review this project and to either confirm specific deliverables that can be monitored or reallocate it to the IMF&T category. BPI has identified that not all of this work is required to meet NIE's obligations and standards, it can therefore be deferred.	Reporting will need to be developed at an appropriate level of detail to track the work pre-funded here.	Overall transformer faults can be recorded
	275kV Plant Painting	Specified number of units			
	275kV disconnecter Refurbishment and spares	Specified improvement at specified location(s)			
	275/110kV TX Tap changer refurbishment	Specified number of units			
	110kV Cooler replacements	Specified number of units			
	110kV Bushings replacements	Specified number of units			
	110kV Plant Painting	Specified number of units			
	110kV Disconnector Refurbishment	Specified improvement at specified location(s)			
110/33kV TX Tap changer refurbishment	Specified number of units				

Project name	Asset name / further information	Planned deliverable – CC Email 25/11/13	Concerns/Questions	Reporting	Outputs
T17 275kV Overhead Line Asset Replacement	275kV Colour and Number Plates	Specified number of units	The deliverables should specify the percentage of the network that should be refurbishment under category A and C. The remaining pre-funded work should also be identified separately. Not all of this work is required to comply with NIE's statutory obligations. Clarity around how NIE could undertake this work and still comply with it duties to maintain an economic network would be appreciated.	Reporting should specify the units of work delivered on exactly the same basis that NIE specified in the BPQ. Any deviation removes transparency and creates opportunities for gaming.	Faults on the 275kV network should be less than that during RP4.
	275kV Spacers	Specified number of units			
	275kV Suspension Insulator	Specified number of units			
	275kV Tension Insulator	Specified number of units			
	275kV Tower Painting	Specified number of units			
	Foundation assessment (towers)	N/A			
	Condition assessment	N/A			
	Vegetation	N/A			
T19 110kV Overhead Line Asset Replacement	110kV Conductor replacement	Specified number of units	The deliverables should specify the percentage of the network that should be refurbishment under category A and C. The remaining pre-funded work should also be identified separately. Not all of this work is required to comply with NIE's statutory obligations. Clarity around how NIE could undertake this work and still comply with it duties to maintain an economic	Reporting should specify the units of work delivered on exactly the same basis that NIE specified in the BPQ. Any deviation removes transparency and creates opportunities for gaming.	Faults on the 275kV network should be less than that during RP4.
	110kV Colour and Number Plates	Specified number of units			
	110kV Suspension Insulator	Specified number of units			
	110kV Tension Damper	Specified number of units			
	110kV Tension Insulator	Specified number of units			
	110kV Tower Painting	Specified number of units			
	110kV Wood Poles replacement	Specified number of units			

Project name	Asset name / further information	Planned deliverable – CC Email 25/11/13	Concerns/Questions	Reporting	Outputs
	Foundation assessment	N/A	network would be appreciated. Deliverables need to be related to the specification used to develop the BPQ		
	Condition assessment	N/A			
	Vegetation Management	N/A			
T20 Transmission Cables	Requirements defined BPQ E1, p4, table 2		BPI has identified that this work is essential to meet NIE's standards and obligations. Deliverables need to be related to the specification used to develop the BPQ	If this project is not undertaken a statement will be required to explain clearly how NIE has been able to comply with its statutory duties.	Cable faults can be recorded. Fluid leakage should reduce (monitored by NIE T&D for compliance with ISO 14001 management systems)
	Refurbishment of cable tunnels & installation of permanent pumps	Specified improvement at specified location(s)			
	Replacement of 110kV double circuit (2.6km)	Specified number of units			
	Replacement of Sheath Voltage Limiters	Specified improvement at specified location(s)			
	Refurbishment cost of double circuit Donegal Main – Whitla Street	Specified improvement at specified location(s)			
	Replacement of existing mineral oil with modern DDB fluid	Specified number of units			
	Refurbishment of 110kV sealing ends	N/A			
	Refurbishment of hydraulic ancillary systems	Specified improvement at specified location(s)			

Project name	Asset name / further information	Planned deliverable – CC Email 25/11/13	Concerns/Questions	Reporting	Outputs
	Sheath testing programme and refurbishment	N/A			
T26 Ballyumford 110kV Switchboard replacement	110kV switchboard	Specified improvement at specified location(s)	Please note - this is not a load related project. It is not required to comply with any mandatory duties or standards.	Reporting should be in line with the RIGS.	As this work is not mandatory it is difficult to identify relevant outputs.
	Installation	Linked to associated deliverable			
	Project Management	Linked to associated deliverable			
T27 Airport Road 110/33kV Substation	Tee off switchgear Rosebank	Specified improvement at specified location(s)	Please note, SONI take over responsibility for planning the transmission system from April 2014. NIE will not decide if this project goes ahead or not. We do not understand how it is in the public interest to reward NIE for deferral that is completely outside its control?	Reporting should be in line with the RIGS.	SONI publish the Ten Year Transmission System Forecast annually. The spare capacity at each node is identified there.
	110kV Cabling from Dee Street tower to 110/33kV TX	Specified improvement at specified location(s)			
	Extend compound	Linked to associated deliverable			
T27 Airport Road 110/33kV Substation	Install 2 110/33kV TX	Linked to associated deliverable			
T28 Ballylumford - Eden 110kV Circuit Upgrade	110kV Line Re-build	No allowance in PD	n/a		

Project name	Asset name / further information	Planned deliverable – CC Email 25/11/13	Concerns/Questions	Reporting	Outputs
T29 Eden - Carnmoney 110kV Line Upgrade	110kV Line Re-build	No allowance in PD	n/a		
T30 4th Transformer at Castlereagh 275/110kv substation	As defined 28.1.2011, BPQ A1, Appendix 11, p30/31	Specified number of units	Please note, SONI take over responsibility for planning the transmission system from April 2014. NIE will not decide if this project goes ahead or not. We do not understand how it is in the public interest to reward NIE for deferral that is completely outside its control?	Reporting should be in line with the RIGS.	SONI publish the Ten Year Transmission System Forecast annually. The spare capacity at each node is identified there
T31 Armagh Main 110/33kV substation	Pre construction works only for project; as defined 28.1.2011, BPQ A1, Appendix 14, p34	Specified improvement at specified location(s)	Please note, SONI take over responsibility for planning the transmission system from April 2014. NIE will not decide if this project goes ahead or not. We do not understand how it is in the public interest to reward NIE for deferral that is completely outside its control? The latest transmission statement shows that this is no longer required until the end of RP7. We are concerned that pre-funding will be forgotten by then, or rebranding will occur.	This project is no longer required.	SONI publish the Ten Year Transmission System Forecast annually. The spare capacity at each node is identified there

Project name	Asset name / further information	Planned deliverable – CC Email 25/11/13	Concerns/Questions	Reporting	Outputs
T32 Dungannon Main 2nd 110/33kV Substation	110 transformers (110/33 kV)	No allowance in PD	We are confused by this, as a partial allowance has been included for the distribution part of this project. This request was a result of an incorrect application of the planning standard and neither part of the project is necessary.		
T33 Castlereagh - Knock 110kV Partial Cable Replacement	110kV Cable Replacement (375 X bond)	Specified number of units	Please note, SONI take over responsibility for planning the transmission system from April 2014. NIE will not decide if this project goes ahead or not. We do not understand how it is in the public interest to reward NIE for deferral that is completely outside its control?	Reporting should be in line with the RIGS.	SONI publish the Ten Year Transmission System Forecast annually. The spare capacity at each node is identified there
T34 Tandragee 275kV substation 2nd bus coupler	As defined 28.1.2011, BPQ A1, Appendix 16, p36	Specified improvement at specified location(s)	Please note, SONI take over responsibility for planning the transmission system from April 2014. NIE will not decide if this project goes ahead or not. We do not understand how it is in the public interest to reward NIE for deferral that is completely outside its control?	Reporting should be in line with the RIGS.	SONI publish the Ten Year Transmission System Forecast annually. The spare capacity at each node is identified there

Project name	Asset name / further information	Planned deliverable – CC Email 25/11/13	Concerns/Questions	Reporting	Outputs
T35 Ballylumford G5 & G6 Cable Replacement	275kV Cable Replacement	No allowance in PD	n/a		
T36 Belfast North Main 110/33kV Bulk Supply Substation	110 transformers (110/33 kV)	Specified number of units	This project commenced in RP4	Reporting should be in line with the RIGS. With additional clarification of the work that took place and was added to the RAB during RP4.	SONI publish the Ten Year Transmission System Forecast annually. The spare capacity at each node is identified there
T37 Hannahstown - Lisburn 110kV Overhead Line Upgrade	110kV Line Re-build	No allowance in PD	n/a		
T38 Creaghagh 110kV substation isolators and Earth switches	As defined 28.1.2011, BPQ A1, Appendix 17, p37	Specified improvement at specified location(s)	Please note, SONI take over responsibility for planning the transmission system from April 2014. NIE will not decide if this project goes ahead or not. We do not understand how it is in the public interest to reward NIE for deferral that is completely outside its control?		

Project name	Asset name / further information	Planned deliverable – CC Email 25/11/13	Concerns/Questions	Reporting	Outputs
T39 Hannahstown & Kells 275kV substation	As defined 28.1.2011, BPQ A1, Appendix 19, p40	Specified improvement at specified location(s)	Please note, SONI take over responsibility for planning the transmission system from April 2014. NIE will not decide if this project goes ahead or not. We do not understand how it is in the public interest to reward NIE for deferral that is completely outside its control?		
T40 ESQCR	Full survey and asset register	N/A			
T42 Substation Flooding Enforcement (T)	Permanent protection to at risk substations	Specified improvement at specified location(s)	n/a	Reporting should be in line with the RIGS.	The sites should be assessed against the projected 1 in 100 year flood event
T21 Transmission Fault & Emergency		N/A	All included in the IMF&T category.	Reporting should be in line with the RIGS.	The overall customer minutes lost is a key indicator here.
T22 Transmission Reactive		N/A			
T23 Design & Consultancy		N/A			
T41 Transmission Capitalised Overheads		N/A			

Distribution Projects

Project name	Asset name / further information	Planned deliverable – CC Email 25/11/13	Concerns/Questions	Reporting	Outputs
D06 Distribution Tower Lines	Refurbishment 26km Tower Lines	Specified number of units	<p>Definition of "units" required to ensure that all work is done - not just the lower cost items. We note that BPI only considers 30% of this work to be mandatory. We are unsure of the reasons why the remaining 70% is being pre-funded.</p> <p>Deliverables need to be related to the specification used to develop the BPQ</p>	Units delivered by circuit each year - broken down by type to ensure a full refurbishment is undertaken.	No further intervention on the 26 km of Distribution Tower Lines in the next 15 years.
	Condition Monitoring	N/A			
	Vegetation Management	N/A			
D07 33kV Overhead Lines	33kV Line Re-engineer	Specified number of units	<p>Definition of "units" required to ensure that all necessary work is done - not just the lower cost items. BPI does not consider all of the 33kV work to be necessary to meet NIE's obligations and standards. We would appreciate clarification of which aspects fall into category (B-C).</p> <p>Deliverables need to be related to the specification used to develop the BPQ</p>	Units delivered each year - broken down by type to ensure a full reengineering is undertaken. The reengineered circuits should be identified to ensure any requests for major intervention within the next 15 years is identified.	In theory the circuits that have been reengineered will not require any major intervention within the next 45 years. We are not sure how to ensure that sufficient work is undertaken to justify the label "reengineering". This is an obvious area for gaming and careful definition of the

Project name	Asset name / further information	Planned deliverable – CC Email 25/11/13	Concerns/Questions	Reporting	Outputs
					deliverables is essential.
D07 33kV Overhead Lines	33kV Line Refurb	Specified number of units	<p>Definition of "units" to ensure that all necessary work is done - not just the lower cost items. BPI does not consider all of the 33kV work to be necessary to meet NIE's obligations and standards. We would appreciate clarification of which aspects fall into category (B-C).</p> <p>Deliverables need to be related to the specification used to develop the BPQ</p>	Refurbishment activities should be reported in line with the RIGS.	In theory the circuits that have been refurbished will not require any major intervention within the next 15 years. Any additional intervention beyond the minor work included in the TAR programme would be considered to have been "pre-funded".

Project name	Asset name / further information	Planned deliverable – CC Email 25/11/13	Concerns/Questions	Reporting	Outputs
D07 33kV Overhead Lines	33kV Line TAR	N/A	While funded elsewhere - it is important that customers receive an adequate service from the TAR programme. This should be specified to reflect the activities being funded. The 33kV network should be inspected and trees cut every 3 years. Tree cutting should be undertaken to an equivalent standard to the GB comparator companies. (ENA TS 43-8 and ENA ETR 132)	Tree cutting activities should be reported in line with the RIGS. In addition, the number of faults on the 33kV network can be measured. If the number of faults increases, an investigation should be triggered to determine if the tree cutting and refurbishment standards have been applied correctly.	The 33kV network should be inspected and trees cut to the same standard as GB DNOs every 3 years. The number of faults on the 33kV network should not increase above the RP4 average.
D08 11kV Overhead Lines	11kV Line Re-engineer	Specified number of units	Definition of "units" to ensure that all necessary work is done - not just the lower cost items. BPI does not consider all of the 11kV work to be necessary to meet NIE's obligations and standards. We would appreciate clarification of which aspects fall into category (B-C). Deliverables need to be related to the specification used to develop the BPQ	Units delivered each year - broken down by type to ensure a full reengineering is undertaken. The reengineered circuits should be identified to ensure any requests for major intervention within the next 15 years is identified.	In theory the circuits that have been reengineered will not require any major intervention within the next 45 years. We are not sure how to ensure that sufficient work is undertaken to justify the label "reengineering". This is an obvious area for gaming and careful definition of the deliverables is essential.

Project name	Asset name / further information	Planned deliverable – CC Email 25/11/13	Concerns/Questions	Reporting	Outputs
D08 11kV Overhead Lines	11kV Line Refurb	Specified number of units	<p>Definition of "units" to ensure that all necessary work is done - not just the lower cost items. BPI does not consider all of the 11kV work to be necessary to meet NIE's obligations and standards. We would appreciate clarification of which aspects fall into category (B-C).</p> <p>Deliverables need to be related to the specification used to develop the BPQ</p>	Refurbishment activities should be reported in line with the RIGS.	In theory the circuits that have been refurbished will not require any major intervention within the next 15 years. Any additional intervention beyond the minor work included in the TAR programme would be considered to have been "pre-funded".
	11kV Line TAR	N/A	<p>While funded elsewhere - it is important that customers receive an adequate service from the TAR programme. This should be specified to reflect the activities being funded. The 11kV network should be inspected and trees cut every 5 years. Tree cutting should be undertaken to an equivalent standard to the GB comparator companies. (ENA TS 43-8 and ENA ETR 132)</p>	Tree cutting activities should be reported in line with the RIGS. In addition, the number of faults on the 11kV network can be measured. If the number of faults increases, an investigation should be triggered to determine if the tree cutting and refurbishment standards have been applied correctly.	<p>The 33kV network should be inspected and trees cut to the same standard as GB DNOs every 5 years. The number of faults on the 33kV network should not increase above the RP4 average.</p>

Project name	Asset name / further information	Planned deliverable – CC Email 25/11/13	Concerns/Questions	Reporting	Outputs
D09 LV Lines	Line Undergrounding (Land locked)	Specified number of units	Definition of "units" to ensure that all necessary work is done - not just the lower cost items.	Units delivered each year - broken down by type to ensure a full reengineering is undertaken. The reengineered circuits should be identified to ensure any requests for major intervention within the next 15 years is identified.	In theory the circuits that have been reengineered or undergrounded will not require any major intervention within the next 45 years. We are not sure how to ensure that sufficient work is undertaken to justify the label "reengineering". This is an obvious area for gaming and careful definition of the deliverables is essential.
	Refurbishment - Urban and rural	Specified number of units	Definition of "units" to ensure that all necessary work is done - not just the lower cost items. Deliverables need to be related to the specification used to develop the BPQ	Refurbishment activities should be reported in line with the RIGS.	In theory the circuits that have been refurbished will not require any major intervention within the next 15 years. Any additional intervention beyond the minor work included in the TAR programme would be considered to have been "pre-funded".

Project name	Asset name / further information	Planned deliverable – CC Email 25/11/13	Concerns/Questions	Reporting	Outputs
D09 LV Lines	Associated tree cutting	N/A	While funded elsewhere - it is important that customers receive an adequate service from the TAR programme. This should be specified to reflect the activities being funded. The LV network should be inspected and trees cut every 5 years. Tree cutting should be undertaken to an equivalent standard to the GB comparator companies. (ENA TS 43-8 and ENA ETR 132)	Tree cutting activities should be reported in line with the RIGS. In addition, the number of faults on the LV network can be measured. If the number of faults increases, an investigation should be triggered to determine if the tree cutting and refurbishment standards have been applied correctly.	The LV network should be inspected and trees cut to the same standard as GB DNOs every 5 years. The number of faults on the LV network should not increase above the RP4 average.
	LV Line TAR	N/A			
	LV Line Undergrounding (Direct Access)	Specified number of units	Definition of "units" to ensure that all necessary work is done - not just the lower cost items.	Reporting should be in line with the RIGS	Overall faults on the LV network should reduce.
D10 Undereaves	0.4 services (undereaves)	Specified number of units	This work is required for safety reasons and should all be delivered. Deferral would not be in the public interest.	Reporting should be in line with the RIGS	Number of safety incidents associated with undereaves (including near misses)
D11 LV cut-outs	Replace house service cut-outs at 8000 properties	Specified number of units	This work is required for safety reasons and should all be delivered. Deferral would not be in the public interest. The unit rate has been increased to allow for the more complex work remaining to be done.	Reporting should be in line with the RIGS. The mix of simple/complex cut-outs should be monitored to ensure that the mix of actual work reflects that used to calculate the allowance.	Number of safety incidents associated with cut-outs (including near misses)

Project name	Asset name / further information	Planned deliverable – CC Email 25/11/13	Concerns/Questions	Reporting	Outputs
D13 Primary Plant	Primary switchgear (11kV & 6.6kV)	Specified number of units	This appears to be clearly defined.	Reporting should be in line with the RIGS. The level of detail needs to be verified to ensure that it will allow reporting against each of the asset types listed.	Number of faults on primary substations. This should not increase above RP4 levels
	Outdoor switchgear - Circuit Breaker (33kV)	Specified number of units			
	Associated civils costs	Linked to associated deliverable			
	Associated cable costs	Linked to associated deliverable			
	Outdoor switchgear - replacement of complete Mesh (with indoor switchboard)	Specified number of units			
	Associated civils costs	Linked to associated deliverable			
	Associated cable costs	Linked to associated deliverable			
	Outdoor switchgear - removal of back stays	Specified number of units			
	Outdoor switchgear - replacement of Mesh equipment (33kV)	Specified number of units			
	Associated civils costs	Linked to associated deliverable			
Associated cable costs	Linked to associated deliverable				

Project name	Asset name / further information	Planned deliverable – CC Email 25/11/13	Concerns/Questions	Reporting	Outputs
D13 Primary Plant	Indoor Switchgear (33kV)	Specified number of units	See above	See above	See above
	Associated civils costs	Linked to associated deliverable			
	Associated cable costs	Linked to associated deliverable			
	Primary substation DC system	Specified number of units			
	Primary substation AC rewiring	Specified number of units			
	Building refurbishment	Specified number of units			
	Civil works to primary substations	N/A			
	Primary transformer painting	N/A			
	Primary substation lease renewal	N/A			
D14 Primary Transformers	33/11kV Transformer (up to 6.25MVA)	Specified number of units	This appears to be clearly defined, but none of the work is considered to be necessary by BPI. This work can be deferred without any breach of standards or other mandatory obligations.	Reporting should be in line with the RIGS. The level of detail needs to be verified to ensure that it will allow reporting against each of the asset types listed.	Number of faults on primary substations. This should not increase above RP4 levels
	33/11kV Transformer (up to 12.5MVA)	Specified number of units			
	33/11kV Transformer (up to 18.75MVA)	Specified number of units			
	33/6.6kV Transformer (up to 18.75MVA)	Specified number of units			

Project name	Asset name / further information	Planned deliverable – CC Email 25/11/13	Concerns/Questions	Reporting	Outputs
D14 Primary Transformers	33/6.6kV Transformer (up to 20/25MVA)	Specified number of units	See above	See above	See above
	Cable	Linked to associated deliverable			
D15 Secondary Substations	Replace RMU	Specified number of units	This appears to be clearly defined. BPI does not consider all of the secondary substation work to be necessary to meet NIE's obligations and standards. We would appreciate clarification of which aspects fall into category (B-C).	Reporting should be in line with the RIGS. The level of detail needs to be verified to ensure that it will allow reporting against each of the asset types listed.	Number of faults on secondary substations. This should not increase above RP4 levels
	Replace complete S/S	Specified number of units			
	Replace complete S/S and temp	Specified number of units			
	Replace switchboard	Specified number of units			
	Replace OH fed GMT	Specified number of units			
	Replace H pole	Specified number of units			
	H pole TX change only	Specified number of units			
	H pole replace LV cab	Specified number of units			
	4 pole replacement	Specified number of units			
	4 pole defects	Specified number of units			
Replace sectionlisers	Specified number of units				

Project name	Asset name / further information	Planned deliverable – CC Email 25/11/13	Concerns/Questions	Reporting	Outputs
D15 Secondary Substations	Minipillars	Specified number of units	See above	See above	See above
	LV wall mounted	Specified number of units			
	Ancillary systems	N/A			
	Inspection programme	N/A			
D16 Distribution Cables	Refurbishment of 4 x 33kV fluid filled circuits	Specified number of units	This appears to be clearly defined. BPI does not consider all of the distribution cable work to be necessary to meet NIE's obligations and standards. We would appreciate clarification of which aspects fall into category (B-C).	Reporting should be in line with the RIGS. The level of detail needs to be verified to ensure that it will allow reporting against each of the asset types listed.	Number of faults on distribution cables. This should not increase above RP4 levels The volume of fluid lost through leakage should reduce (already monitored by NIE T&D for compliance with ISO14001 Systems)
	Refurbishment of hydraulic systems	N/A			
	Sheath renewal	N/A			
	Replacement of oil sections OL147 & 148	Specified improvement at specified location(s)			
	Purchase of hydraulic leak detection equipment	N/A			
	Replacement of L42T connections	Specified number of units			
	Purchase and installation of on-line condition monitoring equipment	Specified improvement at specified location(s)			
	Refurbishment/replacement outdoor terminations	N/A			
	Replace 15km of HV cable	Specified number of			

Project name	Asset name / further information	Planned deliverable – CC Email 25/11/13	Concerns/Questions	Reporting	Outputs
D16 Distribution Cables		units	See above	See above	See above
	Replace 14.5km of LV cable	Specified number of units			
	Replace 6km of VB main cable	Specified number of units			
D22 Airport Road/Titanic Quarter	As detailed in Appendix 3 of BPQ A3 (28.1.2011); p67 - 72	N/A	<p>We are concerned by the high amount of pre-funding that could occur here along with the obligation on NIE to consider opex alternatives to load related infrastructure investment.</p> <p>These opex costs are likely to impact on the wholesale market rather than NIE's cost base. Alternatively they would trigger the change in law clause as the licence modification occurred on 30 April 2013.</p> <p>Where an opex solution funded outside of the price control is identified the "capex pre-funding" should be relinquished by NIE.</p>	The reporting should be in line with the RIGS	<p>We propose that the Load Indices that have already been developed by NIE are used to ensure that an appropriate amount of work is undertaken.</p> <p>While these are imperfect and require a considerable amount of work to refine them before RP6, they could be used to monitor the distribution. The loading of the network at the start of RP6 should not exceed that measured by the LIs at the start of RP5 (based on the current criteria). This obligation should be included in the regulatory agreement. The improved criteria can be adopted for RP6.</p>
D23 Creagh/Maghera/Magherafelt 33kV system	As detailed in Appendix 3 of BPQ A3 (28.1.2011); p73 - 76	N/A			
D24 Cookstown 33kV system reinforcement	As detailed in Appendix 3 of BPQ A3 (28.1.2011); p81 - 84	N/A			
D25 Roslea 33/11kV substation	As detailed in Appendix 3 of BPQ A3 (28.1.2011); p85 - 88 (remainder in RP6)	N/A			
D26 Castleberg 33/11kV substation	As detailed in Appendix 3 of BPQ A3 (28.1.2011); p91 - 92	N/A			
D27 Dungannon Main - new 33kV Switchboard	As detailed in Appendix 3 of BPQ A3 (28.1.2011); p93	No allowance in PD			
D28 Tullyvannon 33/11kV substation	11 cable (3/185)	N/A			
	11 Indoor Circuit Breaker	N/A			

Project name	Asset name / further information	Planned deliverable – CC Email 25/11/13	Concerns/Questions	Reporting	Outputs
D28 Tullyvannon 33/11kV substation	Replacement		See above	See above	This will require reporting against two sets of criteria at the start of RP6.
	33/11kV Transformer (upto 6.25MVA)	N/A			
D29 Brookhill 33kV reinforcement	As detailed in Appendix 3 of BPQ A3 (28.1.2011); p98	N/A			
D30 Belfast North Main 110/33kV Substation	33kV Indoor Circuit Breaker	N/A			
D31 Granville 33kV reinforcement	As detailed in Appendix 3 of BPQ A3 (28.1.2011); p100	No allowance in PD			
D32 Strand Road 33kV reinforcement	As detailed in Appendix 3 of BPQ A3 (28.1.2011); p100	N/A			
D33 Gallaghers 33kV reinforcement	As detailed in Appendix 3 of BPQ A3 (28.1.2011); p100	No allowance in PD			
D34 Whitehouse 33kV reinforcement	As detailed in Appendix 3 of BPQ A3 (28.1.2011); p101	N/A			
D35 Limavady town 33kV reinforcement	As detailed in Appendix 3 of BPQ A3 (28.1.2011); p101	No allowance in PD			
D36 33/11kV Transformers	Carrick North	N/A			
	Coleraine West	N/A			
	Malone	N/A			

D36 33/11kV
Transformers

Project name	Asset name / further information	Planned deliverable – CC Email 25/11/13	Concerns/Questions	Reporting	Outputs
	Omagh West	N/A			
	Drumcairne	N/A			
	Drumcairne	N/A			
	Ballyfordin	N/A			
	Moypark	N/A			
	Claudy Central	N/A			
	Glenavy	N/A			
D37 11kV Load related	Reinforcement on planned and reactive basis. 17 schemes as outlined in BPQ A3, p7 - 9	N/A	See above	See above	See above
D38 LV load related	Reinforcement where overloading and voltage problems have arisen. As per BPQ A4	N/A			
D56 25mm ² overhead line	25mm ² overhead line	No allowance in PD	n/a		
D48 11kV Network Performance	Remote Control devices in rural network	No allowance in PD	n/a		
D51 Public Realms	Replacement / urban regeneration	N/A			

Project name	Asset name / further information	Planned deliverable – CC Email 25/11/13	Concerns/Questions	Reporting	Outputs
D50 Substation Flooding Enforcement (D)	Permanent protection several distribution substations	Specified number of units	Concerns remain about the need for all of this work as the flood maps are not at an appropriate scale. We would be very concerned about NIE being rewarded for deferring work that has not been established as necessary. In this case there would be no other work to offset this allowance against and the pre-funding is a reward for inflating the capex request. Deliverables need to be related to the specification used to develop the BPQ	Reporting should be in line with the RIGS.	The sites should be assessed against the projected 1 in 100 year flood event
D43 ESQCR	Full survey and asset register	N/A			
D44 Road and Street Works		No allowance in PD	n/a		
D49 Smart Grid	Condition monitoring	Specified number of units	NIE explained to us that these were portable units that could be relocated once the original transformer is replaced. This functionality must be preserved for the investment to be cost effective.	Reporting should be in line with the RIGS.	The number of additional years of transformer life should be recorded to assess the cost-effectiveness of this investment. The units should be capable of being relocated.
	Smart technologies	No allowance in PD	n/a		

Project name	Asset name / further information	Planned deliverable – CC Email 25/11/13	Concerns/Questions	Reporting	Outputs
D39 SCADA		N/A	Deliverables are also required for this project.	Reporting should be in line with the RIGS.	All necessary information provided to SONI and the Distribution Control Centre
D41 Operational Telecoms network		N/A	Deliverables are also required for this project.	Reporting should be in line with the RIGS.	The necessary functionality is delivered
D19 Storms		N/A	All included in the IMF&T category.	Reporting should be in line with the RIGS.	The overall customer minutes lost is a key indicator here.
D21 Post Storm repairs		N/A			
D17 Distribution Fault & Emergency		N/A			
D18 Distribution Reactive		N/A			
D12 Distribution OHL Fixed Costs		N/A			
D20 Design & Consultancy		N/A			
D45 Distribution Capitalised Overheads		N/A			