



**Draft Determination**  
**ActewAGL Distribution cost pass through**  
**application**

**Vegetation management costs for the**  
**2012–13 regulatory year**

June 2014

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AER reference: 52680, D13/178708

## Request for submissions

Interested parties are invited to make written submissions to the Australian Energy Regulator (AER) regarding this draft determination by the close of business, Friday 20 June 2014.

We prefer that all submissions sent in an electronic format are in Microsoft Word or other text readable document form. Alternatively, submissions can be sent to:

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We prefer that all submissions be publicly available to facilitate an informed and transparent consultative process. Submissions will be treated as public documents unless otherwise requested. Parties wishing to submit confidential information are requested to comply with the AER's confidentiality guideline. All non-confidential submissions will be placed on our website.

Further information regarding the AER's use and disclosure of information provided to it can be found in the [ACCC/AER Information Policy, October 2008](#).

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## Shortened forms

Shortened Form	Full title
ACT	Australian Capital Territory
ActewAGL	ActewAGL Distribution
AER	Australian Energy Regulator
capex	capital expenditure
DNSP	Distribution Network Service Provider
NEL	National Electricity Law
NER	National Electricity Rules
opex	operating expenditure

# 1 Summary

The Australian Energy Regulator (AER) regulates electricity distributors in the National Electricity Market, including in the Australian Capital Territory (ACT). We do so under the National Electricity Law (NEL) and National Electricity Rules (NER). In April 2009, the AER made a distribution determination for the ACT electricity distributor ActewAGL Distribution (ActewAGL), for the regulatory control period 1 July 2009 to 30 June 2014. The AER's principal task was to set the revenue that ActewAGL can recover from the provision of direct control services during the period.

The AER's distribution determination for ActewAGL provided an amount of \$3.01 million (\$2012–13) for vegetation management costs as part of its total operating expenditure (opex) allowance. The AER's distribution determination also included a pass through mechanism for a 'general nominated pass through event'. This event allows ActewAGL to pass through incremental costs arising from uncontrollable and unforeseeable events which could not have been prevented or mitigated by prudent risk management. The event must also materially change the cost of providing distribution services and significantly affect ActewAGL's ability to achieve the opex and/or capital expenditure (capex) objectives. The pass through mechanism recognises that an efficient revenue allowance cannot account for matters that are uncertain and outside the control of ActewAGL to manage through its revenue allowance.

ActewAGL submitted a cost pass through application to the AER in November 2013. ActewAGL's application is for a material increase in vegetation management costs as a result of an uncontrollable and unforeseeable increase in vegetation growth rates, which followed above average rainfall in the ACT. ActewAGL proposed that the additional vegetation management costs be considered as a general nominated pass through event as specified by the AER in its 2009–14 distribution determination.<sup>1</sup>

ActewAGL is seeking to recover an additional amount of \$1.9 million (\$2012–13) in additional vegetation management costs. ActewAGL submitted that, after a period of dry weather in the ACT, rainfall in 2010–11 and 2011–12 was well above the long term average and at a level not exceeded for over 20 years prior. ActewAGL submitted that the scale of vegetation growth and encroachment on clearance zones following these years of high rainfall was not apparent until its preparation for the 2012–13 bushfire season. Higher vegetation encroachment required ActewAGL to increase inspection activities and clear a greater volume of vegetation from clearance zones.<sup>2</sup>

In assessing ActewAGL's cost pass through application, the AER has given consideration to whether the application was submitted within the required timeframe. There was a twelve month gap between the period of above average rainfall (2010–12) and the conclusion of the claimed pass through event (30 June 2013). The AER considers that the date of the proposed positive change event should be based around the date when the positive change event became apparent. Therefore, the AER is concerned that ActewAGL did not submit its application within 90 business days of the positive change event occurring as required under the NER.<sup>3</sup>

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<sup>1</sup> ActewAGL, *Vegetation management cost pass through*, November 2013, p. 5.

<sup>2</sup> ActewAGL, *Vegetation management cost pass through*, November 2013, p. 3.

<sup>3</sup> NER, cl. 6.6.1(c).

Even if ActewAGL's cost pass through application was made within the required timeframe, the AER does not agree that a 'general nominated pass through event', as set out in ActewAGL's distribution determination, has occurred. A general nominated pass through event must be an event that falls outside the normal operations of the business, such that prudent operational risk management could not have prevented or mitigated the effect of the event. We are of the view that ActewAGL has not undertaken prudent risk management which could have mitigated the effect of the proposed pass through event. We are therefore of the view that the pass through event has not occurred.

## 2 Draft determination

The AER considers that ActewAGL's pass through application does not meet the criteria of a general nominated pass through event as specified in ActewAGL's distribution determination. The AER is of the view that ActewAGL has not undertaken prudent risk management which could have mitigated the effect of the proposed pass through event.



### 3 Cost pass through application

This section discusses the regulatory requirements of the cost pass through. Section 6 discusses the detail of the AER's reasoning for each element that must be satisfied for a positive pass through event to be determined.

#### 3.1 Cost pass through regulatory requirements

Clause 6.6.1(a1) of the NER sets out the allowed pass through events for a distribution network service provider (DNSP):

6.6.1(a1) Any of the following is a pass through event for a distribution determination:

- (1) a regulatory change event;
- (2) a service standard event;
- (3) a tax change event;
- (4) a retailer insolvency event;
- (5) any other event specified in a distribution determination as a pass through event for the determination.

In its distribution determination for ActewAGL, the AER has nominated the following general pass through event for ActewAGL:<sup>4</sup>

A general nominated pass through event occurs in the following circumstances:

- an uncontrollable and unforeseeable event that falls outside of the normal operations of the business, such that prudent operational risk management could not have prevented or mitigated the effect of the event, occurs during the next regulatory period
- the change in costs of providing distribution services as a result of the event is material, and is likely to significantly affect the DNSP's ability to achieve the operating expenditure objectives and/or the capital expenditure objectives (as defined in the transitional chapter 6 rules) during the next regulatory control period
- the event does not fall within any of the following definitions:
  - 'regulatory change event' in the NER (read as if paragraph (a) of the definition were not a part of the definition);
  - 'service standard event' in the NER;
  - 'tax change event' in the NER;
  - 'terrorism event' in the NER;
  - 'feed-in tariff direct payment event' in this final decision;
  - 'smart meter event' in this final decision (read as if paragraph (a) of the definition were not a part of the definition);
  - 'emissions trading scheme event' in this final decision (read as if paragraph (a) of the definition were not a part of the definition).

For the purposes of this definition:

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<sup>4</sup> AER, *ActewAGL distribution determination 2009-14*, April 2009, pp. 136-137.

- an event will be considered unforeseeable if, at the time the AER makes its distribution determination, despite the occurrence of the event being a possibility, there was no reason to consider that the event was more likely to occur than not to occur during the regulatory control period

- 'material' means the costs associated with the event would exceed 1 per cent of the smoothed revenue requirement specified in the final decision in the years of the regulatory control period that the costs are incurred.

If a pass through event materially increases the DNSPs costs of providing direct control services, then a positive change event occurs.<sup>5</sup>

If a positive change event occurs, the DNSP may seek AER approval to pass through to Distribution Network Users a positive pass through amount.<sup>6</sup>

A DNSPs cost pass through application must also conform to the timing and information requirements outlined under clause 6.6.1(c) of the NER. If the AER determines<sup>7</sup> a positive change event has occurred, the AER must determine:

- the approved pass through amount; and
- the amount of the approved pass through amount which should be passed through to Distribution Network Users in each regulatory year of the regulatory control period.

The NER requires the AER to make a determination within 40 business days from receipt of a DNSPs application and all necessary supporting information.<sup>8</sup>

## 3.2 ActewAGL pass through application

On 1 November 2013, ActewAGL submitted its cost pass through application to the AER to pass through additional expenditure to its distribution network users. The expenditure relates to a material increase in vegetation management costs in 2012–13. ActewAGL submitted that it experienced this material increase in vegetation management costs due to the uncontrollable and unexpected increase in vegetation growth following two years of above average rainfall.<sup>9</sup>

In particular, ActewAGL submitted that:<sup>10</sup>

After a period of dry weather the ACT experienced two very wet years with annual rainfall in 2010–11 and 2011–12 reaching 867mm and 778mm, well above the long term average of 620mm and at a level not exceeded since 1988–89, over 20 years prior.

The scale of vegetation growth and encroachment on clearance zones following these years of high rainfall was not apparent until ActewAGL's preparation for the 2012–13 bushfire season.

ActewAGL's ground inspection crews and aerial surveys indicated that the higher rainfall had shortened the time taken for vegetation to regrow into clearance zones. Higher vegetation encroachment required ActewAGL to increase inspection activities and clear a greater volume of vegetation from clearance zones.

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<sup>5</sup> Chapter 10 of the NER. A negative change event under clause 6.6.1(b) is not discussed in this determination as ActewAGL's application refers to a positive change event only.

<sup>6</sup> Clause 6.6.1(a) of the NER.

<sup>7</sup> Clause 6.6.1(d) of the NER and taking into account the matters set out in clause 6.6.1(j) of the NER.

<sup>8</sup> Clause 6.6.1(e) of the NER.

<sup>9</sup> ActewAGL, *Vegetation management cost pass through*, November 2013, p. 4.

<sup>10</sup> ActewAGL, *Vegetation management cost pass through*, November 2013, p. 3.

The unexpected and uncontrollable increase in vegetation growth materially increased ActewAGL's 2012–13 vegetation management (inspection and clearance) costs by \$1.9m above the allowance in the Australian Energy Regulator's (AER) 2009–14 ACT Distribution Determination. The change in costs represents 1.07 per cent of ActewAGL's 2012–13 annual revenue requirement.

ActewAGL submitted that the proposed cost pass through event falls into the general nominated pass through event definition in the AER's distribution determination. ActewAGL reasoned that the event is uncontrollable and unforeseeable, the change in cost is material, and the event does not fit into any other definition defined in the NER or the AER's distribution determination.<sup>11</sup>

### 3.2.1 Additional information sought from ActewAGL

After a preliminary assessment of ActewAGL's pass through application in late 2013, the AER considered that further information was required to assess whether the increase in ActewAGL's vegetation management costs in 2012–13 could be considered a general nominated pass through event.

On 2 December 2013, the AER wrote to ActewAGL requesting further information. This letter also informed ActewAGL that as further information was being sought, the 40 business day period in which the AER must assess ActewAGL's application would not commence until the AER received the requested additional information.<sup>12</sup> On 19 December 2013, ActewAGL submitted a response to the AER's request for additional information.

After considering ActewAGL's response, the AER made a second information request and submitted this to ActewAGL on 17 January 2014. On 12 February 2014, ActewAGL responded to this second information request. The time frame for assessing ActewAGL's pass through application as specified in the NER commenced on this date.

### 3.2.2 Materiality

Clause 6.6.1 of the NER states that an event results in a DNSP incurring materially higher or materially lower costs if the change in costs that the DNSP has incurred, as a result of that event, exceeds 1 per cent of the annual revenue requirement for the DNSP for that regulatory year. ActewAGL submitted that the above allowance vegetation management costs account for 1.07 per cent of the annual revenue requirement. This is shown in table 3.1.

**Table 3.1 Vegetation management costs and the annual revenue requirement (\$2012–13)**

Description	2012–13
Above allowance vegetation clearance costs	\$1.9 million
Annual revenue requirement (ARR)	\$172.9 million
Above allowance vegetation clearance costs/ARR	1.07%

Source: ActewAGL, *Vegetation management cost pass through*, November 2013, p. 9.

<sup>11</sup> ActewAGL, *Vegetation management cost pass through*, November 2013, pp. 6-11.

<sup>12</sup> NER, cl. 6.6.1(e).

Additionally, as outlined in section 3.1, ActewAGL's distribution determination requires the costs associated with the cost pass through event to exceed 1 per cent of the smoothed revenue requirement specified in the final decision in the year of the regulatory control period that the costs are incurred.<sup>13</sup> ActewAGL submitted that the above allowance vegetation management costs account for 1.10 per cent of the smoothed revenue requirement. This is shown in table 3.2.

**Table 3.2 Vegetation management costs and the smoothed revenue requirement (\$2012–13)**

Description	2012–13
Above allowance vegetation clearance costs	\$1.9 million
Smoothed revenue requirement (SRR)	\$169.6 million
Above allowance vegetation clearance costs/SRR	1.10%

Source: ActewAGL, *Vegetation management cost pass through*, November 2013, p. 9.

### 3.2.3 Date of positive change event

The pass through application must specify the date on which the positive change event occurred.

ActewAGL submitted its cost pass through application based upon the event occurring on 30 June 2013.<sup>14</sup> This was on the basis that the pass through event occurred throughout 2012–13 and this was when a material increase in costs had occurred.

### 3.3 Extension of time to assess cost pass through application

Rule 6.6.1(k1) of the NER allows the AER to extend the time limit for making its determination if the AER is satisfied it involves issues of such complexity or difficulty that the usual time limit of 40 business days is insufficient. The AER must give written notice of that extension not later than 10 business days before the expiry of the time limit.

Given the complexity of assessing ActewAGL's cost pass through application against the nominated pass through event criteria and the provisions in the NER, the AER decided to extend the time for making a determination by a period of 60 business days in accordance with r. 6.6.1(k1) of the NER. On 25 March 2014, we gave written notice to ActewAGL that we would extend the time to make a determination on its cost pass through application until on or before 8 July 2014.

<sup>13</sup> AER, *ActewAGL distribution determination 2009-14*, April 2009, pp. 136-137.

<sup>14</sup> ActewAGL, *Vegetation management cost pass through*, November 2013, p. 5. Under cl. 6.6.1(c) of the NER a DNSP must submit a pass through application within 90 business days of the positive change event occurring.

## 4 Assessment approach

When assessing ActewAGL's positive pass through application, we must first determine whether a 'positive change event' occurred. We do this by reference to the current determination for ActewAGL (that defines the cost pass through events ActewAGL can utilise during the regulatory control period) and the NER. As part of this process, we also determine the materiality of the proposed pass through amount.

Once we are satisfied that a positive change event has occurred we then assess the proposed pass through by taking into account the factors set out in clause 6.6.1(j) of the NER.

### 4.1 Relevant regulatory requirements

We have had regard to ActewAGL's distribution determination when making our draft determination. The requirements included within the distribution determination are set out in section 3.1 of this draft determination.

The relevant factors which we must take into account when making a pass through determination are set out in clause 6.6.1(j) of the NER.

### 4.2 Assessment approach

Under clause 6.6.1 of the NER, if a positive change event occurs, ActewAGL may seek approval of the AER to pass additional costs through to users. Chapter 10 of the NER defines a positive change event for a DNSP as:

For a Distribution Network Service Provider, a pass through event which entails the Distribution Network Service Provider incurring materially higher costs in providing direct control services than it would have incurred but for that event, but does not include a contingent project or an associated trigger event.

Once we determine a positive change event has occurred we must then determine:

- the approved pass through amount; and
- the amount of that approved pass through amount that should be passed through to distribution network users in each regulatory year during the regulatory control period.<sup>15</sup>

We do this taking into account the factors set out in clause 6.6.1(j) of the NER.

### 4.3 What we considered in making this draft determination

We have made our draft determination in accordance with clause 6.6.1 of the NER. As the AER considers that a positive change event has not occurred, we have not determined an approved pass through amount.

In forming our draft determination, we have:

- considered the application and supporting information we received from ActewAGL

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<sup>15</sup> NER, clause 6.6.1(d).

- undertaken our own analysis to verify the information provided by ActewAGL.

The AER's internal Technical Advisor Group (TAG) provided advice that was used in our consideration of ActewAGL's application. The TAG is an internal group of experts that provides the AER with insight and advice into electricity supply industry decision making, design and operating practices and costs. The TAG produced a report which is attached to this determination at confidential appendix A.<sup>16</sup>

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<sup>16</sup> AER Technical Advisory Group, *Targeted Technical Report (confidential)*, 23 May 2014.

## 5 Timing of the cost pass through application

If a positive change event occurs, the NER requires a DNSP to submit to the AER, within 90 business days of the positive change event occurring, a written statement which specifies the details of the pass through application.<sup>17</sup> The AER is not convinced that ActewAGL submitted its cost pass through application within the required timeframe.

ActewAGL submitted that, as the pass through event occurred throughout 2012–13, it submitted its cost pass through application within 90 business days of 30 June 2013. However, the period over which ActewAGL has submitted there was above average rainfall was 2010–12. There was therefore a twelve month gap between the period of above average rainfall and when the pass through event is claimed to have occurred.

The AER accepts that in relation to matters such as increased vegetation growth it may not be possible to attribute a specific date to the claimed event and that vegetation growth does not immediately follow a period of rainfall. However, we do not consider that the date of the positive change event should be based around the date on which an increase in costs can reliably be determined, but rather, when the positive change event became apparent. The positive change event claimed by ActewAGL is increased vegetation as a result of above average rainfall. In the case of ActewAGL's cost pass through application we are concerned that ActewAGL has not provided sufficient evidence that the pass through event began on 1 July 2012 and was continuous and ongoing at least up until 30 June 2013. Therefore we cannot be certain that the application was submitted in the required timeframe.

Further, it is not clear whether the claimed event began prior to July 2012 and what steps, if any, ActewAGL took in relation to the increased growth prior to this date. ActewAGL acknowledges that there is a link between rainfall and vegetation growth. ActewAGL states that the increased growth was not apparent until the preparation for the 2012–2013 bushfire season. However, as discussed in section 6.2.1, ActewAGL has not provided any information as to steps taken following 2010–11 and 2011–12 when increased rainfall was recorded which may have mitigated the costs claimed to have incurred in 2012–13.

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<sup>17</sup> NER, cl. 6.6.1(c).

## 6 Occurrence of a general nominated pass through event

ActewAGL's distribution determination sets out the requirements for a general nominated pass through event. Whether an event can be considered a general nominated pass through event depends on three components:

- whether the event is uncontrollable and unforeseeable and prudent risk management could not have prevented or mitigated it
- whether the change in cost is material and is likely to significantly affect the DNSP's ability to achieve the opex objectives and/or the capex objectives
- whether the event falls into any other definition in the NER or ActewAGL's distribution determination.

The AER considers that ActewAGL's cost pass through application does not meet the requirements of ActewAGL's distribution determination. As such, a general nominated pass through event has not occurred.

### 6.1 Uncontrollable and unforeseeable event

ActewAGL described the proposed pass through event as the uncontrollable and unforeseeable increase of vegetation growth following two years of above average rainfall.<sup>18</sup> The AER considers that the event described in ActewAGL's cost pass through application is uncontrollable and unforeseeable.

#### 6.1.1 Uncontrollable event

The rate at which vegetation grows within ActewAGL's distribution area is not controllable by ActewAGL. While there are many variables affecting the growth rates of individual trees, in general terms, vegetation growth rates are typically driven by moisture availability and temperature. These climatic factors are beyond the control of ActewAGL.

#### 6.1.2 Unforeseeable event

In the definition of a general nominated pass through event in ActewAGL's distribution determination, an event is 'unforeseeable' if, despite the occurrence of the event being a possibility, there was no reason to consider that the event was more likely to occur than not occur during the regulatory control period. This test is an objective one. That is, the question is not whether ActewAGL expected the event. The AER must consider whether a well-informed DNSP in the circumstances of ActewAGL, acting reasonably, would have considered the increase in vegetation growth rates experienced by ActewAGL to be more likely than not to occur in the regulatory control period.

ActewAGL has submitted that the unforeseeable increase in vegetation growth in 2012–13 was the result of above average rainfall in 2010–11 and 2011–12. ActewAGL submitted that the historical information available when it was preparing its regulatory proposal for 2009–14 would not have led a

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<sup>18</sup> ActewAGL, *Vegetation management cost pass through*, November 2013, p. 4.



reasonable person to consider that the above average rainfall in these two years would be more likely than not to occur. The AER has reviewed the nature of the climatic conditions experienced in the ACT at that time to assess whether such conditions could have been more likely than not to occur within the regulatory control period.

At the time ActewAGL submitted its regulatory proposal for the current regulatory control period, the ACT had experienced a period of below average rainfall and above average temperatures. These conditions affected the vegetation growth rates experienced by ActewAGL in the previous regulatory control period. Table 6.1 shows the extent to which rainfall and temperature varied from the long term average in the ACT during the current and previous regulatory control periods.

**Table 6.1 Rainfall and temperature anomaly in the ACT 2004-05 to 2012-13**

	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Rainfall (mm above or below long term average)	-28.3	9.5	-187.1	-164.5	-95.7	-10.1	247.3	157.9	-149.4
Maximum temperature (°C above or below long term average)	0.7	0.7	1.8	0.4	0.6	1.1	-0.5	-0.3	1.9
Minimum temperature (°C above or below long term average)	0.4	0.8	1.1	1.1	0.9	1.2	0.2	-0.7	-0.4

Source: Bureau of Meteorology, Climate data online, viewed at [www.bom.gov.au](http://www.bom.gov.au).<sup>19</sup>

The level of rainfall in 2010–11 and 2011–12 clearly varies from the conditions experienced in the 2004–09 regulatory control period. Although any particular level of rainfall cannot of itself be considered a pass through event, the level of rainfall in these particular years was a key driver of vegetation growth rates experienced by ActewAGL. Therefore the AER has examined whether the level of rainfall could reasonably be considered to be unforeseeable.

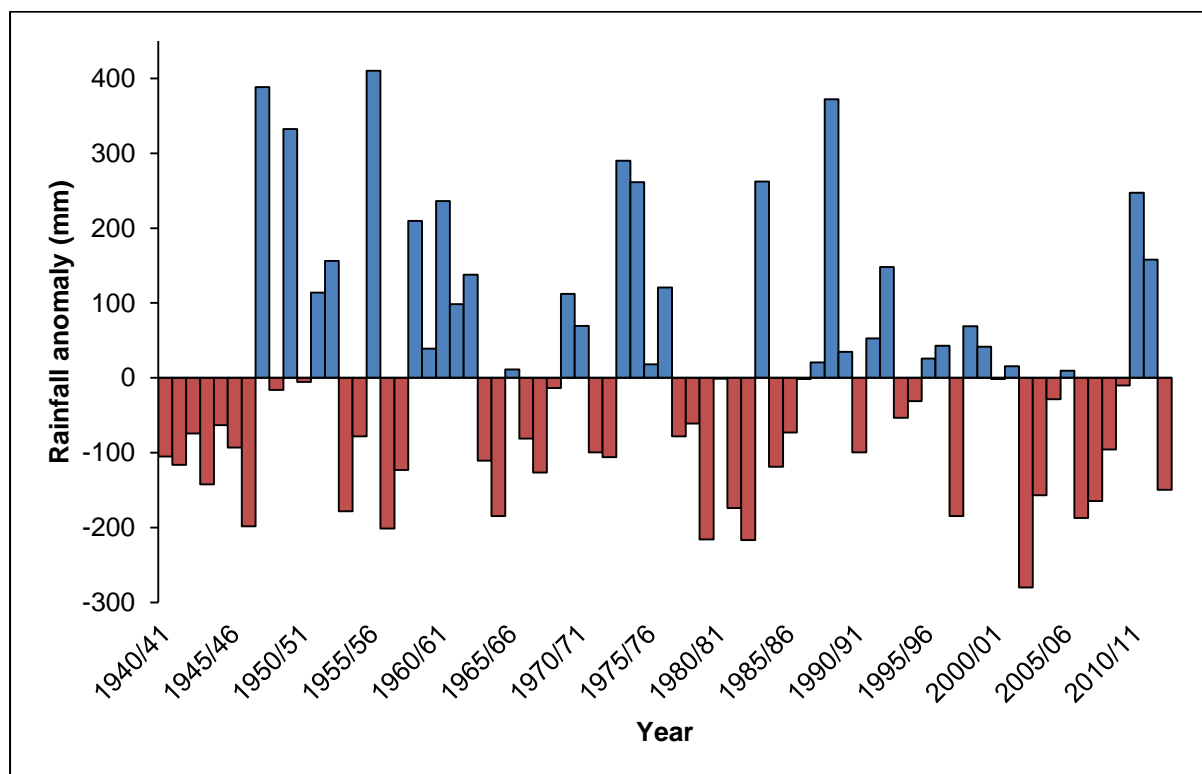
The AER considers that some variability in climatic conditions across regulatory control periods is likely to occur, and therefore cannot be considered to be unforeseeable. However, although some variability in climatic conditions is to be expected, it does not necessarily follow that a specific variation in conditions can be expected within a regulatory control period. The AER must therefore consider the nature of the specific circumstances experienced by ActewAGL to determine whether such circumstances meet the definition of 'unforeseeable'.

Figure 6.2 shows the annual rainfall anomaly for the ACT between 1940–41 and 2012–13. This depicts the extent to which rainfall in each year departed from the long term average. As can be seen,

<sup>19</sup> The data in table 6.1 has been compiled using two distinct weather stations located at Canberra Airport (station 70351 and station 70014). This approach is consistent with ActewAGL's application. Given the sporadic location of ActewAGL's distribution network, the AER also reviewed data from several other weather stations across the ACT. We found that most weather stations across the ACT recorded similar anomalies in rainfall and temperature when compared with long term averages.

2010–11 and 2011–12 were both significantly wetter than average. As indicated in ActewAGL's cost pass through application, the rainfall anomaly in these two years is the highest since 1988–89.<sup>20</sup>

**Figure 6.2 Annual rainfall anomaly for the ACT 1940-41 to 2012-13**



Source: Bureau of Meteorology, Australian climate variability time series graphs, viewed at [www.bom.gov.au](http://www.bom.gov.au).

At the time ActewAGL submitted its regulatory proposal to the AER in 2008, rainfall of the level subsequently experienced in 2010–11 and 2011–12 had not been reached in 19 years. The AER is therefore satisfied that there was no historical information available in 2008 that would have led a reasonable person to consider that a rainfall event such as that experienced in 2010–11 and 2011–12 was more likely than not to occur within the current regulatory control period.

The AER has also considered the availability of forecast information on likely climatic conditions. The AER considers that available forecasting information is not useful in anticipating climatic conditions across a five year regulatory control period due to short forecasting horizons. This forecasting information also cannot predict the nature of specific weather events.

Having considered the nature of the climatic conditions experienced in the ACT during 2010–11 and 2011–12, and the lack of information available to ActewAGL for five-year outlook forecasting, the AER is satisfied that the increase in vegetation growth in 2012–13 was unforeseeable at the time ActewAGL submitted its regulatory proposal to the AER. A well informed DNSP in the circumstances of ActewAGL, acting reasonably, would not have considered the increase in vegetation growth rates experienced by ActewAGL to be more likely than not to occur during the regulatory control period.

<sup>20</sup> ActewAGL, *Vegetation management cost pass through*, November 2013, p. 7.

## 6.2 Effect of the event could not be prevented or mitigated by prudent operational risk management

The definition of a general nominated event requires ActewAGL to establish that prudent operational risk management could not have prevented or mitigated the effect of the event. In the case of ActewAGL's cost pass through application we are not satisfied that ActewAGL has taken steps to prevent or mitigate the costs of increased vegetation growth.

We accept that ActewAGL's reprioritisation of labour from other projects to vegetation management was an action that did reduce the magnitude of ActewAGL's proposed pass through event. We consider that this represented an efficient course of action and resulted in a reduction in the magnitude of the proposed cost pass through event.

However, we consider that there are further measures that ActewAGL could have undertaken in order to prevent or mitigate the effect of the proposed pass through event. In reaching this view we have considered the issues set out in sections 6.2.1-6.2.4 below.

### 6.2.1 Time taken to identify the increased vegetation growth

We are concerned that ActewAGL has not established that it took steps to prevent or mitigate the effect of increased vegetation growth when the increased rainfall was recorded in 2010–11 and 2011–12.

The ACT experienced above average rainfall in 2010–11 and 2011–12 but the vegetation clearance work, the subject of ActewAGL's cost pass through application, did not take place until 2012–13. ActewAGL has stated that increased vegetation growth was not apparent until the preparation for the 2012–13 bushfire season. However, information submitted by ActewAGL indicates that vegetation growth was already increasing significantly in 2011–12. For example:

- the number of vegetation clearance notices issued by ActewAGL rose from 4676 in 2010–11 to 8722 in 2011–12<sup>21</sup>
- ActewAGL's vegetation clearance contractor costs increased significantly from 2010–11 to 2011–12. Details of this are shown in confidential appendix B.

ActewAGL has not provided any information in its cost pass through application establishing that it took steps to prevent or mitigate the effect of increased vegetation growth when the increased rainfall was recorded in 2010–11 and 2011–12.

The TAG report noted that an efficient vegetation management strategy will include monitoring rainfall and pre-emptively adjusting pruning practices to reduce the impact of the expected growth response 18 to 24 months hence. However ActewAGL's strategy operates to first observe the vegetation growth and then respond with increased cutting.<sup>22</sup>

In the absence of additional information from ActewAGL, the AER considers that its approach to vegetation management does not take steps to prevent or mitigate the effect of increased vegetation

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<sup>21</sup> ActewAGL, *Vegetation management cost pass through: additional information – attachment A*, December 2013.

<sup>22</sup> AER Technical Advisory Group, *Targeted Technical Report (confidential)*, 23 May 2014, p. 2.

growth. A pre-emptive vegetation management strategy would have been more effective in mitigating the proposed pass through event.

## 6.2.2 Approach to vegetation clearance contracting arrangements

We consider that the contracting arrangements ActewAGL had in place to undertake vegetation clearance work were not efficient and hindered ActewAGL's ability to prevent or mitigate the effect of the increased vegetation growth.

ActewAGL uses external suppliers to clear the majority of vegetation encroachment. This is consistent with the approach undertaken by most other DNSPs in Australia. The bulk of ActewAGL's contractor payments for these services were made to four vegetation clearance suppliers.<sup>23</sup> The contracts with these suppliers are hourly rate type contracts under which ActewAGL is invoiced for vegetation clearance activities based on hourly rate charges.

To assess ActewAGL's expenditure, we considered alternatives to ActewAGL's vegetation management contracting arrangements. We also considered approaches of other DNSPs to vegetation clearance contracting arrangements, many of whom contract by applying a unit rate approach rather than an hourly rate approach. To evaluate the efficiency of hourly rate approaches and unit rate approaches in vegetation clearance contracting arrangements, we reviewed a confidential expert report which was submitted to the AER by Aurora Energy (Aurora) as part of the Tasmanian distribution determination process (Aurora expert report). While the GHD report was prepared for Aurora's individual circumstances, we consider that many of the contracting issues raised in the report are typical of hourly rate contracting approaches and would therefore also apply to ActewAGL. Details of this report are presented in confidential appendix B.

ActewAGL submitted that there are several major variables impacting vegetation clearance costs making it difficult for a rigid per tree or per km unit rate to be used.<sup>24</sup> The AER acknowledges that unit rate based contracts need to take account of the variables involved – vegetation within spans can vary greatly as well as accessibility. However other DNSPs utilising this contracting approach have been able to overcome these issues.

We recognise that ActewAGL has taken steps to manage some of the risk associated with its contracting practices. Before work packages are issued to the contractors, ActewAGL staff generally prepare a work package estimate and, after completion of the work, compare the final invoiced costs against the work package estimate. This work package estimate is not provided to the contractor. Despite this, ActewAGL has provided little analysis to support the view that its contracting approach results in the most efficient possible outcome (see confidential appendix B for further discussion).

The TAG considers that benchmark total vegetation management costs should be in the order of [cic] per network span. Based on information submitted by ActewAGL, the TAG has calculated its vegetation management costs in the 2012–13 year to total around [cic] per span. As noted in the TAG report, this is more than [cic] per cent above the benchmark range.<sup>25</sup>

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<sup>23</sup> ActewAGL, *Vegetation management cost pass through*, November 2013, p. 21.

<sup>24</sup> ActewAGL, *Vegetation management cost pass through: response to second additional information request*, February 2014, p. 19.

<sup>25</sup> AER Technical Advisory Group, *Targeted Technical Report (confidential)*, 23 May 2014, p.2.

The TAG report sets out that ActewAGL's vegetation management cost per span has moved from approximately [cic] per cent below the benchmark rate in 2006–07 to over [cic] per cent above the benchmark range in 2012–13. The TAG attributes the majority of this cost increase to contracting costs. The TAG therefore cannot conclude that ActewAGL's contracting practices are efficient.<sup>26</sup> Further information is shown in confidential appendix B.

For these reasons, we are not satisfied that ActewAGL has taken steps to prevent the costs of increased vegetation management growth. We consider that the use of more appropriate alternative contracting models, such as unit rate approaches, would have contributed to mitigating the effect of the proposed pass through event by minimising the costs associated with vegetation cutting contractors.

### 6.2.3 Increasing vegetation management costs

ActewAGL's vegetation management costs are increasing much more rapidly than the rate attributable to the proposed rainfall event. We consider that the increases in ActewAGL's vegetation management expenditure are the result of inefficiencies in ActewAGL's vegetation management practices. As such, we are not satisfied that ActewAGL has taken steps to prevent or mitigate the costs of increased vegetation growth.

Historical vegetation management costs submitted by ActewAGL show that contracting costs have been increasing significantly since 2005–06. In particular, the TAG report sets out that there has been a marked upward trend in vegetation management costs from around [cic] per span in 2008–09 to around [cic] per span in 2012–13.<sup>27</sup> As discussed above, ActewAGL's contractor costs are a major source of this increase. Further information is shown in confidential appendix B.

The AER is not aware of any exogenous factors driving these increases in vegetation management costs. On this trend, over \$500,000 of additional contractor costs would have been incurred in 2012–13 irrespective of the rainfall event. Based on the historical vegetation management costs submitted by ActewAGL, the AER assesses that:

- overall costs are increasing at 14% (real) per year
- contractor costs are increasing at an average of 24% (real) since 2005-06.

The AER is not aware of any changes to ACT regulations that have impacted these costs. ActewAGL did not provide vegetation management volume information as requested in the AER's information requests. Therefore it is difficult to determine the extent to which these increases were volume driven or due to higher costs. It is also difficult to assess the drivers of the increase in costs. Aside from this, we have found:

- the volume of overhead line is not increasing (steady or decreasing) based on ActewAGL annual reports
- cost increases are not consistent with changes in rainfall.

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<sup>26</sup> AER Technical Advisory Group, *Targeted Technical Report (confidential)*, 23 May 2014, p.2.

<sup>27</sup> AER Technical Advisory Group, *Targeted Technical Report (confidential)*, 23 May 2014, p. 1.

The AER has analysed the average rainfall from the preceding two years against the total vegetation management contracting costs. This analysis is shown in confidential appendix B.

This comparison of ActewAGL's increasing vegetation management expenditure against rainfall measurements in the ACT indicates that ActewAGL has not taken action that could have been taken to reduce the magnitude of the pass through event. ActewAGL has not submitted any evidence to disprove this observation.

#### 6.2.4 Adoption of LIDAR technology

ActewAGL provided no information to demonstrate the backlog in vegetation inspection identified through the use of LIDAR technology was solely caused by external factors.<sup>28</sup> Although it is difficult to quantify the amount of additional vegetation encroachment which would not have been identified through manual inspection processes, we consider that the use of LIDAR technology resulted in increased costs rather than reducing the magnitude of the pass through event.<sup>29</sup> Accordingly, the AER does not consider ActewAGL's use of LIDAR technology served to reduce the magnitude of the proposed cost pass through event.<sup>30</sup>

After becoming aware of the increased vegetation encroachment on bushfire risk zones, ActewAGL commissioned several aerial inspections to identify vegetation encroachment using LIDAR technology. ActewAGL claimed the need to use LIDAR was for catching up inspection backlogs.<sup>31</sup>

The AER considers that the adoption of LIDAR in 2012–13 will have identified more trees for cutting than the previous manual inspection process. This type of increase in the number of trees identified has been reported by Ergon Energy in its Economic Benchmarking RIN.<sup>32</sup> In 2012–13, Ergon Energy's average number of trees identified for rural vegetation maintenance spans increased by a factor of 44.<sup>33</sup> Ergon Energy stated that, for 2012–13, information was sourced from its Remote Observation Automated Modelling Economic Simulation (ROAMES) LIDAR program. For years prior (i.e. 2008–09 to 2011–12) information was sourced from historical treatment records contained within the Tree Management Database (TMD).<sup>34</sup>

We consider that LIDAR inspections identify a greater number of trees requiring trimming because aerial inspections benefit from a clearer view of the electricity assets and also because of the accuracy of LIDAR technology. For this reason we consider that the decision to use LIDAR would have resulted in increased costs that were not due to the rainfall event. If ActewAGL had continued with the existing manual approach, the find rate would have been lower than that discovered through LIDAR.

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<sup>28</sup> NER cl 6.6.1(c)(6)(ii)

<sup>29</sup> Ituen,I., Sohn,G., and Jenkins,A., 'A Case Study: Workflow Analysis of Powerline Systems for Risk Management' in the *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*. Vol. XXXVII. Part B3b, 2008, pp. 331-336. This article is available at: [http://www.isprs.org/proceedings/XXXVII/congress/3b\\_pdf/66.pdf](http://www.isprs.org/proceedings/XXXVII/congress/3b_pdf/66.pdf).

<sup>30</sup> NER, cl. 6.6.1(j)(3).

<sup>31</sup> ActewAGL, *Vegetation management cost pass through: response to second additional information request*, February 2014, pp. 10-12.

<sup>32</sup> This document is available on the AER's website (<http://www.aer.gov.au/node/24385>).

<sup>33</sup> Ergon Energy, *Economic benchmarking data template, 2006–13, 2014*.

<sup>34</sup> Ergon Energy, *Economic benchmarking regulatory information notice, Final submission (audited), 1 July 2005 to 30 June 2013, 2014*, pp. 88-189.

### 6.3 Change in cost must be material

The definition of material in the 'general nominated pass through event' states that material means:

The costs associated with the event would exceed 1 per cent of the smoothed revenue requirement specified in the final decision in the years of the regulatory control period that the costs are incurred.

ActewAGL submitted that the costs amount to 1.10% of the smoothed revenue requirement. We agree with ActewAGL's calculation and accept, prima facie, that this criteria in the general nominated event definition has notionally been met.<sup>35</sup>

For the purposes of cost-pass through provisions in the NER, materiality is defined in chapter 10:

For the purposes of the application of clause 6.6.1, an event results in a distribution network service provider incurring materially higher or materially lower costs if the change in costs (as opposed to the revenue impact) that the distribution network service provider has incurred and is likely to incur in any regulatory year of a regulatory control period, as a result of that event, exceeds 1 per cent of the annual revenue requirement for the distribution network service provider for that regulatory year.

ActewAGL submitted that the above allowance vegetation management costs account for 1.07 per cent of the annual revenue requirement. We agree with ActewAGL's calculation and accept that this criteria has notionally been met.

### 6.4 The change in costs is likely to significantly affect ActewAGL's ability to achieve the operating expenditure and/or capital expenditure objectives

The definition of a general nominated pass through event for ActewAGL is set out in the distribution determination for ActewAGL.<sup>36</sup> The AER made distribution determinations for ActewAGL and Energy Australia at the same time and determined the same general nominated pass through event definition for both DNSPs.

The Australian Competition Tribunal (Tribunal) amended the definition of Energy Australia's general nominated pass through event by removing the requirement that the proposed pass through event 'is likely to significantly affect the DNSP's ability to achieve the operating expenditure objectives and/or the capital expenditure objectives...'. The Tribunal made this amendment after the AER and Energy Australia reached this position by consent.<sup>37</sup>

In relation to this Tribunal decision, the AER submitted that these words are not intended to impose a second or higher threshold to the materiality requirement provided for in the Transitional Rules.<sup>38</sup> We consider that it is appropriate to take the same position with regard to ActewAGL's cost pass through application. We will therefore not apply this limb of the general nominated pass through event definition.

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<sup>35</sup> This is on the basis that the claimed costs submitted by ActewAGL are accepted as being prudent and efficient. This is separately considered below.

<sup>36</sup> AER, *ActewAGL distribution determination 2009-14*, April 2009, pp. 136-137.

<sup>37</sup> While the Tribunal cannot make orders by consent it did consider the material the parties put before it and was satisfied as to the existence of reviewable error, and the appropriate relief to grant – see paragraph 262 of *Application by EnergyAustralia and Others* [2009] ACompT8.

<sup>38</sup> See paragraph 263 of *Application by EnergyAustralia and Others* [2009] ACompT8.

## **6.5 Whether the event falls within any other cost pass through definition**

ActewAGL's proposed cost pass through event does not fall into any other pass through event definition set out in the NER or any event nominated in ActewAGL's distribution determination. Therefore the AER considers that this criteria is satisfied.