FINAL DECISION
ActewAGL distribution determination
2015–16 to 2018–19

Attachment 11 – Service target performance incentive scheme

April 2015

AUSTRALIAN ENERGY REGULATOR

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Note

This attachment forms part of the AER's final decision on ActewAGL's revenue proposal 2015–19. It should be read with other parts of the final decision.

The final decision includes the following documents:

Overview

Attachment 1 - Annual revenue requirement

Attachment 2 - Regulatory asset base

Attachment 3 - Rate of return

Attachment 4 - Value of imputation credits

Attachment 5 - Regulatory depreciation

Attachment 6 - Capital expenditure

Attachment 7 - Operating expenditure

Attachment 8 - Corporate income tax

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Attachment 19 - Pricing methodology

Attachment 20 - Analysis of Financial Viability

Contents

Shortened forms

Shortened form	Extended form
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
augex	augmentation expenditure
capex	capital expenditure
CCP	Consumer Challenge Panel
CESS	capital expenditure sharing scheme
CPI	consumer price index
DRP	debt risk premium
DMIA	demand management innovation allowance
DMIS	demand management incentive scheme
distributor	distribution network service provider
DUoS	distribution use of system
EBSS	efficiency benefit sharing scheme
ERP	equity risk premium
Expenditure Assessment Guideline	expenditure forecast assessment Guideline for electricity distribution
F&A	framework and approach
MRP	market risk premium
NEL	national electricity law
NEM	national electricity market
NEO	national electricity objective
NER	national electricity rules
NSP	network service provider
opex	operating expenditure
PPI	partial performance indicators
PTRM	post-tax revenue model
RAB	regulatory asset base
RBA	Reserve Bank of Australia
repex	replacement expenditure
RFM	roll forward model

Shortened form	Extended form
RIN	regulatory information notice
RPP	revenue and pricing principles
SAIDI	system average interruption duration index
SAIFI	system average interruption frequency index
SLCAPM	Sharpe-Lintner capital asset pricing model
STPIS	service target performance incentive scheme
WACC	weighted average cost of capital

11 Service target performance incentive scheme

The national Service Target Performance Incentive Scheme (STPIS) is intended to balance the incentives to reduce expenditure with the need to maintain or improve service quality. It achieves this by providing financial incentives to distributors to maintain and improve service performance where customers are willing to pay for these improvements.[1]

The STPIS establishes targets based on historical performance, and provides financial rewards for distributors exceeding performance targets and financial penalties for distributors failing to meet targets. These rewards and penalties are calculated by taking into account the value of customer reliability (VCR). This aligns the distributors' incentives with the long term interests of consumer, which is consistent with the National Electricity Objective (NEO).

The STPIS has two components, the s-factor component and the guaranteed service levels (GSL) scheme. The s-factor component adjusts the revenue that a distributor earns depending on reliability of supply and customer service performance. The GSL scheme sets threshold levels of service for distributors to achieve and requires direct payment to customers who experience service levels below those at the predetermined level.

While the regulatory regime as a whole encourages a business to improve its operating and capital efficiency, the STPIS is designed to ensure that this increase in efficiency is not at the expense of deterioration in service performance for customers. Further, the STPIS is designed to encourage a business to improve its service performance where customers are willing to pay for these improvements. The STPIS plays an important part in balancing the incentives on regulated businesses to ensure outcomes are consistent with the NEO of the National Electricity Law (NEL), in terms of efficient price and non-price outcomes for the long-term benefit of users.[2]

11.1 Final decision

We do not accept ActewAGL's submission that our draft STPIS decision failed to take into account the interrelationship between the decisions on forecast expenditure allowances. We also do not accept ActewAGL's revised performance targets for reliability of supply component, which we consider is based on the assumption that our allowed capex and opex has the effect of aligning reliability with the jurisdictional minimum standards. We maintain the position that we took in the draft decision, that is, to apply the national STPIS to ActewAGL for the 2015–19 regulatory control period.

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1 AER, *Electricity distribution network service providers—service target performance incentive scheme*, 1 November 2009. (AER, *Electricity distribution STPIS*, Nov 2009).

2 AER, *Electricity distribution STPIS*, Nov 2009, p.3.

Instead of applying the default VCR under the STPIS or ActewAGL's proposed VCR, we apply the 2014 AEMO VCR for NSW.

Our allowed expenditure in the final decision reasonably reflects the capex and opex criteria, and provides a sufficient amount for a prudent ActewAGL incurring efficient costs to maintain reliability. The STPIS will provide an incentive for ActewAGL to maintain its current levels of reliability or to improve them where customers are willing to pay for these improvements. The STPIS balances the incentive in the regulatory framework for distributors to reduce costs at the expense of service performance.

Consistent with our draft decision, we will apply the s-factor component of our national STPIS to ActewAGL for the 2015–19 regulatory control period. We will not apply the GSL component to ActewAGL as the existing ACT jurisdictional GSL arrangements will continue to apply.

In the draft decision, we accepted ActewAGL's proposal to apply the System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI) for the reliability of supply component of the STPIS and use 2.5 beta method to derive the major event day thresholds (MED). We also proposed to set ActewAGL's telephone answering target at 79 per cent based on the average performance over the past four years due to the data problem in the period 1 July 2008 to 30 November 2009. We accepted ActewAGL's proposed incentive rate for the telephone answering parameter of –0.04 per cent per unit of the telephone answering parameter.[3] As ActewAGL did not propose alternatives for the above parameters in the revised proposal, we maintain this position in this final decision.

We accepted ActewAGL's proposal in the draft decision that the revenue at risk for each regulatory year of the 2015–19 regulatory control period will be capped at ±5 per cent. Within this there will be a cap of ±0.5 per cent for the customer service component.[4] However, in its revised proposal ActewAGL proposed to lower the revenue at risk to ±2.5 per cent in the revised proposal due to perceived higher risk.[5] As we have accepted this lower level of revenue at risk for NSW distributors, we also accept a revenue at risk of ±2.5 per cent for ActewAGL. We consider this lower powered incentive will balance the risk to both consumers and ActewAGL and thus better meet the objectives of the STPIS.

In the draft decision, we set ActewAGL's reliability of supply performance targets based on average performance over the past five regulatory years without modification. This is because its historical reliability investment was small and we did not expect it to result in a material improvement in supply reliability.[6] ActewAGL amended the targets in its revised proposal assuming capex and opex has the effect of

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3 AER, *Draft decision attachment 11: Service target performance incentive scheme*, November 2014, pp.11-13.

4 AER, *Draft decision attachment 11: Service target performance incentive scheme*, November 2014, p.18.

5 ActewAGL, *Revised regulatory proposal 2015-19*, January 2015, p.621.

6 AER, *Draft decision attachment 11: Service target performance incentive scheme*, November 2014, pp. 20-26.

aligning reliability with the minimum standards.[7] As discussed in section 11.4.1, our allowed expenditure in the final decision reasonably reflects the sufficient amount ActewAGL needs to maintain reliability at the current level. Therefore we remain of the view that ActewAGL's reliability of supply performance targets should be based on its average performance over the past five regulatory years without adjustment. Table 11-1 sets out our final decision on ActewAGL's performance targets for reliability of supply component.[8]

Table 11-1 The proposed performance targets for ActewAGL's reliability of supply component

Year	2015/16	2016/17	2017/18	2018/19
Unplanned SAIDI				
Urban	30.32	30.32	30.32	30.32
Short rural	46.86	46.86	46.86	46.86
Unplanned SAIFI				
Urban	0.585	0.585	0.585	0.585
Short rural	0.895	0.895	0.895	0.895

Source: AER analysis.

ActewAGL proposed a VCR value of $67,258/MWh based on the 2003 NERA and ACNielsen study and the 2012 ANU study in its initial proposal. In the draft decision, we proposed to apply the 2014 AEMO NSW VCR to calculate the incentive rates for ActewAGL as it includes survey results for consumers in the ACT. We consider the AEMO's revised VCR values are robust as it has taken steps to ensure the accuracy of those values and it better meets the STPIS objective.[9] In its revised proposal, ActewAGL remained of the view that a VCR value of $67,258/MWh is reasonable. ActewAGL submitted that VCR would differ between ACT and NSW due to differences in climate and socioeconomic characteristics.[10]

We note the recent AEMO study suggests the VCR values have changed significantly since 2003. The AEMO study indicates there have been significant increases in investments intended to reduce energy consumption and rooftop PV installation over the last three years due to high energy prices.[11] While we accept that the 2014 AEMO NSW VCR may not exactly reflect the VCR for ACT, we do not consider the VCR value proposed by ActewAGL is realistic as explained in section 11.4.4.

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7 ActewAGL, *Revised regulatory proposal 2015-19*, January 2015, pp. 617-618.

8 They are essential the same as what we have determined in the draft decision, but we have updated the performance targets using actual 2013/14 reliability performance data.

9 AER, *Draft decision attachment 11: Service target performance incentive scheme*, November 2014, pp.26-29.

10 ActewAGL, *Revised regulatory proposal 2015-19*, January 2015, pp. 610-611.

11 AEMO, *Value of customer reliability review appendix*, September 2014, p.49.

For the final decision we have applied the September 2014 AEMO NSW VCR of $38,350/MWh and indexed it by the relevant CPI to calculate ActewAGL's incentive rates for its urban and short rural feeder type. Table 11-2 below presents our calculated incentive rates to apply to ActewAGL's SAIDI and SAIFI targets.

Table 11-2 The proposed incentive rates on ActewAGL's reliability of supply targets

Year	Urban	Short rural
Unplanned SAIDI	0.0743	0.0088
Unplanned SAIFI	3.9693	0.5014

Source: AER analysis.

11.2 ActewAGL's revised proposal

ActewAGL contended that our draft decision on the application of STPIS is unreasonable as we failed to take into account the interrelationship between the decision to apply the STPIS and the decision on forecast expenditure allowances. ActewAGL submitted that our expenditure allowance in the draft decision only allows it to meet its regulatory obligations in respect of quality and reliability while the STPIS decision will operate to impose a penalty if it does not maintain its higher historical performance. It also noted the large difference in AEMO's VCR estimate for the NSW and the estimate derived by ActewAGL indicate the value placed on reliability by customers in the ACT is different to those in the NSW.[12]

It proposed to apply the s-factor component of the national STPIS with the following modifications: [13]

- performance targets for the reliability of supply component,
- VCR used to set incentive rates for the reliability of supply component, and
- a lower revenue at risk.

Specifically, ActewAGL proposed to set its performance targets for reliability of supply component assuming:[14]

- the existing assets have the effect of maintaining reliability at the average performance observed over the past five years
- the capex in the 2014–19 period has the effect of aligning reliability with the minimum standards

[12] ActewAGL, *Revised regulatory proposal 2015-19*, January 2015, pp.593-594.
[13] ActewAGL, *Revised regulatory proposal 2015-19*, January 2015, p.594.
[14] ActewAGL, *Revised regulatory proposal 2015-19*, January 2015, pp. 617-618.

- the controllable operating expenditure has the effect of aligning reliability with the minimum standards.

Table 11-3 below presents ActewAGL's revised proposal on reliability of supply performance targets.

Table 11-3 ActewAGL's revised proposal on reliability of supply performance targets

Year	2015/16	2016/17	2017/18	2018/19
Unplanned SAIDI				
Urban	31.3	31.3	31.3	31.3
Short rural	45.8	45.8	45.8	45.8
Unplanned SAIFI				
Urban	0.66	0.66	0.66	0.66
Short rural	0.96	0.96	0.96	0.96

Source: ActewAGL, *Revised regulatory proposal 2015-19*, January 2015, p.618.

It proposed to maintain the VCR at $67,258/MWh based on the 2003 NERA and the 2012 ANU studies in its initial proposal. It submitted that VCR would differ between ACT and NSW due to differences in climate and socioeconomic characteristics:[15]

- the climate in the ACT is more extreme than in NSW
- the ACT's winter temperatures are more comparable with temperatures in Tasmania
- energy demand historically peaked in winter in the ACT, whereas energy demand peaks in summer in NSW
- value of reliability in summer in the ACT is likely to be relatively high due to higher mean daily maximum temperatures in January
- mean annual income and proportion of persons with post-school qualifications are higher in the ACT, some studies have found to be associated with a higher level of willingness to pay.

In addition, ActewAGL proposed to set the revenue at risk at ±2.5 per cent instead of ±5 per cent as originally proposed due to perceived higher risk.[16]

[15] ActewAGL, *Revised regulatory proposal 2015-19*, January 2015, pp. 610-611.

[16] ActewAGL, *Revised regulatory proposal 2015-19*, January 2015, p.621.

11.3 AER's assessment approach

We have outlined our assessment approach to the application of the STPIS in the draft decision:

- rule 6.6.2 of the NER describes the consultative process that we must apply in developing and publishing the STPIS
- rule 6.12.1 (9) of the NER requires use to make a decision on how the STPIS is to apply to the relevant distributor in the Distribution Determination
- the STPIS Guideline outlines the process to be applied in determining performance targets under the STPIS, incentive rates and the MED thresholds.[17]

We have assessed ActewAGL's STPIS proposal according to the NER and the Guideline outlined above. When alternatives are presented, which warrant a reconsideration of this approach, we have considered the relative merits of the alternative against the objectives of the STPIS.

11.3.1 Interrelationships

In applying the STPIS we must consider any other incentives available to the distributor under the NER or relevant distribution determination.[18] One of the objectives of the STPIS is to ensure that the incentives are sufficient to offset any financial incentives the service provider may have to reduce costs at the expense of service levels.[19] For the 2015–19 regulatory control period, the STPIS will interact with the Capital Expenditure Sharing Scheme (CESS).[20] For this period we will not subject any expenditure to the expenditure benefit sharing scheme (EBSS) which applies to opex as we have used an alternative opex forecast rather than ActewAGL's revealed costs. This is explained further in the EBSS appendix (see attachment 9).

The CESS rewards distributors who pursue efficiency improvements in capex to the benefit of both distributors and network users. In setting the STPIS performance targets, we will consider both completed and planned reliability improvements expected to materially affect network reliability performance.[21] By setting the performance targets in such a way, any incentive a distributor may have to reduce the capex at the expense of target service levels will be curtailed by the STPIS financial penalties.

Contrary to ActewAGL's submissions, our approved capex and opex forecasts in the final decision are sufficient to allow a prudent and efficient ActewAGL facing a realistic expectation of the demand forecasts and cost inputs to maintain reliability at the

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17 AER, *Electricity distribution STPIS*, Nov 2009.

18 NER, cl. 6.6.2(b)(3)(iv).

19 AER, STPIS, clause 1.5(b)(5).

20 The Efficiency Benefit Sharing Scheme will not operate for the 2015–19 regulatory control period.

21 Included in the distributor's approved forecast capex for the subsequent period.

current level (see sections 6.4 and appendix A of attachment 9). This is discussed in more detail in section 11.4.1.

11.4 Reasons for final decision

The following section sets out reasons for our final decision.

11.4.1 Application of STPIS

We do not accept ActewAGL's submission that we failed to take into account the interrelationship between the STPIS and the decisions on forecast expenditure allowances. We note that ActewAGL has been delivering performance levels higher than the minimum standards it is required to achieve under its licence obligations.

Our approved capex and opex forecast in the final decision are sufficient to allow ActewAGL to maintain its current levels of reliability, if it spends in a manner that reasonably reflects the opex and capex criteria (see sections 6.4 and appendix A of attachment 9).

In arriving at our capex forecast, we have considered the interaction between the removal of the N-1 deterministic design planning standards imposed by the ACT Government in the previous regulatory control period, the minimum reliability standards and the historical reliability that ActewAGL has been achieving. We have provided sufficient revenue to allow ActewAGL acting prudently and efficiently to maintain its current reliability level with our approved capex allowance. In addition, as the current reliability level is higher than the minimum reliability standards, ActewAGL will also be able to meet, and indeed exceed, this jurisdictional minimum standard (see section 6.4).

Our benchmarking opex approach considers the reliability of the networks by incorporating it as an output in our opex Multilateral Partial Factor Productivity (MPFP) benchmarking. We found most networks have a level of reliability that is close to their expected level given their customer density, as reflected by the reliability scores being close to the trend line. Given this, our benchmarking indicates that a prudent and efficient ActewAGL facing a realistic expectation of demand forecasts and cost inputs should be able to deliver ActewAGL's current levels of reliability for less opex. Based on our benchmarking analysis, we consider that our approved opex for ActewAGL is consistent with the targets that we have set for the STPIS in this period. Our forecast opex is also sufficient to allow prudent and efficient ActewAGL facing a realistic expectation of demand forecasts and cost inputs to maintain reliability at the current level (see appendix A of attachment 7).

In addition, we consider that a distributor's reliability performance is influenced by the configuration and condition of its network assets. This is a result of the distributor's historical investment and operating practices. Most network assets have an expected life in excess of 50 years, therefore, by discounting for uncontrollable external impacts such as weather variations, the distributor's reliability level should not change abruptly.

11.4.2 Applicable components and parameters

In both the Stage two F&A and the draft decision, we noted that:[22]

- performance targets would be set for both SAIDI and SAIFI under the reliability of supply component of the STPIS, with financial incentives attached to each.
- ActewAGL's network would be divided into urban and short rural feeder categories
- we will apply the telephone answering parameter under the customer service component to the NSW distributors in the 2015–19 regulatory control period.
- we would not apply the GSL component of the STPIS to ActewAGL while the jurisdictional GSL scheme remains in place.

We did not receive any submissions objecting our draft decision or our F&A positions in relation to these issue and we will not depart from the above position in this final decision.

11.4.3 Revenue at risk

Revenue at risk caps the potential rewards and penalties that ActewAGL would receive under the scheme. The STPIS allows us to vary the revenue at risk where this would satisfy the objectives of the scheme. In setting the revenue at risk, we must take into account the benefits to consumers that are likely to result from the scheme, and in particular, that the benefits are sufficient to warrant any reward or penalty under the scheme for the distributors.[23]

We proposed to set the revenue at risk for ActewAGL within the range of ± 5 per cent in the stage 2 framework and approach paper. ActewAGL did not propose to move away from this in its initial proposal and therefore we accepted this level of revenue at risk in the draft decision.[24]

However, in its revised proposal, ActewAGL proposed to apply a lower revenue at risk of ±2.5 per cent. It considered the STPIS rewards and penalties under our draft decision is effectively asymmetric as rewards are limited by technical constraints, whereas penalties are limited by the revenue at risk.[25]

While we do not agree that the STPIS provides asymmetric incentives as submitted by ActewAGL, we consider a lower level of revenue at risk is reasonable. The s-factor component in the STPIS scheme provides symmetrical incentives. This symmetry provides distributors with an incentive to maintain, and improve service performance if customers are willing to pay for it. Customers also benefit from the scheme's

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22 AER, *Draft decision attachment 11: Service target performance incentive scheme*, November 2014, pp. 18-19; AER, *Stage 2 framework and approach ActewAGL, Endeavour Energy and Essential Energy*, January 2014, pp.14–15.

23 AER, *Electricity distribution STPIS*, Nov 2009.

24 AER, *Draft decision attachment 11: Service target performance incentive scheme*, November 2014, p.18.

25 ActewAGL, *Revised regulatory proposal 2015-19*, January 2015, p.621.

application by receiving improved service levels or lower prices as a result of degradation in service performance. As we have not previously applied our national STPIS to ActewAGL, applying a lower level of revenue at risk would better meet the objectives of the scheme and long term interest of consumers. This is because it limits risk to both consumers and ActewAGL. This is also consistent with the revenue at risk that we have approved for NSW distributors. Therefore, consistent with NSW distributors, we will apply a cap of ±2.25 per cent for the reliability of supply component and ±0.25 per cent for the customer service component.

11.4.4 Reliability of supply component

We will apply unplanned SAIDI and unplanned SAIFI parameters under the reliability of supply component to ActewAGL for the 2015–19 regulatory control period. Unplanned SAIDI measures the annual sum of the duration of each unplanned sustained customer interruption (in minutes) divided by the total number of distribution customers. Unplanned SAIFI measures the total annual number of unplanned sustained customer interruptions divided by the total number of distribution customers.

Major Event Day (MED) exclusions

The STPIS allows certain events to be excluded from the calculation of the s-factor revenue adjustment. These exclusions include the events that are beyond the control of ActewAGL, such as the effects of transmission network outages and other upstream events. They also exclude the effects of extreme weather events that have the potential to significantly affect ActewAGL's STPIS performance.

We accepted ActewAGL's proposal to calculate MED thresholds using 2.5 beta method in accordance with appendix D of the STPIS in the draft decision. ActewAGL did not propose an alternative method in the revised proposal, therefore we maintain this view in this final decision. Table 11-4 sets out our MED thresholds calculated in accordance with Appendix D of the STPIS.

Table 11-4 MED thresholds (T_{MED}) for ActewAGL

Regulatory year	T_{MED}
2009/10	2.369
2010/11	2.073
2011/12	2.038
2012/13	1.837
2013/14	1.875

Source: AER analysis.

In reviewing ActewAGL's data for the reliability of supply component, we noticed the information provided under sustained interruption to supply did not reconcile with the actual unplanned SAIDI and SAIFI reported under reliability and customer service table. Following our information request, ActewAGL noticed its historical data did not contain single customer premise outages. It updated data in RIN tables 6.2.1, 6.2.2 and table 6.3.1 to reflect the inclusion of the single customer outage statistics.[26]

We are satisfied with the revised reliability of supply data. However, based on our calculated MED thresholds above, we identified an additional major event day on 27 January 2013 (with an unplanned network SAIDI of 1.927) that was not picked up by ActewAGL in its reported sustained interruptions data. We have removed the reported data on that day in accordance with the STPIS and that slightly changed the unplanned SAIDI and SAIFI data for the 2012/13 regulatory year. Table 11.5 sets out the revised 2009/10–2013/14 historical data that we have based our proposed performance targets on.

Table 11.5 Our revised historical unplanned SAIDI and SAIFI for the 2009–14 period, compared with ActewAGL's revised figures

Year	2009/10	2010/11	2011/12	2012/13	2013/14
ActewAGL's revised unplanned SAIDI					
Urban	25.93	45.34	29.72	28.88	23.45
Short rural	46.96	56.88	41.98	37.86	54.23
ActewAGL's revised unplanned SAIFI					
Urban	0.544	0.788	0.570	0.571	0.460
Short rural	1.155	0.876	0.712	0.930	0.809
Our revised unplanned SAIDI after removing additional identified MEDs					
Urban	25.93	45.34	29.72	**27.16**	23.45
Short rural	46.96	56.88	41.98	**34.24**	54.23
Our revised unplanned SAIFI after removing additional identified MEDs					
Urban	0.544	0.788	0.570	**0.565**	0.460
Short rural	1.155	0.876	0.712	**0.922**	0.809

Source: AER analysis.

Performance targets

Clause 3.2.1(a) of the STPIS states that performance targets for the reliability of supply parameters must be established with reference to average historical performance

[26] ActewAGL, *Info request AER ACTEW 030 - STPIS data*, 12 September 2014.

modified to account for completed or planned reliability improvements and any other factor expected to materially affect network reliability performance.

ActewAGL is required to meet the minimum network overall reliability standards prescribed in the ACT Electricity Distribution Supply Standards Code.[27] ActewAGL proposed to set the performance targets for the reliability of supply component based on such minimum standard. The ACT minimum standards are based on total SAIDI and SAIFI, while the performance targets set in the STPIS are based on unplanned SAIDI and SAIFI.

Similar minimum standards are set in the NSW licence conditions for electricity distributors. In the explanatory note of NSW licence conditions, it noted that those network overall reliability standards are to define minimum average reliability performance, by feeder type, for a distributor across its distribution network and provide a basis against which a distributor's reliability performance can be assessed.[28] Therefore, such minimum standards should not be treated as the performance targets under the STPIS. We noted ActewAGL's reliability capex for the 2009–14 period was immaterial. As the STPIS only requires the performance targets to be modified by any reliability improvement that is expected to result in a material improvement in supply reliability, we proposed to set ActewAGL's performance targets based on average performance over the past five regulatory years without modification in the draft decision.[29]

In its revised proposal, ActewAGL submitted that we failed to take into account the interrelationship with the decisions on forecast expenditure allowances and proposed to set its performance targets for reliability of supply component assuming:[30]

- the existing assets have the effect of maintaining reliability at the average performance observed over the past five years
- the capex in the 2014–19 period has the effect of aligning reliability with the minimum standards
- the controllable operating expenditure has the effect of aligning reliability with the minimum standards.

As discussed in section 11.4.1, we consider that our allowed capex and opex in the final decision is sufficient to allow ActewAGL to maintain reliability at current levels, therefore we do not accept ActewAGL's revised proposal. As ActewAGL did not submit any new information supporting its revised proposal, we maintain our draft decision view. We have set ActewAGL's performance targets for reliability of supply component based on the average performance over the past five years. Figure 11-1, Figure 11-2 and Table 11-1 set out our proposed unplanned SAIDI and SAIFI targets for ActewAGL.

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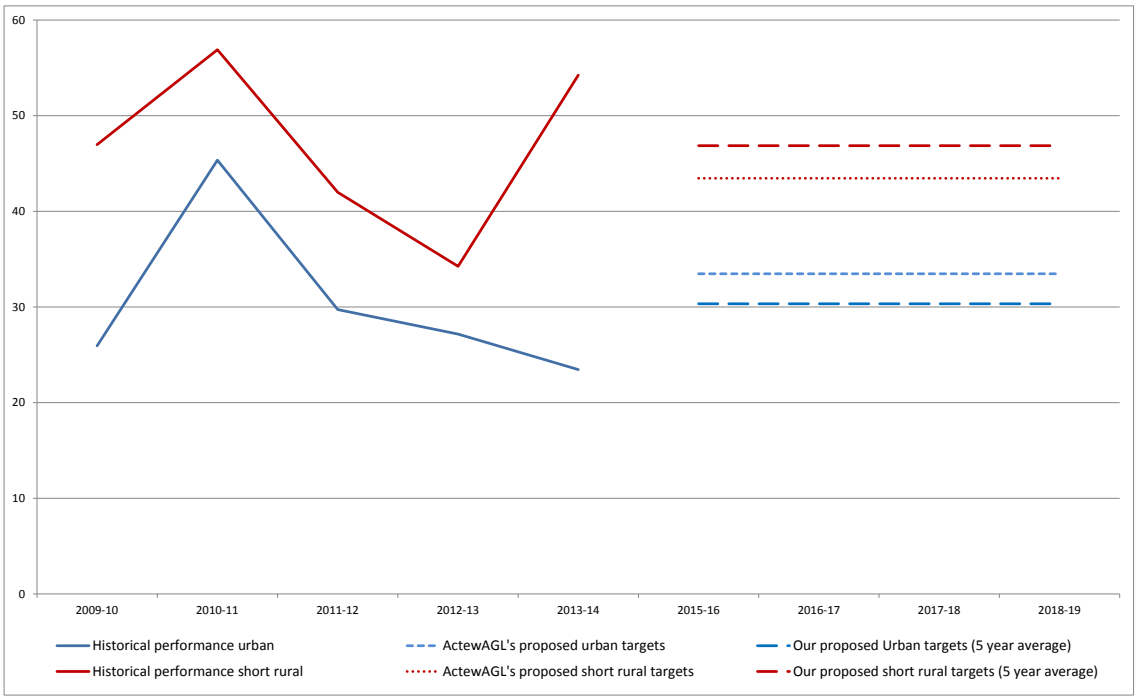
27 ACT Government, *Utilities (Electricity Distribution Supply Standards Code) Determination 2013*, August 2013, p.7

28 NSW Government, Reliability and performance - distributor's licence conditions explanatory note, 1 July 2014.

29 AER, *Draft decision attachment 11: Service target performance incentive scheme*, November 2014, pp.25-26.

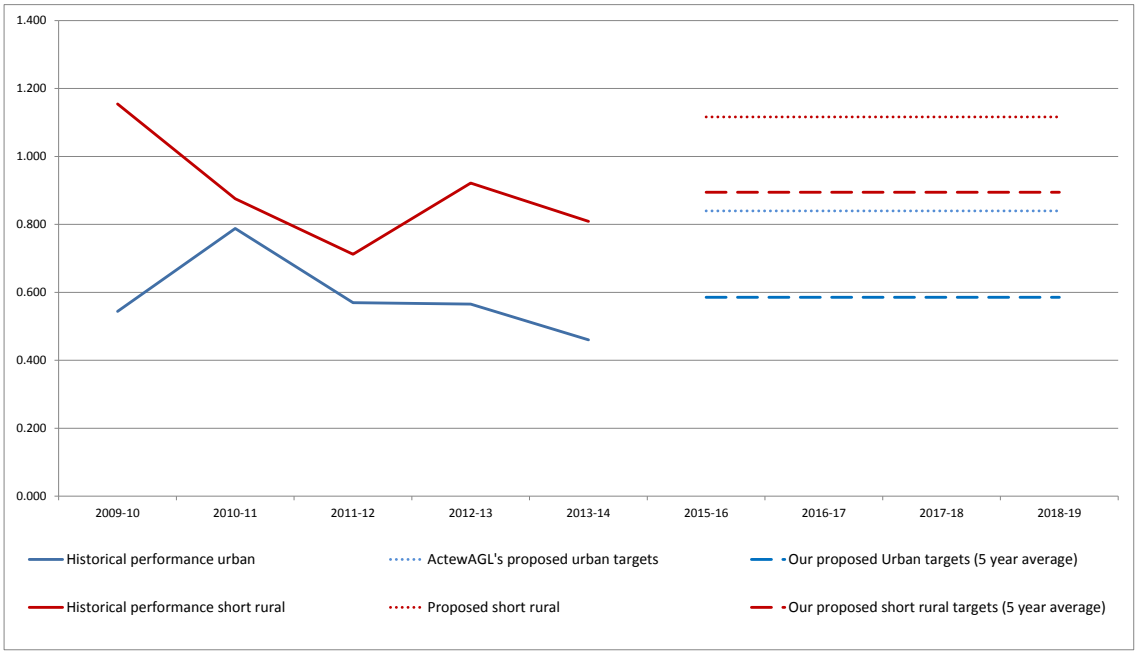
30 ActewAGL, *Revised regulatory proposal 2015-19*, January 2015, pp. 617-618.

Figure 11-1 ActewAGL's historical system unplanned SAIDI and our proposed performance target



Source: AER analysis.

Figure 11-2 ActewAGL's historical system unplanned SAIFI and our proposed performance target



Source: AER analysis.

Incentive rates

The NER stipulates that we must take into account the willingness of the customer to pay for improved service performance when developing and implementing a STPIS.[31] The incentive rates in the STPIS are based on measures of customers willingness to pay for performance, specifically, the value that customers place on supply reliability, referred to as the Value of Customer Reliability (VCR).

ActewAGL proposed a VCR value of $67,258/MWh based on two willingness to pay studies undertaken in the ACT—the 2003 NERA and ACNielsen study on both residential and non-residential customers, and the 2012 ANU study on residential customers only. ActewAGL submitted the 2003 NERA study remains relevant today as the 2012 ANU study indicates the residential willingness to pay remains stable after adjusting for inflation. ActewAGL considered the VCR based on these two ACT studies better reflect the preference of ACT consumers as the default VCR values in the STPIS are based on the Victorian studies. The ACT studies also use choice modelling, which ActewAGL submitted is better than direct worth and economic principle of substitution approaches used in the Victorian studies.[32]

In the draft decision, we noted the AEMO has carried out a review of the VCR and published the final results in September 2014, which also used choice modelling. We proposed to apply the 2014 AEMO NSW VCR to calculate the incentive rates for ActewAGL as it includes survey results of consumers of the ACT.

AEMO published the results of its VCR review on 30 September 2014. This review was requested by the COAG Energy Council and is the first time that a study has been carried out to deliver such values on a NEM-wide basis.

A total of 2,930 residential, business and direct connect customers were surveyed across the NEM — the highest number of customers surveyed in the NEM for a VCR study. This sample represents a 4-fold increase from the VENCorp2007 study, which was used as the default VCR in the STPIS Guideline. The AEMO study revealed a NSW and ACT VCR value of $38,350/MWh.

AEMO reports that the sample size also compares well with international studies including the UK and New Zealand. For these reasons we consider that the AEMO revised VCR values are appropriate and relevant for use across the NEM. Given that the study covers residential, business and direct connect customers and was carried out more recently than the alternatives proposed by ActewAGL, we are more confident in their results of customer preferences.[33]

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31 NER, cl. 6.6.2(b)(3)(vi).

32 ActewAGL, *Regulatory proposal 2015–19 subsequent regulatory control period*, 2 June 2014 (resubmitted 10 July 2014), pp. 372–377.

33 AER, *Draft decision attachment 11: Service target performance incentive scheme*, November 2014, pp.26-29.

In the revised proposal, ActewAGL remained of the view that a VCR value of $67,258/MWh is reasonable. It submitted that VCR would differ between ACT and NSW due to differences in climate and socioeconomic characteristics:[34]

- the climate in the ACT is more extreme than in NSW
- ACT's winter temperatures are more comparable with temperatures in Tasmania
- energy demand historically peaked in winter in the ACT, whereas energy demand peaks in summer in NSW
- value of reliability in summer in ACT is likely to be relatively high due to higher mean daily maximum temperatures in January
- mean annual income and proportion of persons with post-school qualifications are higher in the ACT, some studies have found to be associated with a higher level of willingness to pay.

In responding to our concerns with its 2003 NERA and 2012 ANU studies, ActewAGL noted the following:[35]

- there is no evidence to suggest that non-residential VCR has changed significantly since 2003 as the non-residential sector in Canberra has a large number of national institutions and federal public service customers who do value reliability
- the 2012 ANU study of residential consumers is a very recent study by the standards of choice modelling studies, which are generally not undertaken more frequently than once in five years.

In relation to the 2003 NERA and ACNielsen study, the CCP noted there have been considerable changes in electricity prices and energy markets since the study was undertaken, 12 years ago, when average household electricity bills were about 70 per cent lower than they are now.[36] We agree with the CCP that the evidence suggest the VCR has likely changed since 2003. The 2014 AEMO study found the VCR values for the agricultural and commercial sectors have dropped from between $90,000-110,000/MWh to $44,000-47,000/MWh compared to the 2008 Victorian study.[37] It noted investments intended to reduce energy consumption and rooftop PV installation have increased significantly over the last three years, particularly among businesses within the commercial sector. A number of businesses indicated they could not afford to pay extra to secure a more reliable supply and some businesses commented that they intended to take further steps to reduce energy bills, including by suppling their own energy.[38]

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34 ActewAGL, *Revised regulatory proposal 2015-19*, January 2015, pp. 610-611.

35 ActewAGL, *Revised regulatory proposal 2015-19*, January 2015, p.612.

36 CCP, *Response to AER draft determination re: ActewAGL regulatory proposal 2014-19*, February 2015, p.13.

37 AEMO, *Value of customer reliability review final report*, September 2014, p.24.

38 AEMO, *Value of customer reliability review appendix*, September 2014, p.49.

AEMO further noted that larger businesses tend to have a lower VCR value as they have back-up systems in place to mitigate the impact of outages.[39] We note this logic would similarly apply to national institutions and federal public service customers in Canberra. While they do value reliability, they could potential have lower VCR values as most of them would have robust and tested alternative supply capabilities. It is not clear if the availability of back-up supply systems has been taken into account in the studies referred to by ActewAGL.

While we agree that the climate in ACT is more extreme than the major population centres of NSW and its winter temperatures are more comparable to those temperatures in Tasmania, we note the 2014 AEMO study found there are limited variations in values emerging across the NEM regions. While the residential customers in Tasmania have the highest VCR value of $28,580/MWh, it is just slightly higher than the NSW residential VCR value of $26,53/MWh and is significantly less than ActewAGL's proposed rate of $67,258/MWh.[40] AEMO explained that the Tasmania residential VCR was highest due to its relatively lower reliability level compared to other NEM regions.[41] We note this explanation does not apply to ActewAGL's customers as they experience the second best reliability level in the NEM regions, led by CitiPower customers.[42]

While the 2012 ANU study of residential consumers, based on survey results from the third quarter of 2011, is a recent study, AEMO's study reports residential customers' VCR might have decreased in the past three years. In the 2014 AEMO survey, many respondents provided additional feedback that they would not be willing to pay more to increase reliability and noted there was already considerable cost pressure on energy bills. AEMO's analysis found there was a 35 per cent drop in the total NEM-wide consumption by the residential customers since November 2011 as shown in Figure 11-3. Feedback suggests that a combination of bill pressures, new information, and the installation of energy efficient and supply side technologies contributed to this decrease.[43] In addition, as noted in the draft decision, we consider the 2012 ANU study only surveyed residential customers, which cannot represent the entire customer class under ActewAGL's network. As AEMO found in this review, the VCR values for the commercial and agricultural sectors decreased significantly in recent years. This finding is not captured by the 2012 ANU study.

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39 AEMO, *Value of customer reliability review final report*, September 2014, p.24.

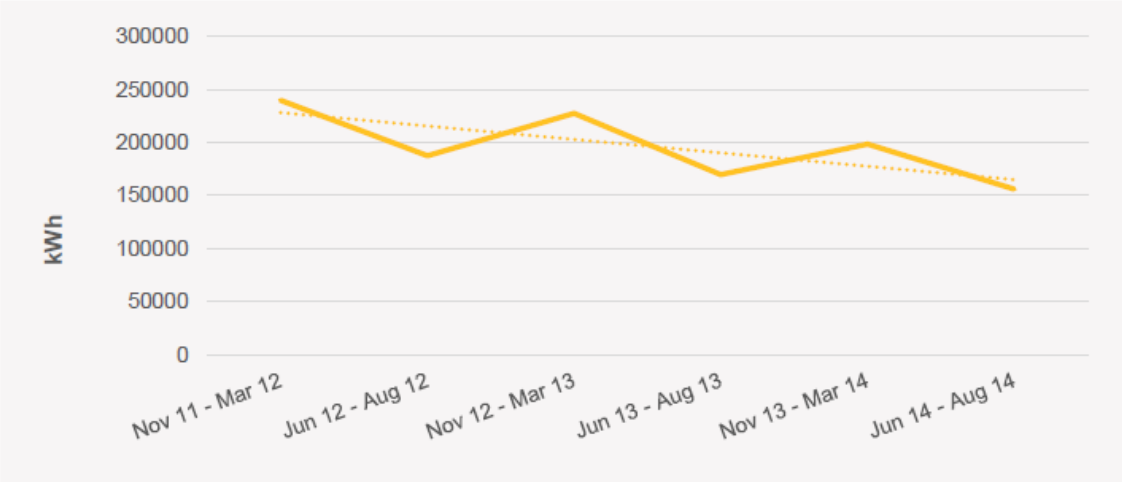
40 ActewAGL, *Revised regulatory proposal 2015-19*, January 2015, p.612.

41 AEMO, *Value of customer reliability review final report*, September 2014, p.18.

42 AER, *Electricity distribution network service providers annual benchmarking report*, November 2014, figures 6&7.

43 AEMO, *Value of customer reliability review appendix*, September 2014, p.46.

Figure 11-3 AEMO total NEM consumption of surveyed responses with energy efficiency responses and valid NMIs



Source: AEMO, *Value of customer reliability review appendix*, September 2014, p.46.

In reaching our decision on VCR for the ACT, we have considered the information and data that is available to us. We accept that, given the ACT's climate and socioeconomic characteristics, the 2014 AEMO VCR for NSW and the ACT may not exactly reflect the VCR for the ACT. However, we do not consider the VCR value proposed by ActewAGL is based on studies that are reflective of current trends. Particularly given that the most recent study, in 2011, did not include commercial and agricultural customers. Moreover, ActewAGL's proposed value, at $67,258/MWh, is more than 2.5 times the new AEMO NEM wide residential VCR average and 1.5 times of the NEM wide commercial VCR average.

By contrast, in 2014 AEMO surveyed approximately 2,930 residential, business and direct connect customers across all NEM states, including the ACT. It adopted a survey-based choice modelling and contingent valuation approach to derive the VCR values and also engaged and consulted with stakeholders extensively.

Therefore, on balance, we consider the 2014 AEMO NSW and ACT VCR better reflects the willingness of customers to pay for the reliable supply of electricity in the ACT.

Consistent with our draft decision, our final decision is not to accept the alternative VCR proposed by ActewAGL for the reasons discussed above. Instead, we will apply the September 2014 AEMO NSW VCR of $38,350/MWh and index it by the relevant CPI to calculate ActewAGL's incentive rates for its urban and short rural feeder type. Table 11-2 sets out the incentive rates that will apply to ActewAGL's SAIDI and SAIFI targets calculated based on this VCR value.

11.4.5 Customer service component

The telephone answering parameter measures the proportion of calls forwarded to an operator that are answered in 30 seconds. We noted historical data reporting problem

from 01/07/2008 to 30/11/2009 in the draft decision. The STPIS specifies that where five years of data is not available, we may approve a target based upon an alternative method or benchmark where this meets the objectives of the scheme.[44] Therefore we discounted the data before 2009/10 and set ActewAGL's telephone answering target at 79 per cent in the draft decision based on the historical data from 2010/11 to 2013/14. We also accepted ActewAGL's proposed incentive rate for the telephone answering parameter of –0.04 per cent per unit.[45] ActewAGL did not propose alternative values in the revised proposal, therefore we maintain this finding in this final decision.[46]

[44] AER, *STPIS*, Clause 5.3.1(d).

[45] AER, *Draft decision attachment 11: Service target performance incentive scheme*, November 2014, p.32.

[46] ActewAGL, *Revised regulatory proposal 2015-19*, January 2015, p.604.