



PRELIMINARY DECISION
United Energy distribution
determination
2016 to 2020

Attachment 11 – Service target
performance incentive scheme

October 2015

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Note

This attachment forms part of the AER's preliminary decision on United Energy'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

Attachment 14 - Control mechanism

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
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 NER 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 United Energy 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 2009.¹ 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 Preliminary decision

Consistent with our framework and approach (F&A) paper position on STPIS, our preliminary decision is to apply the STPIS to United Energy for the 2016–20 regulatory control period in the following manner:

- set revenue at risk for United Energy at the range ± 5.0 per cent
- segment United Energy's network according to feeder categories urban and short rural
- apply reliability of supply parameters of:
 - system average interruption duration index or SAIDI,
 - system average interruption frequency index or SAIFI
 - momentary average interruption frequency index event or MAIFIE
 - customer service (telephone answering).
- set performance targets based on the United Energy'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.

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

In making our preliminary decision on the STPIS, we have taken into account our F&A, United Energy’s regulatory proposal, our information requests to United Energy and submissions raised by stakeholders. Our response to the matters raised by United Energy and stakeholders about the application of the STPIS are discussed in this preliminary decision.²

Tables 11.1 and 11.2 present our preliminary decision on the applicable incentives rates and performance targets that will be applied to United Energy’s STPIS for the 2016–20 regulatory control period. The incentive rate for the customer service component will be –0.040 per cent per unit of the telephone answering parameter.³

Table 11.1 AER preliminary decision on STPIS incentive rates for United Energy for the 2016–20 regulatory control period

	Urban	Short rural
SAIDI	0.40317	0.01843
SAIFI	28.38134	1.50462
MAIFle	2.27051	0.12037

Source: AER Analysis.

² United Energy, Vic. EDPR – United Energy - IR#003- 12 June 2015, 23 June 2015; United Energy, Vic. EDPR – United Energy - IR#005 - 23 June 2015- , 3 July 2015.

³ AER, STPIS, November 2009, cl. 5.3.2(a).

Table 11.2 AER preliminary decision on STPIS reliability targets for United Energy for the 2016–20 regulatory control period

	Value
Urban	
SAIDI	61.188
SAIFI	0.896
MAIFle	0.918
Short rural	
SAIDI	151.602
SAIFI	2.018
MAIFle	2.980
Telephone answering	
Percentage of calls will be answered within 30 seconds	64.78

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 the F&A paper.⁴ 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.⁵ It also proposed to apply the revised values for VCR through the distribution determination.⁶

Our F&A did not specify the application method for the Momentary Average Interruption Frequency Index (MAIFI) component of STPIS.

11.3 United Energy's regulatory proposal

United Energy's regulatory proposal submitted that we should depart from our F&A position in setting its STPIS for the 2016–20 regulatory control period. It raised a number of interrelated issues for our consideration. Primarily, United Energy stated that applying a lower VCR to capex has implications on reliability and as such the

⁴ NER, cl. 6.3.2, 6.8.1(b), 6.8.2(c)(2), 6.8.2(d) and 6.12.1.

⁵ AER, *Final framework and approach for the Victorian Electricity Distributors, regulatory control period commencing 1 January 2016*, 24 October 2014, pp. 96–97.

⁶ Values determined from the most recent Australian Energy Market Operator (AEMO) review of VCR values.

STPIS should be modified to reflect this change. Hence, the STPIS targets should be adjusted accordingly.⁷

United Energy's regulatory proposal also submitted that we should apply Momentary Average Interruption Frequency Index event (MAIFIE) as the measurement method for momentary supply interruptions,⁸ as well as submitting several definitional changes to the STPIS for consideration.⁹

Section 11.5 below sets out our considerations on these matters.

11.4 AER's assessment approach

We are required to make a decision on how the STPIS is to apply to United Energy.¹⁰ 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.¹¹

We outlined our proposed approach to, and justification for, the application of the STPIS in our framework and approach paper for Victorian electricity distributors. Our preliminary decision has adopted the position in the F&A paper, 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 United Energy and by stakeholders.¹²

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.¹³ 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.¹⁴ 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).

The rewards and penalties amounts under STPIS (the incentives rates) are determined based on the average customer value for the improvement, or otherwise, to supply

⁷ United Energy, *2016–20 Regulatory proposal*, 30 April 2015, pp. 138–140.

⁸ Under MAIFIE, all supply restoration attempts by network switching operations within one minute are treated as one event. If supply is restored within the same minute, the event is counted as 1 momentary interruption. If supply cannot be restored, the event is treated as 1 sustained interruption and zero (0) momentary interruption. This measurement method was previously used under the s-factor scheme of the ESCV.

⁹ United Energy, *2016–20 Regulatory proposal*, 30 April 2015, p. 140.

¹⁰ NER, cl. 6.12.1(a).

¹¹ AER, *STPIS*, November 2009, cl. 2.1(d).

¹² AER, *Final framework and approach for the Victorian Electricity Distributors, regulatory control period commencing 1 January 2016*, 24 October 2014, pp. 96–97.

¹³ NER, cl. 6.6.2(b)(3)(iv).

¹⁴ AER, *STPIS*, November 2009, cl. 1.5(b)(5).

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 STIPIS 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 United Energy for the 2016–20 regulatory control period
- transitional matters in the applying the STPIS between regulatory control periods
- whether MAIFle should be applied as a parameter in the performance targets
- whether we should adjust the STPIS performance targets for potential bush fire related expenditure
- how we will apply the STPIS to United Energy.

11.6 Applying the STPIS

We will apply the STPIS in accordance with our framework and approach paper to United Energy.¹⁵ For the reasons outlined in section 11.7.1, we have not accepted United Energy's proposal to depart from our F&A in applying the STPIS because of a lower VCR.¹⁶

¹⁵ AER, *Final framework and approach for the Victorian Electricity Distributors, regulatory control period commencing 1 January 2016*, 24 October 2014, pp. 96–97.

¹⁶ United Energy, *2016–20 Regulatory proposal*, 30 April 2015, pp. 138–140.

11.6.1 Revenue at risk

United Energy's revenue at risk for each regulatory year of the 2016–20 regulatory control period will be capped at ± 5.0 per cent of the annual allowable revenue as per the scheme standard. There is also a cap on the revenue at risk of ± 0.5 per cent for the telephone answering parameter.

For the reasons outlined in section 11.7.1, we have not accepted United Energy's proposal to depart from our F&A position on the STPIS by modifying the revenue at risk due to a lower VCR.¹⁷

Revenue at risk caps the potential rewards and penalties for United Energy under the STPIS. We consider an incentive of ± 5.0 per cent of the annual allowable revenue should balance the risk to both consumers and United Energy 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 United Energy's urban and short rural feeders for the 2016–20 regulatory control period. 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. Under MAIFle, all supply restoration attempts by network switching operations within one minute are treated as one event. If supply is restored within the same minute, the event is counted as 1 momentary interruption. If supply cannot be restored, the event is treated as 1 sustained interruption and zero (0) momentary interruption. This measurement method was previously used under the s-factor scheme of the ESCV.

Exclusions

The STPIS allows certain events to be excluded from the calculation of the service standard component (S-factor) revenue adjustment. These exclusions include the events that are beyond the control of United Energy, 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 United Energy's STPIS performance.

United Energy proposed to calculate the major event day (MED) thresholds using the 2.5 beta method (but excluding catastrophic days) in accordance with appendix D of

¹⁷ United Energy, *2016–20 Regulatory proposal*, 30 April 2015, pp. 138–140.

the STPIS and our framework and approach paper.¹⁸ As stated in section 11.8.1, we consider it inappropriate to alter the STPIS to exclude catastrophic events from the definition of MED. 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 target must be modified for any reliability improvements completed or planned where the planned reliability improvements are:¹⁹

- 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.

United Energy 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 for the STPIS is outlined in section 11.7.1. In accordance with our consideration in that section, we also have not accepted United Energy's proposal to depart from our F&A and will apply the scheme as is. That is, United Energy's performance targets will be based on its five years historical average.

Consequently, our calculated performance targets for United Energy for the 2016–20 regulatory control period are presented in table 11.2 above.

11.6.3 Customer service component

The national STPIS customer service target applicable to United Energy 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 United Energy's customer service targets as it has applied a 5 year historical average to derive them for the 2016–20 regulatory control period. This is consistent with our national STPIS.²⁰

11.6.4 Incentive rates

The incentive rates applicable to United Energy 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 United Energy's incentive rates are at Table 11.3. The incentive rate for the

¹⁸ United Energy, *2016–20 Regulatory proposal*, 30 April 2015, p. 140.

¹⁹ AER, *STPIS*, November 2009, cl. 3.2.1.

²⁰ AER, *STPIS*, November 2009, cl. 5.3.1(a).

customer service component will be -0.040 per cent per unit of the telephone answering parameter.²¹

Table 11.3 AER preliminary decision on STPIS incentive rates for United Energy for the 2016–20 regulatory control period

	Urban	Short rural
SAIDI	0.40317	0.01843
SAIFI	28.38134	1.50462
MAIFle	2.27051	0.12037

Source: AER Analysis.

11.7 Reasons for not departing from our F&A

11.7.1 Value of customer reliability

The core rationale put forward by United Energy to depart from our F&A position on the STPIS revolves around the change in value of customer reliability (VCR). This section will first explain the value of customer reliability in order to conceptualise the issues raised by United Energy prior to our consideration of its proposed change.

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 rewards and penalties 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.²²

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

²¹ AER, *STPIS*, November 2009, cl. 5.3.2(a).

²² AEMO, *Value of customer reliability review final report*, September 2014.

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. United Energy's regulatory proposal rejected our use of the latest VCR to assess capex and outlined that we should either:

1. Allow it to use its composite VCR for network planning while applying the STPIS in accordance with the STPIS.
2. Not allow it to use its composite VCR for network planning but depart from our F&A STPIS position by relaxing the performance targets and reducing the revenue at risk account for a lower VCR.²³

United Energy submitted, amongst other things, that if a lower VCR is adopted by us, the reliability of its networks will deteriorate in the next regulatory control period.²⁴

Put simply, United Energy 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 otherwise. It also stated that the lower VCR will also cause replacement capex (for power transformers) to be deferred.²⁵

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.

United Energy'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.²⁶

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

²³ United Energy, *2016–20 Regulatory proposal*, 30 April 2015, p. 138.

²⁴ The implications of the VCR will be:

- Reliability deteriorates by 4.2 mins p.a. - more blackouts on hot summer days
- Fault response times compromised - outages occurring at same time
- Supply restoration times compromised - reduced spare capacity
- Inconsistent with capex forecast
- Require additional \$0.5 million opex over five years in increased faults, emergency maintenance / claims
- Higher GSL payments for worst served customers
- Only net zero STPIS penalties if targets relaxed – \$7-9 million STPIS penalties over period if targets based on five year average.

²⁵ United Energy, *2016–20 Regulatory proposal*, 30 April 2015, p. 137.

²⁶ United Energy, *2016–20 Regulatory proposal*, 30 April 2015, p. 138.

1. The VCR has varied between years but there has been no net movement in its value between previous (2006–10 and 2011–15) regulatory control 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 United Energy reliability outcomes.
3. United Energy 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.

These points are addressed below.

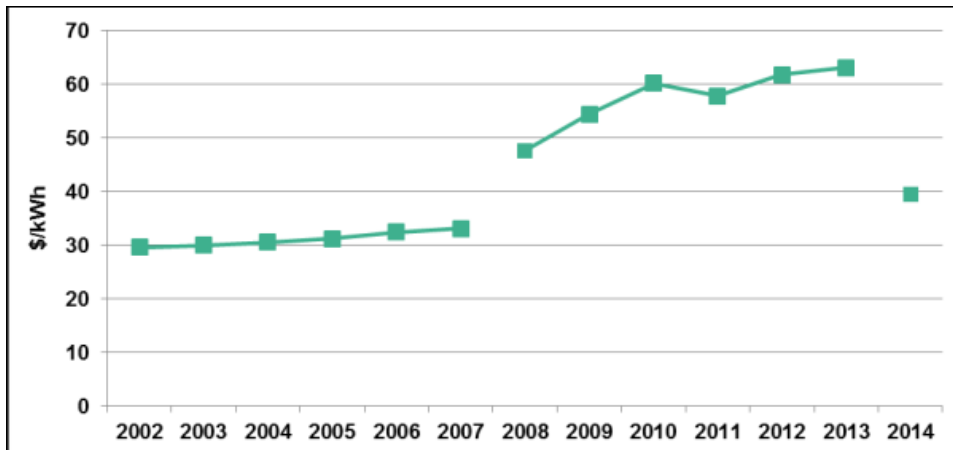
No variation in the VCR between the previous and the forthcoming regulatory control periods

There has been no net movement in the value of the VCR between the two regulatory control periods commencing in 2006 (see), 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.²⁷
- In our 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.

²⁷ 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.

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 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.

Limited relationship between VCR and United Energy's reliability outcomes

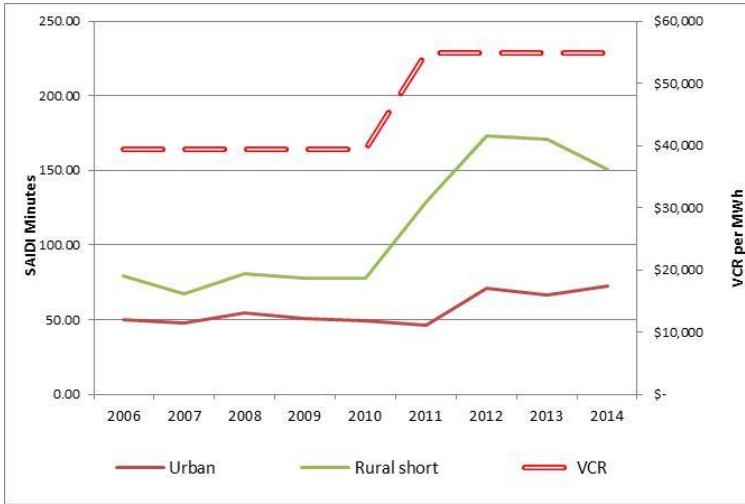
The STPIS states that performance targets must be based on average performance over the past five regulatory years. As stated above, United Energy's regulatory proposal submitted that we should modify its performance targets to reflect the lower VCR for capex planning purposes.

We consider that performance targets should not be modified due to a change in the VCR. Our review of United Energy's regulatory proposal found little evidence to suggest that a change in VCR results in an immediate change to reliability performance.²⁸ United Energy asserts that applying a lower VCR for capex purposes will reduce its reliability performance in 2016–20. In contrast, its historical reliability performance shows that there is limited or no immediate or close correlation between

²⁸ United Energy, Vic. EDPR – United Energy - IR#003- 12 June 2015, 23 June 2015, United Energy, Vic. EDPR – United Energy - IR#005- 23 June 2015, 3 July 2015.

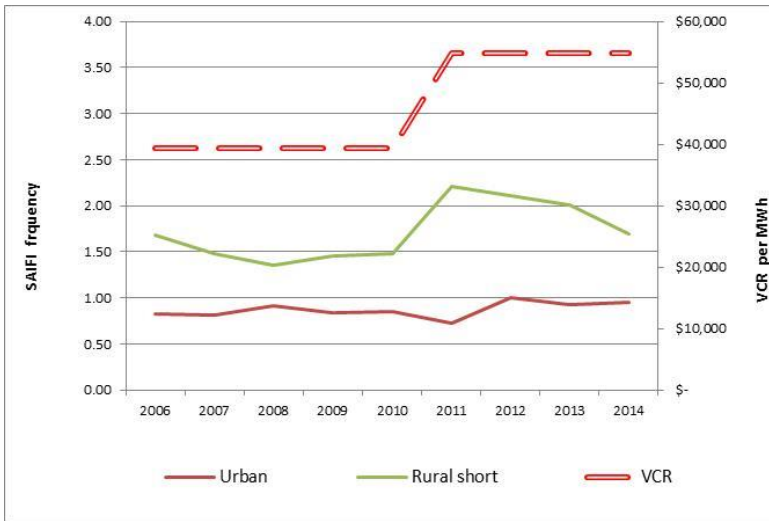
the two variables (see Figure 11.2 and Figure 11.3), at least not within 5 years from the change in VCR. That is, a 40 per cent increase in the VCR in the current period made little difference to United Energy’s reliability performance. In fact, United Energy’s level of supply reliability under the scheme during the current period deteriorated from the previous period, showing an outcome opposite to its contention.

Figure 11.2 Historical SAIDI



Source: AER analysis

Figure 11.3 Historical SAIFI



Source: AER analysis

United Energy also claimed that a lower VCR will also have impact on its asset replacement capex.²⁹ We disagree with the contention that replacement capex will be

²⁹ United Energy, *2016–20 Regulatory proposal*, 30 April 2015, p. 137.

materially affected by a lower VCR. We consider that the prime driver for asset replacement is the physical condition of that asset and to certain extent, the trade-off between capex and opex.

That said, we consider that United Energy'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, United Energy's reliability level should not change abruptly with a lower VCR for planning purposes.

As such we consider that United Energy has not demonstrated that its assertion that reliability will decline immediately in the 2016–20 regulatory control period is due to a lower VCR.

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

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

United Energy benefited from a higher VCR in the current regulatory control period—with no tightening of its performance targets. As such, it is not in the long term interest of consumers to allow it to again benefit from a lower VCR with a softening of its performance targets. We consider this asymmetric treatment is contrary to NEO and the objectives of the scheme.³⁰

In conclusion, we consider that United Energy 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 United Energy's assertion about a lower VCR and reliability performance.

The DEDJTR stated that:

³⁰ AER. *STPIS*, November 2009, clause 1.5(b)(1).

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 AER does not provide expenditure to maintain reliability as a result of the lower VCR, then the targets should be adjusted accordingly.³¹

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.³²

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 Definitional changes to the STPIS

United Energy's regulatory proposal outlined several definitional changes to the STPIS so that it can align with the AEMC's distribution reliability measures recommendations.³³

Removal of catastrophic events from major event days classification

United Energy regulatory proposal submitted that catastrophic events should be excluded from the statistical method used to classify Major Event Days.³⁴ We consider it is not appropriate in a regulatory determination to alter the scheme design without

³¹ Victorian Department of Economic Development, Jobs, Transport & Resources, *Submission to Victorian electricity distribution pricing review – 2016 to 2020*, July 2015, p. 10.

³² 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.

³³ United Energy, *2016–20 Regulatory proposal*, April 2015, p. 140.

³⁴ United Energy, *2016–20 Regulatory proposal*, April 2015, p. 140.

extensive consulting with stakeholders or reviewing and analysing the full impact of the proposed changes on the design of the scheme.

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

The Consumer Challenge Panel rejected United Energy's proposal 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.³⁵

Definition of momentary interruption

United Energy's regulatory proposal submitted that the definition of momentary interruption in the STPIS should be amended to exclude outages of less than three minutes.³⁶

We do not accept this proposed definitional change to momentary interruption 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 momentary interruptions when we review the scheme.

We note that the DEDJTR's submission offered conditional support to this change, if data is available to amend the targets and incentive rates accordingly. However, as stated above, this amendment of the definition has wider implication for the incentive rates and as such will require a comprehensive review of the scheme.³⁷

The Consumer Challenge Panel rejected United Energy's proposal 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.

³⁵ 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.

³⁶ United Energy, *2016–20 Regulatory proposal*, April 2015, p. 140.

³⁷ Victorian Department of Economic Development, Jobs, Transport & Resources, *Submission to Victorian electricity distribution pricing review – 2016 to 2020*, July 2015, p. 11.

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.³⁸

Churn in feeder categories

Depending on jurisdictions, we currently classify feeders into the CBD, urban, short rural and long rural classifications for the STPIS. However, we note that the classification of some urban and rural feeders may change over time.

United Energy proposed that the definition of an urban feeder be based on weather-normalised maximum demand rather than actual maximum demand so that feeder classifications do not vary from one year to the next.³⁹

We consider this definitional change should be thoroughly considered and consulted with all stakeholders prior to implementation. Further, United Energy's proposal to amend the definition is not compelling because:

- the number of feeder “churn” is likely to be not significant
- the incentive rates for both urban and rural feeders are based on the same VCR value. The financial impact on the distributor because of feeder churn, if any, should be small.

In its submission, DEDJTR supported this proposal by United Energy.⁴⁰ We note DEDJTR's submission and consider that this definitional change will require extensive consultation prior to implementation.

The Consumer Challenge Panel rejected Untied Energy's proposal 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.⁴¹

³⁸ 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.

³⁹ United Energy, *2016–20 Regulatory proposal*, April 2015, p. 140.

⁴⁰ Victorian Department of Economic Development, Jobs, Transport & Resources, *Submission to Victorian electricity distribution pricing review – 2016 to 2020*, July 2015, p. 12.

⁴¹ 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.

11.8.2 Using Momentary Average Interruption Frequency Index event (MAIFle)

Under STPIS, all operations of an automatic reclose device are typically counted as a separate interruption (or MAIFI event). However, the measurement method for MAIFI is not clearly defined in STPIS.

Under the historical Victorian measurement method, if supply is restored within one minute, all other unsuccessful attempts to restore supply during this time are not counted towards the MAIFle measurement. This MAIFI measurement method is not inconsistent with note 4 of Appendix A of STPIS, which states that “in calculating MAIFI, each operation of an automatic reclose is counted as a separate interruption. Sustained interruptions which occur when a recloser locks out after several attempts to reclose should be deleted from MAIFI calculations.”

This MAIFle measurement method is currently applied to the Victorian distributors in the 2011–15 determination. United Energy’s regulatory proposal for 2016–20 supported the use of MAIFle in Victoria for the next regulatory control period.⁴²

While our F&A was silent on the application of MAIFI or MAIFle in the STPIS, we consider it reasonable to apply MAIFle for United Energy because it is also consistent with the STPIS.

We received no submissions on this issue.

11.8.3 Adjusting STPIS targets for potential bushfire related expenditure

We received a submission from the DEDJTR outlining that United Energy’s reliability targets should reflect the reliability improvements made from the Victorian Government’s Power line Bushfire Safety Program.⁴³

It stated that the Victorian Government will fund power line replacements 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

⁴² United Energy, *2016–20 Regulatory proposal*, April 2015, p. 139.

⁴³ Victorian Department of Economic Development, Jobs, Transport & Resources, *Submission to Victorian electricity distribution pricing review – 2016 to 2020*, 12 July 2015, pp. 9–10.

this program is yet to be completed and, as such, we do not have the relevant information in order to make such an adjustment.⁴⁴

That said the scheme has provisions to make adjustments to United Energy's 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.⁴⁵

11.8.4 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 United Energy's incentive rates.⁴⁶ For this preliminary decision, we have calculated the incentive rates by deriving the VCR from United Energy'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 United Energy's urban and short rural segments is \$ 39,026.67 per MWh. We have applied this VCR to calculate its incentives rates for 2016–20.

11.9 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.

⁴⁴ There is currently no certainty on the scope, implementation timeframe or the magnitude of the program.

⁴⁵ AER, *STPIS*, November 2009, cl. 3.2.1.

⁴⁶ AER, *Electricity distribution network service providers—service target performance incentive scheme*, 1 November 2009. (AER, *STPIS*, November 2009).

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 caps the risk of the STPIS to United Energy 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"⁴⁷ 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.⁴⁸

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.

11.9.2 Accounting for revenue increments decrements between regulatory control 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

⁴⁷ "Raw" refers to the S-factor prior to any adjustments.

⁴⁸ 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).⁴⁹

The STPIS provides a mechanism to account for any step change in revenues (or prices), via X_0 ⁵⁰, from one regulatory control period to the next. 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.⁵¹

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

Where:

- $X_0 = \frac{AARR_{2014} - AARR_{2015}}{AARR_{2014}}$
- 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
- $AARR_{2014}$ is United Energy's approved revenue in the 2016 pricing proposal
- $AARR_{2015}$ is United Energy's allowable revenue in the final determination 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) 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 final determination for the 2016–20 regulatory control period. 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.⁵² This amendment to the legislation does not alter or limit our approach to close out the scheme.

⁴⁹ AER, *STPIS*, November 2009, appendix C.

⁵⁰ 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.

⁵¹ AER, *STPIS*, November 2009, Appendix C, pp. 33–34.

⁵² *Energy Legislation Amendment Act 2012 (Victoria)*, s. 10.

The financial penalty accrued by United Energy in the 2006–10 regulatory control period in the allowable revenue for 2016–20 regulatory control period will be \$2.64 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.