# Attachment 10 - Service Target Performance Incentive Scheme

**2025–30 Regulatory Proposal**

January 2024

SA Power Networks

Empowering South Australia

## Company information

SA Power Networks is the registered Distribution Network Service Provider for South Australia. For information about SA Power Networks visit sapowernetworks.com.au

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## Disclaimer

This document forms part of SA Power Networks' Regulatory Proposal to the Australian Energy Regulator for the 1 July 2025 to 30 June 2030 regulatory control period. The Proposal and its attachments were prepared solely for the current regulatory process and are current as at the time of lodgement.

This document contains certain predictions, estimates and statements that reflect various assumptions concerning, amongst other things, economic growth and load growth forecasts. The Proposal includes documents and data that are part of SA Power Networks' normal business processes and are therefore subject to ongoing change and development.

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# Note

This attachment forms part of our Proposal for the 2025–30 Regulatory Control Period. It should be read in conjunction with the other parts of the Proposal.

Our Proposal comprises the overview and attachments listed below, and the supporting documents that are listed in Attachment 20:

| Document | Description |
|---|---|
| | Regulatory Proposal overview |
| Attachment 0 | Customer and stakeholder engagement program |
| Attachment 1 | Annual revenue requirement and control mechanism |
| Attachment 2 | Regulatory Asset Base |
| Attachment 3 | Rate of Return |
| Attachment 4 | Regulatory Depreciation |
| Attachment 5 | Capital expenditure |
| Attachment 6 | Operating expenditure |
| Attachment 7 | Corporate income tax |
| Attachment 8 | Efficiency Benefit Sharing Scheme |
| Attachment 9 | Capital Expenditure Sharing Scheme |
| **Attachment 10** | **Service Target Performance Incentive Scheme** |
| Attachment 11 | Customer Service Incentive Scheme |
| Attachment 12 | Demand management incentives and allowance |
| Attachment 13 | Classification of services |
| Attachment 14 | Pass through events |
| Attachment 15 | Alternative Control Services |
| Attachment 16 | Negotiated services framework and criteria |
| Attachment 17 | Connection Policy |
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| Attachment 19 | Legacy Metering |
| Attachment 20 | List of Proposal documentation |

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# 1 Overview

This Attachment explains:

- the importance of the service target performance incentive scheme (or **STPIS**);
- the component of the STPIS that will apply to SA Power Networks for the 2025–30 regulatory control period (**RCP**);
- how we have maintained or improved our service performance for the benefit of customers since the adoption of the STPIS on 1 July 2010;
- the methodology used to amend the STPIS targets for the 2025–30 regulatory control period;
- the adjustments we have made to historic reliability performance to exclude 'momentary interruptions'; and
- the adjustments required for the expiry of the long-standing exemption from notifying customers for a planned interruption not exceeding 15 minutes.

The STPIS is designed to provide a financial incentive for Distribution Network Service Providers (**DNSPs**) (like SA Power Networks) to maintain and improve their service performance. It provides a counterbalance to the Efficiency Benefit Sharing Scheme (**EBSS**) and Capital Expenditure Sharing Scheme (**CESS**) that otherwise reward DNSPs for lowering expenditure. The STPIS ensures that rewards under these expenditure incentive schemes are not achieved at the expense of lowering service quality for customers. Unlike the EBSS and CESS, STPIS-based financial rewards (or penalties) over an RCP are added to (or subtracted from) the DNSPs' annual revenue requirement within the same RCP.

The STPIS has three components[1]:

1. reliability of supply component;
2. customer service component; and
3. guaranteed service level component.

SA Power Networks is proposing to only apply the Reliability of supply component of Version 2.0 of the STPIS[2] for the 2025–30 RCP. We propose to replace the Customer service (telephone answering) component of the STPIS which applied during the 2020–25 RCP with a customer service incentive design consistent with the Australian Energy Regulator's (**AER**'s) Customer Service Incentive Scheme (**CSIS**)[3]. Refer **Attachment 11 – Customer Service Incentive Scheme** for more details. The Guaranteed service level (**GSL**) component of the STPIS is not applicable, as there is an applicable jurisdictional GSL scheme.

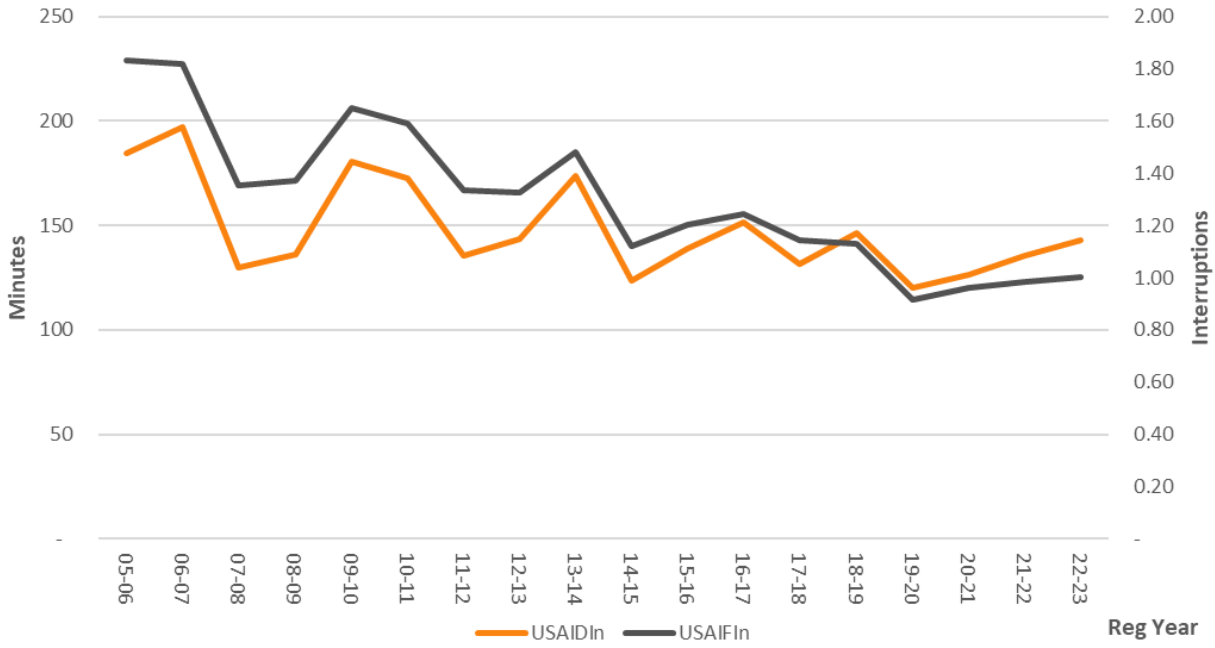
Figure 1 highlights the improvement in reliability and the associated benefits SA Power Networks' customers have received on average from application of the STPIS. Also, it highlights that the reliability performance has declined marginally since the commencement of the 2020–25 RCP, despite a doubling of reliability expenditure.

1 There is a fourth STPIS component which is the Quality of supply component which has no current measures, so does not apply.

2 AER, *Electricity distribution network service providers—Service target performance incentive scheme, version 2.0* – November 2018.

3 AER, *Customer Service Incentive Scheme*, July 2020.

**Figure 1: Distribution system reliability of supply excluding Major Event Days (MEDs)**




For the 2025–30 RCP, SA Power Networks proposes to apply the Reliability of supply component of version 2 of the STPIS published by the AER in November 2018 as:

- it provides a financial incentive for SA Power Networks to maintain and improve reliability service performance during the 2025–30 RCP; and
- it ensures that cost efficiencies encouraged under other expenditure incentive schemes are not realised at the expense of service reliability outcomes for customers.

**Supporting document 10.1 - STPIS Reliability Target Calculations - Model** provides detail calculations of the adjustments to the proposed 2025–30 STPIS reliability targets contained in this Attachment.

# 2 Rule requirements

The National Electricity Rules (**NER**) set out three relevant requirements in relation to the STPIS. They are:

- the building block proposal must contain a description of how the DNSP proposes any STPIS specified in the Framework and Approach (**F&A**) paper should apply for the 2025–30 RCP[4];
- the building blocks used to calculate the annual revenue requirement for each regulatory year of the 2025–30 RCP must include (amongst other things) any revenue increments or decrements for the regulatory year arising from the application of the STPIS[5]; and
- the building block determination must specify how any applicable STPIS is to apply to a DNSP in the 2025–30 RCP[6].

For the STPIS to apply to SA Power Networks in the 2025–30 RCP, it must be developed and implemented in accordance with clause 6.6.2 of the NER. In developing and implementing the STPIS, the AER must:

- consult with the authority responsible for the administration of relevant jurisdictional electricity legislation (ie the Essential Services Commission of South Australia (**ESCoSA**));
- ensure that service standards and service targets (including GSLs) set by STPIS do not put at risk the DNSP's ability to comply with relevant service standards and service targets (including GSLs) as specified in jurisdictional electricity legislation;
- consider a number of specified matters, including (amongst other things) the past performance of the distribution network; and
- have regard to the Distribution Reliability Measures Guideline.

In its 2025–30 F&A, the AER stated its intention to continue to apply the current (version 2.0) STPIS to SA Power Networks for the 2025–30 RCP[7], on the same terms. The AER also set out the components of the STPIS to apply to SA Power Networks.

The STPIS requires that performance targets must not deteriorate over the RCP and must be based on average performance over the past five regulatory years[8].

It allows a DNSP to propose a variation to the application of the STPIS in its regulatory proposal, provided that the proposal is in writing and[9]:

- includes the reasons for and an explanation of the proposed variation;
- demonstrates how the proposed variation is consistent with the objectives in clause 1.5 of the STPIS; and
- if appropriate, include the calculations and / or methodology which differ to that provided for under the STPIS.

The STPIS also allows DNSPs to propose modifications to components of the STPIS, including the revenue at risk (**R@R)**[10], performance targets[11], the value of customer reliability used to set incentive rates for the

4 NER S6.1.3(4).

5 NER 6.4.3(a)(5).

6 NER 6.3.2(a)(4).

7 AER, *Framework and Approach Paper - SA Power Networks Regulatory Control period commencing 1 July 2025*, July 2023.

8 Clauses 3.2.1(a) and 5.3.1(a) of the STPIS.

9 Clause 2.2 of the STPIS.

10 Clause 2.5(b) and 5.2(c) of the STPIS.

11 Clause 3.2.1(a) and 5.3.1(b) of the STPIS.

reliability of supply component[12], the parameter weighting used to set incentive rates for the reliability of supply component[13], the incentive rates for the telephone answering parameter[14] and the MED boundary[15].

This Attachment, along with the information provided in **Supporting document 10.1 – STPIS reliability target calculations - Model** and the Reset Regulatory Information Notice template workbook 1, worksheets 6.2, address these information requirements.

## Proposed application of components of the STPIS

SA Power Networks proposes that the AER apply the Reliability components of the STPIS version 2.0 to SA Power Networks for the 2025–30 RCP in a manner that is consistent with the AER's proposed approach as set out in the F&A with the clarifications we set out in Table 1.

Table 1 sets out and compares the AER position in the F&A with SA Power Networks' proposed approach.

**Table 1: Summary of AER's STPIS position in the 2025–30 F&A and SA Power Networks' proposed approach**

| STPIS component | AER's F&A position | SA Power Networks proposed approach |
|---|---|---|
| **Revenue at risk** | Set revenue at risk within the range of ±5%. | Accept noting that SA Power Networks is proposing a CSIS, so the revenue at risk would be split:<br>• ±4.5% for STPIS (reliability component only); and<br>• ±0.5% for the proposed CSIS. |
| **Segment the network** | Segment the network according to the four feeder categories (CBD, Urban, Short Rural and Long Rural) as per the scheme's definitions. | Accept noting that ESCoSA have expanded the CBD[16] boundary from 1 July 2020, which causes a re-classification of some Urban Feeders to CBD Feeders for 2019/20. |
| **Performance parameters** | Apply the System Average Interruption Duration Index (**SAIDI**), System Average Interruption Frequency Index (**SAIFI**) and, unless SA Power Networks proposes a CSIS, the customer service (telephone answering) parameters. | Accept noting that we are proposing a new CSIS and, as advised by the AER in its F&A, the STPIS Customer service (telephone answering) component will not apply in the 2025–30 RCP. |
| **Performance targets** | Set performance targets based on SA Power Networks' average performance over the past five regulatory years. | Accept noting that adjustments are required to the reliability performance targets for the 2025–30 RCP in accordance with clauses 3.2.1(a)(1A) and (1B), of the STPIS, and Appendix F. Adjustments are required because the outcome of the 2019/20 performance exceeded the R@R cap of 5%, and also because we are proposing expenditure in 2025–30 RCP to address those feeders and regions experiencing poor reliability.<br><br>Also, the reliability performance requires adjustment for<br>• the change in the definition of a momentary interruption to greater than 3 minutes from 1 July 2020 (previously it was greater than 1 minute). This requirements amendments to the 2019/20 previously reported performance; |

12 Clause 3.2.2(d) of the STPIS.

13 Clause 3.2.2(f)(2) of the STPIS.

14 Clause 5.3.2(a)(2) of the STPIS.

15 Clause 2.2 and Appendix D of the STPIS.

16 Also referred to as the Adelaide Business Area in the SA Electricity Distribution Code.

| STPIS component | AER's F&A position | SA Power Networks proposed approach |
|---|---|---|
| | | • the expiry of a long-standing exemption for notifying customers of an interruption where the duration is no more than 15 minutes, and<br>• two fewer MEDs during the 2025–30 STPIS target setting period, due to proposed reliability improvements. |
| **Exclusions** | Apply the method in the STPIS for excluding specific events from the calculation of annual performance and performance targets | Accept |
| **Guaranteed Service Levels** | Not apply the GSL component of the STPIS if SA Power Networks remains subject to a jurisdictional GSL scheme (as set out in the South Australian Electricity Distribution Code) | Accept. For the 2025–30 RCP, we will be subject to the GSL scheme outlined in the South Australian Electricity Distribution Code |

The following sections of this document detail:

- the improvements in service levels experienced by customers;
- the adjustments to the reliability service targets required by the STPIS performance for the 2019/20 regulatory year which exceeded the cap on the R@R and the proposed reliability improvements; and
- the adjustments required to reflect that our current exemption[17] to provide customers with four business days notification of a planned interruption where the duration is expected to be no more than 15 minutes will expire on 30 June 2025.

[17] See National Energy Retail Law (Local Provisions) Regulations 2013 s14(d).

# 3 Historical Performance

This section highlights the benefits to customers resulting from the operation of the STPIS regime, since 1 July 2010. It details the annual STPIS performance outcomes for the whole network operated by SA Power Networks, for the four feeder categories of CBD, Urban, Rural Short and Rural long as per the scheme's definitions for the period from 2010/11 to 2022/23, including a forecast outcome for 2023/24. It also includes the STPIS targets for each RCP. The proposed 2025–30 STPIS targets are based on the average performance over the past five regulatory years, using the actual performance outcomes for the four years from 2019/20 to 2022/23 and a forecast for the 2023/24 year. The quoted percentage improvements are based on the change in the RCP average performance[18] from the initial 2005–10 RCP to the 2020–25 RCP up to and including the forecast for 2023/24.

The graphs in this section are normalised by excluding the service performance on MEDs[19] and are based on the natural logarithm (**LN**) method for determining $T_{MED}$.

## 3.1 Distribution network reliability performance

This subsection details the STPIS annual reliability performance of SA Power Networks' distribution system, the average performance for the STPIS Target Setting Period (**TSP**) and the applicable performance target[20] since 1 July 2005 (or indicative target for the 2025–30 RCP).

Figure 2 highlights that for the whole of our network there has been a 39 percent improvement in the average Unplanned System Average Interruption Frequency Index (**USAIFI**) from the 2005–10 period (1.59 interruptions) to the 2020–25 period (0.97 interruptions).

Figure 3 highlights that for the whole of our network there has also been an 18 percent improvement in the average Unplanned System Average Interruption Duration Index (**USAIDI**) from the 2005–10 period (162 minutes) to the 2020–25 period (132 minutes).

The STPIS incentive has resulted in, on average, 580,000 fewer customer interruptions in the 2020–25 period than customers experienced in the 2005–10 RCP. This improvement is the change in the average performance over the 2005–10 RCP (ie 1.59 interruptions) to the average performance over the 2020–25 RCP (ie 0.97 interruptions). This improvement is shown in the "Ave RCP" in Figure 2.

[18] The proxy for the RCP average performance is the average of the first four years of a RCP and the last year of the prior RCP. This is the same period used to establish the STPIS targets for the next RCP. For example, the proxy for the 2025–30 RCP is the five year period including 2019-20 to 2023-24. This period is also used to set the baseline for the 2025–30 RCP STPIS targets.

[19] MEDs are determined using the STPIS 'safe harbour' LN method for the reliability performance. This LN method was not used for the 2010–15 RCP, when we sought, and the AER agreed to use the Box-Cox method to determine MEDs.

[20] The 2023-24 results are forecast and highlighted with a slightly different colour shade.

**Figure 2: Distribution System STPIS USAIFI normalised performance and target (No. of interruptions)**

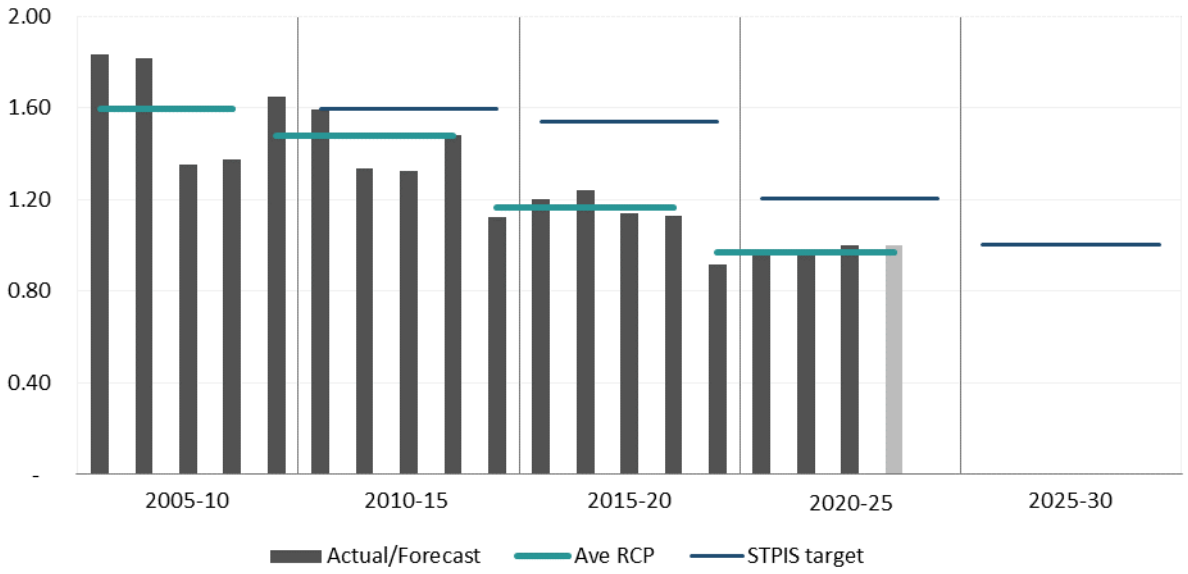
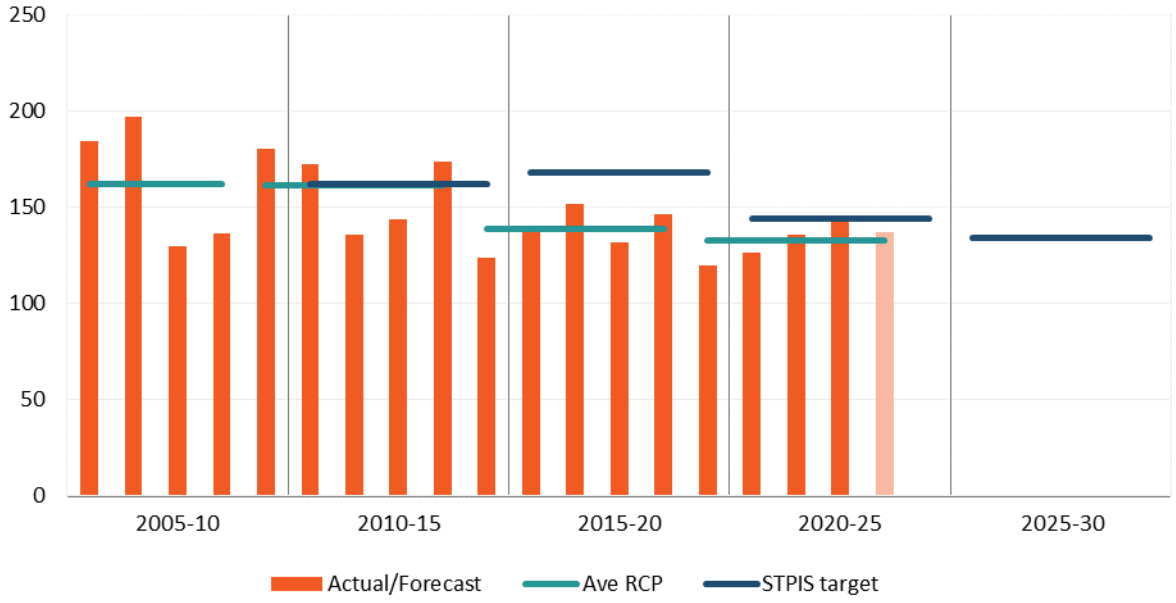



**Figure 3: Distribution System STPIS USAIDI normalised performance and target (minutes off supply)**



## 3.2 CBD feeder category reliability performance

Figure 4 highlights that for CBD classified distribution feeders there has been a 39 percent improvement in average USAIFI from the 2005–10 period (0.28 interruptions) to the 2020–25 period (0.17 interruptions).

Figure 5 highlights there has been a 42 percent improvement in average USAIDI from the 2005–10 period (33 minutes) to the 2020–25 period (19 minutes).

This improved performance is reflected in lower forecast performance targets for the 2025–30 RCP.

**Figure 4: CBD STPIS USAIFI normalised performance and target (No. of interruptions)**

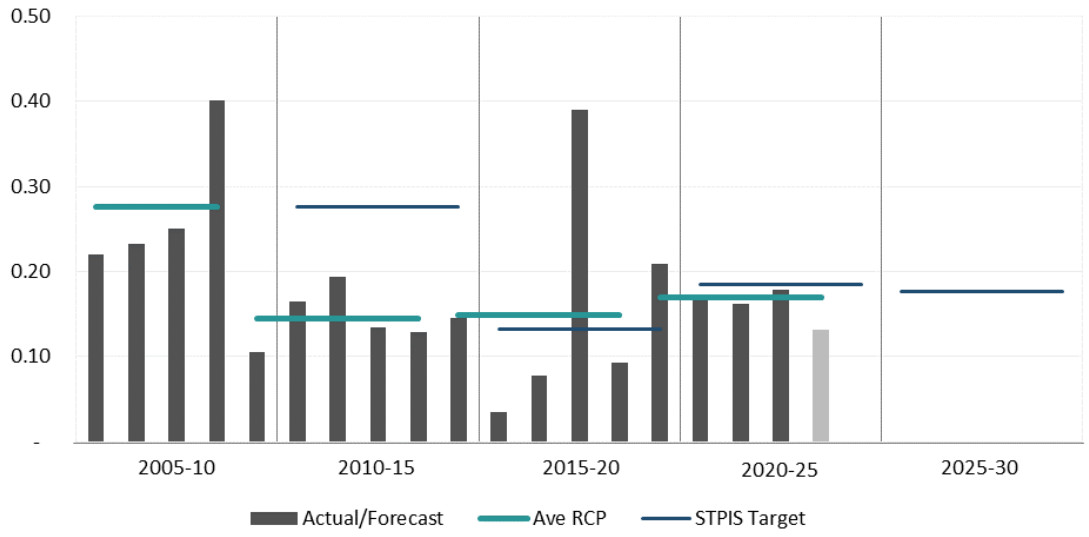
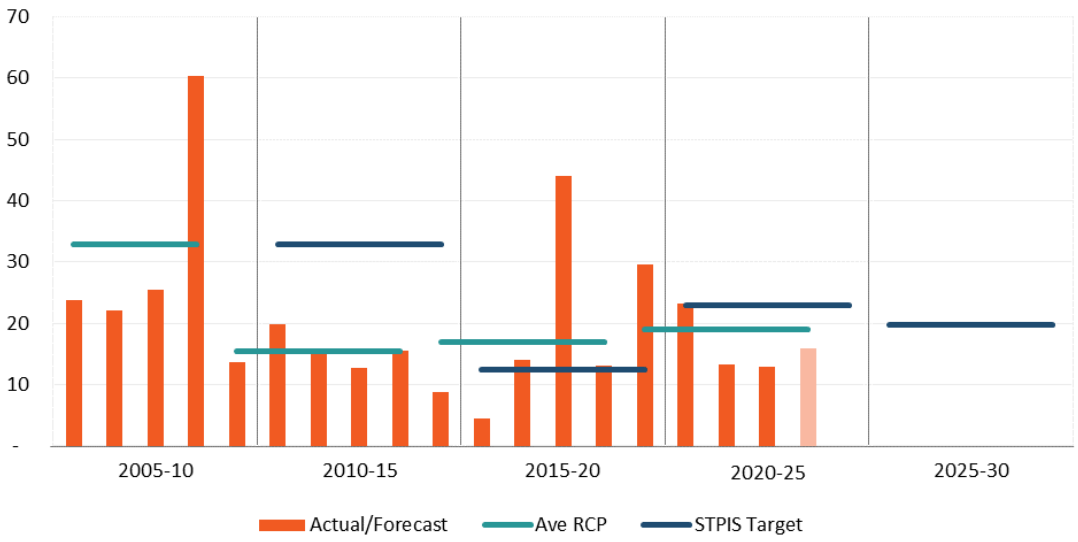



**Figure 5: CBD STPIS USAIDI normalised performance and target (Minutes off supply)**



## 3.3 Urban feeder category reliability performance

Figure 6 highlights that for Urban distribution feeders there has been a 38 percent improvement in average USAIFI from the 2005–10 period (1.38 interruptions) to the 2020–25 period (0.85 interruptions).

Figure 7 highlights that for Urban distribution feeders there has been a 19 percent improvement in average USAIDI from the 2005–10 period (115 minutes) to the 2020–25 period (93 minutes).

This improved performance is reflected in lower forecast performance targets for the 2025–30 RCP.

**Figure 6: Urban STPIS USAIFI normalised performance and target (No. of interruptions)**

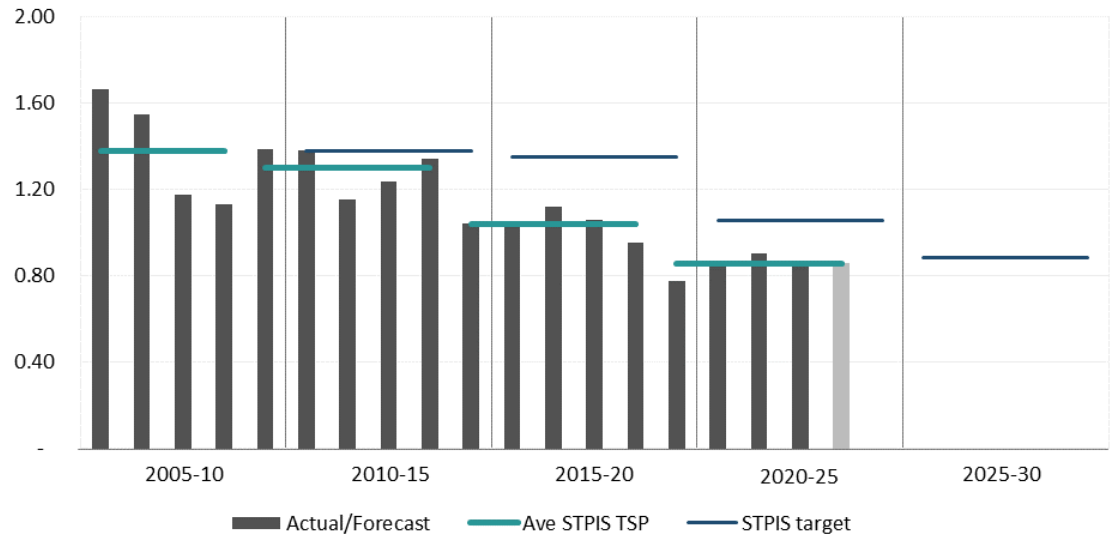
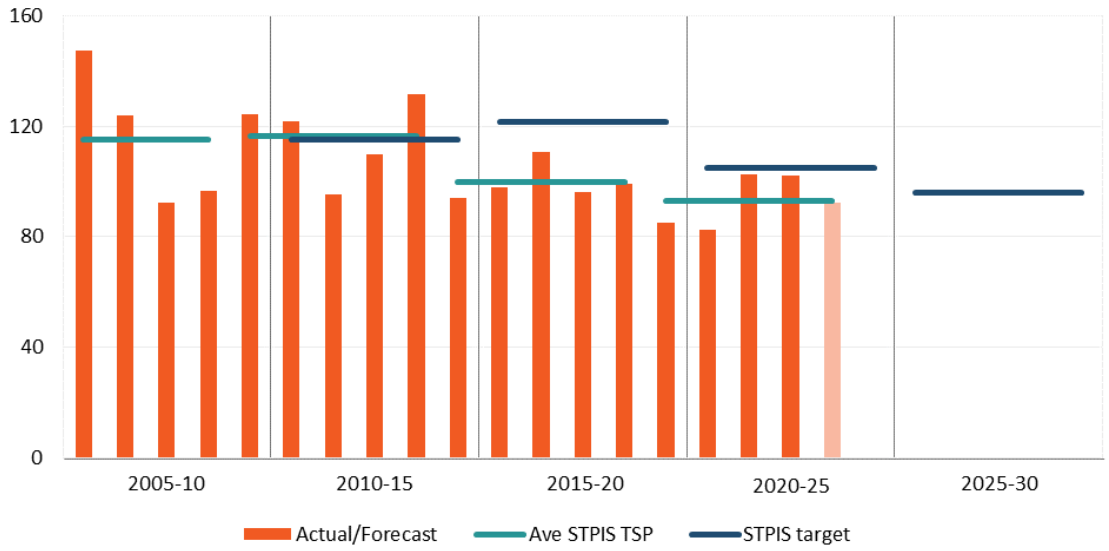



**Figure 7: Urban STPIS USAIDI normalised performance and target (Minutes off supply)**



## 3.4 Short rural feeder category reliability performance

Figure 8 highlights that for Short rural distribution feeders there has been a 38 percent improvement in average USAIFI from the 2005–10 period (1.85 interruptions) to the 2020–25 period (1.14 interruptions).

Figure 9 highlights that for Short rural distribution feeders there has been a 20 percent improvement in average USAIDI from the 2005–10 period (207 minutes) to the 2020–25 period (166 minutes).

This improved performance is reflected in lower forecast performance targets for the 2025–30 RCP.

**Figure 8: Rural Short STPIS USAIFI normalised performance and target (No. of interruptions)**

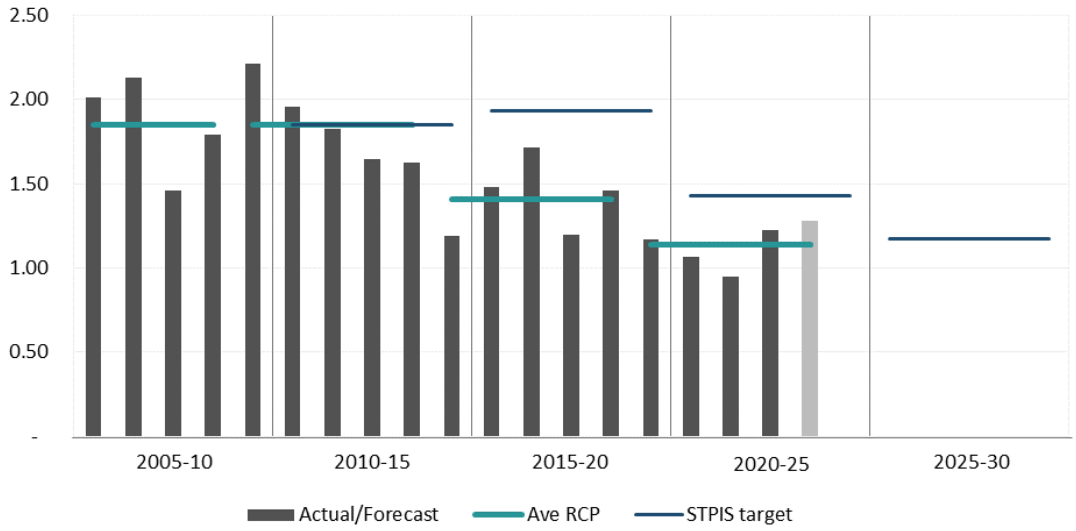
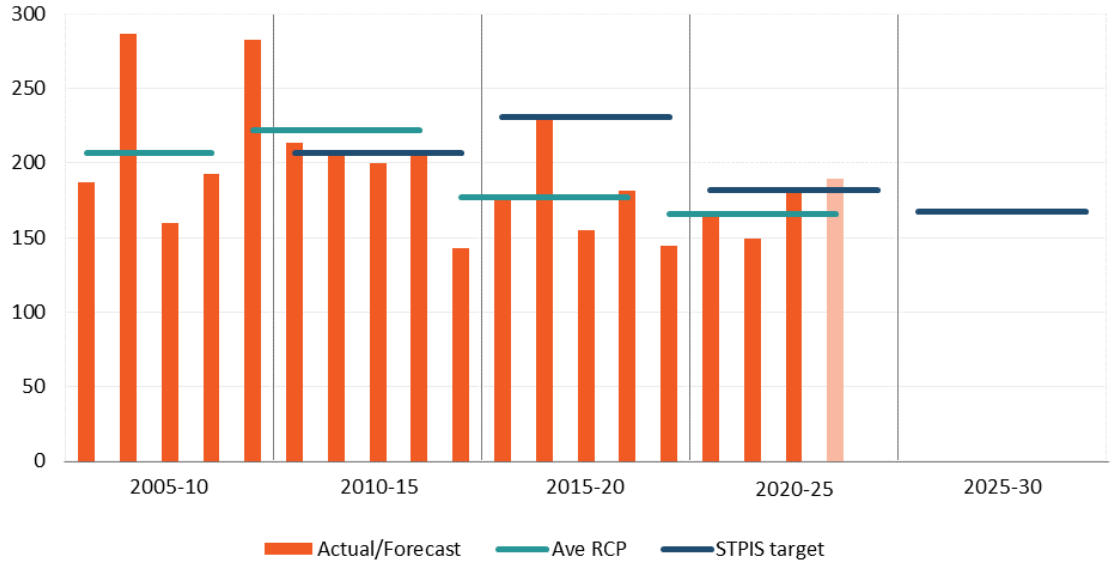



**Figure 9: Rural Short STPIS USAIDI normalised performance and target (Minutes off supply)**



## 3.5 Long rural feeder category reliability performance

Figure 10 highlights that for Long rural distribution feeders there has been a 39 percent improvement in average USAIFI from the 2005–10 period (2.30 interruptions) to the 2020–25 period (1.40 interruptions).

Figure 11 highlights that for Long rural distribution feeders there has been a 9 percent improvement in average USAIDI from the 2005–10 period (318 minutes) to the 2020–25 period (288 minutes).

This improved performance is reflected in lower forecast performance targets for the 2025–30 RCP. We also note the average USAIDI performance used to set the 2020–25 targets (ie 279 minutes) has declined for setting the 2025–30 RCP targets (ie 288 minutes). However, the proposed 2025–30 USAIDI targets are lower than the baseline (ie 288 minutes) due to adjustments outlined in the next section.

**Figure 10: Rural Long STPIS USAIFI normalised performance and target (No. of interruptions)**

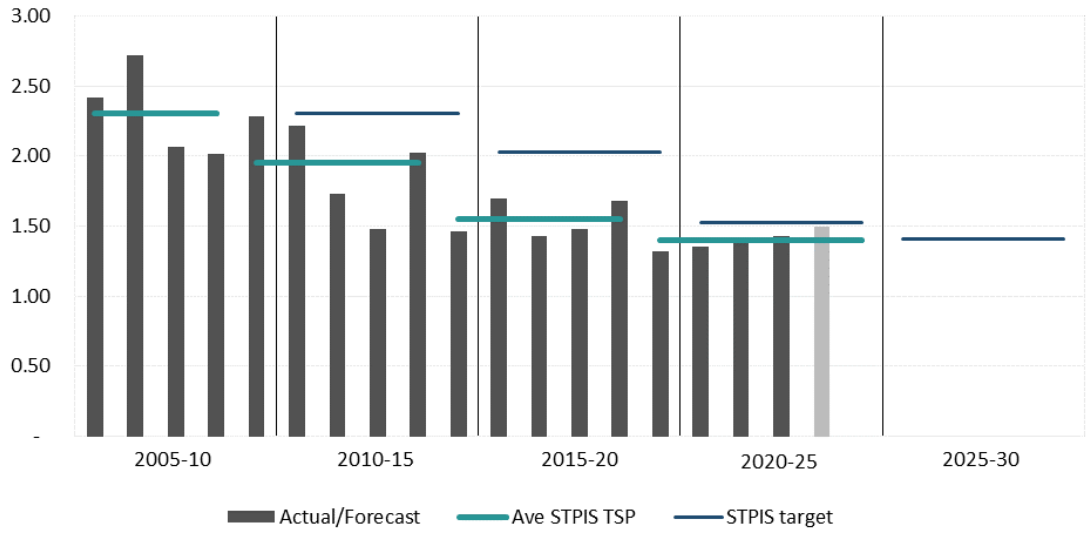
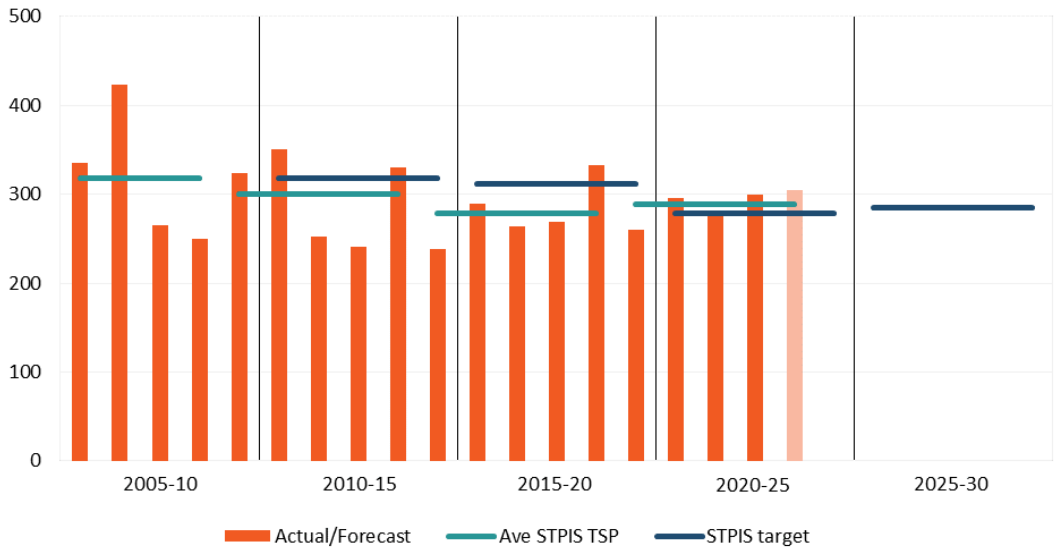



**Figure 11: Rural Long STPIS USAIDI normalised performance and target (Minutes off supply)**



# 4 Adjustment to performance targets for 2025–30 RCP

In accordance with the AER's STPIS, DNSPs are annually rewarded for improvements, or penalised for declines, in performance compared to historic averages (normally determined over a five-year period). The annual performance that resulted in the reward or penalty is then used to establish STPIS performance targets for future RCPs. However, there are exceptions to this where:

- the reward or penalty is capped by the R@R; and / or
- a DNSP has been funded to improve performance, in which case the performance targets are adjusted to reflect the funded improvement.

Under the first exception listed above, the past performance is used to establish future STPIS performance targets, by adjusting targets so they align with the STPIS reward or penalty for that regulatory year. This adjustment ensures that DNSPs do not receive a windfall gain (where performance was worse than the cap) or a windfall loss (where performance was better than the cap) in future RCPs.

## 4.1 Adjustment for where the reward or penalty exceeds the R@R cap

The STPIS outcome for the performance of the 2019/20 year was capped at five percent and resulted in the following rewards of:

- 4.5 percent of revenue for reliability component; and
- 0.5 percent of revenue for the customer service component.

As the 2019/20 performance will be used to establish the targets for the 2025–30 RCP, the raw target (ie the average of the normalized USAIDI (**USAIDIn**) and USAIFI (**USAIFIn**) for the four feeder categories over the five-year period 2019/20 to 2023/24) needs to be adjusted for the performance of the 2019/20 year so that it would match the STPIS reward for that year.

SA Power Networks has used the AER's method detailed in Appendix F of the STPIS Guideline to determine the annual adjustment (ie increase the value of the targets) to the STPIS reliability targets, with the results detailed in Table 2.

**Table 2: Increase in 2025–30 RCP STPIS targets resulting from 2019/20 performance exceeding the R@R cap**

| Annual adjustment | CBD | Urban | Short Rural | Long Rural |
|---|---|---|---|---|
| USAIDIn | + 2.755 | + 2.755 | + 2.755 | + 2.755 |
| USAIFIn | + 0.0171 | + 0.0171 | + 0.0171 | + 0.0171 |

## 4.2 Reliability improvement projects

Clause 3.2.1(1A) of the STPIS requires that the performance targets to apply during the 2025–30 RCP must be modified by any completed or planned reliability improvements where the planned reliability improvements are:

- included in the expenditure program proposed by SA Power Networks in its 2025–30 Regulatory Proposal; and
- expected to result in a material improvement in supply reliability.

### 4.2.1 Low reliability feeder reliability improvement

SA Power Networks has proposed expenditure in the 2025–30 RCP to improve the reliability of feeders in the low reliability feeder category for several years (**supporting document 5.9.5 - Worst Served Customers Reliability Improvement Program – Business case**) and this proposed expenditure meets the requirements in clause 3.2.1(1A) of the STPIS.

We have determined the improvement in the STPIS reliability targets as if the improvements had been in place for the full five years from 2019/20 to 2023/24 and propose that if the AER approves our proposed 'low reliability feeder expenditure' then our STPIS targets for the 2025–30 RCP should be adjusted by the amounts in Table 3. The amounts shown are half the total forecast improvements, as the improvements are planned to be completed evenly over the 2025–30 RCP.

**Table 3: Adjustment to STPIS targets for the 2025–30 RCP if the low reliability feeder expenditure is approved**

| Annual adjustment | CBD | Urban | Rural Short | Rural Long |
|---|---|---|---|---|
| USAIDI | - | - 0.166 | - 0.839 | - 5.142 |
| USAIFI | - | - 0.001 | - 0.004 | - 0.016 |

### 4.2.2 Specific regional reliability improvement projects

SA Power Networks has proposed expenditure to improve the reliability of specific poorly performing regional areas as defined in the South Australian Electricity Distribution Code (**EDC**) for several years (**supporting document 5.9.5 - Worst Served Customers Reliability Improvement Program – Business case**) and this proposed expenditure meets the requirements in clause 3.2.1(1A) of the STPIS.

We have determined the improvement in the STPIS reliability targets as if the improvements had been in place for the full five years from 2019/20 to 2023/24 and propose that if the AER approves our proposed 'regional reliability improvement expenditure' then our STPIS targets for the 2025–30 RCP should be adjusted by the amounts in Table 4. The amounts shown are half the total forecast improvements, as the improvements are planned to be completed evenly over the 2025–30 RCP.

**Table 4: Adjustment to STPIS targets for the 2025–30 RCP if the poor performing Regional reliability of supply expenditure is approved**

| Annual adjustment | CBD | Urban | Rural Short | Rural Long |
|---|---|---|---|---|
| USAIDI | - | - | - 0.733 | - 5.160 |
| USAIFI | - | - | - 0.004 | - 0.019 |

### 4.2.3 Rural long restoration of supply performance improvement

SA Power Networks has proposed expenditure to improve the supply restoration performance of Long Rural feeders to the target set in the EDC. If not addressed, SA Power Networks will not comply with the EDC long rural restoration of supply reliability standards. The proposed expenditure meets the requirements in clause 3.2.1(1A) of the STPIS.

We have determined the improvement in the STPIS reliability targets as if the improvements had been in place for the full five years from 2019/20 to 2023/24 and propose that if the AER approves our proposed 'Rural long restoration of supply improvement expenditure' then our STPIS targets for the 2025–30 RCP should be adjusted by the amounts in Table 5. The amounts shown are half the total forecast improvements, as the improvements are planned to be completed evenly over the 2025–30 RCP.

**Table 5: Adjustment to STPIS targets for the 2025–30 RCP if the rural long restoration of supply expenditure is approved**

| Annual adjustment | CBD | Urban | Rural Short | Rural Long |
|---|---|---|---|---|
| USAIDI | - | - | - | - 2.107 |
| USAIFI | - | - | - | - 0.008 |

### 4.2.4 Resilience mobile generators

SA Power Networks has proposed expenditure (**supporting document 5.8.3 - Network Resilience mobile generation – Business case**) to procure additional mobile generators to improve the reliability performance for customers affected by long duration outages. This proposed expenditure meets the requirements in clause 3.2.1(1A) of the STPIS. This improvement expenditure will reduce customer minutes off supply (USAIDI) not the number of customer interruptions (USAIFI).

We have determined the improvement in the STPIS reliability targets if the improvements had been in place for the full five years from 2019/20 to 2023/24 and propose that if the AER approves our proposed 'resilience mobile generator expenditure' then our STPIS targets for the 2025–30 RCP should be adjusted by, the amounts in Table 6. The amounts shown are half the total forecast improvements, as the improvements are planned to be completed evenly over the 2025–30 RCP.

**Table 6: Adjustment to STPIS targets for the 2025–30 RCP if the resilience mobile generators network expenditure is approved**

| Annual adjustment | CBD | Urban | Rural Short | Rural Long |
|---|---|---|---|---|
| USAIDI | - | - | - 0.407 | - 2.268 |

### 4.2.5 CBD reliability improvement

SA Power Networks has proposed expenditure (**supporting document 5.3.12 - CBD Reliability – Business case**) to improve the reliability of the CBD feeders to restore performance to the EDC reliability targets (USAIDI of 15 minutes and USAIFI of 0.15 interruptions) by the first year of the 2030–35 RCP. This proposed expenditure meets the requirements in clause 3.2.1(1A) of the STPIS. The expenditure targets the replacement of aging and poor condition high voltage cables.

We have determined the improvement in the STPIS reliability targets to achieve the EDC CBD feeder targets by the first year of the 2030–35 RCP and propose that if the AER approves our proposed 'CBD reliability improvement' expenditure then our STPIS targets for the 2025–30 RCP should be adjusted by the amounts in Table 7. The amounts shown are half the total forecast improvements, as the improvements are planned to be completed evenly over the 2025–30 RCP.

**Table 7: Adjustment to STPIS targets for the 2025–30 RCP if the CBD reliability improvement expenditure is approved**

| Annual adjustment | CBD | Urban | Rural Short | Rural Long |
|---|---|---|---|---|
| USAIDI | - 2.025 | - | - | - |
| USAIFI | - 0.010 | - | - | - |

## 4.3 Target adjustment for fewer Major Event Days

The proposed reliability improvement projects in section 4.2 were modelled over the 2025–30 STPIS TSP to determine the average annual improvement to use to adjust targets for the 2025–30 RCP. As the improvements will be progressively implemented over the five years the average annual improvement would be half (or 50 percent) of the total improvement. This modelling also highlighted that once all the improvements are combined, two days previously classified as MEDs would no longer be classified as MEDs.

The inclusion of these two days negates some of the reliability improvements as measured by the STPIS regime, as it excludes MEDs from the reliability performance.

The reliability improvements decrease the number of MEDs over the 2025–30 STPIS TSP from 21 to 19. The inclusion of the outages associated with these previously classified MED days worsens the normalised reliability performance in the regulatory years 2020-21 and 2021-22 (ie one less MED in each year). We estimate the overall distribution network USAIDIn performance would worsen by about 3 minutes in 2020-21 and about 5 minutes in 2021-22. This decline in performance would penalise SA Power Networks under the STPIS regime by about $5m, through no fault of SA Power Networks.

As we are only proposing to adjust the 2025–30 reliability targets by half the value of the reliability improvements, as highlighted above, we checked to ensure the two days were not classified as MEDs. This check involved applying half the reliability improvement and recalculating the TMED and both days were still not classified as MEDs.

We have calculated the remaining reliability performance by feeder category on those two days, one with the full reliability improvements and one with half the reliability improvements applied. For example, the distribution network USAIDI for 2020/21 would worsen by about five minutes with half the improvement applied and by about three minutes the full improvement applied.

We propose an alternative conservative approach by adjusting the STPIS targets by the outcome of these two days, as if the full improvements were applied. This lowers the adjustment (ie increase in the STPIS targets) for these two days. As the targets are based on the average over five years we propose to adjust the 2025–30 STPIS targets by one fifth of the full reliability improvement. Table 8 details the increase in the 2025–30 STPIS targets due to two days no longer being classified as MEDs.

**Table 8: Adjustment to STPIS targets for the 2025–30 RCP for two fewer MEDs during the 2025–30 STPIS TSP**

| Annual adjustment | CBD | Urban | Rural Short | Rural Long |
|---|---|---|---|---|
| USAIDI | - | + 0.276 | + 0.244 | + 8.868 |
| USAIFI | - | + 0.001 | + 0.003 | + 0.013 |

## 4.4 Target amendment due to change in regulatory requirements

### 4.4.1 Target adjustment for change to the momentary interruption definition from 1 July 2020

The STPIS defines a momentary interruption[21] as an interruption where the duration does not exceed three minutes, whereas it was defined as an interruption not exceeding one minute in version 1.2 of the STPIS applying to the 2015–20 RCP. Consequently, we need to adjust the performance of the 2019/20 regulatory year to exclude interruptions of more than one minute and no more than three minutes.

We have determined the impact of the change in the momentary interruption definition for 2019/20 on STPIS reliability targets for the 2025–30 RCP. The amounts shown I Table 9 are one fifth the total adjust for the 2019/20, as the adjustment must be made to each of the five regulatory years of the 2025–30 RCP.

**Table 9: Adjustment to STPIS targets for the 2025–30 RCP for the amendment to the MAIFI definition for 2019/20**

| Annual adjustment | CBD | Urban | Rural Short | Rural Long |
|---|---|---|---|---|
| USAIDI | - | - 0.003 | - 0.023 | - 0.002 |
| USAIFI | - | - 0.001 | - 0.010 | - 0.001 |

[21] As per the momentary average interruption frequency index (**MAIFI**).

### 4.4.2 Target adjustment for removal of jurisdictional exemption – 15-minute planned interruptions

The National Electricity Retail Law (**NERL**) (Local Provision) Regulations 2013 provides SA Power Networks with a derogation from the National Energy Retail Rules (**NERR**) which removes the obligation on us to provide four business days notification of a planned interruption where the outage duration is no more than 15 minutes[22]. This derogation allows continuation of the long-standing practice, which otherwise would be precluded under the NERR[23]. However, this exemption will expire on 30 June 2025.

Prior to the applicability of the NERR rule 90 on 1 February 2013, SA Power Networks was not required to notify customers of a planned interruption where the duration of the interruption was less than 15 minutes. This long-standing practice and was incorporated into the initial EDC in October 1999.

SA Power Networks principally relies on the current derogation to perform urgent network repairs where the supply interruption required is expected to be no more than 15 minutes in duration. SA Power Networks routinely inspects powerlines to identify defects or potential faults. The defect is prioritised, with non-urgent work planned to remedy the defect prior to failure. As part of the preparations to complete the work, customers are provided with the requisite notice where an outage is required for the repair. However, if the asset fails prior to the defect being repaired, the resulting unplanned outage typically lasts longer than 100 minutes. Noting that under the NERR Rule 89 permits a distributor to interrupt supply for an unplanned interruption where there is an apprehended threat to the reliability of supply of energy.

Where a defect is judged to be likely to fail within two weeks (ie an incipient failure), the defect is deemed urgent and is generally repaired within a few days. If the repair is relatively minor / simple and can be undertaken with an outage of less than 15 minutes, then customers are notified if they are registered for digital messaging[24], but are not provided with the requisite four business days notice. The current derogation facilitates this prudent practice. The outage time is significantly shorter than compared to the typical unplanned outage, detailed above. This practice is also reflected in our historic reliability records where these interruptions are treated as planned interruptions but with the expiry of the exemption would be treated as unplanned interruptions.

SA Power Networks proposes to retain this practice following the expiry of the exemption, recognising the benefit to customers of continuing to undertake these repairs as an unplanned interruption. However, we consider that SA Power Networks should not incur a penalty for continuing this long-standing practice, which has been used for more than two decades. The practice benefits our customers by ameliorating the risk of significantly longer duration outages if the defect was not repaired and failed.

We consider that this change is similar to the MAIFI change, which required amendment to our reliability data to remove unplanned interruptions where the duration was between one and three minutes. This change would otherwise materially affect our network reliability performance. Therefore, we consider that our STPIS reliability targets should be adjusted to reflect this change in practice due to a change in a regulatory obligation.

We have determined the impact of the expiry of the 15 minute planned interruption exception on STPIS reliability targets for the 2025–30 RCP. The amounts shown in Table 10 are the average adjustment required for the 2019/20 to the 2023/24 regulatory years.

[22] Section 14(b) of the NERL (Local Provision) Regulations 2013.

[23] Specifically, under the NERR Part 4 Division 6 rule 90.

[24] More than 90 percent of customers are registered for digital messaging.

**Table 10: Adjustment to STPIS targets for the 2025–30 RCP due to the expiry of the 15-minute planned interruption exemption**

| Annual adjustment | CBD | Urban | Rural Short | Rural Long |
|---|---|---|---|---|
| USAIDI | - | + 0.065 | + 0.142 | + 0.122 |
| USAIFI | - | + 0.016 | + 0.032 | + 0.022 |

# 5 Proposed STPIS targets for 2025–30 RCP

The STPIS targets for the 2025–30 RCP are detailed in Table 11 and include all the adjustments detailed in previous sections.

**Table 11: STPIS annual targets for the 2025–30 RCP including all the proposed adjustments**

| Propose STPIS annual targets | CBD | Urban | Rural Short | Rural Long |
|---|---|---|---|---|
| USAIDI | 19.680 | 95.821 | 166.979 | 285.088 |
| USAIFI | 0.176 | 0.887 | 1.168 | 1.416 |

# Glossary

| Acronym / term | Definition |
|---|---|
| **AER** | Australian Energy Regulator |
| **CESS** | Capital Expenditure Sharing Scheme |
| **CSIS** | Customer Service Incentive Scheme |
| **DNSP** | Distribution Network Service Providers |
| **EBSS** | Efficiency Benefit Sharing Scheme |
| **EDC** | Electricity Distribution Code |
| **ESCoSA** | Essential Services Commission of South Australia |
| **F&A** | Framework and Approach |
| **GSL** | Guaranteed service level |
| **LN** | natural logarithm |
| **MAIFI** | Momentary Average Interruption Frequency Index |
| **MED** | Major Event Day |
| **NER** | National Electricity Rules |
| **NERL** | National Electricity Retail Law |
| **NERR** | National Energy Retail Rules |
| **R@R** | Revenue at risk |
| **RCP** | regulatory control period |
| **SAIDI** | System Average Interruption Duration Index |
| **SAIFI** | System Average Interruption Frequency Index |
| **STPIS** | Service Target Performance Incentive Scheme |
| **TSP** | Target Setting Period |
| **USAIDI** | Unplanned System Average Interruption Duration Index |
| **USAIDIn** | Normalised Unplanned System Average Interruption Duration Index (excludes MEDs) |
| **USAIFI** | Unplanned System Average Interruption Frequency Index |
| **USAIFIn** | Normalised Unplanned System Average Interruption Frequency Index (excludes MEDs) |