ATTACHMENT 6.04

Response to AER on vegetation management costs

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Endeavour Energy

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Executive Summary

This document reviews the AER's decision on vegetation management to establish whether we need to revise our substantive proposal.

In our substantive proposal, we forecast total vegetation management opex of $323.4 million for the 2014-19 period. This comprised approximately 23.6% of our total forecast opex for the 2014-19 period. We provided compelling information on why our proposed expenditure for vegetation management was required to achieve the opex objectives and satisfied the opex criteria under 6.5.6 of the Rules.

In our substantive proposal, we set out why we required an increase in costs from actual expenditure in 2012-13 (base year) to address a non-compliance issue with meeting our prudent standard for vegetation management. These costs were clearly to achieve the opex objectives, in particular complying with our regulatory obligations. We also showed how our proposed costs reflect efficient costs. We noted that the activity we performed is tied to a clear and measurable standard and that our delivery mode was based on an open and competitive tendering process in a mature external market.

The AER did not specify a reduction to our proposed vegetation management costs as its substitute opex was based primarily on a benchmarking model which only identified total opex. However, based on the implicit logic in the AER's decision, we consider the AER's decision provides an allowance of approximately $200 million (real, 2013-14) for the 2014-19 regulatory control period. This is a reduction of 38% of our proposed expenditure for 2014-19.

We consider that the AER's decision has been based on flawed benchmarking analysis and inadequate consideration of the non-compliance issue we are seeking to address. For this reason, we have not revised our proposal to address the issues raised by the AER.

However, in reviewing the AER's decision we have considered new information that has come to light since submitting our substantive proposal in May 2014. The new information demonstrates that our estimate of costs for 2013-14 was well below the actual costs we incurred. Accordingly we have revised our proposal to include our latest estimate of vegetation management costs for the 2014-19 regulatory period. This has resulted in a $110 million increase (real, $2013-14) for vegetation management costs compared to our substantive proposal.

Increasing awareness of importance of vegetation management

Vegetation management is critical to manage the risks of trees coming into contact with our electricity network. The central activity is to clear vegetation and remove identified hazard trees that are in close proximity to electricity lines and to safely dispose of cut vegetation in accordance with our environmental obligations.

Vegetation management activities are required to ensure the ongoing safety and reliable functioning of the electricity network. In the absence of such activity, vegetation would grow unchecked and eventually come into contact with electricity assets causing:

- public safety incidents such as electrocution, or damage to a person's property;
- fire starts and the risk of bushfires that have devastating impacts including loss of human life and large scale property destruction; and
- electricity supply interruptions.

The importance of prudent vegetation management has been put into the spotlight as a result of the catastrophic damage of bushfires across the nation, most recently in Victoria. Reviews have shown that prior to these events, the industry as a whole had not been paying sufficient regard to the safety impacts from failing to properly manage vegetation. This was in part due to insufficient allowances

provided in regulatory determinations. The Royal Commission into the 2009 black Saturday bush fires noted that 173 people had died in the bushfires. The Commission stated[1]:

> *"Victoria's electricity assets are ageing, and the age of the assets contributed to three of the electricity-caused fires on 7 February 2009—the Kilmore East, Coleraine and Horsham fires. Distribution businesses' capacity to respond to an ageing network is, however, constrained by the electricity industry's economic regulatory regime. The regime favours the status quo and makes it difficult to bring about substantial reform. As components of the distribution network age and approach the end of their engineering life, there will probably be an increase in the number of fires resulting from asset failures unless urgent preventive steps are taken.*
>
> *The Commission considers that now is the time to start replacing the ageing electricity infrastructure and to make major changes to its operation and management. The seriousness of the risk and the need to protect human life are imperatives Victorians cannot ignore."*

Similar concerns have been raised with the safety practices and risk management of Western Australian distributors. A parliamentary inquiry into wood poles noted:

> *"Given the potential consequences of any wooden power pole failure, wooden power pole safety is, quite literally, a matter of life and death… Over the past ten years in the south west of this State, there have been as many as 13 bushfire incidents, about which subsequent investigations have suggested that faulty electricity infrastructure may have been the principal cause.8 This resulted in a tragic loss to the community of three of our fellow citizens. The total loss of property, wildlife and stock as a result of these incidents is not known, but is unquestionably extensive."*[2]

Concerns with the AER's draft decision

In light of these real life examples, we are very concerned that the AER's decision reflects a substantial reduction to our proposed vegetation management costs.

The AER's decision is predicated on its benchmarking analysis, which it has used to form a view on the efficient base year costs from which to forecast opex. The AER have relied on analysis of benchmark vegetation management costs in coming to a view that our 2012-13 actual costs contained material inefficiencies. Such analysis is however fundamentally flawed for 3 reasons:

- the AER's analysis only considers inputs (ie: expenditure) rather than assessing the outputs (standard and compliance rate) that the DNSP achieves. For instance, Powercor's compliance with a new standard was 3% as at July 2011.[3] This analysis demonstrates that the analysis failed to consider whether benchmark costs were sufficient to meet the opex objectives including compliance with regulatory obligations;

- the analysis used the period 2009-13 to form a view on the average efficient costs of undertaking vegetation management. This was a time when DNSPs in the industry were not achieving a prudent standard of vegetation management and were increasing expenditure at a very fast pace to meet compliance. For example, in this document we show that the majority of Victorian DNSPs tripled their expenditure on vegetation management between the years 2009 and 2013 to ensure they reach compliance with new standards.[4] It is therefore inappropriate to use average costs over this period to inform the AER's judgement on the prudent and efficient level of costs; and

- the AER have not used a statistically relevant tool to normalise for differences between DNSPs and this has led to an incorrect view on the relative efficiency of DNSPs. This means that like for like comparisons are not possible using the data set, as differences will relate more to operating differences across the DNSPs.

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[1] Royal Bushfires Commission Victoria, *Final Summary – 2009 Victorian Royal Bushfire Commissions*, July 2010, p12
[2] Legislative Council of Western Australia (Standing Committee on Public Administraton), *Report 14 - Unassisted failure,* January 2012, pi
[3] Powercor, *2014 to 2015 Electric Line Clearance (vegetation) Management Plan*, 31 July 2014, p48
[4] The source of this data is each of the Victorian DNSPs' response to the AER's Regulatory Information Notice (RIN) – Category Analysis template 2.1.row 32.

The AER has also applied concepts of its own making such as 'step changes' to reject our proposed increased from 2012-13 expenditure levels to address a non-compliance issue with achieving our standard.

In this case the key question that should have been asked by the AER was whether we required additional expenditure to meet a prudent level of vegetation management activity. Rather the AER simply considered that it had provided a sufficient amount based on benchmarking data and that any additional expenditure was a change in business process.

Risks to safety from the AER's draft decision

We consider that a reasonable decision maker would have reflected on what its decision means for the safety of services provided. The AER instead suggest that safety is a secondary consideration:

> *"There are other less material aspects to the quality and reliability of distribution services such safety, aesthetics and quality."*[5]

This is a concerning failure by the AER given the significant risks to human lives and economic growth from events such as bushfires. In this respect, Table A.21 of Attachment 7 of the AER's draft decision identified that Victoria has a greater amount of deaths as a result of bushfires.[6]

Table 1: Extract from AER's decision – Deaths from bushfires

Table A.21 Deaths as a result of bushfires per 100,000 people by state 1900 to 2008

	ACT	New South Wales	Queensland	South Australia	Tasmania	Victoria
Deaths	5	105	17	44	67	296
Average population 1900-2008[267]	122 524	3 804 434	1 688 122	911 524	324 896	2 818 053
Deaths per 100,000 residents	4	3	1	5	21	11

Source: Haynes et al[268] and ABS[269]

We note that the data time period excludes the black Saturday bushfires which caused the death of 173 people. In any event, the key point is that a prudent DNSP would seek to comply with prudent standards to ensure that the bushfire risk of its electricity network is mitigated to a prudent and reasonable degree. The number of deaths from bushfires may suggest that a prudent DNSP in the benchmarking analysis is not spending enough on managing vegetation.

While there may be a case to say that tranches of Victoria have more extreme fire danger relative to NSW, we consider that it is more important to focus on the relative consequences to life and economic prosperity. Our network has large tracts of area which are in high risk bushfire zones. These are areas that have high population centres, which means that a prudent DNSP cannot simply take a degree of risk by not complying with standards.

The AER's examination of vegetation management highlights the artificial logic of benchmarking and some of the consequences that may occur if applied in a deterministic manner. This includes a higher likelihood of bushfires, which cause deaths and economic costs which run into billions of dollars. A reasoned regulator would examine both inputs and outcomes in its deliberations and would pause to ask whether it is prudent for a DNSP to address non-compliance issues when the costs to life and economy are potentially great.

[5] AER, Annual Distribution Benchmarking report, November 2014, p11
[6] AER, Draft decision: Endeavour Energy draft distribution 2015-16 to 2018-19, Attachment 7 – Operating Expenditure, November 2014, p 7-115.

1.0 Material we had submitted to the AER

Our substantive proposal provided detailed information on our proposed methodology and resulting forecast of vegetation management opex. We later provided the AER with additional information in response to a request for further information. We discuss each below.

1.1 Substantive proposal

Endeavour Energy's building block proposal set out a total forecast operating expenditure for the 2014-19 period that we required to undertake the necessary activities to achieve each of the opex objectives listed in clause 6.5.6(a) of the rules.

In setting out our proposed opex, we identified vegetation management as an important activity we undertake to achieve all 4 opex objectives. We noted that expenditure was required to maintain safety and security of supply and is required to meet our regulatory obligations. Our proposal also observed that compliance with our vegetation management standard is a critical control measure to manage bushfires.

Our substantive proposal demonstrated that we have a 'fit for purpose' approach to forecast our total operating expenditure for the 2014-19 period. Our initial step was to disaggregate our actual costs in 2012-13 (last known actual costs) into identifiable cost categories such as vegetation management.

Our next step was to assess whether there were any 'change factors' from our 2012-13 base year that would influence our efficient costs in the 2014-19 period. With respect to vegetation management we forecast an increase in annual vegetation management costs to address non-compliance issues that were present in the 2012-13 year. In particular we stated[7]:

> *"To implement appropriate contract management, incentivise our providers and target best performance our contracts are contingent on achieving full compliance with our standards. For the 2009-14 period we were able to secure improved overall vegetation costs, however we were required to exercise aspects of our contracts relating to insufficient conformance with our mandated standards. The impact of both of these matters has resulted in lower than expected vegetation management costs across the current regulatory control period.*
>
> *In the 2014-19 period we are targeting further improvements to conformance with our standards. In the recent market tender process we have observed that the market has sought to price in the standard expected of them, and therefore we are forecasting increased costs for this activity. We consider vegetation management contributes to the achievement of the expenditure objectives and criteria, in particular managing bushfire, reliability and safety risk."*

We provided the AER with our proposed vegetation management costs over the 2014-19 period and the increase in costs for each year relative to the actual costs we incurred in the base year. The total proposed amount was $323.4million over the 2014-19 period, of which $130.6million related to the increase from the base year.

Table 2- Proposed vegetation management and increase from base year for 2014 to 2019

$m; Real 13-14	2014-15	2015-16	2016-17	2017-18	2018-19
Vegetation management costs	63.6	64.9	66.1	64.3	64.5
Increase from base year	23.1	25.4	27.6	26.7	27.8

Our total costs for vegetation management also considered the impact of other change factors that were calculated using a top down approach including the efficiencies we forecast for the 2014-19 period, and changes relating to output growth. We note that these top down factors had the effect of absorbing some of the proposed increase to vegetation management costs.

[7] Endeavour Energy, *Regulatory Proposal – 1 July 2015 to 30 June 2019*, November 2014, p78

1.2 Response to AER's questions during review process

The AER sought additional information on our proposed vegetation management costs on 21 July 2014 as part of its review of our opex proposal.

In our response, we noted that we have regulatory obligations to provide a safe network under our licence conditions and in jurisdictional regulation. To meet this obligation in a prudent manner, our standards and practices are aligned to nationally recognised guidelines for vegetation management. These are referred to as the "Industry Safety Steering Committee (ISSC) 3 Standard – Guideline for Managing vegetation near powerlines".

In the 2009- 2014 period, we have been taking all prudent measures to improve our compliance with the standard specified in ISSC3. A key issue we have faced is ensuring that our external contractors deliver to the required industry standard. As with any contract, under-performance results in the contracted amount not being paid. This is a key reason why our vegetation management costs were under the allowance determined by the AER in the early years of the 2009-14 period. Any contractor under performance against standards resulted in under-spend.

Table 3- Actual opex for vegetation management in 2009-10 to 2012-13 ($m, real 2013-14)

$m; Real 13-14	2009-10	2010-11	2011-12	2012-13 base year
Opex	40.8	38.3	37.2	42.2

Since 2009 we have sought to improve compliance with those standards, making substantial progress over the 2009-14 period. In the 2012-13 base year, our compliance levels were only 76%.

Our proposed costs for 2014-19 reflected most current data on fully complying with the required industry standards in the 2014-19 period. In the 2013-14 year, we had expected to reach a very high level of compliance with our standards and our forecast costs in this year provided a basis for estimating our expected costs in the 2014-19 period.

As this was based on an external delivery model that had been market tested and open to tender, we considered that the resultant costs reflected the efficient and prudent costs of delivering our vegetation management activities in the 2014-19 period.

2.0 AER decision

In reviewing our proposed expenditure, the AER used an approach that did not start with a review of our proposal or justification for increased vegetation management costs.

When assessing forecast opex, the AER first derived an 'alternative forecast of opex' based on an approach set out in its Forecast Expenditure Assessment Guidelines. The AER terms this approach a 'base-step – trend', where the AER derives an alternative forecast by:

- testing the efficiency of actual costs in 2012-13 year (the base year) as a starting point for forecasting opex in the 2014-19 regulatory period. The AER either accepts or rejects the DNSP's actual costs as an efficient starting point under this assessment;
- the AER applies a rate of change formula which estimates the change in opex from the base year as a result of output growth, real cost escalation and productivity; and
- the AER then tests whether increase or decrease in costs from the base year (termed 'step change') proposed by the AER should be accepted.

Based on this approach, the AER considered that the efficient base year should be 10.3% less than the actual costs we incurred in the 2012-13 year. The AER's analysis was based on a benchmark model which only assessed total opex, rather than specific categories of costs. For this reason, we have assumed that the 10.3% reduction applies equally to all our cost categories. Given that our actual costs for vegetation management in the 2012-13 base year was $42.2million (real, 2013-14), we consider this represents a $4.2million reduction for each year of the 2014-19 period, or a total reduction of approximately $21million for the 2014-19 period.

Secondly, the AER considered that our proposed increase from the base year for vegetation management constituted a 'step change' under its assessment approach. The AER considered that the cost did not meet its definition of a step change and accordingly did not accept any increases above the benchmark allowance. As noted in Section 1.0, we had proposed an increase of $130million for vegetation management.[8]

In total we consider that the effect of the AER's draft decision has been to reduce our proposed vegetation management cost by approximately $151million from our proposed $323.4million to $202.4million.

2.1 AER's reasoning relating to efficiency of our base year

The AER's assessment of the 2012-13 'base year' found there were material inefficiencies in historic costs. The AER's conclusion was mainly based on benchmarking analysis, together with a review of labour practices in the 2014-19 period.

In terms of benchmarking, the AER used econometric and partial productivity measures to assess opex at the total level. Based on these tools, the AER considered that there were material inefficiencies in our historic costs. This was further supported in the AER's view by a report by Deloitte on labour practices in the 2009-14 period. We have addressed both the AER's econometric and partial productivity benchmarks in Section 6.4.2 of our revised proposal. We have also sought to review the Deloitte report in Section 6.5.1 of our revised proposal.

The AER also applied category benchmarking including a peer assessment of the costs of undertaking vegetation management in the NEM. It assessed vegetation management costs against a single variable of per kilometre of overhead line length and sought to present the data by normalising by a customer density measure. The AER's analysis is re-produced below.[9]

Figure 1: Extract from AER's decision - AER's benchmarking analysis of vegetation management costs per overhead kilometre

Figure A.18 Average vegetation management costs per kilometre of overhead line length for 2009 to 2013 against customer density ($2014)

Source: Category analysis RIN and Economic benchmarking RIN

The AER stated that the analysis showed that Endeavour Energy appear to have high costs relative to United Energy but lower costs compared to Energex, ActewAGL and CitiPower. The AER only offered views on Essential Energy in its analysis and did not provide any commentary on Endeavour Energy or Ausgrid

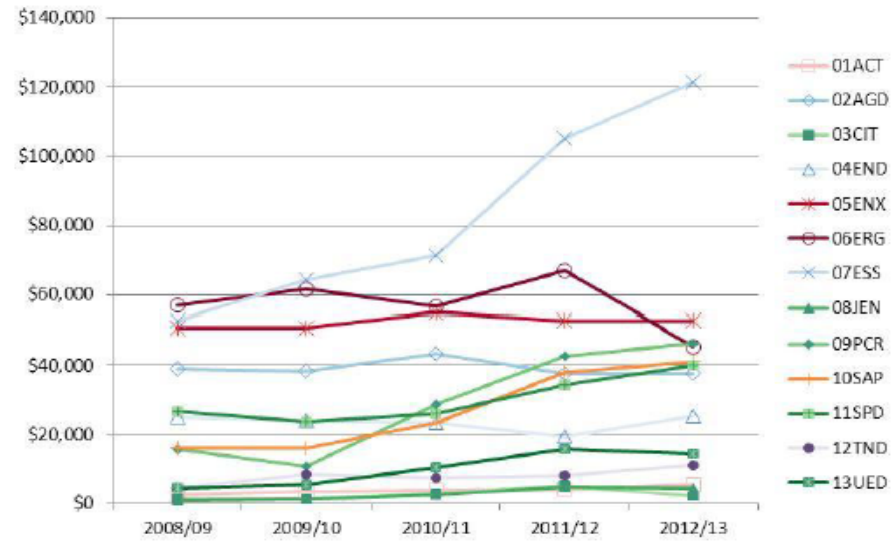
[8] The AER incorrectly depicted our proposed increase as a step change of $152 million.
[9] AER, Draft decision: Endeavour Energy draft distribution 2015-16 to 2018-19, Attachment 7 – Operating Expenditure, November 2014, p 7-84

The AER also chose to present the trend in total vegetation management costs, noting that there have also been significant increases for some other service providers. It noted that the data had not been normalised by an output so service providers are not directly comparable. Similar to above, the AER's analysis has wholly focused on Essential Energy, and has not provided any direct commentary on Endeavour Energy.[10]

On the basis of its benchmarking analysis and its review of labour efficiencies, the AER considered that the total proposed opex does not satisfy the opex criteria under 6.5.6 of the Rules.

Figure 2: Extract from AER's decision - AER's benchmarking analysis of vegetation management costs over time

Figure A.19 Total vegetation management costs 2009 to 2013 ($'000, 2014)



Source: Category analysis RIN data

The AER decided to reject our proposed opex and provide a substitute allowance based on a single benchmarking model that assesses opex at the total level. The AER used the Cobb-Douglas function set out by its consultant (Economics Insights).

Based on this model, the AER considered that our costs should be set based on the average of the top 5 firms in the analysis. The AER then applied an upwards adjustment of 10% to the benchmark estimate to reflect its own estimate of factors that drive our costs. The AER's decision adjusts 10.3% of the 2012-13 base year costs and trended this forward using its real rate of change to derive an estimate of the forecast opex for each year of the 2014-19 period.

2.2 AER's reasoning relating to proposed increases from base year

The AER considered that our proposed increase from the base year in expenditure for vegetation management constituted a 'step change' under its assessment approach. The AER noted that in assessing a step change it generally only considers a step change if a cost increase relates to a new regulatory obligation or an efficient capex/opex trade-off.

The AER noted that the increase in our vegetation management costs was not related to a new regulatory obligation. It referred to Endeavour Energy's statement that we do not face any change to the minimum risk standards to which we much comply. As there has been no change in regulatory obligations related to vegetation management for Endeavour Energy, the AER was not satisfied a step change in opex is necessary to meet ongoing obligations.

The AER referred to Endeavour Energy's statement that the increase in costs related to targeting further improvements to ensure its contractors conform with prudent industry standards. The AER considered that these are not regulatory obligations, but rather discretionary business decisions. For

[10] AER, Draft decision: Endeavour Energy draft distribution 2015-16 to 2018-19, Attachment 7 – Operating Expenditure, November 2014, p 7-85

instance, it considered that we had discretion over whether we provide vegetation management services in-house or whether we outsource. It noted that as we outsource most vegetation management services, we have discretion over the contracts we write and how we manage these outsourced providers to ensure they deliver the contracted services to Endeavour Energy's expectations.

The AER was clear that it does not typically provide a step change for a discretionary change in business practices. It stated that a service provider can generally fund a discretionary change from an efficient base level of opex. To demonstrate that a step change would lead to an opex forecast consistent with the opex criteria it needed evidence justifying the proposed increase in expenditure relative to historical expenditure. In doing so it expected to see evidence that:

- an efficient base level of opex is not sufficient to deliver all regulatory obligations;
- the service provider considered a range of different options in deciding whether to change its business practice;
- the service provider clearly demonstrated that benefits of the change in business practice outweighed the costs of the increase in expenditure; and
- the change in business practice could not be funded through another part of the regulatory framework.

The AER also noted that vegetation management tasks must be considered within the context of Endeavour Energy's total opex budget. It observed that Endeavour Energy is free to allocate its resources in whatever way it considers is necessary to best meet its regulatory obligations. Without evidence that a service provider's total historical opex was too low, it did not consider a discretionary change in how we manage our contractors to be a reason for an increased opex allowance. For instance, as long as a service provider's total opex is not unsustainably low, the AER considered it could prioritise additional opex on vegetation management over other areas of opex.

The AER also noted that Endeavour Energy had not demonstrated that its total historical opex is unsustainably low. The AER considered that its benchmarking suggested the opposite. They suggested that Endeavour Energy should be spending less opex in order to efficiently deliver standard control services.

For this reason, the AER considered that it is difficult to see why Endeavour Energy would require an increase in opex for vegetation management when its regulatory obligations have not changed and our analysis suggests its total opex is too high when compared with other service providers similarly regulated.

In this respect the AER considered that Endeavour Energy's proposed increase in vegetation management expenditure above its historical vegetation management expenditure was also not well substantiated with evidence. It noted that the only evidence Endeavour Energy provided to support its change in vegetation management practices was information on internal audits and reviews of contractor performance and management.

The AER did not consider this information to be sufficient to demonstrate an increase in opex on vegetation management was needed. It agreed with the Consumer Challenge Panel that just because the expenditure is directed towards an area that affects the safety of a service provider's network, it does not change the level of evidence it must provide to justify an increase in expenditure.

The AER acknowledged that managing the risks associated with vegetation management is a critical part of any service provider's business. However, as with any aspect of what a service provider does, changes in business practices typically come with a change in cost. A service provider must demonstrate that any additional cost is justified by considering it against the additional benefits of the proposed expenditure.

The AER noted that this is consistent with its Forecast Expenditure Assessment Guideline, which states that in assessing opex, they require economic analysis demonstrating the efficiency and

prudency of all material forecast operating and maintenance expenditure. The AER noted that Endeavour Energy has not presented sufficient analysis that demonstrates the consumer and public benefits arising from its change in vegetation management practices. It also noted that we had not presented any analysis that compares these benefits to the proposed cost of the additional expenditure. As such, these are additional reasons why it was not satisfied of the need to increase the AER's alternative opex forecast to include this proposed step change.

The AER also considered there are inconsistencies between Endeavour Energy's proposed vegetation management expenditure and the operation of the Efficiency Benefit Sharing Scheme (EBSS). It was not satisfied that Endeavour Energy has adequately considered this inter-relationship in proposing an increase in vegetation management opex.

In the 2009–14 regulatory control period, Endeavour Energy was subject to an incentive scheme for opex, the EBSS. The EBSS for opex is designed to encourage a service provider to pursue efficiency gains in opex and to share these gains with consumers. The AER noted that the EBSS that applied to Endeavour Energy was designed to work in conjunction with a revealed cost forecasting approach. The AER noted that where a service provider is able to reduce its opex below its forecast, two things happen:

- the service provider keeps the amount it underspent against its allowance and it also obtains an EBSS carryover payment in the next period. Consumers pay for these carryover amounts as rewards to the service provider for making an efficiency improvement; and

- consumers benefit in the next period through a lower opex forecast.

The AER observed that as long as a lower opex forecast is passed through to consumers, the benefits of a lower opex forecast will always outweigh the EBSS carryover amounts consumers pay for. This simultaneously rewards a service provider for reducing its opex, and shares the benefits of these reductions in opex with consumers.

However, the AER considered that if a service provider accrues EBSS carryover benefits but the efficiency is not recognised in the opex forecast for the next period then consumers will not benefit. Consumers would pay for EBSS carryover amounts but would not receive the benefits of lower opex that should arise from an opex saving.

Endeavour Energy reported that one of the main reasons its actual opex was less than its forecast opex in the 2009–14 regulatory control period was because of lower vegetation management expenditure. The AER noted that this is a significant contributor to the EBSS carryover amounts in the 2014–19 regulatory control period.

It noted that under Endeavour Energy's proposed approach, consumers would pay for EBSS carryover amounts – which partly relate to lower spending on vegetation management in the 2009–14 regulatory control period – but are also asked to pay for higher forecast opex on vegetation management in the 2014–19 period.

3.0 Considering issues raised in AER's decision

In our revised proposal document we summarised how we considered the AER's decision on opex, including its findings on vegetation management. We noted that our task was to review the AER's decision, and make revisions where we consider the AER has raised a legitimate concern.

The AER's decision on total opex has been on two elements of our proposed vegetation management costs:

- the AER examined our 2012-13 actual costs for vegetation management as part of its category benchmarking exercise, and found our costs to be high relative to United Energy Distribution. The review supplemented its econometric and partial productivity benchmarking. In this light, we consider that its category analysis review has been important in forming the AER's view that our 2012-13 base year costs contained material inefficiencies, one of which relates to vegetation management; and

- the AER examined our proposed increase in costs for vegetation management relative to actual costs incurred in 2012-13. The AER used a construct termed step change to test whether the proposed increase should be accepted. The AER considered that the proposed cost does not meet the test of a step change.

Based on our review, we consider that the AER has not raised an issue that requires a revision of our proposal.

However, in undertaking the review of the AER's findings, we assessed whether there was any new information or data that required revisions to our proposal. At the time of our substantive proposal we had only used an estimate of the likely costs of fully complying with our standards. Since that time we have been able to identify the actual contract costs in the 2013-14 year. We discuss this further in Section 4.0 of this document.

3.1 AER's category analysis

The AER has purported to undertake a comparison of our benchmarking costs relative to other DNSPs in the NEM. It has formed a view that we have high costs relative to United Energy and provided a graph which showed our relative cost compared to customer density. The AER has not provided any further evidence, with its entire focus being on Essential Energy.

We have reviewed the data to establish whether the analysis establishes a need to revise our proposal. Our method of reviewing the AER's analysis has been to assess whether the analysis is sufficiently robust to draw a conclusion that our vegetation management costs are inefficient compared to our peers. In doing so, we considered 3 aspects of the AER's benchmarking review:

- Did the benchmarking analysis consider outputs?
- Was the time series appropriate for inferring an efficient cost of delivering a prudent standard?
- Was the analysis performed in a way that adequately normalised for differences between DNSPs?

Based on our review. we consider that the AER's category analysis of vegetation management is highly flawed and does not show a reasonable basis for forming a conclusion that our costs are inefficient. Indeed we consider that this reveals broader weaknesses in the AER's benchmarking approach to reviewing our proposal given that 23% of our proposed costs related to vegetation management.

Outputs considered in analysis

The first question we considered was whether the analysis accounted for the relative performance levels of each DNSP. This is an important consideration as benchmarking inputs can provide a misleading picture on efficiency.

In this respect, the data used by the AER to inform its benchmarking analysis all relate to inputs, that is the actual expenditure incurred in performing vegetation management. The AER has not considered the outputs achieved by each DNSP, including the standards that the DNSP applies nor the compliance with those standards.

We consider that the failure to seek information on standards or compliance rates does not give a true measure of the efficient costs of delivering vegetation management activities. A business that delivers 50% compliance to its own stated standards can reasonably be expected to expend only 50% of the operating amount required for full compliance.

Our view is that without this level of analysis it is hard to determine whether the observed cost differential relates to taking on more risks through applying a lower standard, or failing to meet compliance with the standard. For this reason, we consider that it is difficult to form a judgement based on a review of inputs, and therefore the analysis is not reliable or robust to consider whether there are in fact inefficiencies in our vegetation management costs.

Indeed our analysis demonstrates that the AER's data was based on a period where our peer DNSPs (including ourselves) were not meeting compliance. For example, Powercor and Citpower have both

stated that they were only 3 per cent compliant as at July 2011 with a new standard that was imposed in the wake of the Victorian bushfires.

Table 5: Extract from Powercor report - Compliance with new standards[11]

Period Ending	Percentage of Total Spans to be actioned	Percentage of total Spans compliant with *the* code
30 June 2011	3%	3%
31 December 2011	10%	13%
30 June 2012	15%	28%
31 December 2012	10%	38%
30 June 2013	4%	42%
31 December 2013	18%	60%
30 June 2014	20%	80%
31 December 2014	20%	100%

Table 6: Extract from Citipower report - Compliance with new standards [12]

Period Ending	Percentage of Total Spans to be actioned	Percentage of total Spans compliant with *the* code
30 June 2011	3%	3%
31 December 2011	10%	13%
30 June 2012	15%	28%
31 December 2012	10%	38%
30 June 2013	4%	42%
31 December 2013	18%	60%
30 June 2014	20%	80%
31 December 2014	20%	100%

Time series used in analysis

A second question is whether the time period used in the analysis can be used to form a judgment on the efficient cost level. In this case, the key question is whether the observed costs during that period relate to meeting a prudent standard of work activities.

We note that the AER has used the average of costs over the 2009 and 2013 period. First of all, we note that the AER was required to use the last year of data under the Rules when publishing its annual benchmarking report.

In any case, we consider that using this period provides a misleading picture on the efficient costs of meeting vegetation management obligations. The 2009-13 years mark a period where DNSPs in the industry were responding to concerns emerging from the Royal Commission inquiry into the Black Saturday fires. The Commission's findings were the catalyst for re-examining the safe vegetation management practices that DNSPs should prudently apply, and led to a series of actions where DNSPs sought to refresh standards or ensure full compliance with existing standards.

As a result, the reported costs for complying with vegetation management increased markedly over that period. Indeed our own costs also increased over that period as we had a greater focus on achieving compliance in the wake of the Royal Commission findings. As explained in Section 3.2 of this document, this was a key reason we proposed an increase relative to our base year actual costs in 2012-13, due to continual non-compliance with our standards.

What is most noticeable however is that the DNSPs identified by the AER as being on the frontier have dramatically increased their costs by a multiple of 3 to 4 in the case of Citipower, Powercor,

[11] Powercor, *2014 to 2015 Electric Line Clearance (vegetation) Management Plan*, 31 July 2014, p48
[12] Citipower, *2014 to 2015 Electric Line Clearance (vegetation) Management Plan,* 27 March 2014, p40

Jemena and United Energy. The latter we note has been the only comparison point that the AER has used to determine that our vegetation management costs are higher than peer DNSPs. This can be seen in Table 7.

Table 7: Actual vegetation management costs ($m, nominal)[13]

	2009	2010	2011	2012	2013	% change (2009-13
Citipower	0.960	1.014	2.601	4.908	2.308	140%
Powercor	14.001	9.959	26.901	40.520	45.144	222%
Jemena	0.884	1.086	2.291	4.629	4.405	398%
SPAusNet	23.567	21.490	24.487	32.686	38.883	65%
United Energy	4.057	4.972	9.895	15.026	14.029	246%

Based on this analysis, we consider that the benchmarking results are highly skewed as they include a time period where DNSPs were clearly not meeting the standards required of a prudent operator. Had the AER used the 2013 year as a reference point, the analysis would have revealed greater disparity in its results compared to using an average of 2009-13 years.

Consistent with our statements in Section 3.1, the use of 2013 would still not be sufficient to draw conclusions, as we would need to understand whether this level of expenditure is based on a prudent standard, or is consistent with full compliance.

Normalising for operating differences

A third question we considered was whether the AER's analysis accurately accounted for the differences between DNSPs. The AER has used a construct termed 'customer density' to normalise the cost data. This is based on the AER's reasoning that there are two predominant factors that underlie the relative costs of delivering a service – customers and circuit length.

However, the AER's method to normalise for these 2 factors is mathematically illogical. Simply dividing line length by customers does not provide a 'like for like' comparison, as this presumes that there is a linear relationship between the two factors. This is an incorrect assumption. By way of analogy, it would be akin to normalising for 2 explanatory factors that cause heart disease – age and packets of cigarettes - by dividing one over the other. This would not provide any meaningful analysis.

In any case, we consider that the baseline analysis fails to normalise for the plethora of costs that may impact the relative costs of delivering vegetation management.

The AER purported to take into account other factors that may influence the efficient level of costs across DNSPs. The AER provided data which shows that Victoria have more deaths by bushfire, and therefore concluded that this means our costs should be lower.

Quite clearly this analysis is flawed. The AER should have assessed whether the recorded incidents had to do with vegetation management practices across Victoria, including that undertaken by Victorian DNSPs. Our view is that an alternative view could have been formed from this analysis, namely that a higher level of expenditure on vegetation management may have prevented the catastrophic impact of bushfires.

3.2 AER's review of our proposed increases from base year

The AER used a concept of its own construction termed 'step change' to test whether our proposed increase in costs from the base year was appropriate.

The AER's test of an acceptable 'step change' was to identify whether the proposed increase in costs was related to a new regulatory obligation. If the AER could find no evidence to support this, it considered that the change related to a change in business practices. The DNSP would need to justify the change in business practice to demonstrate that it had undertaken sufficient assessment of

[13] The source of this table is each of the Victorian DNSPs' response to the AER's Regulatory Information Notice (RIN) – Category Analysis template 2.1.row 32.

options, and that the benefits outweigh the costs. The DNSP would also need to demonstrate that the costs could not be funded from its total opex.

We observe that the AER's test of a step change is not adequate to cater with a circumstance when the increase in costs relates to addressing non-compliance with an existing regulatory obligation. In this case, our vegetation management expenditure in 2012-13 was not sufficient to meet the opex objectives specified in 6.5.6 of the Rules.

As our responses to the AER made clear (as set out in Section 1.0 of this document) we have regulatory obligations for vegetation management that are met by meeting a national standard for clearance of trees. In 2012-13 we failed to achieve compliance with these standards achieving a compliance rate of 76 per cent. Given the risks from not meeting standards, we needed an increase in expenditure to ensure we fully comply in the 2014-19 period.

This should have formed a central aspect of the AER's assessment of increases to base year costs, rather than narrowly assuming that actual costs in the base year enable a DNSP to achieve the opex objectives.[14] To this extent we consider that the AER's test of a step change did not enable the AER to make a proper assessment under the Rules.

While we consider the AER used an inappropriate method to test our proposed increases from the base year, we have nevertheless sought to understand if the AER has raised any substantive issues that require us to re-visit our proposed vegetation management opex. The AER's reasoning for rejecting the increased proposed expenditure is based on three conclusions:

- that the expenditure relates to a change in business practice, as it does not relate to a new regulatory obligation. For this reason the AER considered that the additional cost was discretionary in that it related to a change in obligations;
- given that the costs were a change in business practice, it was incumbent on Endeavour Energy to provide justification explaining the increase in costs. The AER considered that Endeavour Energy had not provided any justification; and
- Endeavour Energy should not be provided with additional costs as it had received an EBSS reward related to an under-spend in vegetation management in 2009-14.

Expenditure is discretionary in nature

We consider the AER is correct to state that our proposed opex did not relate to a new regulatory obligation. We note however that the Safety Electricity Supply (Safety and Network Management) regulation 2014 amended our obligations in respect of safety. While we have not changed our standard to which we comply, it is clear that compliance with the standard would align to our obligations under the Regulation (please see Section 4.2 of this document).

In any case, we disagree with the AER's assessment that the cost is' discretionary' in nature. We consider that a new regulatory obligation is one of many reasons why a DNSP would prudently increase expenditure on an activity it performs. In this case, the AER should have understood that the costs relate to achieving full compliance with a prudent standard. Has the AER applied itself to reviewing our proposal, it would have concluded that the cost is not discretionary and that it exposes the public to an unacceptable risk.

Rather, we consider that achieving compliance with the standard is a fundamental objective that a prudent director of a DNSP would seek to achieve in the shortest window period.

Evidence to support increase in costs

The AER considered that Endeavour Energy's proposed increase in vegetation management expenditure above its historical vegetation management expenditure was also not well substantiated with evidence. It noted that the only evidence Endeavour Energy provided to support its change in

[14] The AER notes in this respect that "Underlying our approach to reviewing the base year are two general assumptions: the efficiency criterion and the prudence criterion in the NER are complementary and actual expenditure was sufficient to achieve the expenditure objectives in the past. AER, Draft decision: Endeavour Energy draft distribution 2015-16 to 2018-19, Attachment 7 – Operating Expenditure, November 2014, p 7-13.

vegetation management practices was information on internal audits and reviews of contractor performance and management.

We consider this is an inaccurate representation of the reasons we provided the AER in our response to its questions of 21 July 2014. In our response we stated[15]:

> *"Endeavour Energy has been on a journey over the past several years to ensure that the acquired vegetation management services achieve the minimum standards. This has required a concerted effort to apply appropriate management structure and reporting to enforce the minimum standards contained in the contracts as well as ensuring that the contracts moving forward reflect the realistic costs of achieving the standards. Market pricing is necessary to provide the requisite confidence that the contract terms will be met by the suppliers.*
>
> *There are several key elements of Endeavour's journey that should be kept in mind, including:*
>
> - *There have been no changes to the minimum risk standard to which Endeavour is required to comply;*
> - *Endeavour Energy is committed to appropriately managing bushfire risks, and has ensured that the forward vegetation management programs take account of all material relevant to the expected bushfire management strategies;*
> - *Endeavour has been seeking to manage contractor conformance to this standard despite the financial losses being accrued under the pre-existing contracts for those suppliers;*
> - *Contracts were re-tendered and awarded over the 2011/12 to 2013/14 period. The market pricing of achieving compliance with the pre-existing minimum risk standards is reflected in the tenders received;*
> - *Based on the experience for the 2013/14 financial year, the market based costs of achieving compliance with the minimum risk standards will exceed the costs incurred in 2013/14. This will require our projections for the 2014-19 regulatory period to be increased; and*
> - *Endeavour will necessarily update the forecast costs to be included as part of the revised proposal."*

We also provided the AER with two attachments. Firstly, we provided a breakdown of our costs by each year for vegetation management. Secondly, we provided copies of our audit assessments against our compliance standards.

Clearly this information alerted the AER to the predominant reason why we needed to increase our costs for vegetation management. That being, to address compliance issues with our standard. It is therefore unclear why the AER disregarded this information in forming its views. For this reason, we have not revised our proposal based on the AER's conclusion that we provided no information to justify the increased costs.

We were provided with an EBSS reward related to underspend

We consider that the AER's decision to reject proposed expenditure should be based on whether it satisfies the opex criteria. That is whether the expenditure is prudent and efficient and represents a realistic expectation of demand forecasts and cost inputs. While the AER may assess past expenditure and our performance against incentives, it cannot simply provide a lower opex based on a decision it has made elsewhere in its proposal.

[15] Endeavour Energy, Response to Question 9 of AER's questions - Attachment 1, 16 August 2014.

In any case, we note that the AER has been clear that the EBSS is not directed at a line of activity, but rather opex at a total level. There were many factors that caused an increase in our costs in the 2009-14 period, many of which were outside our control. The AER has not made a decision to increase our EBSS reward for these issues.

3.3 AER's substitute amount

The AER's method for deriving a substitute allowance relies on a benchmarking model for total opex developed by its consultant. The model does not provide analysis at a cost category level as it relies on an econometric function based on the actual opex incurred by the five most efficient DNSPs in the AER's analysis.

We consider that this method to derive a substitute allowance does not provide the AER with any suitable information to form a view as to whether a DNSP would be able to achieve the opex objectives. Nor does this type of analysis enable the AER to form a view on the risks and consequences from a lower allowance.

The AER should have undertaken a proper risk assessment of the substitute allowance to satisfy itself under the opex criteria. We consider that the AER's risk assessment should have extended to major cost categories such as vegetation management. This would have provided a 'sanity check' to assess whether the benchmark allowance would be sufficient for Endeavour Energy to prudently deliver on its vegetation management activities. Such analysis was particularly important given the AER's substitute allowance provided lower opex than our actual 2012-13 costs despite information we provided that showed the amount was insufficient to meet our regulatory obligations.

4.0 Revision to vegetation management opex

4.1 Revisions for 2013-14 actual costs

As noted in Section 3.0, we undertook a review of the AER's decision to inform ourselves of whether there is a need to revise our proposal for the issues raised by the AER. We found that there were deficiencies in the manner and analysis the AER used to assess our proposed vegetation management costs. On this basis, we did not find that the AER has raised any substantive issue that required a revision to our proposed methodology to derive the efficient costs of undertaking vegetation management.

In reviewing the AER's decision, we also assessed whether there had been any new information since submitting our proposal. In our response to the AER's questions of 21 July 2014, we noted that our substantive proposal had been based on an estimate of the likely costs of achieving compliance with our standards. Since submitting the proposal, we now have actual data from the 2013-14 year on the costs of compliance, which reveals that the contracted costs are higher than we estimated.

This has resulted in a $110 million increase (real, $2013-14) for vegetation management costs compared to our substantive proposal. We consider that the 2013-14 costs are therefore more accurate for deriving the forecast opex for 2014-19 for vegetation management, as they are based on latest actual costs.

We also note that these costs are based on market tended outsourcing contracts in a mature market, and therefore reflect the efficient cost of undertaking the activity.

In the sections below we demonstrate that our revised proposed vegetation management costs for each year of the 2014-19 period are the efficient costs of prudently meeting our compliance obligations. In doing so, we set out how the revised forecast opex for vegetation management is to achieve the opex objectives, and satisfies the opex criteria.

4.2 Achieving the opex objectives

Our proposal must set out how our total of forecast opex is to achieve the opex objectives identified in Clause 6.5.6(a) of the Rules. While our revised vegetation management costs broadly meet all four objectives, we consider that it predominantly relates to complying with our regulatory obligations relating to clearance and disposal of vegetation.

In this respect, our jurisdictional regulations impose requirements pertaining to the safety and reliability of the network. It is clear that vegetation management activities are required to maintain a safe, reliable and secure network. We consider that there is a clear relationship between the vegetation management standard we apply under the ISSC3 and our jurisdictional obligations.

ISSC 3 acts to meet our licence conditions

The Code of Practice Electricity Transmission and Distribution Asset Management published in February 2009 by the NSW Government is recognised as forming part of our network operator's licence[16].

> *"This Code has been recognised by the Director-General of the Department of Water and Energy for the purposes of network operator's licences."*

The purpose of the Code is to provide guidance on achieving the minimum standard of electrical safety to customers, the public and industry workers, contractors and their employees. The document published in 2009 states[17]

> *"This Code shall be followed unless there is an alternative course of action which achieves the same or better outcomes."*

Appendix A of the Code identifies the standards that are relevant to the Code. The ISSC 3 standard is identified as one of the standards to guide to tree planting and maintaining safety clearances near power lines.[18]

The ISSC3 identifies minimum clearances between electricity assets based on the operating voltage and construction type of the electricity assets. This means there is a clear nexus between the standard and the activities undertaken in our vegetation management activities, in a manner that can be clearly measured. In this way, we are able to clearly identify instances of non-compliance with our regulatory obligations.

ISSC 3 will meet our obligations under Safety Regulations

The Safety Electricity Supply (Safety and Network Management) regulation 2014 is made under the Electricity Supply Act (1995) in New South Wales. Clause 5 of the Regulation states that a network operator must take all reasonable steps to ensure that the design, construction, commissioning, operation and decommissioning of its network (or any part of its network) is safe.

Clause 7 of the Regulation requires that network operator must have a safety management system in place by 1 March 2015.[19] As stated in clause 6 of the Regulation, the primary objective of safety management systems is to assist network operators to comply with the requirement in Clause 5 and to support, among other things, the management of safety risks arising from the protection of the environment (for example, preventing bush fires that may be ignited by network assets).Clause 7 stipulates the content of the safety management system:

> *"(1) A network operator must, by no later than 1 March 2015 (or any later date that the Secretary may, by written notice given to the network operator, direct), have a safety management system in place that:*
>
> *(a) is in accordance with AS 5577 or with any other code or standard that the Secretary may, by written notice given to the network operator, nominate, and*
>
> *(b) without limiting paragraph (a), deals with the following matters:*
>
> *(i) the safety and reliability of the network operator's network,*

[16] NSW Government of Water and Energy, Code of Practice Electricity transmission and distribution asset management, February 2009, p4
[17] NSW Government of Water and Energy, Code of Practice Electricity transmission and distribution asset management, February 2009, p5.
[18] NSW Government of Water and Energy, Code of Practice Electricity transmission and distribution asset management, February 2009, p34
[19] The Savings Provisions of "The Supply (Safety and Network Management) Regulation 2014" provide that "any act, matter or thing that, immediately before the repeal of the Electricity Supply (Safety and Network Management) Regulation 2008, had effect under that Regulation continues to have effect under this Regulation." In this respect, the previous regulation required us to prepare a bushfire management plan as part of our Network Management Plan that is submitted to our jurisdictional regulator.

(ii) the safety of electrical installations of customers connected to the network operator's network,
(iii) advice to the public about the hazards associated with electricity in relation to the network operator's network,
(iv) management of bush fire risk relating to electricity lines and other assets of the network operator's network that are capable of initiating bush fire.

(2) The Secretary may nominate a code or standard for a network operator for the purposes of subclause (1) (a) only if the Secretary is satisfied that a safety management system that is in accordance with the nominated code or standard would achieve the primary objective of safety management systems, in relation to the network operator's network, as well as or better than a safety management system that is in accordance with AS 5577.

(3) The Secretary may, by written notice given to a network operator, revoke any such nomination in force in respect of the network operator.

(4) In determining the content of its safety management system, a network operator must take into account the primary objective of safety management systems."

The Electricity network Safety management systems (AS5577) is an Australian Standard that provides a national framework for the harmonisation of energy safety systems. In respect of vegetation management the AS5577 states:

"As well as the maintenance of network asset integrity, management of vegetation in the vicinity of powerlines is an essential part of maintaining the electrical and fire safety of networks and avoiding catastrophic bushfires. Vegetation management and bushfire risk are regarded as an essential part of an Electricity Network Safety Management System (ENSMS) prepared in accordance with this standard."

We consider that ISSC 3 is a relevant industry standard that meets the objective and principles underlying AS5577. In this respect Section 4.3.4.2 of the code states:

"A Network Operator shall identify the industry or company codes used by it in:

(a) The design and construction of existing network assets;

(b) The design and construction of new network assets; and

(c) The commissioning, installation, operation, maintenance and decommissioning of network assets.

If the Network Operator chooses to not comply with particular provisions of an industry of company code, the Network Operator shall document:

(i) The reason for non-compliance with the code; and

(ii) The alternative provisions for the design, construction, commissioning, operating, maintenance and decommissioning of network assets that will ensure a level of safety in relation to those activities that is at least equal to or greater than the level of safety that would ensue from compliance with the code."

4.3 Why our revised proposal satisfies the opex criteria

Our substantive proposal was accompanied by expert economic opinion from NERA Consulting on how to interpret the opex criteria in the Rules, and on how to demonstrate that the forecast opex reflected these criteria with regard to the factors. A key element of NERA's advice was that there is no external, observable measure that can be relied upon to demonstrate and/or conclude that the total forecast expenditure is efficient. In this context, NERA considered that a practical demonstration that the forecast expenditure reasonably reflects the expenditure criteria can be achieved by:

- demonstrating that the process the DNSP employed in developing its forecast expenditure is efficient and prudent. Such a process would also give consideration to a realistic expectation of input costs and demand; and

- using indicators to assess the reasonableness of the result and to inform a decision on whether the resulting forecast expenditure (from applying a prudent forecasting approach) reasonably reflects the efficient cost.

We note that these relate directly to the opex factors, enabling the AER to have a level of satisfaction as to the prudency of our costs. We note that certain factors are not relevant to the AER's assessment of the prudent and efficient level of vegetation management. For instance, the extent of non-network alternatives do not have an impact on vegetation management activity. Also, we have no related parties or vegetation management activities that are affected by contingent projects.

Prudency of forecasting method

We consider that our method to forecast vegetation management costs is prudent and results in an efficient forecast.

Firstly, we dis-aggregated our actual costs in 2012-13 base year (last known) costs into our key cost categories such as vegetation management. We used this as a starting point to consider the opex we required in the 2014-19 period. We considered that our decisions to outsource our costs provided a degree of confidence that we were achieving the efficient costs for the activity performed by our contractors in the 2012-13 year. This was based on the fact that market testing revealed that for this activity we could derive reasonably lower costs than internally sourcing the activity, and that we had undertaken an open market tender process.

Our next step was to assess whether the base year amount would be sufficient to achieve the opex objectives. In undertaking this analysis we recognised that the current activity we perform in our vegetation management function is not sufficient to meet our compliance obligations. This was clear from audit reports that showed a deficiency relative to the standard we apply for clearance of vegetation material. We therefore considered that a prudent operator in our circumstances would seek to increase our vegetation management activities to achieve full compliance with these standards.

Based on our analysis we considered that an increase in vegetation management expenditure would be required. In the substantive proposal, our method was to determine an amount based on an estimate of the likely increase in contract management costs of achieving full compliance. At the time, this was the most accurate basis to determine our forecast costs.

Our revised proposal utilises actual costs in the 2013-14 year as a basis for determining the additional amount we require to comply with the obligations. These were not available at the time of our substantive proposal. Accordingly, we consider that our revised proposal provides a better measure of the full costs of complying with the activity.

Our proposed methodology has also given consideration to a realistic expectation of input costs and demand. Input costs have been based on outsourcing contracts. Demand has been considered through the top down output growth factor we applied.

We have also examined relevant opex factors that relate to the prudency of the forecasting method:

- substitution possibilities between operating and capital expenditure (expenditure factor 7) – We note that our vegetation management activities are impacted by augmentation capex which increases the area of the network over which we have to perform vegetation management. We took this into account in deriving a top-down forecast of output growth in our proposal;

- relative prices of capital and operating inputs (expenditure factor 6) – We have separately accounted for real cost escalation as a 'top down' factor in deriving our proposed vegetation management costs; and

- the extent to which the expenditure forecast includes expenditure to address the concerns of electricity consumers as identified by the DNSP in the course of its engagement with electricity customers. (expenditure factor 5A) – Our customers have clearly indicated a preference for safe and reliable networks.

High level checks

There are 3 high level checks we have performed to satisfy ourselves that our revised forecast of vegetation management satisfies the opex criteria with respect to the opex factors.

Firstly, we consider that our process to use external service providers to deliver vegetation management provides a degree of confidence on the efficiency of the costs. We note that outsourcing is not always more efficient than internal labour, and this is related to a number of factors. In our case however, we have market tested vegetation management activities and found that outsourcing is more efficient. Accordingly, we consider this provides a reasonable high level check of the efficiency of our proposed costs.

As noted in Section 3 of this document, we have also sought to understand the data presented by the AER in its benchmarking exercise. We consider the analysis does not provide a meaningful basis for comparison as it does not seek to identify outputs such as standards or compliance levels. Further the time series includes a period where the expenditure of our comparator DNSPs were clearly below the level required to meet compliance.

A check of our forecast compared to past expenditure shows that we are increasing our expenditure for a sound reason. That is, we are trying to address a non-compliance issue.