

# PRELIMINARY DECISION Powercor distribution determination 2016 to 2020

# Attachment 11 – Service target performance incentive scheme

October 2015



Service schools

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### Note

This attachment forms part of the AER's preliminary decision on Powercor's revenue proposal 2016–20. It should be read with all other parts of the preliminary decision.

The preliminary 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
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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
ССР	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

Shortened form	Extended form
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 (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 our national STPIS in November 2009.<sup>1</sup> 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 Preliminary decision**

Consistent with our framework and approach (F&A) position on STPIS, our preliminary 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 and long rural
- apply reliability of supply parameters of:
  - system average interruption duration index (SAIDI)
  - o system average interruption frequency index (SAIFI)
  - o momentary interruption frequency index event (MAIFI)
  - o 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 the 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.

In making our preliminary decision on the STPIS, we have taken into account our F&A, Powercor's regulatory proposal, our information requests to Powercor and submissions

<sup>&</sup>lt;sup>1</sup> AER, *Electricity distribution network service providers—service target performance incentive scheme*, 1 November 2009. (AER, *STPIS*, November 2009).

raised by stakeholders. Our responses to the matters raised by Powercor and stakeholders about the application of the STPIS are discussed in this preliminary decision.<sup>2</sup>

Table 11-1 and Table 11-2 present our preliminary decision on the applicable incentives rates and performance targets that will be applied to Powercor's STPIS for the 2016–20 regulatory period. The incentive rate for the customer service component will be -0.0400 per cent per unit of the telephone answering parameter.<sup>3</sup>

# Table 11-1 Preliminary decision—STPIS incentive rates for Powercor over the 2016–20 regulatory period

	Urban	Short rural	Long rural
SAIDI	0.19148	0.10254	0.06799
SAIFI	15.67312	9.29958	8.51741
MAIFI	1.25385	0.74397	0.68139

Source: AER Analysis.

<sup>&</sup>lt;sup>2</sup> Powercor, Vic. EDPR - Powercor – IR#003 – 17 June 215, 30 June 2015, Powercor, Vic. EDPR - Powercor – IR#006– 23 June 215, 2 July 2015.

<sup>&</sup>lt;sup>3</sup> AER, *STPIS*, November 2009, cl. 5.3.2(a).

	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
Telephone answering	
Percentage of calls will be answered within 30 seconds	70.59

# Table 11-2Preliminary decision—STPIS reliability targets for Powercorover the 2016–20 regulatory period

Source: AER analysis.

# 11.2 Our framework and approach paper

We are required to set out our likely approach on how to apply our STPIS in our framework and approach (F&A) paper.<sup>4</sup> Our final F&A for Victorian electricity distributors proposed to apply our national STPIS to the Victorian businesses but not apply the guarantee service level (GSL) component.<sup>5</sup> It also proposed to apply the revised values for VCR through the distribution determination.<sup>6</sup>

Our F&A did not specify the application method for the MAIFI component of STPIS.

<sup>&</sup>lt;sup>4</sup> NER, cll. 6.3.2, 6.8.1(b), 6.8.2(c)(2), 6.8.2(d) and 6.12.1.

<sup>&</sup>lt;sup>5</sup> AER, Final framework and approach for the Victorian Electricity Distributors, regulatory control period commencing 1 January 2016, 24 October 2014, pp. 96–97.

<sup>&</sup>lt;sup>6</sup> Values determined from the most recent Australian Energy Market Operator (AEMO) review of VCR values.

# 11.3 Powercor's proposal

Powercor's regulatory proposal submitted that we should depart from our F&A position in setting its STPIS for the next regulatory control period. It raised a number of interrelated issues for our consideration. Primarily, Powercor stated that applying a lower VCR to capex has implications on reliability and as such the STPIS should be modified to reflect this change. Hence, the STPIS targets and the revenue at risk should be adjusted accordingly.<sup>7</sup>

Powercor also submitted that:

- the momentary average interruption frequency index should not apply as a performance measure<sup>8</sup>
- the definition of SAIFI should be amended to reflect the AEMC's reliability measures review recommendations.<sup>9</sup>

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.<sup>10</sup> 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.<sup>11</sup>

We outlined our proposed approach to, and justification for, the application of the STPIS in our F&A for Victorian electricity distributors. Our preliminary decision has adopted the position in the F&A, unless new information has become available or new arguments have been put forward which warrants 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.<sup>12</sup> One of the objectives of the STPIS is to ensure that the incentives are sufficient to offset any financial incentives the distributor may have to reduce costs at the expense of service levels.<sup>13</sup> For the 2016–20 regulatory control period, the STPIS will interact with the

<sup>&</sup>lt;sup>7</sup> Powercor, 2016–2020 Price Reset Appendix H Service target performance incentive scheme, 30 April 2015, pp. 3–9.

<sup>&</sup>lt;sup>8</sup> Powercor, 2016–2020 Price Reset Appendix H Service target performance incentive scheme, 30 April 2015, p. 6.

<sup>&</sup>lt;sup>9</sup> Powercor, 2016–20 Price Reset Appendix H Service target performance incentive scheme, 30 April 2015, p. 5.

<sup>&</sup>lt;sup>10</sup> NER, cl. 6.12.1(a).

<sup>&</sup>lt;sup>11</sup> AER, *STPIS*, November 2009, cl. 2.1(d).

<sup>&</sup>lt;sup>12</sup> NER, cl. 6.6.2(b)(3)(iv).

<sup>&</sup>lt;sup>13</sup> AER, *STPIS*, November 2009, cl. 1.5(b)(5).

Capital Expenditure Sharing Scheme (CESS) and the opex Expenditure Benefit Sharing Scheme (EBSS).

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 preliminary 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
- proposed definitional changes to several parameters in STPIS
- whether MAIFI should be applied as a performance measure
- whether we should adjust the STPIS performance targets for potential bush fire related expenditure
- how we will apply the STPIS to Powercor.

# **11.6 Applying the STPIS**

We will apply the STPIS in accordance with our framework and approach paper to Powercor.<sup>14</sup> For the reasons outlined in section 11.7, we have not accepted Powercor's proposal to depart from our F&A in applying the STPIS because of a lower VCR.<sup>15</sup>

#### 11.6.1 Revenue at risk

Powercor proposed to adopt our F&A position to apply the standard STPIS for the forthcoming regulatory period. Hence, we will set the' revenue at risk cap for each regulatory year of the 2016–20 regulatory control period will be capped at  $\pm$  5.0 per cent of the annual allowable revenue as per the scheme standard.<sup>16</sup> There is also a cap on the revenue at risk of  $\pm$  0.5 per cent for the telephone answering parameter.

### 11.6.2 Reliability of supply component

### Applicable components and parameters

We will apply unplanned SAIDI, unplanned SAIFI and MAIFI parameters under the reliability of supply component to Powercor's urban and 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. MAIFI captures the average number of 'momentary' disruptions 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.

Our F&A paper stated that we will apply the methodology indicated in the national STPIS for excluding specific events from the calculation of annual performance targets. The default method for calculating the MED in the STPIS is to apply the 2.5 beta method. However, subject to our approval distributors can propose a major event day boundary that is greater than 2.5 standard deviations from the mean.<sup>17</sup>

<sup>&</sup>lt;sup>14</sup> AER, *Final framework and approach for the Victorian Electricity Distributors, regulatory control period commencing* 1 January 2016, 24 October 2014, pp. 96–97.

<sup>&</sup>lt;sup>15</sup> Powercor, 2016–2020 Price Reset Appendix H Service target performance incentive scheme, 30 April 2015, pp. 3–9.

<sup>&</sup>lt;sup>16</sup> AER, *Final framework and approach for the Victorian Electricity Distributors, regulatory control period commencing 1 January 2016, 24 October 2014, pp. 96–97.* 

<sup>&</sup>lt;sup>17</sup> AER, *STPIS*, November 2009, Appendix D.

Powercor proposed to calculate the major event day (MED) thresholds using the 2.8 beta method in accordance with appendix D of the STPIS.<sup>18</sup> We accept Powercor's application of the 2.8 beta method to calculate the MED. This method, is consistent with our current determination for Powercor and the higher the beta the lesser the number of MED events that can be excluded and a higher level of accountability on the distributor's performance outcomes.

### **11.6.3 Performance targets**

The STPIS specifies that the performance targets should be based on the average performance over the past five regulatory years. It also stated that the performance target must be modified for any reliability improvements completed or planned where the planned reliability improvements are:<sup>19</sup>

- 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 set the performance targets based on historical averages as per the scheme, but adjusted because of the application of a lower VCR for capex planning purposes. 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 also not accepted Powercor's proposal to depart from our F&A and will apply the scheme as is. That is, Powercor's performance targets will be based on its five years historical average.

Consequently, our calculated performance targets for Powercor for the 2016–20 regulatory control period are presented in Table 11-3.

<sup>&</sup>lt;sup>18</sup> Powercor, 2016–20 Price Reset Appendix H Service target performance incentive scheme, 30 April 2015, p. 7.

<sup>&</sup>lt;sup>19</sup> AER, *STPIS*, November 2009, cl. 3.2.1.

	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
Telephone answering	
Percentage of calls will be answered within 30 seconds	70.59

# Table 11-3Preliminary decision—STPIS reliability targets for Powercorfor the 2016–20 regulatory period

Source: AER analysis.

#### 11.6.4 Customer service component

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

We accept Powercor's customer service targets as it has applied a 5 year's historical average to derived them for the next regulatory control period. This is consistent with our national STPIS.<sup>20</sup>

<sup>&</sup>lt;sup>20</sup> AER, *STPIS*, November 2009, cl. 5.3.1(a).

### 11.6.5 Incentive rates

The incentive rates applicable to Powercor for the reliability of supply performance parameters of the STPIS have been calculated in accordance with clause 3.2.2 and using the formulae provided as appendix B of the National STPIS. Our preliminary decision of Powercor's incentive rates are at Table 11-4. The incentive rate for the customer service component will be -0.040 per cent per unit of the telephone answering parameter.<sup>21</sup>

	Urban	Short rural	Long rural
SAIDI	0.19148	0.10254	0.06799
SAIFI	15.67312	9.29958	8.51741
MAIFI	1.25385	0.74397	0.68139

# Table 11-4 Preliminary decision—STPIS incentive rates for Powercor for the 2016–20 regulatory period

Source: AER Analysis.

# 11.7 Reasons for not departing from our F&A

#### 11.7.1 Value of customer reliability

The core rational put forward by Powercor to depart from our F&A position on the STPIS revolves around the change in VCR. This section will first explain the value of customer reliability in order to conceptualise the issues raised by Powercor prior to our consideration 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 in the electricity network. It is therefore important the VCR figures accurately reflect the value of reliability across a range of customers. The VCR is also used to set the incentive rates under the STIPIS. 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

<sup>&</sup>lt;sup>21</sup> AER, *STPIS*, November 2009, cl. 5.3.2(a).

reliability that customers expect by producing a range of VCR values for residential and business customers across the National Electricity Market.<sup>22</sup>

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). The actual VCR for setting the STPIS incentive rates for the 2011–15 period is \$54.92 per kWh.

Our F&A paper 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 F&A position on the STPIS by relaxing its performance targets to account for a lower VCR.<sup>23</sup>

Put simply, 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, augmentation projects will be implemented later than other wise.<sup>24</sup>

### 11.7.2 Departing from our F&A due to VCR

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.

Powercor's regulatory proposal submitted that we should depart from our F&A by modifying its performance targets and revenue at risk to account for a lower VCR for capex planning purposes. It stated that it will defer capex as a result of a lower VCR value. Hence, reliability will be affected due to the capex deferrals.<sup>25</sup>

We consider that Powercor has not demonstrated that departing from our F&A position on the application of the STPIS is reasonable or necessary because:

- The VCR has varied between years but there has been no net movement in the values between 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 co-relation between the VCR and Powercor's reliability outcomes.
- 3. Powercor did not seek an upward adjustment to tighten the STPIS targets for the current period (2011–15) when the VCR rose from the previous (2006–10) period.

<sup>&</sup>lt;sup>22</sup> AEMO, Value of customer reliability review final report, September 2014.

<sup>&</sup>lt;sup>23</sup> Powercor, 2016–20 Price Reset Appendix H Service target performance incentive scheme, 30 April 2015, p. 3.

<sup>&</sup>lt;sup>24</sup> Powercor, *Vic. EDPR - Powercor – IR#003 – 17 June 215*, 30 June 2015, pp. 2–3.

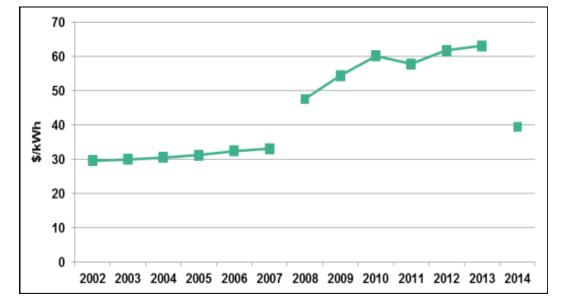
<sup>&</sup>lt;sup>25</sup> Powercor, 2016–2020 Price Reset Appendix H Service target performance incentive scheme, 30 April 2015, pp. 3–9.

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 (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 \$39,456 per MWh (\$ 2014) was used as the basis for setting the incentive rates of the previous Victorian equivalent of the STPIS.<sup>26</sup>
- In our current distribution determination for the 2011–15 regulatory control period, a VCR of \$54,922 per MWh (\$ 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 \$39,456 per MWh (\$ 2014) without adjustments.
- The most recent study by AEMO indicates that the Victorian state-wide VCR is now \$39,500 per MWh (\$2014)—practically at the same level as the 2006–10 period.



#### Figure 11-1 Historical Victorian VCR (nominal)

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

Consistent with, our recent final determinations for NSW and ACT distributors, and preliminary determinations for Qld and SA distributors, we have not varied the STPIS

<sup>&</sup>lt;sup>26</sup> Essential Services Commission (Victoria), *Electricity Distribution Price Revie 2006–10, Final Decision volume 1 Statement of Purpose and Reasons*, October 2005, p. 88.

targets due to a change in VCR. In doing so, and as shown in Figure 11-1, we consider that the VCR will vary between years and that:

- over the long term the scheme will automatically adjust for this variation in VCR via strengthening or weakening the performance targets and incentive rates. That is, the performance targets in the future periods will be based on historical performance that reflects the historical VCR value.
- an adjustment to the STPIS may be appropriate if the VCR remains below its recent average for a lengthy period.

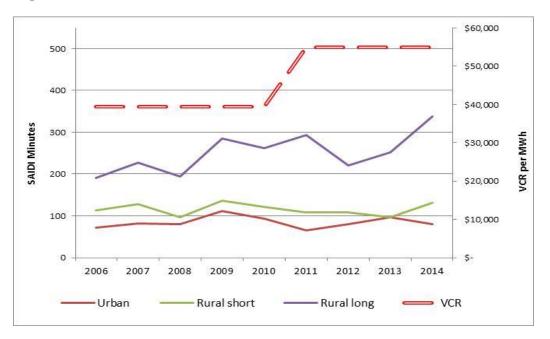
#### No correlation between VCR and reliability outcomes

The STPIS states that performance targets must be based on average performance over the past five regulatory years. As stated above, Powercor's regulatory proposal submitted that we should modify its performance targets to reflect the lower VCR for capex planning purposes.

We consider that performance targets 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 the value of the VCR have immediate effect on Powercor's reliability performance.<sup>27</sup> While Powercor asserts that applying a lower VCR for capex purposes will reduce its reliability performance in 2016–20, its historical reliability performance demonstrates that there is limited or no immediate or close correlation between the two (see Figure 11-2 and Figure 11-3), at least not within 5 years from the change in VCR. That is, a 40 per cent increase in the VCR in the current period made little difference to Powercor's reliability performance. In fact, Powercor's level of supply reliability under the scheme during the current period deteriorated from the previous period, showing an outcome opposite to its contention.

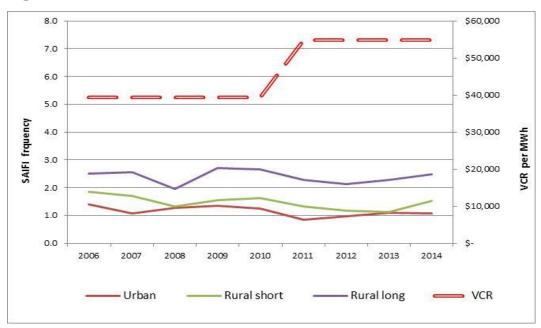
<sup>&</sup>lt;sup>27</sup> Powercor, Vic. EDPR - Powercor - IR#003, 30 June 2015, Powercor, Vic. EDPR - Powercor - IR#025, 28 August 2015.





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



#### 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 also 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 should not change abruptly with a lower VCR for planning purposes.

# Relaxing STPIS performance targets for lower VCR but not increasing it for higher VCR

As outlined above, there is no clear correlation between the VCR and reliability. Powercor's regulatory proposal submitted its performance targets should be relaxed for a lower VCR in the next regulatory period. We observe that there is asymmetry in Powercor's regulatory proposals, as it did not seek to have its performance targets tightened in the current regulatory period for a 40 per cent increase in the VCR for capex planning purposes for the current regulatory.

Powercor benefited from a higher VCR in the current regulatory period—with no tightening of its performance targets. 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.<sup>28</sup>

In conclusion, we consider that Powercor has not made the case that supply reliability level will change immediately after the VCR value is changed. Even if its reasoning were proven, 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.

#### Stakeholders' submissions

The Victorian Department of Economic Development, Jobs, Transport & Resources (DEDJTR) raised concerns about this proposal. The consumer challenge panel suggested that we should reject Powercor's assertion about a lower VCR and reliability performance.

The DEDJTR stated that:

AusNet Services, CitiPower and Powercor have proposed that the targets for the STPIS should be decreased in line with the reduced VCR, despite not seeking an increase in targets in line with the increased VCR for the 2011–15 regulatory control period.

The AER needs to ensure that the targets for the STPIS are consistent with the expenditure forecasts that are provided. If the AER provides expenditure to maintain reliability, then the targets should not be adjusted and the DNSPs should be penalised for any reduction in reliability through the STPIS. If the

<sup>&</sup>lt;sup>28</sup> AER. *STPIS*, November 2009, cl. 1.5(b)(1).

AER does not provide expenditure to maintain reliability as a result of the lower VCR, then the targets should be adjusted accordingly.<sup>29</sup>

The consumer challenge panel considered that:

The impact of changing VCR will be minimal in the short term as the bulk of assets providing the reliability were implemented under the higher values of VCR used in the past, along with deterministic reliability settings used before probabilistic tools were used. Overall, reliability across the networks should be maintained because the decisions for historic investments which comprise the vast majority of the network assets were made using higher standards. As the STPIS reflects historic performance, the impact of the slight deferrals that will now apply through the use of a lower VCR will change over time to reflect the outcomes of using a lower VCR.

CCP3 does not consider that the approach to setting reliability levels for the STPIS incentive needs to be changed as a result of the lower VCR.<sup>30</sup>

These submissions reinforce our preliminary decision that we should not depart from our F&A on this matter.

# **11.8 Other considerations in applying the STPIS**

#### 11.8.1 Not applying the MAIFI parameter

Powercor's regulatory proposals submitted that the MAIFI measure should be removed from its STPIS target as:

- the MAIFI measures act to undermine the positive incentive to improve SAIFI.
- there are few cost effective technical solutions available for them to improve MAIFI.<sup>31</sup>

We have not accepted Powercor's proposal to exclude MAIFI because:

- Powercor has not demonstrated that they it is unable to measure MAIFI, as required by clause 3.1(f) of the STPIS. Further, there is no other basis in the STPIS by which Powercor can propose to vary the application of the STPIS to exclude MAIFI.
- MAIFI does have an impact on customers, such as interruption to personal computer operations and manufacturing processes.
- the infrastructure has already been installed in Victoria to measure MAIFI
- this measure has been in this and earlier similar scheme since 2001

<sup>&</sup>lt;sup>29</sup> Victorian Department of Economic Development, Jobs, Transport & Resources, *Submission to Victorian electricity distribution pricing review – 2016 to 2020*, July 2015, p. 10.

<sup>&</sup>lt;sup>30</sup> Consumer Challenge Panel Sub Panel 3, *Response to proposals from Victorian electricity distribution network* service providers for a revenue reset for the 2016-2020 regulatory period, 5 August 2015, p. 61.

<sup>&</sup>lt;sup>31</sup> Powercor, 2016–2020 Price Reset Appendix H Service target performance incentive scheme, 30 April 2015, p. 6.

• a proposal to exclude a performance target under the scheme must be subject to a general review of the scheme and will require extensive consultation (rather than addressed in a single company reset process).

The Victorian DEDJTR submitted that it:

...does not support the exclusion of MAIFI from the STPIS. The STPIS is not only about funding improvements in performance but also to penalise the DNSPs for any deterioration in performance. If MAIFI is removed, there is a risk that the frequency of momentary interruptions will increase and customers have indicated their frustration with resetting clocks and other electronic equipment regardless of whether the interruption is momentary or sustained. While there are currently few cost effective technical solutions to improve MAIFI, there may be technical advances in the future which enable improvements in MAIFI.<sup>32</sup>

The consumer challenge panel did not support Powercor's proposal to remove MAIFI as a performance measure and stated that:

CCP3 is aware that the AER has moved to exclude as few limitations to the assessments of inputs as possible in its decisions. CCP3 supports this as consumers experience total costs and reliability as a package, uninfluenced by the network's experiences. Further, as noted above, CCP3 sees that the incentives need to be seen as a package.

On this basis, no exclusions should be made to the approach used by the AER in its guidelines as this will change the balance of the incentives.<sup>33</sup>

#### 11.8.2 Changing the SAIFI definition

Powercor's regulatory proposal submitted that the definition of unplanned SAIFI should be amended to exclude outages of less than three minutes' duration, rather than the current definition which only excludes outages of less than one minute duration.<sup>34</sup>

We do not accept this proposed definitional change because it will alter the operation of the STPIS scheme. Further, changes of such magnitude should be comprehensively consulted with all stakeholders, including whether there is an associated change to how the incentive rates should be calculated.

We will, however, review the definition of SAIFI when we review the scheme.

We note that the DEDJTR's submission provided a conditional support for such a change provided that data is available to amend the targets and incentive rates accordingly. However, as stated above, this amendment of the definition has wider

<sup>&</sup>lt;sup>32</sup> Victorian Department of Economic Development, Jobs, Transport & Resources, *Submission to Victorian electricity distribution pricing review – 2016 to 2020*, July 2015, p. 11.

<sup>&</sup>lt;sup>33</sup> Consumer Challenge Panel Sub Panel 3, *Response to proposals from Victorian electricity distribution network* service providers for a revenue reset for the 2016-2020 regulatory period, 5 August 2015, p. 62.

<sup>&</sup>lt;sup>34</sup> Powercor, 2016–20 Price Reset Appendix H Service target performance incentive scheme, 30 April 2015, p. 5.

implication for the incentive rates and as such will require a comprehensive review of the scheme.<sup>35</sup>

The Consumer Challenge Panel did not support Powercor's proposed change to the definition and stated that:

CCP3 is aware that the AER has moved to exclude as few limitations to the assessments of inputs as possible in its decisions. CCP3 supports this as consumers experience total costs and reliability as a package, uninfluenced by the network's experiences. Further, as noted above, CCP3 sees that the incentives need to be seen as a package.

On this basis, no exclusions should be made to the approach used by the AER in its guidelines as this will change the balance of the incentives.<sup>36</sup>

# 11.8.3 Adjusting the STPIS targets for potential bushfire related expenditure

We received a submission from the Victorian Department of Economic Development, Jobs, Transport & Resources outlining that Powercor's reliability targets should reflect the reliability improvements made from the Victorian Government's Power line Bushfire Safety Program.<sup>37</sup>

It stated that the Victorian Government is funding power line replacement in the most dangerous areas of the state and is currently considering regulating the installation of Rapid Earth Fault Current Limiters (REFCLs) in the highest consequence bushfire risk areas and automatic circuit reclosers on Single Wire Earth Return power lines in rural areas. Both the power line replacement and REFCLs are expected to improve the supply reliability in the areas targeted.

We agree that the installation of these safety measures may impact on the reliability of supply but cannot consider the proposal in our preliminary decision. The legislation of this program is yet to be completed and, as such, we do not have the relevant information in order to make such an adjustment.<sup>38</sup>

That said, the scheme has provisions to make adjustments to Powercor's performance targets in the 2021–2025 regulatory control period for capex that may improve reliability. This will ensure that consumers are not paying for the expenditure again through STPIS for improvement factored in this expenditure.<sup>39</sup>

<sup>&</sup>lt;sup>35</sup> Victorian Department of Economic Development, Jobs, Transport & Resources, *Submission to Victorian electricity distribution pricing review – 2016 to 2020*, July 2015, p. 11.

<sup>&</sup>lt;sup>36</sup> Consumer Challenge Panel Sub Panel 3, *Response to proposals from Victorian electricity distribution network* service providers for a revenue reset for the 2016-2020 regulatory period, 5 August 2015, p. 62.

<sup>&</sup>lt;sup>37</sup> Victorian Department of Economic Development, Jobs, Transport & Resources, Submission to Victorian electricity distribution pricing review – 2016 to 2020, 12 July 2015, pp. 9–10.

<sup>&</sup>lt;sup>38</sup> There is currently no certainty on the scope, implementation timeframe or the magnitude of the program.

<sup>&</sup>lt;sup>39</sup> AER, *STPIS*, November 2009, cl. 3.2.1.

# 11.9 Value of customer reliability to calculate the incentive rates

Our F&A paper stated that we will apply a revised value for VCR through the distribution determination in calculating Powercor's incentive rates.<sup>40</sup> For this preliminary decision, we have 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. The steps are:

- First, calculate the VCR for CBD based on the assumption that all CBD consumptions are commercial loads. The expected error for the resultant VCR for CBD is small.
- Then calculate the VCR for urban and rural feeders by dividing the "difference between [all state wide consumption \* state wide VCR] and [CBD consumption \* VCR for CBD network]" by the "difference between all state wide consumption and CBD consumption".

The VCR for network segments is outlined in Table 11-5. We have applied this VCR to calculate its incentives rates for 2016–20.

We consider that this approach should deliver better relativity between the calculated VCR for CBD networks and the VCRs for all other networks.

#### Table 11-5 Value of customer reliability (\$/MWh)

	Urban	Short rural	Long rural
VCR	39,026.67	39,026.67	39,026.67

Source: AER Analysis and AEMO, Value of customer reliability review, final report, September 2014, p. 30. VCR values have been escalated to the June 2015 quarter.

# **11.10 Transitional arrangements for the STPIS**

This section addresses the following transitional issues relating the STPIS:

- 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.

<sup>&</sup>lt;sup>40</sup> AER, *STPIS*, November 2009.

# 11.10.1 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 caps the risk of the STPIS to Powercor at  $\pm$  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"<sup>41</sup> 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.<sup>42</sup>

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.

# 11.10.2 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 5 regulatory years between 1 July 2007 and 30 June 2012, its performance in the 2011–12 financial year

<sup>&</sup>lt;sup>41</sup> "Raw" refers to the S-factor prior to any adjustments.

<sup>&</sup>lt;sup>42</sup> AER, STPIS, November 2009, Appendix C, pp. 33–34.

will affect its revenues in the second regulatory year of the next regulatory control period (that is from 1 July 2014).<sup>43</sup>

The STPIS provides a mechanism to account for any step change in revenues (or prices), via  $X_0^{44}$ , 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:<sup>45</sup>

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

Where:

- $X_0 = \frac{AARR_{2014} AARR_{2015}}{AARR_{2014}}$
- $S_t^{m}$  is the sum of the S-factors for all parameters, after application of the s-bank, as determined in equation (3) in the STPIS
- *AARR*<sub>2014</sub> is Powercor's approved revenue in the 2016 pricing proposal
- *AARR*<sub>2015</sub> is Powercor's allowable revenue in the final determination 2017.

### 11.10.3 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) service performance scheme.

In order to close out the ESCV's 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 preliminary close out was factored into the current determination, requiring a final true-up when the final performance data are 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.

In 2012 the Victorian government amended the *National Electricity (Victoria) Act 2005*, to allow us the power to close out the ESCV's service performance scheme.<sup>46</sup> This amendment to the legislation does not alter or limit our approach to close out the scheme.

<sup>&</sup>lt;sup>43</sup> AER, *STPIS*, November 2009, appendix C.

<sup>&</sup>lt;sup>44</sup> 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.

<sup>&</sup>lt;sup>45</sup> AER, STPIS, November 2009, Appendix C, pp. 33–34.

<sup>&</sup>lt;sup>46</sup> Energy Legislation Amendment Act 2012 (Victoria), s. 10.

The financial penalty accrued by Powercor in the 2006–10 regulatory period in the allowable revenue for 2016–20 regulatory period will be -\$8.98 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.