

Attachment 10: Incentive schemes

Regulatory proposal for the ACT electricity distribution network 2019–24
January 2018

Table of contents

List of figures	iv
List of tables	iv
List of appendixes	iv
10.1. Introduction	1
10.2. Efficiency Benefit Sharing Scheme	1
10.2.1 Rule requirements	2
10.2.2 Evoenergy's EBSS performance during 2014–19	2
10.2.3 Evoenergy's proposed application of EBSS for 2019–24	3
10.3. Capital Expenditure Sharing Scheme	4
10.3.1 Rule requirements	4
10.3.2 Evoenergy's performance under CESS during 2014–19	5
10.3.3 Evoenergy's proposed application of CESS for 2019–24	6
10.4. Service Target Performance Incentive Scheme	7
10.4.1 Rule and scheme requirements	7
10.4.2 Summary of AER's final position in Framework and Approach paper and Evoenergy's proposal	8
10.4.3 Summary of Evoenergy's proposed application of STPIS	9
10.4.4 Evoenergy's STPIS proposal for 2019–24	9
10.5. DMIS and DMIA mechanism	16
10.5.1 Rule requirements	16
10.5.2 Demand Management Incentive Scheme	17
10.5.3 Demand Management Innovation Allowance mechanism	18
Shortened forms	20

List of figures

Figure 10.1 Historical annual performance on unplanned SAIDI and SAIFI ex MEDs 10

List of tables

Table 10.1	Capex efficiency gains calculations for 2015–19	5
Table 10.2	CESS penalty calculation (\$ million, 2018–19)	5
Table 10.3	Summary of the AER’s STPIS position and Evoenergy’s proposal	8
Table 10.4	Revenue impacts from repeats of historical performance	11
Table 10.5	Historical reliability performance after removing excluded events and MEDs	13
Table 10.6	Proposed reliability of supply targets for the 2019–24 regulatory control period	14
Table 10.7	Historical telephone answering and proposed targets	14
Table 10.8	Specific inputs into the calculation of Evoenergy’s incentive rates	15
Table 10.9	The proposed per cent incentive rates for Evoenergy’s reliability of supply targets	16
Table 10.10	Evoenergy’s provisional calculation of the allowance under the DMIA mechanism	19

List of appendixes

- Appendix 10.1** Proposed STPIS performance targets
- Appendix 10.2** Proposed STPIS incentive rates
- Appendix 10.3** An explanatory note on feeder reclassification

10.1. Introduction

The National Electricity Rules (Rules) incorporate incentive schemes to encourage Distribution Network Service Providers (DNSPs) to manage their businesses in a safe, reliable manner that serves the long-term interests of consumers and meets policy objectives. In some instances, distributors may incur a financial penalty if they fail to meet set targets.

The overall objectives of the schemes are to:

- encourage distributors to spend more efficiently on capital expenditure (capex) and operating expenditure (opex), while maintaining neutrality between each;
- reduce the risk of consumers being required to pay for unnecessary capex;
- maintain or improve on existing levels of service quality;
- promote an optimal sharing of efficiency improvements and losses between distributors and consumers;
- encourage distributors to consider economically efficient alternatives to augmenting the distribution network; and
- encourage research and development (R&D) in demand management.

Evoenergy is generally supportive of the Australian Energy Regulator's (AER's) position in its final Framework and Approach paper to apply the following incentive schemes to its electricity distribution network during the 2019–24 regulatory control period:

- the Efficiency Benefit Sharing Scheme (EBSS);
- the Capital Expenditure Sharing Scheme (CESS);
- the Service Target Performance Incentive Scheme (STPIS);
- the Demand Management Incentive Scheme (DMIS); and
- the Demand Management Innovation Allowance (DMIA) mechanism.

Together, these schemes provide balanced incentives for the electricity network to operate in the long-term interests of consumers. Decisions on how these schemes will apply to Evoenergy are constituent decisions that the AER must make in its determinations under clause 6.12.1(9) of the Rules.

This attachment describes Evoenergy's proposed approach to their application.

10.2. Efficiency Benefit Sharing Scheme

The EBSS is designed to ensure electricity distributors are provided with a continuous incentive throughout the regulatory control period to achieve the lowest efficient levels of opex through the sharing of efficiency gains and losses with customers. The basic regulatory framework allows a distributor to keep the difference between the actual opex and the opex allowance in any year until the end of the regulatory period. However, without an EBSS, the incentive to deliver efficiency gains would diminish towards the end of a given regulatory period. The EBSS gives a consistent incentive to deliver efficiency

improvements throughout the regulatory period by allowing the distributor to retain a share of the efficiency gains over time. Assuming a five-year regulatory period, efficiency gains or losses are shared approximately 30 per cent to the distributor and the remaining 70 per cent to customers.

The mechanism underpinning the EBSS is the carryover of opex underspends and overspends between regulatory periods. In each regulatory year, the carryover is given by the difference between the opex forecast (set in the AER's distribution determination) and the outturn opex. A positive (negative) carryover is obtained when the outturn opex is less (more) than the forecast opex in any particular year. Any efficiency gains (or losses) are retained by Evoenergy for five years, regardless of the year in which the gain (or loss) was made.

The carryover in each regulatory year is then used to calculate the incremental efficiency gains or losses for the length of the carryover period, where they will be added or subtracted as an additional building block when determining Evoenergy's revenue allowance for the 2024–29 period.

With an EBSS in place, distributor businesses are provided with an incentive to spend efficiently. Revealed opex incurred becomes a good indicator of efficient costs and can reliably be used to inform the proposed opex forecast.

In its Framework and Approach paper for Evoenergy, the AER has indicated that it intends to apply the EBSS to Evoenergy in the 2019–24 regulatory control period if it is satisfied that the scheme will allow a fair sharing of efficiency gains and losses between Evoenergy and its customers.

10.2.1 Rule requirements

Clause S6.1.3 of the Rules requires Evoenergy to describe how the EBSS, as specified in the AER's Framework and Approach paper, would be applied in the 2019–24 regulatory control period. The sections below describe in detail how Evoenergy proposes to apply the EBSS, which would comply with the National Electricity Objective.

10.2.2 Evoenergy's EBSS performance during 2014–19

In its 2015 distribution determination, the AER suspended the application of EBSS to Evoenergy for the 2015–19 regulatory period because the AER had relied on benchmarking instead of a revealed cost approach to determine Evoenergy's opex allowance.

Under the Rules,¹ since an EBSS is not in place during the 2014–19 period, the AER is not required to determine the revenue increments or decrements (if any) for each regulatory year. However, in July 2015, Evoenergy sought a merit review of the AER's decision on opex with the Australian Competition Tribunal (Tribunal) which, in February 2016, ordered the AER to remake the revenue determination for Evoenergy, taking into account interrelationships between the different contingent parts of its decision. This decision was reaffirmed by the Full Federal Court of Australia in May 2017 in its judicial review of the Tribunal's decision. Since the opex decision, which is one of the reference points from which the AER based its decision on EBSS, is flawed, it follows that the EBSS determination by the AER may also be flawed.

¹ Rules, clause 6.4.3(a)(5).

At the time of the submission, Evoenergy's distribution determination had not yet been remade and therefore the original AER constituent decision on EBSS still stands.

10.2.3 Evoenergy's proposed application of EBSS for 2019–24

Evoenergy's Expenditure Forecasting Methodology² describes the base-step-trend forecasting approach undertaken by Evoenergy to forecast its operating expenditure for the 2019–24 regulatory control period. Attachment 6 (Operating expenditure) has applied this methodology and has demonstrated that the proposed opex forecasts reflect the opex criteria. The revealed cost forecast approach used by Evoenergy to derive its opex forecast is therefore consistent with intended operation of the EBSS.

Evoenergy is proposing the reinstatement of the EBSS as set out in Section 1.3 of the 2013 version of the EBSS guideline for the 2019–24 regulatory control period for the following reasons.

- Evoenergy is proposing to set its revised base year opex based on revealed costs, instead of relying on a flawed benchmarking approach that has been successfully appealed in the Tribunal and the Federal Court of Australia.
- The last two annual benchmarking reports published by the AER acknowledge significant improvements in opex productivity in 2014–15 and 2015–16 for Evoenergy.
- The top-down and bottom-up benchmarking work undertaken by Evoenergy in Appendix 6.1 of Attachment 6 provides further evidence that Evoenergy is operating at an efficient level and there is no incentive for Evoenergy to inflate its opex forecasts.
- Evoenergy's consumers would be rewarded by the AER maintaining the key features of the regulatory incentive framework embedded in the Rules.

10.2.3.1 Carryover period length

Evoenergy proposes that the carryover period length to apply for the 2019–24 regulatory control period be equal to five years which corresponds to the length of the forthcoming regulatory period. This will ensure that the 70:30 approximate efficiency sharing ratio between Evoenergy and its customers is achieved. With a similar carryover period and sharing ratio for CESS, this will provide a balanced incentive for Evoenergy to reduce opex and capex, or to substitute between opex and capex where prudent.

10.2.3.2 Calculation of the efficiency gains in each year of the 2019–24 regulatory control period

Evoenergy supports the method for calculating the incremental efficiency gains in each regulatory year of the 2019–24 regulatory control period as set out in Section 1.3.2 and 1.3.3 and 1.3.4 of the 2013 version of the AER's EBSS guideline.

10.2.3.3 Opex exclusions

As per Section 1.4 of the EBSS guideline, prior to the commencement of the 2019–24 regulatory control period, the AER will list the relevant opex categories exclusions or adjustments in its final determination.

² ActewAGL Distribution Network, Expenditure Forecasting Methodology, 2019–24, June 2017.

Evoenergy proposes that the following list of cost categories be excluded from the calculations of efficiency gains or losses. Excluding these costs will ensure that Evoenergy's performance against the opex benchmarks are not distorted. The proposed exclusions are also consistent with the AER's previous determinations on EBSS for other DNSPs. Evoenergy also considers that the requirements of clause 6.5.8 of the Rules are better achieved by excluding these operating expenditure categories:

- debt-raising costs;
- costs of any approved pass through events and new regulatory obligations introduced after the final determination;
- insurance and self-insurance costs;
- superannuation costs for defined benefits fund members;
- operating costs associated with projects funded under the DMIA mechanism;
- operating costs associated with demand management (non-network) initiatives as they will not be forecast using a single-year revealed-cost approach; and
- costs for any services that will not be classified as Standard Control Services in the 2024–29 regulatory control period.

The impact of excluding the above categories would be to adjust both the opex allowance and actual opex that would be subject to the EBSS when the AER determines the revenue decrement or increments in calculating the EBSS carryover for the 2024–29 regulatory control period.

10.3. Capital Expenditure Sharing Scheme

The CESS provides financial rewards for distributors whose capex becomes more efficient, and imposes financial penalties for those that become less efficient. Without a CESS a service provider faces a declining incentive to reduce its capex over the regulatory period. Consumers generally benefit from improved efficiency through lower regulated prices. Under the CESS, a service provider retains 30 per cent of any underspend or overspend while consumers retain 70 per cent of underspend or overspend. This means that for a one dollar saving in capex, the service provider keeps 30 cents of the benefit while consumers keep 70 cents of the benefit.

In its Framework and Approach paper, the AER has expressed its position to apply the CESS, as set out in its Capital Expenditure Incentive Guideline, to Evoenergy in the 2019–24 regulatory control period. Evoenergy supports the application of the CESS in conjunction with the EBSS as the two schemes provide balanced incentives for efficient expenditure.

10.3.1 Rule requirements

Clause 6.1.3 (3A) of the Rules requires Evoenergy to indicate how the CESS should apply to its services for the 2019–24 regulatory control period, taking account of how the AER intends to apply the CESS as set out in its Framework and Approach paper.

10.3.2 Evoenergy's performance under CESS during 2014–19

The CESS currently applies to Evoenergy in the 2015–19 regulatory control period but not in the transitional regulatory control period (2014–15)³. In relation to clause 6.4.3(a)(6) of the Rules, as part of the AER's 2019–24 determination, the AER is meant to calculate the cumulative underspend or overspend for the current regulatory control period in net present value terms, apply a sharing ratio of 30 per cent to determine Evoenergy's share of the underspend or overspend, and take into account the financing benefit or costs of the underspends or overspends.

Evoenergy has calculated the CESS payment based on CESS version 1. The AER allowance for net capex has been converted from 2013–14 real values to nominal values, under the assumption the capex is incurred in the middle of the regulatory year. The actual or estimate capex is defined net of capital contributions and asset disposals. Table 10.1 and Table 10.2 calculate the annual efficiency gains, financing benefits and the CESS revenue decrement of \$4.71 million (\$2018/19) that has been included in Evoenergy's 2019–20 building block proposal for the 2019/20 regulatory year.

Table 10.1 Capex efficiency gains calculations for 2015–19

Regulatory year ending	2015	2016	2017	2018	2019
AER net capex allowance (\$ million, nominal)	0	63.4	69.0	60.5	60.5
Actual/estimate net capex (\$ million, nominal)	0	59.7	53.6	66.4	66.1
Capex uUnderspend/Overspend	0	4	15.4	-5.8	-5.6
Year 1 benefit	0.00	0.00	0.00	0.00	0.00
Year 2 benefit		0.12	0.24	0.24	0.24
Year 3 benefit			0.49	0.99	0.99
Year 4 benefit				-0.18	-0.37
Year 5 benefit					-0.18
Total financing benefit	0.00	0.12	0.72	1.04	0.68
Discount factor (middle of year)	1.32	1.24	1.17	1.10	1.03
Discount factor (end of year)	1.28	1.20	1.13	1.06	1.00
NPV underspend	0.00	4.60	18.11	-6.36	-5.82
NPV financing benefit	0.00	0.14	0.82	1.11	0.68

Table 10.2 CESS penalty calculation (\$ million, 2018–19)

CESS calculation	
Total underspend (NPV)	10.29
Relevant sharing ratio	30%
Consumer share	7.20
NSP share	3.09
Total DNSP financing benefit (NPV)	2.69
NPV of CESS payments	0.40

³ AER 2015, Final Decision ActewAGL distribution determination, Attachment 10, Capital expenditure sharing scheme, April 2015.

AER 2014, Stage 2 Framework and Approach for ActewAGL, January 2014, p. 28.

The total net capex spent in regulatory years 2016/17 and 2017/18 contain capex amounting to \$3.5 million and \$5.6 million, respectively, which have been incurred or are expected to be incurred in order to comply with Power of Choice obligations related to the Expanding Competition in Metering and Related Services Rule Change, for which Evoenergy has yet to submit a pass through application. In April 2016, the AER granted Evoenergy an extension of time to April 2018 to submit the application. Therefore, for the purposes of this initial regulatory proposal, Evoenergy has included the Power of Choice capex in the CESS calculations. However, following the AER's assessment of Evoenergy's pass through application, Evoenergy's revised proposal will adjust the CESS calculations for the aforementioned pass through amounts, as per Section 2.3.1 of the Capital Expenditure Incentive Guideline.

10.3.3 Evoenergy's proposed application of CESS for 2019–24

Evoenergy proposes to apply the CESS as follows.

- Applied to capex net of capital contributions and asset disposals. This is consistent with the AER's response to CESS issues raised by Western Power as part of TransGrid's Framework and Approach consultation.⁴ This is because capex that is recovered through a capital contribution has no net impact on the regulatory asset base (RAB), so the CESS is not needed to incentivise expenditure that is recovered through a capital contribution.
- Designed to take into account the financing benefit or cost to the service provider of the underspend or overspend.
- Effected using a sharing ratio of 30 per cent to the cumulative underspend or overspend.
- Adjusted to account for deferral of capex, exclusions for inflated related party margins, capitalised opex and approved pass through amounts for capex.
- Revised for any exclusions of capex from the RAB resulting from any ex-post reviews. Ex-post reviews enable the AER, independently of the CESS, to exclude from the RAB any inefficient or impudent capex. The AER must assess in the draft/final determination on whether the roll forward of the RAB meets the capex incentive objective. However, under the CESS, a service provider bears 30 per cent of any overspend. If the overspend is found to be inefficient through an ex-post review, then the service provider will bear 100 per cent of the inefficient overspend.
- Determined in net present value terms of the cumulative underspend or overspend for the current regulatory control period.
- Directed to the total capex allowance and not at a component level.
- Added or subtracted to the service provider's regulated revenue as a separate building block in the next regulatory control period.

⁴ AER 2016, TransGrid final framework and approach 2018–23, July 2016, pp. 21–22.

10.4. Service Target Performance Incentive Scheme

The STPIS⁵ is designed to provide a financial incentive for DNSPs to maintain and improve their service performance. It is intended to work alongside the EBSS and CESS to ensure that cost efficiencies rewarded under these incentive schemes are not achieved at the expense of lowering service quality for customers. Unlike the EBSS and CESS, financial rewards (or penalties) over a regulatory period are added to (or subtracted from) the DNSP's annual revenue requirements within the same regulatory period.

The STPIS contains two measures that create incentives for improved service performance:

- a service standards factor (S-factor) reward (or penalty) for improved (or diminished) service compared to service targets for reliability, quality of supply, and customer service; and
- a Guaranteed Service Level (GSL) that requires businesses to make direct payments to customers who experience service under a pre-determined level.

For the 2019–24 regulatory control period, Evoenergy proposes the application of the November 2009 Electricity Distribution STPIS guideline (STPIS guideline) for the following reasons:

- it provides a financial incentive to distributors to maintain and improve service performance; and
- it ensures that cost efficiencies encouraged under other incentive schemes are not at the expense of service quality for customers.

Evoenergy notes that, at the time of lodging the regulatory proposal, the STPIS guideline is under review by the AER with a draft amended STPIS published on 14 December 2017 but the amended version has not yet been finalised. As a result, Evoenergy's proposal has been developed with reference to the STPIS guideline that is currently in place. Evoenergy reserves the right to amend its STPIS proposal in its revised proposal.

10.4.1 Rule and scheme requirements

Clause S6.1.3(4) of the Rules requires that a regulatory proposal must contain a description of how the DNSP proposes the STPIS should apply for the relevant regulatory control period.

Modifications to default positions set out in the STPIS guideline can be proposed under Section 2.2 of the STPIS guideline, which requires that the DNSP must:

- include the reasons for and an explanation of the proposed variation;
- demonstrate how the proposed variation is consistent with the objectives in Section 1.5; and

⁵ AER, Electricity distribution network service providers—Service target performance incentive scheme, November 2009.

- if appropriate, include the calculations and/or methodology which differ to that provided for under this scheme.

The STPIS guideline allows Evoenergy to propose modifications to the revenue at risk (Sections 2.5(b) and 5.2(c)), performance targets (Sections 3.2.1(a) and 5.3.1(b)), the Value of Consumer Reliability (VCR) used to set incentive rates for the reliability of supply component (Section 3.2.2(d)), the parameter weighting used to set incentive rates for the reliability of supply component (Section 3.2.2(f)(2)), the incentive rates for the telephone answering parameter (Section 5.3.2(a)(2)) and the major event day boundary (Appendix D).

Section 10.4 of this attachment, along with Appendixes 10.1, 10.2 and 10.3 and Reset Regulatory Information Notice (RIN) template worksheets 6.1 and 6.2, satisfy the information requirements set out in section 19 of Schedule 1 of the Reset RIN.

Under the Rules, the AER has to make a constituent decision on how an STPIS will apply to a DNSP through the following process:

- publish a STPIS for DNSPs as per Clause 6.6.2 of the Rules;
- set out its proposed approach to applying the current version of the STPIS in the Framework and Approach paper as per Clause 6.8.1 (b)(2)(iii) of the Rules; and
- make a constituent decision in the distribution determination on how any applicable SPIS is to apply to the DNSP as per 6.12.1(9).

10.4.2 Summary of AER’s final position in Framework and Approach paper and Evoenergy’s proposal

In accordance with Section 1.3 (b)(1) of the STPIS guideline, on 31 July 2017 the AER published its final Framework and Approach paper that sets out the AER’s proposed approach to applying the STPIS to Evoenergy in the 2019–24 regulatory control period. Table 10.3 compares the AER position with Evoenergy’s proposal.

Table 10.3 Summary of the AER’s STPIS position and Evoenergy’s proposal

AER’s Framework and Approach position on STPIS	Evoenergy’s proposal
Revenue at risk within the range of $\pm 5\%$	Revenue at risk within the range of $\pm 2.5\%$
Supply reliability areas: urban and short rural	Accept. Update urban and short rural feeder classification for 2019–24.
Reliability measures:	
Unplanned SAIDI ⁶ – yes	Accept
Unplanned SAIFI ⁷ – yes	Accept
MAIFI ⁸ – no	Accept

⁶ SAIDI means System Average Interruption Duration Index.

⁷ SAIFI means System Average Interruption Frequency Index.

⁸ MAIFI means Momentary Average Interruption Frequency Index.

AER's Framework and Approach position on STPIS	Evoenergy's proposal
Customer service measures:	
Telephone answering - yes	Accept
Performance targets: based on 5 regulatory year historical average	Accept
Specific event exclusions from annual performance and performance targets	Accept
VCR used: AEMO's 2014 VCR	Accept
No AER's GLS scheme	Accept as Evoenergy is subject to the ACT GLS scheme.

10.4.3 Summary of Evoenergy's proposed application of STPIS

Evoenergy proposes:

- to only apply the service standards factor (S-factor) for improved (or diminished) service compared to service targets for reliability of supply and customer service;
- to maintain the revenue at risk within the range of 2.5 per cent instead of the 5 per cent proposed by the AER in its Framework & Approach paper;
- to update the feeder classification of its feeders for the purposes of calculating the reliability of supply targets for the 2019–24 regulatory control period; and
- that the STPIS GSL scheme should not apply as Evoenergy must comply with the ACT Jurisdictional GSLs contained within the ACT Consumer Protection Code, Schedule 1.⁹

In accordance with Section 2.2 of the STPIS guideline, the remainder of this section sets out the reasons for and explanation of the proposed variation, and demonstrates how the proposed variation is consistent with the objectives in Section 1.5 of the STPIS guideline.

10.4.4 Evoenergy's STPIS proposal for 2019–24

10.4.4.1 Revenue at risk

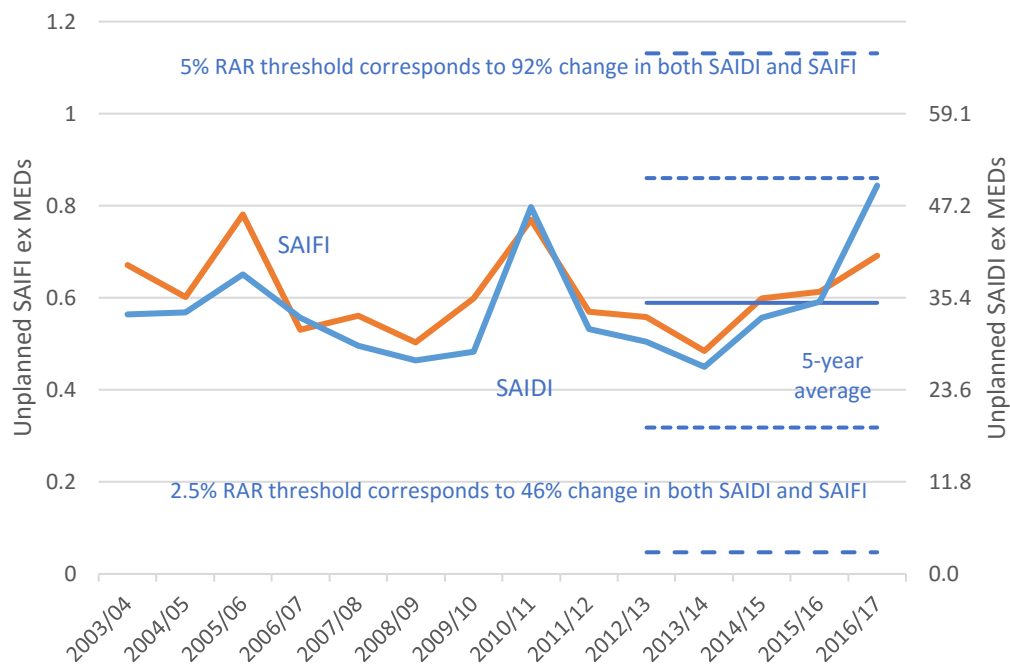
During the Framework and Approach consultation, the AER proposed a revenue at risk of ± 5 per cent (as indicated in the STPIS guideline). Evoenergy considers that the AER's proposal to be unreasonable considering the specific circumstances that Evoenergy faces. Consistent with the objectives of the STPIS, Evoenergy proposes that the revenue at-risk cap for each regulatory year in 2019–24 to be ± 2.5 percent as per the STPIS in place for 2015–19. Within this revenue at-risk cap, Evoenergy also proposes a cap on the revenue at risk of ± 0.5 per cent for the telephone answering parameter.

⁹ Utilities (Consumer Protection Code) Determination 2012, July 2012, pp. 34–36.

Evoenergy provides the following reasons for the proposed variation and explanations why it satisfies the STPIS objectives.

- The revenue at risk within the range of ± 2.5 per cent is consistent with the revenue at risk that the AER has approved for Evoenergy for the 2015–19 regulatory period. In its 2015 final determination, the AER surmised that this level of revenue at risk would meet the objectives of the scheme and the long-term interests of consumers.
- During the 2014–19 regulatory period, Evoenergy was provided with a materially lower level of opex allowance, with a 35.2 per cent reduction of the total opex allowance compared to Evoenergy’s revised proposal. This significant opex reduction has resulted in a significant restructuring of the network’s organisational structure and fewer maintenance crew, and has been correlated with worsening reliability performance since the beginning of the 2014–19 regulatory period. Evoenergy therefore considers a lower limit on revenue at risk is consistent with clause 1.5(b)(5) of the STPIS which relates to the incentives to reduce costs.
- Evoenergy’s historical annual performance with respect to unplanned interruptions excluding major event days (MEDs) shows that the variation in reliability does not justify increasing the revenue at-risk cap from 2.5 to 5 per cent. Figure 10.1 illustrates the annual variation in unplanned SAIFI and SAIDI (excluding MEDs) from 2003/04 to 2016/17. Dotted lines in the chart represent SAIDI and SAIFI levels corresponding to the 2.5 per cent and 5 per cent level of revenue at risk.

Figure 10.1 Historical annual performance on unplanned SAIDI and SAIFI ex MEDs



Note: SAIDI and SAIFI derived using definitions in the 2009 STPIS.

Data source: Evoenergy’s own calculations

Figure 10.1 shows that with a 2.5 per cent level of revenue at risk, a repeat of 2010/11 performance would see STPIS penalties close to the cap, but there is no historical year

in which rewards would come close to being capped. Evoenergy calculates that a 92 per cent increase or decrease in both SAIFI and SAIDI would be required to trigger the ± 5 per cent cap. Hence, with revenue at risk set at 5 per cent, it is very unlikely that any rewards or penalties would ever be capped. Evoenergy's electricity distribution network is currently the second ranked DNSP in Australia in terms of unplanned interruptions.¹⁰ Therefore, the scope for further reliability improvement is limited and subject to rapidly increasing marginal cost and technological constraints.

Table 10.4 shows the rewards and penalties that would be gained or incurred under repeats of various periods of historical performance.¹¹ It shows that the revenue at risk is unlikely to constrain any rewards or penalties if it is set at 2.5 per cent or more.

Table 10.4 Revenue impacts from repeats of historical performance

Performance (drawn from 2004–2016 actuals)	Average annual revenue impact (\$)	Average annual revenue impact (%)
Worst year	-2,247,680	-1.8
Worst two consecutive years	-1,121,727	-0.9
Worst three consecutive years	-698,418	-0.6
Best three consecutive years	849,163	0.7
Best year	1,412,289	1.2

Source: Evoenergy analysis

Evoenergy's consumer engagement program, undertaken in the context of the AER's 2019–24 price determination, has found that the majority of residential consumers surveyed are comfortable with continuing the current strategy of maintaining the level of reliability of supply provided by Evoenergy, compared to having a proactive approach to improving reliability by investing more in pole replacement.¹² Therefore, the current revenue at risk represents a more reasonable threshold consistent with consumer expectations.

10.4.4.2 Proposed reliability of supply and customer service components

Section 3.1 of the STPIS guideline defines three reliability of supply parameters that may be applied under the scheme: unplanned System Average Interruption Duration Index

¹⁰ AER Annual Benchmarking Report, November 2017, p. 62.

¹¹ Assumes targets are set equal to average performance over the past five years and the incentive rates used are as per the AER's 2015 final determination.

¹² See Attachment 2 (Consumer engagement), p. 10.

(SAIDI); unplanned System Average Interruption Frequency Index (SAIFI); and Momentary Average Interruption Frequency Index (MAIFI).

Unplanned SAIDI and SAIFI

Evoenergy supports the AER's approach in its Framework and Approach paper to apply unplanned SAIDI and unplanned SAIFI parameters under the reliability of supply component to Evoenergy's urban and rural feeders for the 2019–24 regulatory period.

In Appendix A of the STPIS guideline, unplanned SAIDI is defined as the sum of the duration of each unplanned sustained customer interruption (in minutes) divided by the total number of distribution customers. Unplanned SAIDI excludes momentary interruptions (one minute or less). Unplanned SAIFI would be defined as the total number of unplanned sustained customer interruptions divided by the total number of distribution customers. Unplanned SAIFI excludes momentary interruptions (one minute or less). SAIFI is expressed per 1 interruptions.

Evoenergy also supports the AER's position in its Framework and Approach paper to exclude MAIFI as a parameter within the S-factor.

Telephone answering

Section 5.1 of the STPIS guideline defines three customer service parameters that may be applied under the scheme, including telephone answering, streetlight repair, new connections and response to written enquiries.

Evoenergy supports the AER's approach in its Framework and Approach paper to apply the telephone answering parameter for the 2019–24 regulatory control period. This parameter is defined as the percentage of calls answered within 30 seconds, excluding excluded event and MEDs.

Exclusion Thresholds

The AER's proposed approach to calculating the exclusion or MEDs threshold is to apply the methodology in accordance with Appendix D of the STPIS guideline, which implies a uniform 2.5β threshold. That is, the MED thresholds are calculated at the end of each regulatory year for use during the next reporting period using the 2.5 beta method by recording the values of daily unplanned SAIDI over five sequential regulatory years ending on the last day of the last complete reporting period. Evoenergy currently applies a 2.5β threshold and is proposing this will also apply for the 2019–24 regulatory control period.

10.4.4.3 Supply reliability areas

Evoenergy supports the AER's proposal in its Framework and Approach paper to segment the network according to urban and short rural feeders. The feeder classification is based on the definition specified in Appendix A of the STPIS guideline. Urban feeder is a feeder which is not a CBD feeder with actual maximum demand per total feeder route length greater than 0.3 MVA/km. Short rural feeder is a feeder which is not a CBD or urban feeder with a total feeder route length less than 200 km. Evoenergy proposes to base and maintain the feeder classification on the ratio which existed in 2016/17, which is then used for the five-year average and as a basis for the proposed STPIS targets.

Historical reliability data segregated by network type provided to the AER so far is based on an urban and short rural feeder classification which existed at the start of the 2014–19 regulatory control period, which was used to determine the five-year average and as a

basis for the current reliability of supply targets. For the purpose of determining the reliability targets for 2019–24, Evoenergy examined the feeder maximum demand and route length based on 2016/17 RIN data provided to the AER. This results in 63 short rural feeders, which meet the definition of short rural feeders in Appendix A of the STPIS guideline, instead of the 19 feeders currently classified as short rural. As a result, Evoenergy proposes to use the latest feeder classification of the existing feeders prior to the final decision. The list of urban and rural feeders has been applied to outage data going back to 2012/13 to recalculate unplanned SAIDI and SAIFI by network type. It is important to know that the reclassification of feeders does not impact the whole-of-network recording and reporting of unplanned SAIDI and SAIFI in the Economic Benchmarking RIN responses. Appendix 10.3 provides a more detailed explanation regarding the impact of the proposed change in feeder classification on historical unplanned reliability data segregated by network type. For consistency, Evoenergy proposes that the new feeder classification only apply from the beginning of the 2019–24 regulatory control period.

10.4.4.4 Proposed targets

Reliability of supply targets

Evoenergy proposes that the reliability targets for unplanned SAIDI and unplanned SAIFI, for urban and short rural network segment, be calculated based on available data from the last five years. For the purpose of this submission, the targets reflect the five-year average performance over the period 2012/13 to 2016/17 which is shown in in Table 10.5. This corresponds to the AER’s preferred approach outlined in its Framework and Approach paper and as defined in the STPIS guideline. The reliability of supply and customer service targets are provided in Table 10.6 and Table 10.7.

Table 10.5 Historical reliability performance after removing excluded events and MEDs

Year ending 30 June	2013	2014	2015	2016	2017
Unplanned SAIDI					
Urban	27.3	25.1	37.2	35.8	40.3
Short rural	29.2	35.2	23.3	33.7	37.8
Network-wide	27.9	28.2	32.8	35.1	39.5
Unplanned SAIFI					
Urban	0.531	0.465	0.679	0.742	0.673
Short rural	0.713	0.602	0.442	0.531	0.726
Network-wide	0.588	0.508	0.605	0.676	0.690

Table 10.6 Proposed reliability of supply targets for the 2019–24 regulatory control period

Measure	2019–24
Unplanned SAIDI	
– Urban	33.1
– Short rural	31.8
Unplanned SAIFI	
– Urban	0.618
– Short rural	0.603

Customer service target

In relation to telephone answering performance, Evoenergy accepts the approach indicated by the AER in its Framework and Approach paper to ‘set performance targets based on the distributor’s average performance over the past five regulatory years’. This yields an annual telephone answering target of 78.87 per cent for each year of the 2019–24 regulatory control period, as shown in Table 10.7

Table 10.7 Historical telephone answering and proposed targets

	2012-13	2013-14	2014-15	2015-16	2016-17
Percentage of calls answered within 30 seconds	83.2	82.7	79.7	74.3	74.4
Item	Years		Target	Basis of preparation	
Evoenergy’s proposed telephone answering target	2019–24		78.87%	5-year average of 2012/13 to 2016/17 data	

Performance targets and reliability expenditure

Section 3.2.1 of the STPIS guideline also states that the performance targets must be modified for any reliability improvements completed or planned where the planned reliability improvements are:

- 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.

In section 5.10 of Attachment 5 (Capital expenditure) Evoenergy proposes spending a total of \$6.3 million during the 2019–24 regulatory control period on distribution substation monitoring devices in order to maintain the security and quality of supply of its network in the face of the impact of increasing penetration of micro-generators on excessive voltage, thermal overload of low voltage feeders and load balancing issues on distribution feeders.

Evoenergy clarifies that the impact of this proposed capex would not improve its reliability performance beyond the current historical level, but would prevent reliability from deteriorating further owing to the impact of distribution energy resources. As a result, Evoenergy does not anticipate the need to modify the proposed performance targets to account for the above capex forecast.

10.4.4.5 Incentive rates

Unplanned SAIDI and unplanned SAIFI

Evoenergy supports the use of incentive rates to determine the relative importance of measured performance consistent with the methodology outlined in the AER’s Framework and Approach paper. The incentive rates are calculated as per Section 3.2.2 of the STPIS guideline. The inputs used in these calculations are set out in Table 10.8.

The calculations set out in Sections 3.2.2(h) and (i) of the STPIS guideline require average annual energy consumption by feeder type. Evoenergy does not possess data on consumption by feeder type. In the absence of this data, Evoenergy has disaggregated the total forecast by feeder type on the assumption that average consumption per customer is constant across feeder types. Evoenergy’s proposed revised feeder classification (with 63 rural feeders) has been used in this calculation for consistency with future reporting.

Table 10.8 Specific inputs into the calculation of Evoenergy’s incentive rates

Item	Amount	
Average annual (smoothed) distribution revenue requirement (\$000, 2019/20)	163,359	
Average annual energy consumption: forecast for 2019/20 – 2023/24 (MWh)	2,920,643	
Feeder type	Urban	Short rural
VCR (\$2019-20/MWh)	\$43,920.06	\$43,920.06
Urban/short rural weighting	88.5%	11.5%
Average unplanned SAIDI target	33.1	31.8
Average unplanned SAIFI target	0.618	0.603

Evoenergy accepts the AER’s approach in its Framework and Approach paper to replace the VCR values in Section 3.2.2 (b) of the STPIS guideline with the AEMO NSW VCR¹³ of \$38.35 /kWh, with indexation to 2019/20 to calculate Evoenergy’s incentive rates for its urban and short rural feeder type. Table 10.9 presents Evoenergy’s calculated incentive rates to apply to its unplanned SAIDI and unplanned SAIFI targets.

Table 10.9 The proposed per cent incentive rates for Evoenergy’s reliability of supply targets

Year	Urban	Short rural
Unplanned SAIDI	0.065	0.0082
Unplanned SAIFI	3.57	0.472

Source: Submitted calculations in Appendix 10.2

The incentive rate for unplanned SAIDI is expressed as a percentage per unit of unplanned SAIDI (where unplanned SAIDI is measured as the difference in minutes from the target). Similarly, the incentive rate for unplanned SAIFI is expressed as a percentage per unit of unplanned SAIFI (where unplanned SAIFI is measured in 0.01 interruptions away from the target).

Telephone answering

Evoenergy proposes to use the AER’s incentive rate for the ‘telephone answering’ parameter of -0.040% per unit of the ‘telephone answering’ parameter. This is consistent with Section 5.3.2 of the STPIS.

10.5. DMIS and DMIA mechanism

10.5.1 Rule requirements

The Rules¹⁴ require the AER to develop and implement a Demand Management Incentive Scheme (DMIS) and a Demand Management Innovation Allowance (DMIA) mechanism.

On 14 November 2017, the AER released guidelines and explanatory statements on demand management incentives for DNSPs for the new DMIS and DMIA mechanism.¹⁵

¹³ AEMO VCR Application Guide, Final Report, December 2014, p. 5.

¹⁴ Clause 6.6.3(a) and clause 6.6.3A(a) of the Rules provide for the AER to develop a Demand Management Incentive Scheme and Demand Management Innovation Allowance mechanism consistent with the Demand Management Incentive Scheme objective and the Demand Management Innovation Allowance objective, respectively.

¹⁵ AER 2017, Demand management incentive scheme, November 2017; AER 2017, Explanatory Statement, Demand management incentive scheme, November 2017; AER 2017, Demand management innovation allowance mechanism, November 2017; AER 2017, Explanatory statement, Demand management innovation allowance mechanism, November 2017.

The AER developed these new demand management incentives following the 2015 Australian Energy Market Commission (AEMC) rule change.¹⁶

The Rules provide that a building block proposal must specify how any applicable DMIS or DMIA mechanism is to apply for a regulatory control period.¹⁷ Section 10.5.2 and section 10.5.3 form part of Evoenergy's regulatory proposal for the 2019–24 regulatory control period, and proposes how the DMIS and DMIA mechanism should apply to Evoenergy.¹⁸

10.5.2 Demand Management Incentive Scheme

The AER's final Framework and Approach paper for Evoenergy specified that the new DMIS will apply to Evoenergy in the 2019–24 regulatory control period.¹⁹ The Rules require the AER to make a constituent decision on how the DMIS is to apply to Evoenergy for the 2019–24 regulatory control period.²⁰ Further, Evoenergy is required by the Rules to include a description in its regulatory proposal of how the DMIS should apply in the 2019–24 regulatory control period.²¹

10.5.2.1 Evoenergy's proposal for the 2019–24 regulatory control period

Evoenergy supports in principle the arrangements proposed by the AER for the new DMIS. Evoenergy intends to participate in the DMIS in the 2019–24 regulatory control period, and will consider eligible projects over time as part of its network planning process. Evoenergy will determine whether a Regulatory Investment Test for Distribution (RIT-D)²² is appropriate or follow the minimum project evaluation requirements when identifying whether a project is applicable under the DMIS.

Evoenergy documents the outcomes of network planning, including non-network options for demand management, in its Annual Planning Report (APR).²³ The APR describes the annual planning process that involves determining credible options to meet identified needs in the network. The APR summarises projects proposed for implementation over the next five years, including the projects which may be subject to assessment through RIT-D.

As detailed in Attachment 1 (Asset management and governance), a key improvement in network planning regards the consideration of non-network options in the NPV analysis for augmentation. The option analysis considers rigorously alternative solutions to

¹⁶ AEMC 2015, National Electricity Amendment (Demand management incentive scheme) Rule 2015 No. 8.

¹⁷ Rules, clause 6.3.2(a)(3).

¹⁸ Clause 2.1(1)(b) of the DMIS; clause 2.1(1)(b)(i) of the DMIA mechanism.

¹⁹ AER 2017, Framework and approach: ActewAGL electricity distribution 2019–24, July 2017, p. 62.

²⁰ Rules, clause 6.12.1(9).

²¹ Rules, clause S6.1.3(5).

²² Where the cost of the most costly credible option exceeds \$5 million, the project is subject to the RIT-D in accordance with the Rules (clause 5.17).

²³ A summary of proposed supply projects over the next five years is publicly available in Evoenergy's APR which is prepared in accordance with clauses 5.12.2 and 5.13.2 of the Rules. The APR is published annually. ActewAGL 2017, Annual Planning Report, p. 96.

address supply requirements including the do-nothing option and non-network option as appropriate.²⁴

Evoenergy's planning approach selects the most efficient (or least cost) solution that can deliver the required outcome, irrespective of whether that solution is a network or non-network option. Evoenergy uses the CutlerMerz Augex Uncertainty Risk Appraisal (AURA) model to assess both non-network demand management and network options. The AURA model provides a tool for considering demand-side options alongside network solutions based on probabilistic demand forecasts.²⁵

For example, Evoenergy anticipates that deferring a major investment in the Strathnairn Zone Substation project in the 2019–24 period may be achieved by implementing a demand management solution in combination with a minor augmentation of capacity.²⁶ The proposed solution is discussed further in Attachment 5 (Capital expenditure) and Attachment 6 (Operating expenditure).

10.5.3 Demand Management Innovation Allowance mechanism

The AER's final Framework and Approach for the ACT specified that the new DMIA mechanism will apply to Evoenergy in the 2019–24 regulatory control period.²⁷ The Rules require the AER to make a constituent decision on how the DMIA mechanism is to apply to Evoenergy for the 2019–24 regulatory control period.²⁸ Further, Evoenergy is required by the Rules to include a description in its regulatory proposal of how the DMIA mechanism should apply in the 2019–24 regulatory control period.²⁹

10.5.3.1 Evoenergy's proposal for the 2019–24 regulatory control period

Evoenergy intends to continue to participate in the DMIA mechanism, and will consider eligible projects during the 2019–24 regulatory control period. Evoenergy supports in principle the arrangements proposed by the AER for the new DMIA mechanism in accordance with the Rules.³⁰

Evoenergy notes the DMIA mechanism provides an annual, ex-ante allowance in each regulatory year of the regulatory control period. Further, the AER approves the profile of expenditure under the DMIA mechanism for the regulatory control period.

The DMIA mechanism provides annual funding equivalent to \$200,000 (in 2016/17 dollars) + 0.075% of the unsmoothed annual revenue requirement, excluding annual adjustments for changes in the cost of debt and other factors. Evoenergy's provisional calculation of annual funding under the DMIA mechanism results in five instalments of \$307,978 (real, \$2018/19) over the 2019–24 regulatory control period.

Table 10.10 provides the provisional calculation of funding for Evoenergy under the DMIA mechanism over the 2019–24 regulatory control period.

²⁴ Non-network solutions include demand management options which are considered as part of each proposal.

²⁵ Appendix 5.3 Cutler Merz – AURA Model Methodology.

²⁶ Appendix 6.2 Strathnairn demand management opex/capex trade-off step change.

²⁷ AER 2017, Framework and approach: ActewAGL electricity distribution 2019–24, July 2017, p. 62.

²⁸ Rules, clause 6.12.1(9).

²⁹ Rules, clause S6.1.3(5).

³⁰ Rules, clause 6.6.3A.

Table 10.10 Evoenergy’s provisional calculation of the allowance under the DMIA mechanism

\$ million (2018/19)	2019/20	2020/21	2021/22	2022/23	2023/24
DMIA	0.31	0.31	0.31	0.31	0.31

Evoenergy is supportive of the AER’s up-front consideration of whether a project is likely to comply with the DMIA mechanism. Indicative consideration of the eligibility of R&D projects supports project development, and provides further assurance to other stakeholders about the scope of demand management activities of the business. Evoenergy is conducting trials of demand management techniques to increase its understanding of the effectiveness and emerging demand management options.

Attachment 1 (Asset management and governance) discusses the existing R&D activities for demand management that Evoenergy is undertaking.

Shortened forms

Term	Meaning
AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
APR	Annual Planning Report
AURA	Augex Uncertainty Risk Appraisal
capex	capital expenditure
CBD	central business district
CESS	Capital Expenditure Sharing Scheme
DMIA	Demand Management Innovation Allowance
DMIS	Demand Management Incentive Scheme
DNSPs	Distribution Network Service Providers
EBSS	Efficiency Benefit Sharing Scheme
GSL	Guaranteed Service Level
MAIFI	Momentary Average Interruption Frequency Index
MEDs	major event days
MWh	megawatt hour
opex	operating expenditure
R&D	research and development
RAB	regulatory asset base
RIN	Regulatory Information Notice
RIT-D	Regulatory Investment Test for Distribution
Rules	National Electricity Rules
SAIDI	System Average Interruption Duration Index
SAIFI	System Average Interruption Frequency Index
STPIS	Service Target Performance Incentive Scheme
Tribunal	Australian Competition Tribunal
VCR	Value of Consumer Reliability