

Vegetation management cost pass through: Additional information

December 2013

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Overview

On 1 November 2013 ActewAGL sought approval from the Australian Energy Regulator (AER) to pass through in 2014/15 network prices a positive pass through amount arising from a material increase in vegetation management costs incurred in 2012/13. On 2 December 2013 the AER requested additional information.

This submission provides the answers to the specific questions asked by the AER in their letter of 2 December 2013, such that it can make a determination under clause 6.6.1(d) of the National Electricity Rules. Supporting documentation, including contracts and invoices, is also attached. The submission also provides more detailed and clarifying commentary on the justification for the amount claimed in the pass through application, and on ActewAGL's expectations of vegetation management expenditure going forward.

Due to abnormally high annual rainfall in 2010/11 and 2011/12, ActewAGL experienced an unexpected and uncontrollable increase in vegetation growth.

The rapid regrowth in vegetation necessitated the urgent redeployment of ActewAGL pole inspection staff onto vegetation inspection and management, and the backfilling of their pole inspection activities with existing contract staff to ensure that the pole inspection program met corporate obligations.

This strategy was considered by ActewAGL management to be the most cost effective solution to the problem, as it used experienced ActewAGL asset inspection staff to quickly assist with vegetation management, and made cost effective use of existing and established pole inspection contractors to maintain the pole inspection regime to schedule.

During most of 2011/12 and part of 2012/13 ActewAGL already had in place three vegetation clearance suppliers who had been selected through a formal competitive tendering process, and a fourth contractor was engaged to help address the most urgent of the vegetation problems. The three vegetation clearance suppliers were retained on similar contractual conditions during the remainder of 2012/13, until the backlog of vegetation encroachments had been cleared.

In August 2012 when ActewAGL became aware of the rapid regrowth problem, an aerial (helicopter) patrol of its high bushfire risk rural areas was commissioned. These aerial patrols used LiDAR (light detecting and ranging) technology, which is reportedly accurate to +/- 3 cm, and is safer than earlier low level aerial surveillance and involves less noise. Aerial patrols also allow for inspections to be completed in a much shorter timeframes than ground surveillance.

Further aerial surveys were carried out in December 2012 (urban) and March 2013 (rural) to determine if the vegetation regrowth problem also existed in these areas, which it did.

The experience gained by ActewAGL during these aerial surveys has been beneficial and enabled ActewAGL to evaluate the cost effectiveness of aerial patrols versus ground based inspections. ActewAGL has concluded that such surveys are cost effective.

As at the date of the pass through submission, ActewAGL has addressed and rectified the vast majority of the vegetation clearance encroachment problems in the areas for which ActewAGL has clearance responsibility. ActewAGL expects that vegetation management and clearance costs in 2013/14 will continue to remain higher, although not materially higher, than the allowance set in the distribution determination

There are five main cost components to our calculation of the pass through amount:

1. Vegetation control contractor costs – these are summarised in Tables 4 and 6 of the pass through submission, and supported by further documentation in Attachment B: Invoices.
2. Aerial survey costs – these are summarised in Table 6 of the pass through submission, and also addressed in the answers to questions 2 and 8, and supported by the summary breakdown of invoiced costs in Attachment B: Invoices.
3. Labour costs – these are substitution labour costs for contract pole inspectors used to backfill the activities of ActewAGL asset inspectors who were redeployed to the vegetation management projects. The costs are summarised in Table 4 of the submission, and addressed further in the answers to questions 5 and 6.
4. Other costs – these costs were covered in Table 4 and 6 of the pass through submission, and supporting documentation.
5. Time cost of money - this component of the cost pass through is summarised in Table 7 of the submission.

ActewAGL believes that its initial vegetation management cost pass through submission and this additional information report (including supporting documentation) demonstrates that it has developed cost effective and efficient strategies for managing and undertaking the rectification of unexpected and uncontrollable vegetation growth experienced.

ActewAGL has accounted for and verified the component costs associated with the pass through event. The proposed pass through amount only includes for incremental costs and has not included increased overhead costs or internal labour costs (vegetation inspection and management), already factored into ActewAGL's annual revenue requirement (in the AER's 2009 final decision).

Correction

ActewAGL has found a non-material error in the calculation of the Vegetation Management Cost Allowance for 2012/13. ActewAGL calculated the allowance using the same methodology used to calculate “vegetation control maintenance expenditures”¹ outlined in ActewAGL’s June 2008 Regulatory Proposal. This allowance included costs from projects 7516019 (Overhead Distribution Trees Planned) and 7516012 (Sub-transmission Easement Management Planned), however reactive maintenance allowance in project 7516029 (Overhead Distribution Trees Reactive) was not included.

ActewAGL did however, include costs from project 7516029 (Overhead Distribution Trees Reactive) in the pass through amount.

ActewAGL has updated the spreadsheet attachment previously provided to the AER and corrected this error. The error resulted in a change in cost \$4,204 less than previously provided. See Attachment A: Calculation Spreadsheets.

¹ ActewAGL 2008, *ActewAGL Distribution Determination 2009-14 Regulatory Proposal to the Australian Energy Regulator*, p.77

Responses to questions

Question 1

What was the basis of the vegetation management allowance that was approved in the Distribution Determination? In responding to this question, please discuss:

- i. the historical information that was available at the time of the regulatory review in relation to vegetation management (note: the information available at the time contributes to the interpretation that this was an 'unforeseeable' event)*
- ii. an overview of what vegetation management activities were included in the allowed forecast costs*

Response

ActewAGL's June 2008 Regulatory Proposal for the 2009-14 Distribution Determination used a base year approach assuming a business-as-usual scenario to forecast vegetation management costs.²

For planned maintenance, projects 7516019 (Overhead Distribution Trees Planned) and 7516012 (Subtransmission Easement Management Planned), ActewAGL calculated the total cost for each project by estimating the number of units of internal labour, required plant, and contract payments using the actual rates per unit. Estimated hours for each unit were based on historical invoices and staff estimates. The total cost was then allocated between contract costs, other costs, labour expenditure and overheads by the average cost split over 2005/06, 2006/07 and 2007/08 periods.

A project cost estimate was not used for project 7516029 (Overhead Distribution Trees Reactive). Instead the forecast was calculated using the average of the actual costs incurred in 2005/06, 2006/07 and 2007/08.

Vegetation inspection (normally carried out by ActewAGL staff) and clearance (normally carried out by external suppliers) comprise the majority of vegetation management activities included in the 2012/13 forecast. Aside from the use of aerial surveillance in 2012/13 there has been no change to the scope of the vegetation management activities since the estimate in 2007.

At the time of the cost estimate, historical information was available on rainfall from 1940 and on first notices issued since November 2003. This information presented graphically is available in Figure 1, Figure 2 and Figure 3. This information is similar to that provided in ActewAGL's vegetation cost pass through submission, but with information collected after the cost estimate was made removed. No pattern or trend is evident which would have led a reasonable person to conclude that the rainfall event was more likely to occur than not to occur.

² ActewAGL 2008, *ActewAGL Distribution Determination 2009-14: Regulatory Proposal to the Australian Energy Regulator*, p.167

Figure 1 Rainfall anomaly in the previous 20 years to June 2007

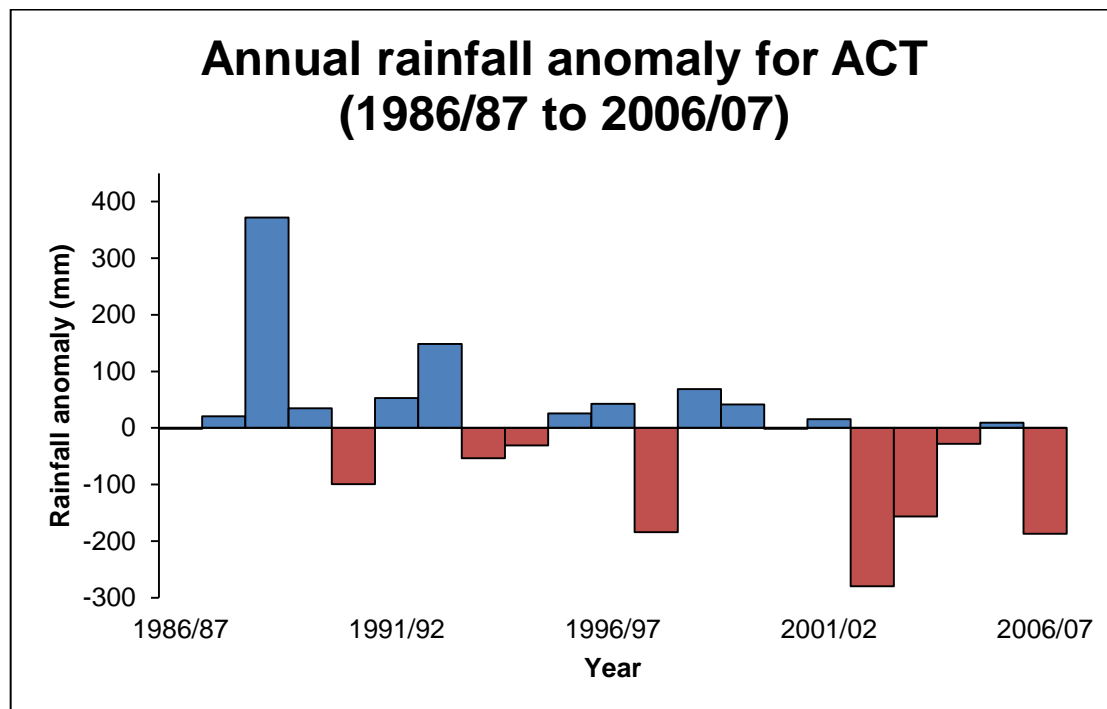


Figure 2 Rainfall anomaly since the beginning of records to June 2007

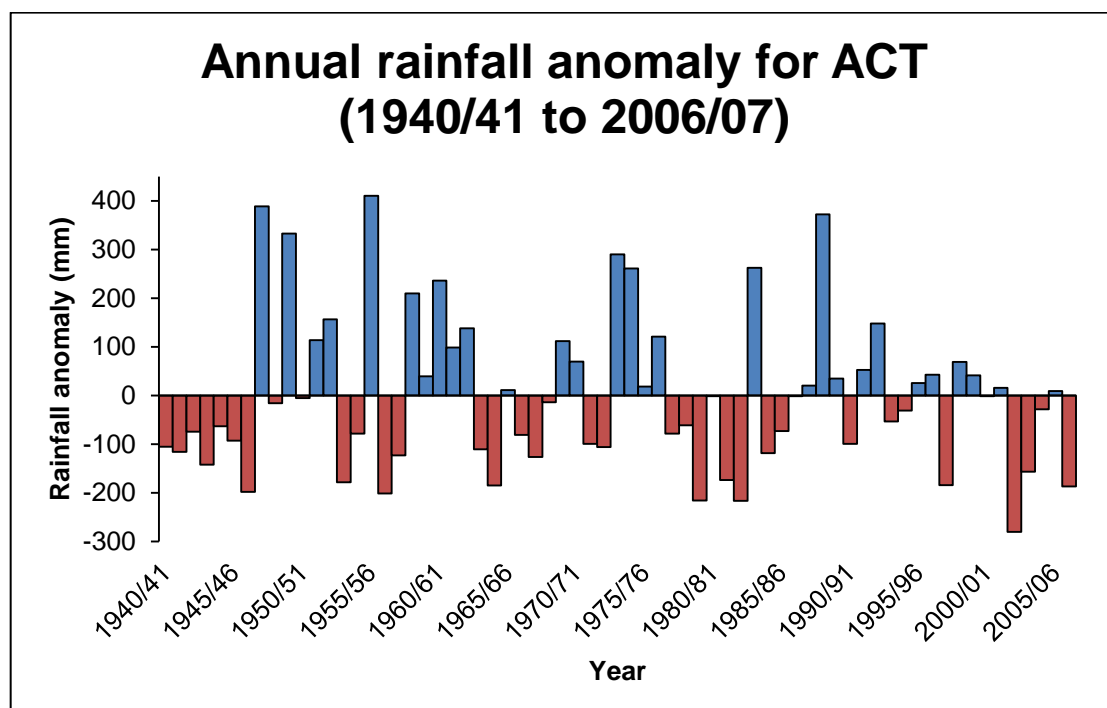
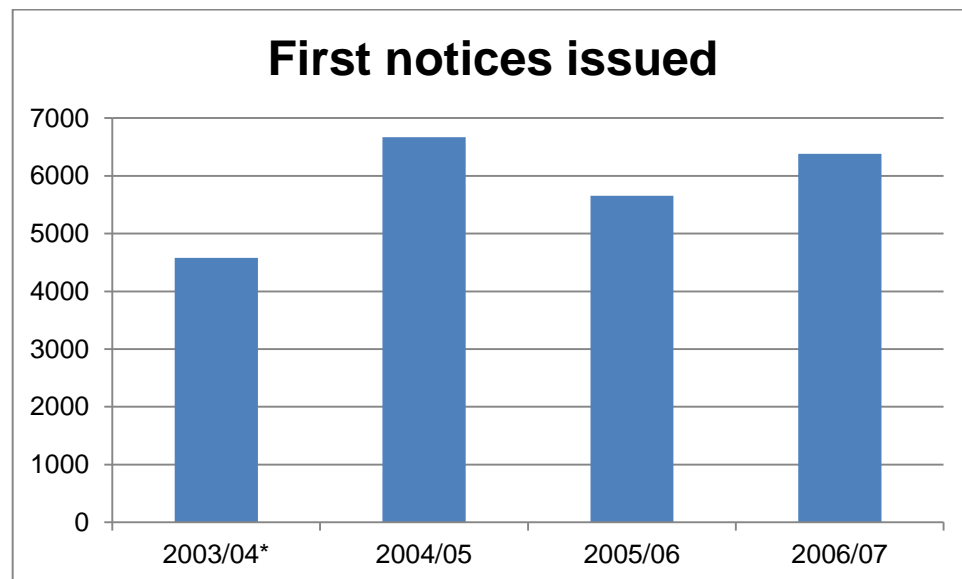


Figure 3 First notices issued from November 2009 to June 2006



* Data collected from November 2003.

Question 2

Section 3.2.2 of your application discusses the use of aerial helicopter inspection. Please provide further detail and any supporting documentation on:

- i. *why aerial inspections were not undertaken by ActewAGL previously to August 2012;*
- ii. *why aerial inspections were not considered as cost effective option for ActewAGL to undertake vegetation management inspections at the time of submitting the regulatory proposal;*
- iii. *when and how ActewAGL became aware that LiDAR technology and aerial inspections were being used by other network service providers;*
- iv. *the factors ActewAGL took into account when assessing whether or not to undertake aerial inspections*

Response

Aerial inspections have been previously employed by ActewAGL sporadically over a period of about 20 years. In the past they had proven to be more expensive than ground patrols, and not very effective in identifying with sufficient accuracy the condition of pole top assets by viewing through high powered binoculars from a hovering helicopter.

In addition, the need to get quite close to the assets to get a better view of suspect components (e.g. rotting cross-arms, rusting hardware, etc,) often caused alarm to cattle and horses, sometimes causing them to bolt onto public roads, creating a safety hazard for both livestock and members of the public.

In 2002 ActewAGL reviewed and subsequently ceased using aerial inspections. The decision was made based on the above factors, and cost and quality of the information collected.

At the time the 2008 regulatory submission was being prepared, ActewAGL was unaware of any operational or technological developments that would have made the use of aerial patrols more cost effective, more precise in their determination of asset condition, and less disruptive to stock.

In 2010 ActewAGL was approached by suppliers with improved inspection technologies. However despite repeated requests to provide operational safety plans, none were forthcoming and ActewAGL did not proceed.

Through new staff ActewAGL became aware in 2012 of the experience of Essential Energy in using LiDAR technology. This combined with the higher level of vegetation encroachment led to a reinvestigation of aerial inspections. ActewAGL took the following factors into account in assessing whether or not to undertake aerial inspections:

- the reduced safety concerns in flying at higher altitudes enabled by LiDAR;
- the quality of the information collected;
- the timeliness of the information collection; and
- the cost effectiveness of the inspections.

To a large extent, the decision to retrial aerial surveys in August 2012 was driven by the urgent operational imperative to determine the extent of vegetation regrowth in the high bushfire risk areas.

As it transpired, the first aerial patrols identified approximately 526 urgent clearance encroachment (<0.5m), compared to normal levels of less than 10% of this number.

The next series of aerial patrols in urban areas in December 2012 identified 411 urgent clearance encroachment (<0.5m), and approximately 2,500 high risk encroachment (0.5-1.5m) the majority of which relate to trees for which either the ACT Government or private property owners have financial responsibility. In these cases, ActewAGL still bears the cost of undertaking surveys (either ground based or aerial), and issues notices to the responsible party.

Based on the experience with the aerial surveys in 2012 and 2013, ActewAGL has now decided to conduct aerial surveys every two years on high voltage (HV) and transmission lines in urban areas, and every year on HV and low voltage (LV) lines in rural areas.

Question 3

Page 15 of your application notes that aerial inspections found vegetation encroachment not identified by ground crews. Please explain how this encroachment was not identified by the ground crews and whether the aerial inspections identified any issues in ActewAGL's approach to vegetation management inspections.

Response

ActewAGL clears vegetation such that further clearance is not required for three years. However, the above average rainfall led to unexpected and uncontrollable vegetation growth reducing the time taken for vegetation to grow into encroachment zones.

Aerial surveys are able to quickly inspect for clearance encroachment across a greater portion of ActewAGL's network than ground based crews. This speed advantage results in the aerial inspections covering a greater area and identifying encroachment not previously identified by ground crews. ActewAGL considers that if timeliness was not an issue ground based crews would have identified the vegetation encroachment.

ActewAGL's ground based crews also assessed other factors such as vegetation type, volume of material to be cleared and disposed of, travel distances and accessibility of the sites. This level of information assists with preparing and scoping the work given to vegetation clearance suppliers.

Question 4

Discuss what vegetation management ActewAGL has undertaken to date. Please also provide further details and supporting documentation as to the processes for identification of areas where vegetation clearance was required and the subsequent steps to clear the vegetation. In particular:

- i. how the work is prioritised;*
- ii. what is classified as high risk versus low risk,*
- iii. how is the scope of clearance required identified,*
- iv. what are the requirements of any relevant applicable legislation, and*
- v. any other relevant information.*

Response

In 2012/13 ActewAGL developed a new Bushfire Management Plan which incorporates better understanding of bushfire modeling and new technological capabilities, such as LiDAR, image stabilisation and higher resolution cameras. Although the plan was not finalised until March 2013, the supporting material and ideas were incorporated into ActewAGL's approach during 2012/13.

Prior to December 2012, ActewAGL inspected assets in accordance with the Asset Management Plan on a sector by sector basis. Any vegetation encroachment identified was prioritised by the distance to the aerial lines.

Table 1 Pre March 2013 Classification of Vegetation Encroachment

Classification	Encroachment distance from lines
Urgent	<0.5 m
High Risk	0.5 – 1.5 m
Low Risk	>1.5 m

As the new Bushfire Management Plan was developed, ActewAGL incorporated the output of models, which is presented in Attachment D: Internal ActewAGL Documents. While the development of the new Bushfire Management Plan provided new tools to help prioritise the inspection and clearing of vegetation, they did not change the magnitude of clearing required during 2012/13. The magnitude of vegetation clearing during the period 2010/11 to 2012/13 was driven by the urgent and high risk encroachments following rapid vegetation regrowth.

Where possible, ActewAGL clears vegetation such that further encroachment will not occur for 3 years.

The scope of clearance is set by the Utility Networks (Public Safety) Regulation 2001 (ACT), specifically clause 25 and 26.³ The clearances are provided in Table 2.

Table 2 Minimum clearances

direction in which minimum distance must be observed	minimum distance from insulated aerial cable or insulated aerial service line, where nominal voltage ≤ 1 kV	minimum distance from aerial conductor or covered aerial cable, where nominal voltage ≤ 1 kV	minimum distance from aerial conductor or aerial cable, where $1 \text{ kV} < \text{nominal voltage} \leq 33 \text{ kV}$	minimum distance from aerial conductor or aerial cable where $33 \text{ kV} < \text{nominal voltage} \leq 132 \text{ kV}$
Any direction	1.0m	1.5m	2.0m	3.0m

³ Utility Networks (Public Safety) Regulation 2001 (ACT) clause 25 & 26. Available: <http://www.legislation.act.gov.au/sl/2001-28/default.asp> >

Question 5

Page 22 of your application states that contractors were not engaged to undertake vegetation management projects. Please provide further details and supporting documentation for the basis upon which ActewAGL decided not to engage contractors to undertake vegetation management projects and instead use its own staff. In particular, please include further information on:

- i. the steps that ActewAGL consider necessary in undertaking a tender process,
- ii. the estimated timeframe for undertaking a tender process,
- iii. the process and estimated timeframe for authorising additional vegetation inspections;
- iv. the time constraints which applied in relation to ActewAGL clearing the vegetation growth; and
- v. any other information you consider relevant.

Response

Traditionally, ActewAGL has separated vegetation clearance and vegetation inspection activities. Vegetation clearance (trimming of vegetation that encroaches clearance zones) and vegetation inspections (which involves work scoping, customer negotiation, and clearing cost estimation) has typically been undertaken by ActewAGL personnel, while contractors have been used for the vast majority of vegetation clearance.

This model is quite deliberate and is commonly used within the Australian electricity distribution industry. The main reason for retaining the vegetation management function within ActewAGL is to ensure that the cost effectiveness and quality of the tree trimming and vegetation control activities is effectively managed.

In particular, if the vegetation management activity is combined with the vegetation control activity, there is no meaningful way for a DNSP to know if it is getting “value for money”.

With respect to its vegetation control contracts (as with all service contracts), ActewAGL applies a contract management framework derived from the Energy Industry Model (EIM) developed by the Australian Energy Market Operator. The four stages to Procurement Management and the major activities in each stage are as follows:

Business Needs and Sourcing Strategy

- Identify a contract owner
- Understand business needs
- Develop a business case
- Decide on the commercial arrangement
- Determine the sourcing strategy
- Appoint a contract manager

Supplier Selection

- Conduct procurement activities (Request for quotation, Request for tender, Expression of interest etc)
- Award contract

Contract Management

- Contract Manager manages the contract
- Uses appropriate tools and techniques
- Develop a Contract Management Manual/Plan for each contract
- Conduct regular supplier meetings (quarterly/bi-annually)
- Manage key performance indicators and supplier performance
- Manage supplier issues

Supplier and Contractor Management

- Appoint contract administrator
- Raises requisitions
- Process purchase orders
- Receipt goods or inspect services
- Returns, defects, refunds

As ActewAGL was able to reprioritise labour, ActewAGL did not move past the business needs and sourcing strategy stage.

ActewAGL has had no experience in engaging and training vegetation management inspectors on a contract basis, however we estimate that given normal tendering, evaluation, training and deployment, it would have taken 3-4 months to mobilise the additional contract resources required. ActewAGL provides authorisation of vegetation clearance contractors if they are required to enter within the clearance zone. Authorisation is granted to contractors who are accredited by ActewAGL to work near live powerlines and possess qualifications in arboriculture. ActewAGL could employ contractors for vegetation inspection who are not authorised if they are not required to enter clearance zones.

An alternative approach available which ActewAGL management considered to be more cost effective and achievable in the time available, and given the obvious urgency in dealing with the large number of clearance encroachments, was to redeploy several crews of existing ActewAGL asset inspectors (mainly trained pole inspection crews), and to backfill their work as pole inspectors by extending the contracts of existing pole inspection contractors.

The existing ActewAGL asset inspection crews were already trained to identify vegetation encroachment, and required no further training. This allowed ActewAGL to respond as quickly as it did, and achieve the current situation of now having no outstanding backlog of urgent and high risk encroachments for trees ActewAGL is responsible for. Any urgent and high risk encroachments that remain are the responsibility of either the ACT Government or private property owners, and encroachment notices have been issued.

ActewAGL redeployed between 10 and 12 asset inspection staff for a period of 2 - 3 months. Additionally other management personnel and staff involved in organising the work packages to be issued to the clearance contractors. Check audits were carried out on about 25 per cent of the completed work to ensure the quality of work was satisfactory.

Before work packages were issued to the contractors, ActewAGL staff generally prepared a work package estimate and, after completion of the work, compared the final invoiced costs against the work package estimate. The work package estimate is not provided to the contractor.

[REDACTED]

Question 6

Page 23 of your application states that in the absence of increased vegetation growth, ActewAGL would have allocated more inspection resources on asset inspection. ActewAGL has measured the increased vegetation growth costs by using the incremental cost of the pole inspections contract extension in 2012/13. Please clarify whether pole inspection contractors were directly involved on inspections for vegetation management issues. Also, provide supporting evidence including copies of relevant pole inspection contracts (including any extensions) and invoiced costs.

Response

Pole inspection contractors were not directly involved in inspections for vegetation management issues. The pole inspection contractors (2 x 2 team member crews) were used to back fill the void created by the deployment of between 10 and 12 ActewAGL asset inspectors onto the vegetation management problem.

In November 2012 the Pole Inspection contract was extended to 31 December 2013. However, only the contract costs up to 30 June 2013 have been included in the \$290,101 stated in section 4.4.2 of the pass through submission. Although the pole inspection contractors were not directly used to work on the vegetation projects, they were used to backfill the roles of the ActewAGL staff that were reprioritised from asset inspection to vegetation inspection.

ActewAGL only included the contract costs to ensure that costs already factored into the calculation of the ActewAGL's annual revenue requirement are not included in the cost pass through amount, as per clause 6.6.1 (j)(7) of the National Electricity Rules.

Supporting evidence is provided in Attachment B: Invoices and Attachment C: Contracts and amendments.

Question 7

How do contractor unit rates compare with the forecast rates determined at the time the AER set the vegetation management allowance? In providing this information please provide relevant contracts and invoices for vegetation clearance work undertaken during 2012/13.

Response

In 2012/13 the schedule of works provided by each contractor is based on different units of work than those included in ActewAGL's cost estimate. ActewAGL's unit costs, escalated to \$2012/13 using the pre-determined AER escalators, is provided in Table 3 below, and a summary of rates for the four vegetation control contractors is provided in Table 4. The tables below show that contractor rates in 2012/13 are broadly in line with what ActewAGL estimated for the 2008 regulatory proposal (in July 2007) for work undertaken during normal operational hours.

Table 3 ActewAGL July 2007 supplier hourly rates in project cost estimate

\$2012/13		
Labour		
Plant		

Table 4 Summary of supplier hourly rates during/outside operational hours for the period 1/09/2011 to 31/08/2012

After 31 August 2012 contractors were engaged at rates similar to the contracted rates that applied from 1 April 2013.

Table 5 Summary of supplier hourly rates during/outside operational hours for the period 1/04/2013 to 30/09/2013

In Attachment B: Invoices, ActewAGL has provided contracts for each vegetation clearance provider, an Oracle project account list of all invoices, selected invoices and contract time sheets reviewed and approved by ActewAGL.

was not engaged as part of the competitive tender process. Instead was engaged to assist the three other vegetation management contractors. rates were similar to the existing three suppliers.

Table 6 Summary of rates

Question 8

Please provide copies of itemised invoices referred to on page 22 of your application setting out how these costs have been allocated between vegetation management and asset inspection. Please outline the impact on ActewAGL if the reprioritised asset inspection staff who undertook the vegetation work were not replaced by contractors. What obligations did ActewAGL have to meet in this area? Why could staff not be reprioritised from another area of ActewAGL to assist with the asset inspection work? As part of your response, please provide more detailed and supporting evidence on how the reprioritisation reduced the magnitude of the cost pass through event.

Response

Copies of invoices from each supplier referred to on page 22 have been provided in Attachment B: Invoices along with a split between vegetation management and asset inspection for the aerial inspections.

If ActewAGL did not supplement the asset inspection teams with contractors then the planned pole and line inspection program for 2012/13 to deliver on corporate standards⁴ would not have been achieved. In turn there would be an increased risk of asset failure and an impact on the safety, reliability and consistency of supply of the electricity network.

Reprioritising staff from another area of ActewAGL to Asset Inspection takes time. To deliver consistent high quality, prospective asset inspectors are required to undergo formal theoretical and field training, depending on their prior experience. After an induction program over 12 weeks, new starters commence theoretical training which takes 1-2 weeks. Included in the training is coverage of various types of wood rot and decays, timber defects in power poles, termites and other wood eating insects, and vegetation encroachment. At the end of the training, staff must successfully complete a practical assessment, including the drilling and identification of the various decays. Successful staff members then work for 12 weeks under direct supervision by an experienced asset inspector and be assessed by the Works Coordinator Poles and Lines. Typically it takes 2 years for a newly trained asset inspector to reach the productivity of an experienced asset inspector.

ActewAGL was able to reduce the magnitude of the cost pass through amount by reprioritising asset inspectors and continuing existing pole inspection contractors. This approach was timely, avoided the need to prepare and run a tender to provide additional support, and allowed resourcing levels to be reduced following the conclusion of the event.

⁴ ActewAGL adheres to the ENA Doc 17 ENA Industry guideline for the inspection, assessment and maintenance of overhead power lines as required by the Utilities (Management of Electricity Network Assets Code) Determination 2013, page 10. Available: <http://www.legislation.act.gov.au/di/2013-222/default.asp>

As reported in section 4.4.2 of the 1 November pass through submission, ActewAGL logged an additional 7,860 hours of staff time against vegetation management in 2012/13. A large proportion of this was the redeployed asset inspection staff. At a typical average hourly labour rate of [REDACTED], excluding overheads, this totals approximately [REDACTED]. ActewAGL considers that if contractors were engaged to assist with vegetation management inspection, total costs would exceed [REDACTED]. These estimates are significantly higher than the incremental costs claimed by ActewAGL (\$290,101) for vegetation inspection.

Question 9

Are costs associated with the mobile data capture system (as referred to on page 18 of your application) included in the proposed pass through amount? If so, please provide a breakdown of these costs and identify where they are included.

Response

No costs associated with the mobile data capture system have been included in the proposed pass through amount.

Question 10

The 'proposed pass through amount' worksheet in the supporting spread sheet that you submitted to the AER on 5 November 2013 sets out the change in cost between allowances and actual expenditure. Please explain the change in cost calculation for labour expenditure (cell E6) with reference to the labour expenditure allowance (cell C6). Also explain what costs make up the labour expenditure allowance amount of \$978,283.

Response

In 2011/12 ActewAGL allocated internal labour resources to asset and vegetation inspection. Asset inspections were supported by a pole inspection contractor with the intention of the contract concluding in 2012/13. The determined labour costs for vegetation management and overhead line inspection (including pole inspection) were constant in real terms through 2011/12 and 2012/13.

In 2012/13 due to the increased vegetation growth a higher proportion of labour resources were allocated to vegetation inspection than planned, shifting labour resources that had been intended to be allocated to asset inspection. As a consequence of the reprioritisation, the pole inspection contractor provided additional support beyond the end date envisaged, supplementing the lower allocation of ActewAGL labour hours to the asset inspection.

In the absence of the increased vegetation growth ActewAGL would have been able to maintain the 2011/12 allocation of inspectors to assets and vegetation inspection. This would have enabled ActewAGL to end the pole inspection contract in 2012/13 as intended and avoid the contractor costs incurred from September 2012.

As a result, the incremental change in cost is the pole inspection cost incurred from September 2012. ActewAGL did not calculate the change in cost using the forecast allowance and actual labour and overhead expenditure.

The forecast labour expenditure allowance of \$978,283 is a CPI escalation of estimated costs for 'Overhead Distribution Trees Planned' and 'Subtransmission Easement Management Planned'. As outlined earlier, ActewAGL has corrected this amount and included the forecast labour expenditure allowance due to the project 'Overhead Distribution Trees Reactive'. The corrected forecast labour expenditure allowance is \$1,071,435.

The amounts were calculated by applying the AER's cost escalators, from the 2009 final distribution determination, to ActewAGL's 2007 cost build up. The cost build ups are provided in attachment 1 and discussion in the response to question 1.

Attachment A: Calculation Spreadsheets

Attached Spread sheets include

- Corrected attachment to initial submission
- First notices since November 2003

Attachment B: Invoices

Included in this attachment is

- An Oracle Project Accounting list of all invoices for costs incurred in 2012/13
- Invoices for:
 1. Pole inspections:
 2. Vegetation Clearance:
 3. Aerial Inspections
 4. Other costs

Also included is supplier costs itemisation approved by ActewAGL and an allocation of aerial inspections costs been vegetation and pole inspection.

Attachment C: Contracts and amendments

Contracts (and any amendments) for pole inspection and vegetation clearance suppliers.

Attachment D: Internal ActewAGL Documents

Attachment E: Confidentiality Claim