Draft Decision

SA Power Networks Electricity Distribution Determination 2025 to 2030

(1 July 2025 to 30 June 2030)

Attachment 10
Service target performance incentive scheme

September 2024

AUSTRALIAN ENERGY REGULATOR

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10 Service target performance incentive scheme

The National Electricity Rules (NER) set out that our regulatory determination must specify how any applicable service target performance incentive scheme (STPIS) is to apply to a distribution network service provider (DNSP) in the 2025–30 regulatory control period (period).[1]

This attachment sets out our draft decision on how we will apply the STPIS to SA Power Networks for the 2025–30 period.

AER's service target performance incentive scheme

Our distribution STPIS provides DNSPs with incentives to maintain and improve network reliability performance, to the extent that consumers are willing to pay for such improvements. The STPIS is also intended to ensure that DNSPs' service levels do not reduce as a result of efforts to achieve efficiency gains.

The current version (version 2.0) of our STPIS was published in November 2018 and will apply to all revenue determinations from that date.[2]

Framework and approach to the application of STPIS

Our July 2023 Framework and Approach (F&A)[3] stated that we will apply version 2.0 of the STPIS to SA Power Networks in the 2025–30 period, noting that:

- the guaranteed service level (GSL) component of the STPIS will not apply if SA Power Networks remains subject to a jurisdictional GSL scheme[4]
- the customer service (telephone answering) component of STPIS will not apply if SA Power Networks proposes, and we accept, a CSIS for the 2025-30 period.

We also proposed to apply the default revenue at risk of ±5%. Our reasoning is set out in our F&A.[5]

10.1 Draft decision

Our draft decision is to apply STPIS version 2.0 to SA Power Networks in the 2025–30 period. Specifically, we will continue with the following arrangements:

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1 NER, clauses 6.3.2 and 6.12.1(9).

2 AER, *Electricity distribution network service providers— Service target performance incentive scheme Version 2.0*, November 2018. (AER, STPIS Version 2.0, November 2018).

3 AER, *Framework and Approach Paper SA Power Networks Regulatory control period commencing 1 July 2025*, July 2023, p. 20–21.

4 The STPIS GSL scheme does not currently apply in South Australia as a jurisdictional GSL payment scheme is in place (Essential Services Commission of South Australia, Electricity Distribution Code, January 2018, section 2.3).

5 AER, *Framework and Approach Paper SA Power Networks Regulatory control period commencing 1 July 2025*, July 2023, p. 20–21.

- set revenue at risk at ±5% of the annual forecast revenue
- segment the network according to the Central Business District (CBD), urban, short rural and long rural supply reliability categories
- apply the system average interruption duration index or SAIDI, system average interruption frequency index or SAIFI and customer service (telephone answering) parameters
- set performance targets based on SA Power Networks' average performance
- apply the method in the STPIS for excluding specific events from the calculation of annual performance and performance targets
- apply the 2019 values of customer reliability (VCR) adjusted to June 2024 CPI values to set incentive rates for SAIDI and SAIFI[6]
- the GSL component of the STPIS will not apply to SA Power Networks as it remains subject to a jurisdictional GSL scheme.[7]

SA Power Networks is required to submit the 2023–24 STPIS actual performance data in its revised revenue proposal for the STPIS targets and incentive rates to be approved in our final decision.

We have considered SA Power Networks' revenue proposal, submissions raised by stakeholders and our F&A in reaching our draft decision. Our response to the matters raised by SA Power Networks and stakeholders about the application of the STPIS are discussed below.

Table 10-1 and Table 10-2 present our draft decision on the applicable performance targets and incentive rates that will apply to SA Power Networks for the 2025–30 period.

Table 10-1 Draft decision: SA Power Networks' STPIS reliability targets for 2025–30 period[8]

	CBD	Urban	Short rural	Long rural	Telephone answering
SAIDI (minutes)[9]	20.4484	95.6469	160.6376	271.9916	N/A

6 For the final decision, we will apply the December 2024 values of customer reliability calculated in accordance with the 2024 VCR methodology (AER, *Values of customer reliability, Statement of methodology,* August 2024).

7 The STPIS GSL scheme does not currently apply in South Australia as a jurisdictional GSL payment scheme is in place (Essential Services Commission of South Australia, *Electricity Distribution Code*, January 2018, section 2.3).

8 As SA Power Networks' 2023-24 performance data is not yet available, we have calculated targets for this draft decision using historical data for 4 years (2019-20 to 2022-23). For the final decision we will calculate targets using 5 years of data, including 2023-24 performance data.

9 System Average Interruption Duration Index (SAIDI).

SAIFI (interruptions)[10]	0.1858	0.8673	1.0912	1.3499	N/A
Customer service (%)	N/A	N/A	N/A	N/A	88.01%

Source: AER analysis

Table 10-2 Draft decision: SA Power Networks' STPIS incentive rates for 2025–30 period

	CBD	Urban	Short rural	Long rural	Telephone answering
ir - SAIDI	0.0044	0.0503	0.0100	0.0094	N/A
ir - SAIFI	0.3233	3.6950	0.9790	1.2677	N/A
ir – Customer service	N/A	N/A	N/A	N/A	-0.0400

Source: AER analysis
Note: ir is the incentive rate (expressed in a percentage per unit of the parameter).

10.2 SA Power Networks' revenue proposal

SA Power Networks' revenue proposal accepted our F&A position to apply version 2.0 of the STPIS in the 2025–30 period, but with several clarifications:[11]

- Network segmentation: SA Power Networks proposes to segment the market into CBD, urban, short rural and long rural (as per the scheme), but notes that ESCOSA's CBD boundary expansion caused a re-classification of some urban feeders to CBD feeders for 2019–20.
- Performance targets: SA Power Networks proposed performance targets based on its average performance over the past 5 regulatory years (as per the scheme), but with several adjustments (as discussed below).

SA Power Networks also proposed to continue with the current arrangements for the STPIS in relation to reliability of supply parameters.

However, in a departure from current arrangements, SA Power Networks also proposed to replace the customer service (telephone answering) component of the STPIS that applies in the 2020-25 regulatory control period with the Customer service incentive scheme (CSIS). On this basis SA Power Networks sought to split the revenue at risk ±4.5% for STPIS (reliability component only) and ±0.5% for the proposed CSIS. This is explained in more detail below in section 10.4.3 of this attachment.

10 System Average Interruption Frequency Index (SAIFI).

11 SA Power Networks, *2025–30 Regulatory Proposal, Attachment 10 - Service Target Performance Incentive Scheme*, January 2024, p.9–10.

SA Power Networks' revenue proposal accepted, without clarification, our F&A position[12] on how STPIS will apply to calculate its incentive rates and major event days (MED), and the decision to not apply the guaranteed service level component.[13]

10.3 Assessment approach

We are required to decide how the STPIS is to apply to SA Power Networks.[14] 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.[15]

10.3.1 Interrelationships

We must consider any other incentives available to the DNSP under the NER or relevant distribution determination in implementing the STPIS.[16] One of the objectives of the STPIS is to ensure that the incentives are sufficient to offset any financial incentives the DNSP may have to reduce costs at the expense of service levels.[17] For the 2025–30 period, the STPIS will interact with the capital expenditure sharing scheme (CESS) and the operating expenditure (opex) efficiency benefit sharing scheme (EBSS).

The reward and penalty mechanism under the STPIS (the incentive rates) are determined based on the average customer value for the improvement, or otherwise, to supply reliability (the VCR). This is aimed at ensuring that the DNSP'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 of supply outcomes.

The STPIS provides an incentive for DNSPs to invest in further reliability improvements (via additional STPIS rewards) where customers are willing to pay for it. Conversely, the STPIS penalises DNSPs where they let reliability deteriorate. Importantly, the DNSP 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, and
- any reduction in capex and opex are achieved efficiently, rather than at the expense of service levels to customers.

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12 AER, *Framework and Approach Paper SA Power Networks Regulatory control period commencing 1 July 2025*, July 2023, p. 20–21.

13 SA Power Networks, *2025–30 Regulatory Proposal, Attachment 10 - Service Target Performance Incentive Scheme*, January 2024, p.9–10.

14 NER, clause 6.12.1(9).

15 AER, *STPIS Version 2.0*, November 2018, cl. 2.1(d).

16 NER, clause 6.6.2(b)(3)(iv).

17 NER, clause 6.6.2(b)(3)(v).

10.4 Reasons for draft decision

The following section sets out our detailed consideration on applying the STPIS to SA Power Networks for the 2025–30 period.

10.4.1 Revenue at risk

Revenue at risk caps the potential reward and penalty for SA Power Networks under the STPIS. We consider that an incentive of ±5.0% of the annual forecast revenue is appropriate for SA Power Networks. Detailed reasoning is set out in our F&A.[18]

10.4.2 Reliability of supply component

Applicable components and parameters

We will apply the unplanned SAIDI and unplanned SAIFI parameters under the reliability of supply component to SA Power Networks' feeder segments for the 2025–30 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.[19]

Exclusions

The STPIS allows certain events to be excluded from the calculation of the s-factor revenue adjustment. These exclusions include the events specified in the STPIS, 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 SA Power Networks' underlying STPIS performance.

We accept SA Power Networks' proposal to calculate the major event day threshold using the 2.5 beta method in accordance with our F&A and scheme.[20]

Performance targets

Clause 3.2.1(a) of version 2.0 of the STPIS specifies that the performance targets to apply during the regulatory control period must not deteriorate across regulatory years and must be based on the average performance over the past 5 regulatory years, modified by the following:

- exclusions under the scheme[21]
- any reliability improvements completed or planned where the planned reliability improvements are[22]:

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18 AER, *Framework and Approach Paper SA Power Networks Regulatory control period commencing 1 July 2025*, July 2023, p. 20–21.

19 Sustained interruption means supply interruption longer than 3 minutes. Momentary interruptions are those supply interruptions lasting less than 3 minutes.

20 SA Power Networks, *2025–30 Regulatory Proposal, Attachment 10 - Service Target Performance Incentive Scheme*, January 2024, p.9–10.

21 STPIS Version 2.0 clause 3.2.1(a)(1).

22 STPIS Version 2.0 clause 3.2.1(a)(1A).

  - included in the expenditure program proposed by the network service provider, or
  - proposed by the DNSP, and the cost of the improvements is allowed by the relevant regulator, in the DNSP's previous regulatory proposal or regulatory submission, and
  - expected to result in a material improvement in supply reliability.
- an adjustment to correct for revenue at risk[23]
- any other factors that are expected to materially affect network reliability performance.[24]

Performance target adjustments proposed by SA Power Networks

SA Power Networks proposed adjustments to its reliability performance targets for the following reasons:

- the outcome of the 2019–20 performance exceeded the revenue at risk cap of 5%
- proposed expenditure in the 2025–30 period to address feeders and regions experiencing poor reliability
- a change in the definition of momentary interruption from greater than 1 minute to greater than 3 minutes from 1 July 2020
- the expiry of a long-standing derogation that exempted it from notifying customers of an interruption where the duration is not more than 15 minutes
- 2 fewer major event days during the 2025–30 regulatory period due to proposed reliability improvements.

As discussed above, clause 3.2.1(a) of STPIS version 2.0 sets out the circumstances under which modifications can be made to performance targets.

In accordance with the scheme, our draft decision is to set SA Power Networks' performance targets based on average performance over the past 5 regulatory years with modification for:

- reward or penalty exceeding revenue at risk
- the change in the definition of momentary interruption from greater than 1 minute to greater than 3 minutes from 1 July 2020
- reliability improvement projects expenditure.

Please see the AER's STPIS model accompanying this draft decision for the adjusted figures.[25]

In accordance with the scheme, we have not adjusted performance targets for:

- the expiry of a derogation that exempted SA Power Networks from notifying customers of an interruption where the duration is not more than 15 minutes
- the potential for two fewer major event days.

23 STPIS Version 2.0 clause 3.2.1(a)(1B).

24 STPIS Version 2.0 clause 3.2.1(a)(2).

25 AER, *Draft Decision- SAPN 2025-40 - Distribution revenue proposal - STPIS Model*, September 2024.

Our reasoning is provided below.

Past STPIS reward/penalty is capped by revenue at risk limit of the previous distribution determination

Clause 3.2.1(a)(1B) of the STPIS requires that where the past performance of a distributor exceeded its revenue at risk thresholds, its performance targets must be adjusted accordingly. This will ensure a balanced outcome for both the distributor and its customers.

SA Power Networks' performance for 2019–20 exceeded its revenue at risk reward cap of 5% (comprised of 4.5% for reliability component and 0.5% for the customer service component).

Therefore, our draft decision is to increase SA Power Networks' STPIS reliability targets in 2025–30 to account for reliability performance exceeding the reward cap in the 2019–20 regulatory year.[26]

Target adjustments for reliability improvement projects

Clause 3.2.1(a)(1A) of the STPIS requires that the performance targets to apply for the period must be modified by any completed or planned reliability improvements where the planned reliability improvements are:

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

The projects proposed by SA Power Networks are as follows:

- low reliability feeder reliability improvement
- specific regional reliability improvement projects
- rural long restoration of supply performance improvement
- resilience mobile generators
- CBD reliability improvement.

Our draft decision (set out in Attachment 5 – Capital Expenditure) is to accept expenditure associated with all of the above projects with the exception of the CBD reliability project. We have reviewed SA Power Networks' economic analysis and STPIS adjustments methodology[27] and are satisfied that these proposed projects are expected to result in a material improvement in supply reliability.[28] Consequently, we have adjusted SA Power Networks' reliability targets in accordance with the scheme for the reliability impact of the expenditure projects.

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26 In accordance with the method outlined in STPIS Version 2.0 Appendix F.

27 SAPN - Mobile Generators Minutes STPIS – Public; SAPN - STPIS to CBA cross check – Public; SA Power Networks, *10.1 - STPIS reliability target calculations*, January 2024.

28 SA Power Networks, *10.1 - STPIS reliability target calculations*, January 2024.

Other factors materially expected to affect network reliability performance

Clause 3.2.1(a)(2) of the STPIS requires that the performance targets to apply during the period be modified by other factors that are expected to materially affect network reliability performance.

SA Power Networks proposed performance target adjustments under this clause for the following reasons.

Adjustment to performance target for 2018 change in definition of momentary interruption

SA Power Networks has proposed performance target adjustments to account for a change in the definition of momentary interruption. In November 2018 we published STPIS 2.0 with several major amendments, including changing the definition of momentary interruption from an interruption where the duration does not exceed one minute to an interruption not exceeding 3 minutes.

In our 2018 Explanatory Statement on the amendment to the STPIS we said:

> We confirm our decision to move to a 3-minute threshold for the definition of a momentary interruption. To ensure that consistent data are used, we require distributors to remove data on interruptions of less than 3 minutes from their historical data sets.[29]

Version 2.0 of the STPIS was first applied to SA Power Networks from 1 July 2020, the beginning of its 2020–25 period.

Both SAIFI and SAIDI exclude momentary interruptions. Therefore, when applying STPIS version 2.0 in the 2025–30 period, historical data for 2019–20 (under STPIS 1.2[30]) must be adjusted to exclude interruptions of more than 1 minute and no more than 3 minutes. Consequently, we have adjusted SA Power Networks' reliability targets for the transition of data between version 1.2 and 2.0 of the STPIS.

This is consistent with the approach we took for SA Power Networks for its 2020–25 period.[31]

No adjustment to performance target for expiry of derogation which exempted SA Power Networks from notifying customers of an interruption where the duration is not more than 15 minutes

SA Power Networks has proposed performance target adjustments to account for the expiry on 30 June 2025 of a derogation from the National Electricity Retail Rules (NERR).[32] Upon the expiry of this long-standing derogation (in effect since 2013), SA Power Networks will be

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29 AER, *Explanatory statement, Final decision, Amendment to the Service Target Performance Incentive Scheme (STPIS)*, *Establishing a new Distribution Reliability Measures Guideline (DRMG)*, November 2018, p.17.

30 AER, *STPIS Version 1.2*, 2009.

31 AER, *Final Decision, SA Power Networks Distribution Determination, 2020 to 2025, Attachment 10, Service target performance incentive scheme*, June 2020.

32 SA Power Networks, *2025–30 Regulatory Proposal, Attachment 10 - Service Target Performance Incentive Scheme*, January 2024, p21.

required to provide 4 business days of notification of a planned interruption where the outage duration is no more than 15 minutes.[33]

Prior to the NERR change taking effect on 1 February 2013, SA Power Networks was not required to notify customers of a planned interruption of under 15 minutes. According to its proposal, SA Power Networks principally relies on the derogation to perform urgent repairs on an asset where the interruption required is likely to be under 15 minutes. However, according to SA Power Networks, if the asset fails prior to the fault being repaired, the resulting unplanned outage typically lasts longer than 100 minutes.

If the repair is assessed as relatively minor in nature and can be undertaken with an outage of under 15 minutes, eligible customers are notified via digital messaging (90% of customers are registered) but are not provided with 4 business days' notice.[34] This is allowed under the derogation .

SA Power Networks proposes to retain this practice following the expiry of the derogation, as it considers there is a benefit to customers of continuing to undertake these repairs as an unplanned interruption.

As its reliability performance will be affected if it continues with this practice, SA Power Networks proposes to adjust its STPIS targets to reflect a decline in reliability in the next regulatory period.

We considered the possibility of the derogation being revoked in the 2020-25–period in our Final Decision, where we said:

> Further, even if the current derogation is to be revoked, we consider that SA Power Networks should be providing the necessary planned outage notices to its customers as required by the energy rules, rather than treating the outages as unplanned outages.[35]

Our draft decision is consistent with this position. Therefore, we have not included any adjustment to performance targets to account for the expiry of the derogation.

No target adjustment for fewer Major Event Days

SA Power Networks has modelled the effect of implementing the reliability improvement projects. According to its modelling, as a result of the combined effect of the proposed improvement projects, 2 days that were previously classified as major event days (MED) would no longer qualify to be.[36] On this basis it has proposed an adjustment to its performance target.

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33 NERL (Local provision) Regulations 2013, Section 14(b).

34 SA Power Networks, *2025–30 Regulatory Proposal, Attachment 10 - Service Target Performance Incentive Scheme*, January 2024, p21.

35 AER, *Final Decision, SA Power Networks Distribution Determination, 2020 to 2025, Attachment 10, Service target performance incentive scheme*, June 2020, p.9.

36 SA Power Networks, *2025–30 Regulatory Proposal, Attachment 10 - Service Target Performance Incentive Scheme*, January 2024, p.19-20.

Performance targets are set in determinations based on a 5-year history of outcomes. When we compare outcomes to the targets, some outages are excluded from the STPIS. Outages may be excluded if they meet the threshold of a MED. The MED threshold is set based on a statistical measure. It is updated every year using a 5-year rolling average. If an event exceeds the MED threshold its impact on the performance measures and reward or penalty is excluded.

MEDs are typically associated with adverse weather events that are outside the control of the DNSP. That is why they are excluded from our calculation of the performance measure and reward or penalty. However, longer term future adverse weather events are not predictable, and therefore it is not possible to accurately forecast the number of MEDs.

As the MED threshold is calculated using actual historical performance data, not predictive modelling, our draft decision is to not allow a performance target adjustment for potentially fewer MEDs associated with implementing reliability improvement projects. Importantly, the self-correcting nature of the STPIS will balance out any reliability improvement gains resulting from the capital expenditure in subsequent periods.

Submissions

Stakeholder submissions reflected that service reliability is an area of importance to SA Power Networks' customers, as several submissions expressed support for SA Power Networks' various reliability programs.

10.4.3 Customer service component

SA Power Networks originally proposed to apply a CSIS. However, it identified a data reliability issue with its proposed first parameter, and has not yet submitted a complete revised proposal. We have therefore decided not to approve SA Power Networks' CSIS and our draft decision applies the customer service component (telephone answering) parameter of the STPIS instead. For more information, see Attachment 12 – Customer Service Incentive Scheme.

The STPIS telephone answering target and incentive rate applicable to SA Power Networks in the 2025–30 period is at Table 10-1.

10.4.4 Incentive rates

The incentive rates applicable to SA Power Networks for the reliability of supply performance parameters of the STPIS were calculated in accordance with clause 3.2.2 of version 2.0 of the STPIS. We used the formulae provided as Appendix B of version 2.0 of the STPIS and escalated the values to the June 2024 CPI value.[37]

Our draft decision incentive rates for SA Power Networks for the 2025-30 period are presented in Table 10-2.

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[37] AER, *STPIS Version 2.0*, November 2018; AER, *Values of Customer Reliability, Final report on VCR values*, December 2019, p.17 and 71.

10.4.5 Value of customer reliability to calculate the incentive rates

Our F&A stated that we will apply version 2.0 of the STPIS in the 2025–30 period. Consistent with this our draft decision is to apply the 2019 VCR (escalated to the June 2024 CPI value) to the distribution determination in calculating SA Power Networks' incentive rates.

The VCR for network segments outlined in Table 10-3 were applied to calculate SA Power Networks' incentives rates for the 2025–30 period.

Table 10-3 Value of customer reliability ($/MWh)

	CBD	Urban	Short rural	Long rural
VCR	53,827	52,268	52,268	52,268

Source: AER, *Values of Customer Reliability, Final report on VCR values*, December 2019, p.17 and 71.[38] For the final decision, we will apply the December 2024 values of customer reliability calculated in accordance with the 2024 VCR methodology (AER, *Values of customer reliability, Statement of methodology*, August 2024).

38 AER, *Values of Customer Reliability, Final report on VCR values*, December 2019, p.17 and 71.

Shortened forms

Term	Definition
AER	Australian Energy Regulator
capex	capital expenditure
CBD	central business district
CESS	Capital expenditure sharing scheme
CPI	consumer price index
distributor	distribution network service provider
EBSS	Efficiency benefit sharing scheme
F&A	Framework and approach
GSL	guaranteed service level
ir	incentive rate
MED	major event day
NER	National Electricity Rules
opex	operating expenditure
SAIDI	system average interruption duration index
SAIFI	system average interruption frequency index
SAPN	SA Power Networks
STPIS	Service target performance incentive scheme
VCR	Values of customer reliability