



FINAL DECISION
Powercor distribution
determination
2016 to 2020

Attachment 11 – Service target
performance incentive scheme

May 2016

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or publishing.unit@acc.gov.au.

Inquiries about this publication should be addressed to:

Australian Energy Regulator
GPO Box 520
Melbourne Vic 3001

Tel: (03) 9290 1444

Fax: (03) 9290 1457

Email: AERInquiry@aer.gov.au

Note

This attachment forms part of the AER's final decision on Powercor's distribution determination for 2016–20. It should be read with all 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

Attachment 9 – Efficiency benefit sharing scheme

Attachment 10 – Capital expenditure sharing scheme

Attachment 11 – Service target performance incentive scheme

Attachment 12 – Demand management incentive scheme

Attachment 13 – Classification of services

Attachment 14 – Control mechanisms

Attachment 15 – Pass through events

Attachment 16 – Alternative control services

Attachment 17 – Negotiated services framework and criteria

Attachment 18 – f-factor scheme

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Shortened forms

Shortened form	Extended form
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
AMI	Advanced metering infrastructure
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

Shortened form	Extended form
repex	replacement expenditure
RFM	roll forward model
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

Under clause 6.3.2 of the National Electricity Rules our regulatory determination must specify how any applicable service target performance incentive scheme (STPIS) is to apply in the next regulatory control period.

This attachment sets out how we will apply the STPIS to Powercor for the 2016–20 regulatory control period.

AER's service target performance incentive scheme

We published the current version of the national STPIS in November 2009.¹ The STPIS is intended to balance 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.

11.1 Final decision

Consistent with our preliminary decision position on STPIS², our final decision is to apply the STPIS to Powercor for the 2016–20 in the following manner:

- set revenue at risk for Powercor at the range ± 5.0 per cent
- segment Powercor's network according to feeder categories urban, short rural and long rural
- apply reliability of supply parameters of:
 - system average interruption duration index (SAIDI)
 - system average interruption frequency index (SAIFI)
 - momentary average interruption frequency index event (MAIFIE)
 - customer service (telephone answering)
- set performance targets based on the Powercor's average performance over the past five regulatory years
- apply the methodology indicated in our national STPIS for excluding specific events from the calculation of annual performance targets
- apply the methodology and value of customer reliability (VCR) values to the calculation of incentive rates using the latest VCR for Victoria

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

² AER, *Preliminary decision Powercor distribution determination - Attachment 11 - STPIS*, October 2015.

- not apply the guaranteed service level of the STPIS as Powercor is subjected to the Victorian GSL scheme.

In making our final decision on STPIS, we have taken into account our preliminary decision, Powercor’s regulatory and revised regulatory proposals, our information requests to Powercor and submissions raised by stakeholders. Our responses to the matters raised by Powercor and stakeholders about the application of the STPIS are discussed below.³

Table 11.1 and Table 11.2 present our final decision on the applicable incentives rates and targets that will be applied to Powercor for the 2016–20 regulatory period. The incentive rate for the customer service component will be –0.040 per cent per unit of the telephone answering parameter.⁴

Table 11.1 Final decision—STPIS incentive rates for Powercor for the 2016–20 regulatory period

	Urban	Rural Short	Rural Long
SAIDI	0.0375	0.0201	0.0133
SAIFI	3.0689	1.8209	1.6678
MAIFI	0.2455	0.1457	0.1334

Source: AER Analysis.

³ Powercor, *Revised regulatory proposal 2016–20*, January 2016, pp. 391-397.

⁴ AER, *STPIS*, November 2009, cl. 5.3.2(a).

Table 11.2 Final decision—STPIS reliability targets for Powercor for the 2016–20 regulatory period

	value
Urban	
SAIDI	83.111
SAIFI	1.047
MAIFI	1.184
Short Rural	
SAIDI	113.191
SAIFI	1.357
MAIFI	2.998
Long Rural	
SAIDI	273.091
SAIFI	2.369
MAIFI	5.401
<i>Telephone answering</i>	
Percentage of calls will be answered within 30 seconds	70.59

Source: AER analysis.

11.2 Our preliminary decision

Our preliminary decision for Powercor applied our national STPIS to the distributor except for the guaranteed service level (GSL) component. It also applied the revised values for VCR in calculating the incentive rates for the distributors.⁵

The preliminary decision did not accept Powercor's proposal to transition the performance targets to account for the current value of customer reliability.⁶

⁵ Values determined from the most recent Australian Energy Market Operator (AEMO) review of VCR values, AER, *Preliminary decision Powercor distribution determination - Attachment 11 - STPIS*, October 2015, pp. 7–9.

⁶ AER, *Preliminary decision Powercor distribution determination - Attachment 11 - STPIS*, October 2015, pp. 14–20.

11.3 Powercor's revised proposal

Powercor's revised regulatory proposal accepted our preliminary decision to apply AEMO's 2014 VCRs to calculate the reliability incentive rates. It also accepted our preliminary decision on the telephone answering incentive rate.⁷

Powercor's revised regulatory proposal, however, disputed our preliminary decision regarding its performance targets for STPIS. It stated that applying a lower VCR to capex has implications on reliability and, as such, the STPIS targets should be transitioned to reflect this change.⁸

Powercor stated that, due to the significant reduction in the VCR, the incentive rates have reduced by approximately 30 per cent relative to the 2011–2015.⁹ As such, the scheme will provide weaker incentives to mitigate deteriorations in reliability or to seek reliability improvement opportunities.¹⁰

Powercor's revised regulatory proposal submitted that MAIFle be applied and calculated in accordance with our national STPIS.¹¹

Section 11.7 below sets out our considerations on the matters submitted.

11.4 AER's assessment approach

We are required to make a decision on how the STPIS is to apply to Powercor.¹² When making a distribution determination, the STPIS requires us to determine all performance targets, incentive rates, revenue at risk and other parameters under the scheme.¹³

We outlined our proposed approach to, and justification for, the application of the STPIS in our preliminary decision. Our final decision has adopted the position in the preliminary decision, unless new information has become available or new arguments have been put forward which warrant a reconsideration of this position. We have considered materials submitted to us by Powercor and by stakeholders.

11.4.1 Interrelationships

In applying the STPIS, we must consider any other incentives available to the distributor under the NER or relevant distribution determination.¹⁴ One of the objectives of the STPIS is to ensure that the incentives are sufficient to offset any financial

⁷ Powercor, *Revised regulatory proposal 2016–20*, January 2016, p. 393.

⁸ Powercor, *Revised regulatory proposal 2016–20*, January 2016, p. 394.

⁹ Powercor, *Revised regulatory proposal 2016–20*, January 2016, p. 394.

¹⁰ Powercor, *Revised regulatory proposal 2016–20*, January 2016, p. 394.

¹¹ Powercor, *Revised regulatory proposal 2016–20*, January 2016, p. 396.

¹² NER, cl. 6.12.1(a).

¹³ AER, *STPIS*, November 2009, cl. 2.1(d).

¹⁴ NER, cl. 6.6.2(b)(3)(iv).

incentives the distributor may have to reduce costs at the expense of service levels. For the 2016–20 regulatory control period, the STPIS will interact with the Capital Expenditure Sharing Scheme (CESS) and the opex Expenditure Benefit Sharing Scheme (EBSS).¹⁵

The reward and penalty amounts under STPIS (the incentive rates) are determined based on the average customer value for the improvement, or otherwise, to supply reliability (the VCR). This is aimed at ensuring that the distributor's operational and investment strategies are consistent with customers' value for the services that are offered to them.

Our capex and opex allowances are set to reasonably reflect the expenditures required by a prudent and efficient business to achieve the capex and opex objectives. These include complying with all applicable regulatory obligations and requirements and, in the absence of such obligations, maintaining quality, reliability, and security outcomes.

The STPIS, on the other hand, provides an incentive for distributors to invest in further reliability improvements (via additional STPIS rewards) where customers are willing to pay for it. Conversely, the STPIS penalises distributors where they let reliability deteriorate. Importantly, the distributor will only receive a financial reward after actual improvements are delivered to the customers.

In conjunction with CESS and EBSS, the STPIS will ensure that:

- any additional investments to improve reliability are based on prudent economic decisions
- reductions in capex and opex are achieved efficiently, rather than at the expense of service levels to customers.

11.5 Reasons for final decision

The following section sets out our detailed consideration on:

- applying the STPIS to Powercor for the 2016–20 regulatory control period
- transitional matters in the applying the STPIS between regulatory control periods.

11.6 Applying the STPIS

We will apply the scheme as is to Powercor's STPIS for the 2016–20 regulatory control period. This is consistent with our preliminary decision on STPIS for Powercor. For the reasons outlined in section 11.7, we have not accepted Powercor's revised regulatory proposal to vary the STPIS scheme design at this stage.¹⁶

¹⁵ AER, *STPIS*, November 2009, cl. 1.5(b)(5).

¹⁶ Powercor, *Revised regulatory proposal 2016–20*, January 2016, p. 394.

11.6.1 Revenue at risk

Revenue at risk caps the potential reward and penalty for Powercor under the STPIS. Powercor's revenue at risk for each regulatory year of the 2016–20 regulatory control period will be capped at ± 5.0 per cent as per the scheme standard. Within this cap, there is also a cap on the revenue at risk of ± 0.5 per cent for the telephone answering parameter.

We consider an incentive of ± 5.0 per cent of the annual allowable revenue should balance the risk to both consumers and Powercor and thus better meet the objectives of the STPIS.

11.6.2 Reliability of supply component

Applicable components and parameters

We will apply unplanned SAIDI, unplanned SAIFI and MAIFle parameters under the reliability of supply component to Powercor's urban, short and long rural feeders for the 2016–20. Unplanned SAIDI measures the 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 number of unplanned sustained customer interruptions divided by the total number of distribution customers. MAIFle captures the average number of 'momentary' disruption events on the network.

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 Powercor, 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 Powercor's STPIS performance.

The major event day (MED) threshold for exclusions should be calculated in accordance the STPIS using the 2.8 beta method.¹⁷

Performance targets

The STPIS specifies that the performance targets should be based on the average performance over the past five regulatory years. It also states that the performance targets must be modified for any reliability improvements completed or planned where the planned reliability improvements are:¹⁸

¹⁷ We note that there is a typographical error on p.60 of the Overview chapter of the AER, *PRELIMINARY DECISION, Powercor distribution determination, 2016 to 2020*, October 2015, which incorrectly stated that the beta value was 2.5.

¹⁸ AER, *STPIS*, November 2009, cl. 3.2.1.

- included in the expenditure program proposed by the distributor in its regulatory proposal, or
- proposed by the distributor, and the cost of the improvements is allowed by the relevant regulator, in the distributor's previous regulatory proposal or regulatory submission, and
- expected to result in a material improvement in supply reliability.

Powercor proposed to transition the performance targets to account for a lower VCR. Our discussion and reasoning about the application of the VCR on STPIS is outlined section 11.7. In accordance with our reasoning in that section, we have not accepted Powercor’s proposal to depart from our preliminary decision and will apply the scheme as is. That is, Powercor’s performance targets for the next regulatory control period will be based on its five years historical average and presented in Table 11.3.

The national STPIS customer service target applicable to Powercor is telephone response measured as a percentage of telephone calls answered within 30 seconds. This measure is referred to as the telephone Grade of Service (GOS).

Table 11.3 Final decision—STPIS reliability targets for Powercor for the 2016–20 regulatory period

	value
Urban	
SAIDI	83.111
SAIFI	1.047
MAIFI	1.184
Short Rural	
SAIDI	113.191
SAIFI	1.357
MAIFI	2.998
Long Rural	
SAIDI	273.091
SAIFI	2.369
MAIFI	5.401
<i>Telephone answering</i>	
Percentage of calls will be answered within 30 seconds	70.59

Source: AER analysis.

11.6.3 Incentive rates

The incentive rates applicable to Powercor for the reliability of supply performance parameters was calculated in accordance with clause 3.2.2 and using the formulae provided as appendix B of the National STPIS. Our final decision of Powercor's incentive rates are shown in Table 11.4. The incentive rate for the customer service component will be –0.040 per cent per unit of the telephone answering parameter.¹⁹

Our preliminary decision utilised Powercor's total energy consumption instead of average energy consumption to determine the incentive rates. This final decision has updated the incentive rates using Powercor's average energy consumption to calculate the incentive rates.

Table 11.4 Final decision—STPIS incentive rates for Powercor for the 2016–20 regulatory period

	Urban	Rural Short	Rural Long
SAIDI	0.0375	0.0201	0.0133
SAIFI	3.0689	1.8209	1.6678
MAIFI	0.2455	0.1457	0.1334

Source: AER analysis.

11.7 Reasons for not departing from our preliminary decision

11.7.1 Value of customer reliability

In its regulatory proposal and revised regulatory proposals, Powercor stated that its performance targets should be amended as a result of the change in VCR.²⁰ This section will first explain the value of customer reliability in order to conceptualise the issues raised by Powercor, and then our consideration of its proposed changes.

The VCR represents, in dollar terms, the willingness of customers to pay for the reliable supply of electricity. The values are typically derived from customer surveys.

The outcome of the survey (or VCR) can then be applied for use in incentive regulation, planning and operational purposes in the National Electricity Market. In network planning, the VCR may be used by electricity distributors to assess the economic merits of carrying out additional investment to manage the energy at risk in the electricity network. It is therefore important the VCR figures accurately reflect the

¹⁹ AER, *STPIS*, November 2009, cl. 5.3.2(a).

²⁰ Powercor, *Revised regulatory proposal 2016–20*, January 2016, p. 394.

value of reliability across a range of customers. The VCR is also used to set the incentive rates under the STPIS. A lower VCR reduces the reward and penalty under the scheme, whereas a higher VCR increases them.

In 2014, the Australian Energy Market Operator (AEMO) carried out a review of the VCR. The intention of this review was to improve the understanding of the level of reliability that customers expect by producing a range of VCR values for residential and business customers across the National Electricity Market.²¹

As a result of the AEMO review, the Victorian composite VCR was significantly reduced to \$39.50 per kWh (\$ 2014), a reduction of approximately 40 per cent from the STPIS scheme specification value of \$63.09 per kWh (\$ 2014). However, the actual VCR for setting the STPIS incentive rates for the 2011–15 period was \$54.92 per kWh (\$ 2014).

Our preliminary decision stated that we will apply the latest VCR in the STPIS for the Victorian electricity distributors. Powercor's regulatory proposal accepted our use of the latest VCR to assess capex but outlined that we should depart from our preliminary decision on the STPIS by transitioning Powercor's performance targets to account for a lower VCR.²²

Powercor submitted that a lower VCR will result in less monetary value being attributed to the energy associated with supply interruptions that cannot be serviced should parts of its networks fail (energy at risk). Hence, capex will be implemented later than otherwise.²³

11.7.2 Relationship between VCR, reliability outcomes and performance targets

The STPIS states that performance targets must be based on average performance over the past five regulatory years. However, distributors may seek a variation in targets as long as they are in accordance with the scheme.²⁴

Powercor's revised regulatory proposal disputed our preliminary decision not to modify its STPIS performance targets to account for a lower VCR for capex planning purposes. It stated that it will defer some capex as a result of a lower VCR value and that the scheme provides a weaker incentive to mitigate deteriorations in reliability and to seek reliability improvement opportunities. Hence, reliability will deteriorate gradually over 60 years.²⁵

²¹ AEMO, *Value of customer reliability review final report*, September 2014.

²² Powercor, *Revised regulatory proposal 2016–20*, January 2016, pp. 394–395.

²³ Powercor, *Vic. EDPR - Powercor – IR#003 – 17 June 2015*, 30 June 2015, pp. 2–3.; Powercor, *Revised regulatory proposal 2016–20*, January 2016, pp. 395.

²⁴ AER, *STPIS*, November 2009, cl. 3.2.1 (b).

²⁵ Powercor, *Revised regulatory proposal 2016–20*, January 2016, pp. 394–395.

We consider that Powercor has not demonstrated that departing from our preliminary decision on the application of the STPIS is reasonable or necessary because:

1. The VCR has varied between years but there has been no net movement in the values between the previous (2006–10 and 2011–15) regulatory periods and forthcoming (2016–20) regulatory control periods, for the purpose of setting STPIS targets. That is, the VCR value in 2010 is almost identical to that in 2016.
2. There appears to be limited or no immediate or close correlation between the VCR and Powercor's reliability outcomes.
3. Powercor sought no adjustment when the VCR rose but now considers it necessary when the VCR falls back to trend.

These points are addressed below.

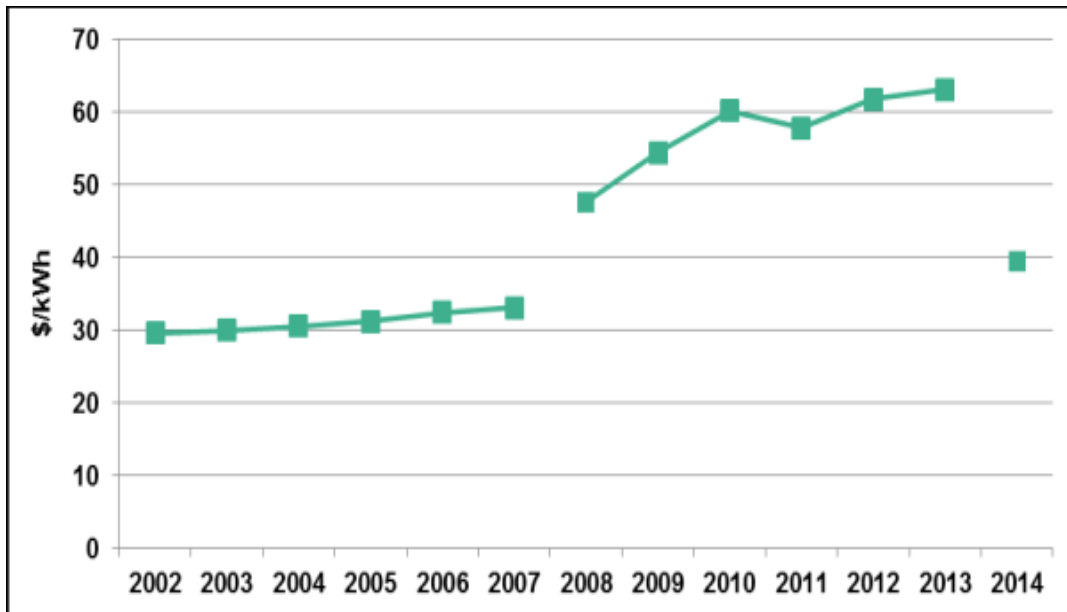
No variation in the VCR between the previous and the forthcoming regulatory periods

There has been no net movement in the value of the VCR between the two regulatory periods commencing in 2006 and 2011, respectively, (see Figure 11.1) for the purpose of setting STPIS targets:

- In the 2006–10 determination (by the Essential Services Commission of Victoria), a VCR of \$39.46 kWh (\$ 2014) was used as the basis for setting the incentive rates of the previous Victorian equivalent of the STPIS.²⁶
- In the 2011–15 distribution determination, a VCR of \$54.92 per kWh (\$ 2014) was used to calculate the incentive rates. However, the performance targets for the 2011–15 period was based on the actual performance outcomes of the 2006–10 period when the VCR was \$39.46 kWh (\$ 2014) without adjustments.
- The most recent study by AEMO indicates that the Victorian state-wide VCR is now \$39.50 per kWh (\$ 2014)—practically at the same level as the 2006–10 period.

²⁶ Essential Services Commission (Victoria), *Electricity Distribution Price Review 2006–10, Final Decision volume 1 Statement of Purpose and Reasons*, October 2005, p. 88.

Figure 11.1 Historical Victorian VCR (nominal)



Source: AusNet Services, *Regulatory proposal 2016–20*, 30 April 2015, p. 120.

Our final determinations for NSW, ACT, QLD and SA distributors also did not vary the STPIS targets due to a change in VCR.

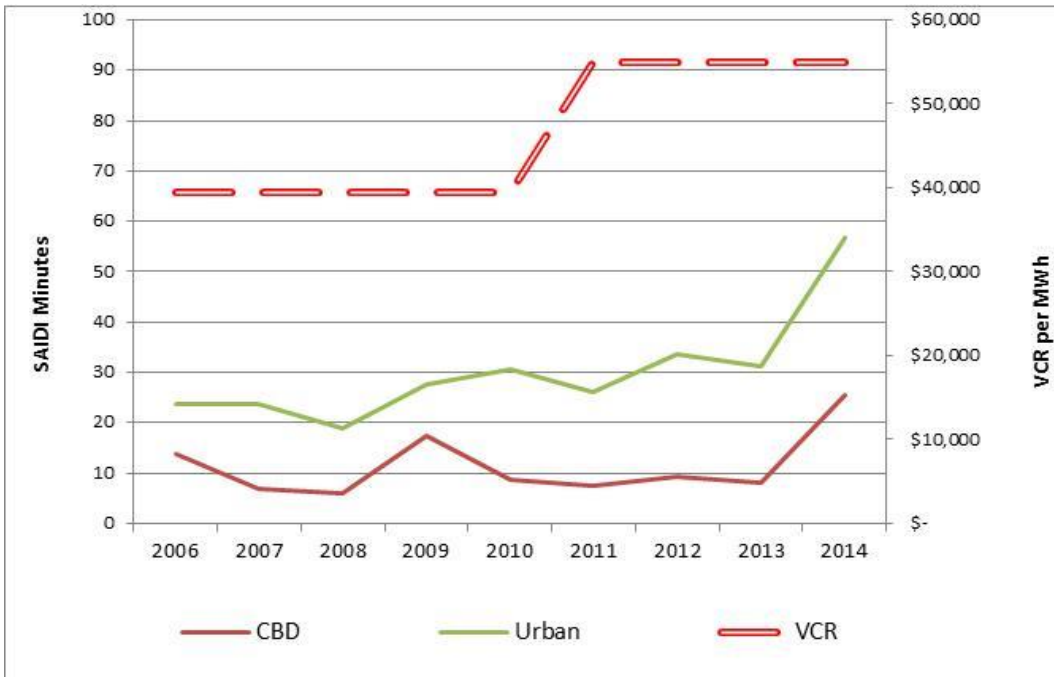
Limited correlation between VCR and reliability outcomes

The STPIS states that performance targets must be based on average performance over the past five regulatory years.²⁷ We consider that performance targets for the next regulatory control period should not be modified due to a change in the VCR. Our review of Powercor’s historical reliability performance found little evidence to suggest that a change in VCR results in an immediate change to reliability performance. Powercor asserts that applying a lower VCR for capex purposes will reduce its reliability performance. In contrast, its historical reliability performance shows that there is limited or no immediate or close correlation between the two variables (see

Figure 11.2 and Figure 11.3), at least not within five years from the change in VCR. Powercor’s level of supply reliability under the scheme during the current period (at a much higher VCR) deteriorated from the previous periods (with a low VCR), showing an outcome opposite to its contention.

²⁷ AER, *STPIS*, November 2009, cl. 3.2.1 (a).

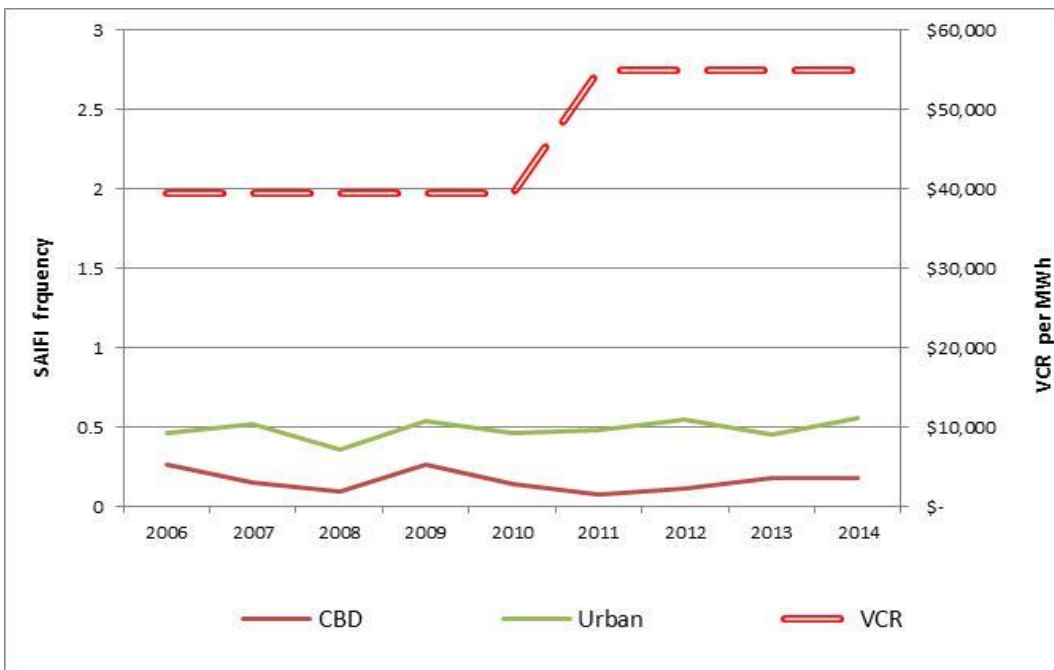
Figure 11.2 Historical SAIDI



Source: AER analysis.

Note: Under both the ESCV's performance incentive scheme and the AER's STPIS there appears to be no correlation with the VCR and reliability outcomes.

Figure 11.3 Historical SAIFI



Source: AER analysis.

Note: Under both the ESCV's performance incentive scheme and the AER's STPIS reliability there appears to be no correlation with the VCR.

We consider that Powercor's reliability performance is more likely to be influenced by other factors other than the VCR, such as the configuration and condition of its network assets. Further, most network assets have an expected life in excess of 50 years. Therefore, by discounting for uncontrollable external impacts such as material weather events, Powercor's reliability level in 2016–20 is unlikely to change materially.

Relaxing STPIS for lower VCR but not increasing it for higher VCR

As outlined above, there is limited evidence to demonstrate an immediate correlation between the VCR and reliability outcomes over a short term. That said, we accept Powercor's submission that reliability performance may decline over a long period of time due to a number of factors including the VCR.

We observe that there is asymmetry in Powercor's submission, as our regulatory determination in 2011–15 was made on the same basis, that is, no adjustment of the performance targets because of a change in VCR between 2008 and 2011.²⁸ That said, we consider that adjusting the performance targets immediately to account for a movement in the VCR is not appropriate because the reliability effects of the changes should be gradual, likely to be over a long period of time—for example over 60 years as submitted by CitiPower and Powercor²⁹ and AusNet Services transmission.³⁰

Furthermore, this final decision has provided Powercor with an efficient expenditure allowance to maintain reliability.

Even if we accepted this reasoning, since the VCR is now back to the previous level, such adjustment to STPIS performance targets is not required—as there should have been a previous equal and opposite adjustment for the 2011–15 performance targets. Hence, Powercor will be financially neutral for the proposed STPIS. Further, the scheme is designed to incentivise distributors to both maintain and improve reliability where customers are willing to pay for them.

We consider that the operation of the scheme as is will not affect reliability performance in the short term. Hence, no adjustment to the performance target is necessary. That said, we will review the scheme and consult stakeholders on whether or how the scheme is to be applied to reflect the step changes in VCR over multiple regulatory control periods in the near future.

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²⁸ Powercor made no submission to have its performance targets tightened for the 2011-15 regulatory period because of a 40 per cent increase in the VCR from the 2005-10 period. As such, we consider it is not in the long term interest of consumers to allow it to also benefit from a lower VCR with a softening of its performance targets. We consider this asymmetric treatment is contrary to the NEO and the objectives of the scheme

²⁹ Powercor, *Revised regulatory proposal 2016–20*, January 2016, p. 394.

³⁰ AusNet Services, *Transmission Revenue Review 2017-2022*, October 2015, p. 162.

11.7.3 Adjusting STPIS targets for the installation of rapid earth fault current limiters

The Victorian Government submission stated that there are reliability benefits associated with the installation of rapid earth fault current limiters (REFCLs)³¹ and that the AER must take into consideration any potential revenue increments that the distributor will receive under the STPIS.³²

Powercor's revised regulatory proposal submitted that it would be inappropriate to adjust its reliability targets on the basis that these will improve reliability. It noted that the technology is relatively untested from a reliability perspective in Victoria with only one installation in service and insufficient data to assess the reliability impact. Further, it anticipates that it may only operate REFCLs during total fire ban and code red days. Hence, this may constitute only around 10 days a year and therefore no reliability benefits can be assumed. In fact, there may be negative reliability impacts from REFCLs. Furthermore, it considered that it should be consulted prior to our decision to adjust the performance targets for REFCL.

Submissions by Victorian distributors (except for United Energy who provided no comment) disagreed with the Victorian Government. In summary, they stated that they do not anticipate a material improvement in supply reliability; in fact, they envisaged a possibility that reliability may deteriorate rather than improve as a result of the deployment of REFCL devices in the electricity distribution network.³³

On balance, we consider that there is no evidence to suggest that reliability will improve because Powercor stated that:³⁴

- It intends to operate REFCL on total fire ban days and as such reliability will worsen rather than improve because of the operations of the devices.
- Most REFCL devices are expected to be installed late in the 2016–20 regulatory control period; therefore, any reliability benefits will be realised after 2020.³⁵

³¹ When one of the high voltage conductors develops an earth fault, REFCL will suppresses the voltage of that particular conductor to prevent a fire from starting.

³² Victorian Government, *Submission on the Victorian electricity distribution network service providers' preliminary distribution determinations for 2016-20*, 4 January 2016, pp. 8–10.

³³ CitiPower and Powercor, *Further submission to the AER regarding preliminary determination*, 4 February 2016, pp. 19–21; Jemena Electricity Networks, *Victorian 2016-2020 Electricity Distribution Process Review Submission to the Victorian EDPR Process*, 4 February 2016, pp.18–20; AusNet Services, *Response to submissions on the Victorian EDPR Preliminary Decision*, 4 February 2016, pp. 31–32.

³⁴ Powercor, *Further submission to the AER regarding preliminary determination*, 4 February 2016, pp 19–21.

³⁵ Jemena Electricity Networks, *Victorian 2016-2020 Electricity Distribution Process Review Submission to the Victorian EDPR Process*, 4 February 2016, p.20.

11.7.4 Adjusting the STPIS targets for benefits associated with smart meters

The submission from the Victorian Government also recommended that we consider the reliability benefits associated with the installation of smart meters in determining the performance targets.³⁶ The Victorian government quoted the findings from a cost benefits analysis by Deloitte. It concluded that there may be reliability benefits associated with installing smart meters that have not been captured by historical data. Consequently, the Victorian recommended the AER to adjust the performance targets for these reliability improvements.³⁷

While we agree that the installation of smart meters may have some impact on reliability, we consider that there is insufficient evidence to support the extent of improvements to reliability claimed by the 2011 Deloitte report because:

- Only Jemena and AusNet Services achieved sustained performance improvement in the last regulatory period, whereas the CitiPower, Powercor and United Energy—all of whom achieved a very high rate of AMI implementation—did not report improvement in supply reliability.
- On specific SAIDI benefits³⁸, Powercor stated that faster outage detection does not result in a change in the number or duration of outages recorded for STPIS purposes. Earlier notification of the fault means the distributor starts recording the outage sooner and commencing restoration procedures faster; however, this does not result in a reduction in the duration of the outage for STPIS purposes because the response process is the same.³⁹

11.8 Other considerations in applying the STPIS

11.8.1 Applying the MAIFle parameter

We will apply the MAIFle parameter to Powercor.

Our preliminary decision applied MAIFI contrary to Powercor's regulatory proposal to exclude this measure from the STPIS targets.

³⁶ Victorian Department of Economic Development, Jobs, Transport & Resources, *Submission to Victorian electricity distribution pricing review – 2016 to 2020*, 14 January 2016, p. 2.

³⁷ Deloitte, *Advanced metering infrastructure cost benefit analysis*, 2 August 2011, p. 61; Available at <http://www.smartmeters.vic.gov.au/about-smartmeters/reports-and-consultations/advanced-metering-infrastructure-cost-benefit-analysis>.

³⁸ Deloitte, *Advanced metering infrastructure cost benefit analysis*, 2 August 2011, p. 65; Available at <http://www.smartmeters.vic.gov.au/about-smartmeters/reports-and-consultations/advanced-metering-infrastructure-cost-benefit-analysis>.

³⁹ Powercor, *Further submission to the AER regarding preliminary determination*, 4 February 2016, pp. 8–9.

Powercor's revised regulatory proposal accepted our preliminary decision on MAIFI. It further requested that we clarify whether MAIFle will apply rather than MAIFI in the STPIS targets.

We have historically applied MAIFle as a reliability parameter for Victorian distributors. For consistency we will continue to apply MAIFle as a reliability parameter in 2016–20.

11.8.2 Changing the SAIFI definition

Our preliminary decision rejected Powercor's submission to alter the SAIFI definition in the STPIS. That decision considered that changing the definition for SAIFI would require an extensive review of the scheme.

Powercor's revised regulatory proposal accepted our preliminary decision on this issue.⁴⁰

11.8.3 Value of customer reliability to calculate the incentive rates

Our preliminary decision calculated Powercor's VCR for the incentive rates by deriving it from Powercor's consumption data, the other Victorian electricity distributors' consumption data and AEMO's published state wide VCR.

Powercor's revised regulatory proposal accepted our preliminary decision on this issue.⁴¹

Our final decision is to apply the preliminary decision in calculating the VCR for the incentive rates.

11.8.4 Consumer challenge panel submission

The consumer challenge panel stated that deeper analysis is required of the preliminary decisions and the revised proposals to ensure that there are no added costs which would lead to increased reliability.⁴²

We have reviewed Powercor's revised proposal and found no additional costs that would lead to increased reliability.

11.9 Transitional arrangements for the STPIS

This section addresses the following transitional issues relating to the STPIS:

⁴⁰ Powercor, *Revised regulatory proposal 2016–20*, January 2016, p. 396.

⁴¹ Powercor, *Revised regulatory proposal 2016–20*, January 2016, p. 393.

⁴² Consumer challenge panel, *CCP3 Response to AER Preliminary Decisions and revised proposals from Victorian electricity distribution network service providers for a revenue reset for the 2016-2020 regulatory period*, 22 February 2016, p. 28.

- how we intend to adjust the S-factor between regulatory control periods
- how we intend to account for revenue increments or decrements resulting from the STPIS outcomes between regulatory control periods
- how we will close out Essential Services Commission service performance scheme for 2006–10.

11.9.1 Adjusting the S-factor between regulatory control periods

The STPIS operates as part of the building block determination and is applied via the control mechanism. Through the S-factor component of the STPIS, distributors are penalised or rewarded for diminished or improved service performance compared to predetermined targets. Distributors are either rewarded or penalised via network charges two years after the end of each regulatory year because audited performance data would only be available after the regulatory year is completed—hence, the earliest time the S-factor can apply is the year following audited performance data availability.

Consequently, the S-factor outcomes of 2014 and 2015 will apply to prices in the 2016 and 2017 regulatory years respectively.

The revenue at risk cap limits the risk of the STPIS to Powercor at ± 5.0 per cent of the annual allowable revenue. However, distributors may exceed this cap where there are increases or decreases to the amount of the annual allowable revenue that they can recover between regulatory control periods. The STPIS scheme accounts for the differences to the allowable revenue recoverable between regulatory control periods by making an adjustment to the "raw"⁴³ S-factor for the last and second last regulatory years of the current regulatory control period (which is applied in the first and second regulatory years of the next regulatory control period) by adjusting the raw S-factor value based on:

...the percentage change between the annual revenue requirement in the last regulatory year of the previous regulatory control period and the annual revenue requirement for first regulatory year of the next regulatory control period taken from the post-tax revenue model.⁴⁴

Hence, the revenue at risk cap for the first two years of the next regulatory control period will be adjusted based on the approved revenue at risk cap of the previous regulatory control period.

⁴³ "Raw" refers to the S-factor prior to any adjustments.

⁴⁴ AER, *STPIS*, November 2009, Appendix C, pp. 33–34.

11.9.2 Accounting for revenue increments decrements between regulatory periods

A distributor's performance in the last regulatory year of its regulatory control period will affect its revenue in the second regulatory year in the next regulatory control period.

For example, if a distributor has a regulatory control period of five regulatory years between 1 July 2007 and 30 June 2012, its performance in the 2011–12 financial year will affect its revenues in the second regulatory year of the next regulatory control period (that is from 1 July 2014).⁴⁵

The STPIS provides a mechanism to account for any step change in revenues (or prices) via X_0 ,⁴⁶ from one regulatory control period to the next. For Powercor, the 'raw' S-factor calculated for the last and second last regulatory years of the regulatory control period (which is applied in the first and second regulatory years of the next regulatory control period) is adjusted in accordance with the following formula:⁴⁷

$$S_t''' = \frac{S_t'}{1-X_0}$$

where:

- $X_0 = \frac{AR_{2014} - AR_{2015}}{AR_{2014}}$
- S_t''' is the sum of the S-factors for all parameters, after application of the s-bank, as determined in equation (3) in the STPIS
- AR_{2014} is Powercor's approved revenue in the 2016 pricing proposal
- AR_{2015} is Powercor's allowable revenue in the final decision 2017.

11.9.3 Closing out of the ESCV's service performance scheme

Prior to the operation of STPIS from 2011, Victorian distributors were subjected to the Essential Services Commission Victoria's (ESCV) "S Factor" service performance scheme.

In order to close out the ESCV's S Factor scheme, we required the final performance data of the distributors for 2010. As this information was not available in time for the final decision of the 2011–15 determination, a final close out was factored into the current determination, requiring a final true-up when the final performance data are

⁴⁵ AER, *STPIS*, November 2009, appendix C.

⁴⁶ Defined as the percentage change between the annual revenue requirement in the last regulatory year of the previous regulatory control period and the annual revenue requirement for first regulatory year of the next regulatory control period taken from the post-tax revenue model, AER, *STPIS*, November 2009, Appendix C, pp. 33–34.

⁴⁷ AER, *STPIS*, November 2009, Appendix C, pp. 33–34.

available. We will complete the close out calculation in the determination for the next regulatory period (2016–20). The calculation method on how to close out the ESCV's scheme was set out in our 2011–15 determination. The close out of the S Factor service performance scheme will result in an adjustment to Powercor's revenue in 2016–17.

In 2021 the Victorian government amended the *National Electricity (Victoria) Act 2005* to allow us the power to close out the ESCV's S Factor scheme.⁴⁸ This amendment to the legislation does not alter or limit our approach to close out the scheme.

The financial penalty accrued by Powercor in the 2006–10 regulatory period in the allowable revenue for 2016–20 regulatory period will be \$1.54 million (\$ 2015) in total. This amendment to the legislation does not alter or limit our approach to close out the scheme.

This number has been included in the forecast revenue for the forthcoming regulatory control period by including the adjustment in the 'revenue adjustments' row of the post-tax revenue model.⁴⁹

⁴⁸ *Energy Legislation Amendment Act 2012* (Victoria), s. 10.

⁴⁹ NER, cl. 6.4.3(a)(5) and (b)(5) as amended by Division 4 of Part 3 to the National Electricity (Victoria) Act 2005.