



DRAFT DECISION

AusNet Services Transmission Determination 2022 to 2027

Attachment 10 Service target performance incentive scheme

June 2021

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Note

This attachment forms part of the AER's draft decision on AusNet Services' 2022–27 transmission determination. It should be read with all other parts of the draft decision.

The draft decision includes the following attachments:

Overview

Attachment 1 – Maximum allowed revenue

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 – Demand management innovation allowance mechanism

Attachment 12 – Pricing methodology

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10 Service target performance incentive scheme

The service target performance incentive scheme (STPIS) provides a financial incentive to transmission network services providers (TNSPs) to maintain and improve service performance. We will apply current version 5 of the STPIS to AusNet Services for the 2022–27 regulatory control period. Under this version of the scheme, three components are applicable: the service component, market impact component and network capability component.¹

The service component provides a reward or penalty of +/- 1.25 per cent of the maximum allowed revenue (MAR) to improve network reliability by focussing on unplanned outages. The service component is designed to encourage TNSPs to seek to reduce the number of unplanned network outages and to promptly restore the network in the event of unplanned outages that result in supply interruptions. This component is also designed to indicate potential reliability issues.

The market impact component (MIC) provides an incentive to TNSPs to minimise the impact of transmission outages that can affect wholesale market outcomes. The MIC measures performance against the market impact parameter, which is the number of dispatch intervals where an outage on the TNSP's network results in a network outage constraint with a marginal value greater than \$10/MWh (MIC count).²

Each TNSP's annual MIC count is measured against its target, where the target is calculated by averaging the median five of the last seven years of performance data.³ Further, the dollars per dispatch interval (\$/DI) associated with the reward/penalty for each count can be directly calculated for the regulatory control period by dividing the MAR by the MIC target. Both the target and the \$/DI are fixed for the regulatory control period.

TNSPs receive a reward or penalty of up to +/- 1 per cent of the MAR for the relevant calendar year. Under clause 4.2(a), a TNSP must submit 7 calendar years of data to calculate the target as noted above.

The network capability component is designed to encourage TNSPs to develop projects (up to a total of one per cent of the proposed MAR per year) in return for a pro-rata incentive payment of up to 1.5 per cent of MAR depending on the successful completion of proposed projects.⁴ This component encourages TNSPs to examine their networks to identify suitable one-off operational and capital expenditure projects. These projects are expected to have a high net benefit and a short payback period and deliver improvements in the capability of the transmission network at times when it is most needed.

¹ AER, *Final – Service Target Performance Incentive Scheme*, October 2015, cl. 2.2(a).

² AER, *Final – Service Target Performance Incentive Scheme*, October 2015, Appendix C.

³ The target will be calculated from the average of the five values remaining from the last seven years of data, excluding the largest and smallest annual values.

⁴ AER, *Final – Service Target Performance Incentive Scheme*, October 2015, cl.5.2.

10.1 Draft decision

We will apply all components of version 5 of the STPIS to AusNet Services for the 2022–27 regulatory control period. We propose to apply the STPIS to AusNet Services in accordance with the details set out below.⁵

The draft decision components are outlined in the tables below. Our draft decision is based on the relevant data for 2013–19 and therefore is indicative only. We require AusNet Services to submit its 2020 data with its revised regulatory proposal for the final decision. The final decision components will be calculated using 2016–20 data.

Table 10.1 Draft decision — Indicative values for service component caps, floors and targets for 2022–27

Parameter	Distribution	Cap	Target	Floor
Lines outage rate - fault	Weibull	11.68%	17.38%	22.24%
Transformers outage rate - fault	Weibull	6.85%	11.70%	16.22%
Reactive plant outage rate - fault	Pearson	13.75%	19.88%	27.94%
Lines outage rate - forced	Uniform	1.09%	11.84%	20.61%
Transformer outage rate - forced	Weibull	7.32%	11.85%	15.86%
Reactive plant outage rate - forced	Pearson	25.54%	30.69%	36.71%
Average outage duration (minutes)	Log Logistic	13	53.6	146
No. of events > 0.05 system minutes	Poisson	0	1	3
No. of events > 0.30 system minutes	Poisson	0	1	2
Failure of protection system	Poisson	23	32	42
Material failure of SCADA	Geometric	0	1	3
Incorrect operational isolation of primary or secondary equipment	Poisson	2	6	11

Source: AER analysis.

⁵ AER, *Final – Service Target Performance Incentive Scheme*, October 2015, cl. 2.2.

Table 10.2 Draft decision for MIC parameter values for 2022–27

MIC parameter values	
Performance target	1236
Unplanned outage event limit	210
Dollar per dispatch interval (\$/DI)	4,551

Source: AER analysis.

Table 10.3 Draft decision — Network capability component for 2022–27 (\$2020–21)

Project	Proposed cost
No projects proposed	Nil

Source: AER analysis.

10.2 AusNet Services' proposal

AusNet Services proposed to apply version 5 of the STPIS as per the scheme requirements that:⁶

- the service component parameter targets were calculated as the 5-year annual average of the performance history over 2015–19. The service component caps and floors were set at the 5th and 95th percentiles of historic performance
- the market impact component (MIC) performance data from 2013–19 were used to calculate the annual performance target, the unplanned outage event limit and the dollar per dispatch interval
- no NCIPAP project proposal was submitted. AusNet Services indicated that it may propose projects if it identifies any in its revised revenue proposal.

With respect to the service component, AusNet Services indicated that it would propose an alternative method for calculating the large loss of supply sub-parameter if it incurred zero events in 2020. In its opinion a zero target would result in asymmetry in the operation of this measure.⁷

10.3 Assessment approach

A revenue determination for a TNSP is to specify, amongst other things, the annual building block revenue requirement for each regulatory year of the regulatory control period.⁸ In turn, the annual building block revenue requirement must be determined

⁶ AusNet Services, *Regulatory Proposal 2023-27*, 29 October 2020, pp. 169,173, 177.

⁷ AusNet Services, *Regulatory Proposal 2023-27*, 29 October 2020, p. 171.

⁸ NER, cl. 6A.4.2(a)(2).

using a building blocks approach, under which, one of the building blocks is the revenue increments or decrements (if any) for that year arising from the application of any STPIS (and other schemes).⁹ We have assessed AusNet Services' revenue proposal against the requirements of version 5 of the STPIS.

10.3.1 Service component

We assessed whether AusNet Services' proposed performance targets, caps and floors comply with the STPIS requirements for the:¹⁰

- average circuit outage rate, with six sub parameters¹¹
- loss of supply event frequency, with two loss of supply event sub-parameters¹²
- average outage duration
- proper operation of equipment, with three sub-parameters.¹³

Under the STIPS, we must accept AusNet Services' proposed parameter values if they comply with the requirements of the STPIS. We may reject them if they are inconsistent with the objectives of the STPIS.¹⁴ We measure actual performance for the 'average circuit outage rate' and 'average outage duration' parameters on a two calendar year rolling average in accordance with Appendix E of the STPIS.

We assessed AusNet Services' service component proposal against the requirements of the STPIS – that is, whether:

- AusNet Services' data recording systems and processes produce accurate and reliable data and whether the data is recorded consistently based on the parameter definitions under the STPIS¹⁵
- the proposed performance targets were equal to the average of the most recent five years of performance data¹⁶
- any adjustments to the proposed targets are warranted and reasonable¹⁷
- AusNet Services applied a sound methodology, with reference to the performance targets, to calculate the proposed caps and floors¹⁸

⁹ NER, cl. 6A.5.4(a)(5), 6A.5.4(b)(5) and 6A.7.4.

¹⁰ AER, *Final – Service Target Performance Incentive Scheme*, October 2015, cl. 3.2.

¹¹ Six parameters include Line event rate–fault, Reactive plant event rate – fault, Lines event rate – forced, Transformer event rate –forced and Reactive plant event rate – forced.

¹² They are the number of events greater than 0.05 system minutes per annum and the number of events greater than 0.30 system minutes per annum.

¹³ They are failure of protection system, material failure of SCADA system and incorrect operational isolation of primary or secondary equipment.

¹⁴ AER, *Final – Service Target Performance Incentive Scheme*, October 2015, cl. 3.2(l).

¹⁵ AER, *Final – Service Target Performance Incentive Scheme*, October 2015, cl. 3.2(d).

¹⁶ AER, *Final – Service Target Performance Incentive Scheme*, October 2015, cl. 3.2(g).

¹⁷ AER, *Final – Service Target Performance Incentive Scheme*, October 2015, cl. 3.2(j).

¹⁸ AER, *Final – Service Target Performance Incentive Scheme*, October 2015, cl. 3.2(e).

- any adjustment to a performance target was applied to the cap or floor of that parameter.¹⁹

We assessed the probability distributions applied by AusNet Services to calculate caps and floors to determine whether a sound methodology was used.

10.3.2 Market impact component

We assessed AusNet Services' market impact component proposal against the requirements of the STPIS – that is, whether:

- data used to calculate the market impact parameter is accurate and reliable, and consistently recorded based on the parameter definition in Appendix C²⁰
- the proposed performance target was calculated in accordance with the requirements of clause 4.2(g) of version 5 of the STPIS
- the proposed unplanned outage event limit has been calculated in accordance with the requirements of clause 4.2(h) of version 5 of the STPIS
- the proposed dollar per dispatch interval has been calculated in accordance with clause 4.2(j) of version 5 of the STPIS.

Where AusNet Services' proposed values for the market impact parameter do not comply with the requirements of the STPIS or is otherwise inconsistent with the objectives of the scheme,²¹ we will reject the proposed values and provide substitute values which comply with the STPIS.

10.3.3 Network Capability Component

We are required to assess the network capability component against the requirements of clause 5.2 of version 5 of the STPIS.

A TNSP is able to propose projects with an average total expenditure in each regulatory year of not greater than 1 per cent of the TNSP's average annual maximum allowed revenue proposed in its revenue proposal for the regulatory control period.²² For AusNet Services this amount is \$5.4 million (\$2021–22) per year or \$27.0 million (\$2021–22) in total.

The projects included in the NCC component must not have been included in the proposed opex and capex revenue allowance.²³

¹⁹ AER, *Final – Service Target Performance Incentive Scheme*, October 2015, cl. 3.2(e).

²⁰ AER, *Final – Service Target Performance Incentive Scheme*, October 2015, cl. 4.2(c).

²¹ AER, *Final – Service Target Performance Incentive Scheme*, October 2015, cl. 4.2(d).

²² AER, *Final – Service Target Performance Incentive Scheme*, October 2015, cl. 5.2(b)(2)(vi).

²³ AER, *Final – Service Target Performance Incentive Scheme*, October 2015, cl. 5.2(r).

The projects are expected to be high benefit/low cost projects with short payback periods. They are expected to be directed towards directly addressing transmission constraints.²⁴

10.4 Interrelationships

The STPIS takes into account any other provisions in the NER that incentivise TNSPs to minimise capital or operating expenditure.²⁵ One of the objectives of the STPIS is to assist in the setting of efficient capital and operating expenditure allowances by balancing the incentive to reduce actual expenditure with the need to maintain and improve reliability for customers and reduce the market impact of transmission congestion.²⁶

The STPIS will interact with the capital expenditure sharing scheme (CESS) and the opex efficiency benefit sharing scheme (EBSS). The STPIS allows us to adjust the performance targets of the service component for the expected effects on the TNSP's performance from any increases or decreases in the volume of capital works planned during the regulatory control period.²⁷ In conjunction with CESS and EBSS, the STPIS will ensure:

- any additional investments to improve service quality are based on prudent economic decisions
- reductions in capex and opex are achieved efficiently, rather than at the expense of service levels to the network users.

10.5 Submissions

As referred to in section 10.6.1, AusNet Services indicated in its revenue proposal that it intends to propose an alternative methodology for establishing the large Loss of Supply target if it receives zero events in 2020. This is because it would have yielded a zero target for the 2022–27 period if the current scheme was applied. It submitted that a zero target would result in an inappropriately biased incentive.²⁸

In our Issues Paper, we explained that:²⁹

We do not consider the STPIS is an asymmetric scheme. One of the key features of the STPIS is that a TNSP can only keep its reward under the STPIS if the service level improvement is retained in subsequent regulatory control periods. If the improvement is not maintained, the TNSP will need to return the earlier reward to the network users. Hence, a TNSP can only earn a reward for service improvement results once. Consumers, however, receive on going benefits from

²⁴ AER, *Final – Service Target Performance Incentive Scheme*, October 2015, cl 5.2(a).

²⁵ NER, cl. 6A.7.4(b)(5).

²⁶ AER, *Final – Service Target Performance Incentive Scheme*, October 2015, cl. 1.4.

²⁷ AER, *Final – Service Target Performance Incentive Scheme*, October 2015, cl. 3.2(j).

²⁸ AusNet Services, *Regulatory Proposal 2023–27*, 29 October 2020, p. 171.

²⁹ AER, *Issues Paper, AusNet Services 2022–27 Transmission Revenue Proposal*, 11 December 2020, p. 33.

the earlier service level improvements, because the performance targets are increased to that level in the next regulatory control period—for the next five years in the new the regulatory control period

The Consumer Challenge Panel, sub-panel 23 (CCP23) advised that it supports the above AER position.³⁰

We maintain our position that it would not be appropriate to modify the performance target for AusNet Services to potentially receive reward payments that it has already received previously.

10.6 Reasons for draft decision

We will apply version 5 of the STPIS to AusNet Services. The reasons for our draft decision are outlined below.

At the time of submitting its regulatory proposal, AusNet Services did not have the 2020 performance data. Hence, only the 2013–19 data were provided. Our draft decision is based on the 2013–2019 audited data. However, we consider that the final decision should include the 2020 data, which will be available for inclusion in the calculations submitted as part of AusNet Services' revised proposal.

10.6.1 Service component

Performance targets

Performance targets must equal the TNSP's average performance history over the past five years unless they are subject to an adjustment under clause 3.2(i) or (j) of the STPIS.³¹ We have determined performance targets that are equal to the arithmetic mean of the 2015–19 performance data. AusNet Services followed this approach for its proposed performance targets.³² Our placeholder performance targets are shown in Table 10.1 above.

Caps and floors

Proposed caps and floors must be calculated with reference to the proposed performance targets using a sound methodology.³³ In the past, we have generally accepted approaches that use five years of performance data to determine a statistical distribution that best fits the data, with the caps and floors set at two standard deviations either side of the mean (if using a normal distribution), or at the 5th and 95th percentiles (if using a distribution other than the normal distribution).

³⁰ CCP23, *Advice to AER on AusNet Services Transmission regulatory proposal*, 12 February 2021, p. 66.

³¹ AER, *Final – Service Target Performance Incentive Scheme*, October 2015, cl. 3.2.

³² AusNet Services, *Regulatory Proposal 2023–27*, 29 October 2020, pp. 169–170.

³³ AER, *Final – Service Target Performance Incentive Scheme*, October 2015, cl. 3.2(e).

The distribution selected to calculate the caps and floors for a particular parameter must be conceptually sound. We have established the following principles for selecting a distribution to calculate caps and floors:³⁴

- the chosen distribution should reflect any inherent skewness of the performance data
- the distribution should not imply that impossible values are reasonably likely. For example, the distribution for an average circuit outage rate sub-parameter should not imply that values below zero per cent are reasonably likely
- discrete distributions should be used to represent discrete data. For example, a discrete distribution such as the Poisson distribution should be used when calculating caps and floors for loss of supply sub-parameters. Continuous distributions should not be used.

Using standard deviations to set caps and floors is appropriate when a normal distribution is selected. However, when a normal distribution is not selected, the better measure to use is the percentiles.

AusNet Services' set out its methodology for choosing the distribution and target, cap and floor result for the service component sub-parameters.³⁵

For reasons below, we do not accept AusNet Services' proposed cap and floor values as set out in Table 10.4:³⁶

- for some of the sub-parameters which have continuous data AusNet Services chose distributions which do not have a fixed lower bound of zero.³⁷ We do not agree with having a lower bound that can be less than zero as none of the sub-parameters can be negative
- AusNet Services used both the Anderson-Darling (A-D) statistic and the Kolmogorov-Smirnov (K-S) statistic³⁸ in order to choose a distribution for obtaining caps and collars for the sub-parameters. It submitted that the A-D statistic was preferred due to data being concentrated in the middle of the distribution or due to data being concentrated closer to the centre and near tails of the distribution.³⁹ We do not consider that strong claims that data is more in the middle or the tails of a distribution are able to be supported when there are only five data points. On balance we consider the K-S fit statistic to be preferred due to its simplicity,

³⁴ AER, *Draft decision, SP AusNet Transmission determination 2014–15 to 2016–17*, August 2013, pp. 184–185.

³⁵ AusNet Services, *Regulatory Proposal 2023–27*, 29 October 2020: Appendix 7A: Fitting probability distributions to Service Component data.

³⁶ AusNet Services, *Regulatory Proposal 2023–27*, 29 October 2020, pp. 172–173.

³⁷ AusNet Services, *Regulatory Proposal 2023–27*, 29 October 2020: Appendix 7A: Fitting probability distributions to Service Component data, pp. 4–10.

³⁸ The Kolmogorov-Smirnov test (KS-test) tries to determine if two datasets differ significantly. The Anderson-Darling (A-D) test is used to test if a sample of data came from a population with a specific distribution. It is a modification of the Kolmogorov-Smirnov (K-S) test and gives more weight to the tails than does the K-S test.

³⁹ AusNet Services, *Regulatory Proposal 2023–27*, 29 October 2020: Appendix 7A: Fitting probability distributions to Service Component data, pp. 4–10.

especially when there is no evidence to suggest the A-D fit statistic is more appropriate in this setting

- for the discrete distributions, AusNet Services report both the AIC and BIC statistics. For the 'Material failure of SCADA' sub-parameter, the AIC and BIC statistics are lowest, indicating that the Geometric distribution is the distribution of choice. However, AusNet Services selected the Poisson distribution.⁴⁰ We note that although the Poisson fitted distribution has a lower standard deviation, it does not provide direct information about how well the data fit the distribution. On this basis our preferred distribution is the Geometric distribution.

Table 10.4 AusNet Services proposed — distribution, targets, caps and floors for 2022–27

Parameter	Distribution	Cap (5th percentile)	Target	Floor (95th percentile)
Average circuit outage rate				
Line event rate – fault	Normal	11.6%	17.38%	23.2%
Transformer event rate - fault	Logistic	6.6%	11.70%	17.5%
Reactive plant event rate - fault	InvGauss	15.5%	19.88%	31.7%
Line event rate – forced	Normal	1.9%	11.84%	21.8%
Transformer event rate - forced	Laplace	7.3%	11.85%	16.1%
Reactive plant event rate - forced	Normal	24.7%	30.69%	36.6%
Loss of Supply Event Frequency				
Number of events greater than 0.05 system minutes per annum	Poisson	0	1	3
Number of events greater than 0.30 system minutes per annum	Poisson	0	1	2
Average Outage Duration				
Average Outage Duration	InvGauss	19	53	159
Proper operation of equipment (number of events):				
Failure of protection system	Poisson	23	32	42
Material failure of SCADA	Poisson	0	1	2
Incorrect operational isolation of primary or secondary equipment	Poisson	2	6	11

Source: AusNet Services, *Regulatory Proposal 2023–27*, 29 October 2020, pp. 172–173.

⁴⁰ AusNet Services, *Regulatory Proposal 2023–27*, 29 October 2020: Appendix 7A: Fitting probability distributions to Service Component data, pp. 4–10.

Applying our reasoning described above, we used our @risk model to estimate AusNet Services' distributions, caps and floors.⁴¹ We provided our assessment to AusNet Services for comment. They agreed with our choice of distributions and the value of the caps and floors.⁴²

Our approved distribution, target, cap and floor values for AusNet Services are set out in Table 10.5.

Table 10.5 Draft decision — distributions, targets, caps and floors for 2022–27

Parameter	Distribution	Cap (5th percentile)	Target	Floor (95th percentile)
Average circuit outage rate				
Line event rate – fault	Weibull	11.68%	17.38%	22.24%
Transformer event rate - fault	Weibull	6.85%	11.70%	16.22%
Reactive plant event rate - fault	Pearson	13.75%	19.88%	27.94%
Line event rate – forced	Uniform	1.09%	11.84%	20.61%
Transformer event rate - forced	Weibull	7.32%	11.85%	15.86%
Reactive plant event rate - forced	Pearson	25.54%	30.69%	36.71%
Loss of Supply Event Frequency				
Number of events greater than 0.05 system minutes per annum	Poisson	0	1	3
Number of events greater than 0.30 system minutes per annum	Poisson	0	1	2
Average Outage Duration				
Average Outage Duration	InvGauss	13	54	146
Proper operation of equipment (number of events):				
Failure of protection system	Poisson	23	32	42
Material failure of SCADA	Geometric	0	1	3
Incorrect operational isolation of primary or secondary equipment	Poisson	2	6	11

Source: AER analysis.

⁴¹ Our @risk model has been used to set the cap and floor range in most of our recent determinations.

⁴² AusNet Services, *Response to AER Information Request #009 – STPIS*, received 15 February 2021, p. 4.

10.6.2 Market impact component

For reasons explained below, we do not accept AusNet Services' proposed performance target for the market impact parameter. Instead, our draft decision is to substitute the proposed value of 1813 dispatch intervals with 1236 dispatch intervals. This is a placeholder value using 2013–19 data. The final performance target will be calculated using 2014–2020 data.

As version 5 of the STPIS is being applied to AusNet Services for the second time, the performance target is to be calculated in accordance with clause 4.2(g) of version 5 of the STPIS.

Under this methodology:

- the performance target for the 2022–27 regulatory period is calculated as the average of the annual performance measure using the median five out of seven preceding calendar year values of the performance measure. The performance measure is the raw annual performance adjusted for the unplanned outage event limit.⁴³ The annual performance measure is the result reported at each annual STPIS review. The annual MIC financial incentive is calculated using this result
- the unplanned outage event limit to be applied for the 2022–27 regulatory period is calculated as 17 per cent of the performance target calculated for the 2022–27 regulatory period, in the step above.

AusNet Services submitted a performance target of 1813 dispatch intervals based on its 2013–19 data.⁴⁴

However, our assessment of the AusNet Services' 2013–19 performance history data submission found that a number of the performance history counts were not consistent with the requirements of the STPIS. AusNet Services submitted a 2015 value of 969. This is different to the raw performance count of 966.5 and the adjusted performance count of 906.5 that was agreed with AusNet Services for the AER's final decision of the 2017–22 revenue determination. AusNet Services also calculated its performance target using the raw performance data, which was not adjusted for the unplanned outage event limit. The annual performance measure used to calculate the performance target should equal the performance measures reported at the Annual STPIS Review and used for calculating the MIC incentive payment. We have substituted the annual STPIS performance measure that was determined at the Annual STPIS Review for 2017 and 2019. AusNet Services proposed a raw performance value of 871 for 2014. The adjusted performance count that the AER has used is 858 for 2014, as per the AER's final decision of the 2017–22 revenue determination.

Based on these adjustments, we calculated the MIC target as 1236 dispatch intervals, the unplanned outage event limit as 210 dispatch intervals as set out in

Table 10.6. We calculated the incentive rate per DI as \$4,551/DI.

⁴³ AER, *Final – Service Target Performance Incentive Scheme*, October 2015, cl.4.2(h).

⁴⁴ AusNet Services, *Regulatory Proposal 2023–27*, 29 October 2020, p. 174.

Table 10.6 Draft decision — MIC parameter values for 2022–27

Regulatory period (RP)	Raw performance count			Capped unplanned count	Adjusted performance count
	Planned	Unplanned	Total (Planned + Unplanned)	Min of Raw Unplanned or 0.17x(M)	planned + capped unplanned
(RP)	(a)	(b)	(a)+(b)	(d)	(e)
2013	598	147	745	147	745
2014	650	221	871	208	858
2015	698.5	268	966.5	208	906.5
2016	5988	702	6690	208	6196
2017	1946	2549	4495	212	2158
2018	217	101	318	101	318
2019	1298	686	1984	212	1510
2020					
Max			6690		
Min			318		
Average of 5 median			1812		1236
Unplanned outage event limit (2013-16)			208		
Unplanned outage event limit (2017-21)			212		
Unplanned outage event limit (2022-27)			210		

Source: AER analysis.

Exclusions

AusNet Services has requested confirmation that the interpretation of exclusions in relation to it for the 2018–20 Annual STPIS Reviews⁴⁵ continue to be applied for the 2022–27 revenue determination period. Two of the questions relate to exclusion 1, one question each on exclusions 3A, 4, 6 and 11 were raised by AusNet Services.

The interpretation of the exclusion under the scheme is set out, followed by a description of the application of the exclusion to AusNet Services during the 2017–20 Annual STPIS Reviews.

We have met with AusNet Services to gain a better understanding of the issues raised in the revenue proposal. We consider that the decision on exclusions should be considered as part of the annual STPIS compliance review. AusNet Services is seeking clarification on the interpretation of these exclusions specific to their application in Victoria. We will work with AusNet Services to provide clarification on the interpretation of these exclusions before the commencement of the next regulatory period.

⁴⁵ These are the Annual STPIS Reviews for which version 5 of the STPIS applied to AusNet Services.

AEMO imposed Frequency Control Ancillary Service constraints

Exclusion 1 captures force majeure events.⁴⁶ The scheme defines force majeure events as ‘any event, act or circumstance or combination of events, acts and circumstances which (despite the observance of good electricity industry practice) is beyond the reasonable control of the part affected by any such event’.⁴⁷ A list of events considered to meet the force majeure definition are subsequently set out.⁴⁸

In making version 4 of the scheme the AER stated that ‘The AER recognises that during force majeure events there is no incentive on TNSPs under the scheme to minimise the time taken to return service to customers due to the existence of standard force majeure exclusions’.⁴⁹ The AER amended the scheme to require TNSPs to report on the steps taken to ensure that TNSPs use all reasonable endeavours to minimise the impact of force majeure events on customers.⁵⁰

In its revenue proposal, under the force majeure exclusion AusNet Services sought continuation of its current exclusion claims of particular Frequency Control Ancillary Service (FCAS) constraints.⁵¹ It submitted that these constraints are directed by AEMO, and relate to assets associated with the VIC-SA interconnector. On the basis that these constraints are imposed by AEMO, and that AusNet Services does not have control over these constraints, it further submitted that future constraints should also be excluded from its performance if and when they occur.⁵²

For the 2017–22 AusNet Services Draft Transmission Determination the AER decided that it was appropriate to exclude F_S+LREG_0035 and F_S+RREG_0035 for the determination period. This was on the basis that AusNet Services was not in a position to control the impact of those requirements upon its performance. We indicated that we would review AusNet Services’ ability to mitigate the impact of the policy in the annual compliance review process and the setting of AusNet Services’ targets at the end of 2017–22 regulatory control period. We stated that AusNet Services should continue to investigate practical approaches to mitigate the impact of the operational change.⁵³

⁴⁶ AER, *Final Electricity transmission network service provider Service target performance incentive scheme, version 5 (corrected)*, October 2015, Appendix C, p. 37.

⁴⁷ AER, *Final Electricity transmission network service provider Service target performance incentive scheme, version 5 (corrected)*, October 2015, Appendix G, p. 49.

⁴⁸ AER, *Final Electricity transmission network service provider Service target performance incentive scheme, version 5 (corrected)*, October 2015, Appendix G, p. 49.

⁴⁹ AER, *Explanatory statement, Electricity transmission network service providers, Draft service target performance incentive scheme, September 2012*, p. 34.

⁵⁰ AER, *Final Decision, Electricity transmission network service providers, Service Target Performance Incentive Scheme*, December 2012, p. 25.

⁵¹ These include F_S+LREG_0035, F_S+RREG_0035, F_S++HYSE_L6_1, F_S++HYSE_L60, F_S++HYSE_L5, and V_SV_MLMO_NETT.

⁵² AusNet Services, *Revenue Proposal 2023–27*, 29 October 2020, pp.174–175.

⁵³ AER, *AusNet Services transmission determination 2017-2022*, Final Decision, Attachment 11, April 2017, pp.15–16.

Constraints associated with contestable projects and AEMO non-contestable projects

Exclusion 3A is for binding constraints associated with any planned outage of an asset that is providing prescribed transmission services shown to be primarily caused or initiated for the connection of a new asset that is not providing prescribed transmission services as requested by a third-party or by AEMO.

In making version 5 of the scheme we stated that:⁵⁴

In Victoria contestable arrangements exist for network augmentations where the "construction, ownership and operation" of new transmission assets is competitively tendered. Therefore, in Victoria:

- any connection arrangements that result in MIC counts on the existing prescribed network will be excluded from the parameter. This is irrespective of whether AusNet Services, or any other TNSP subject to the STPIS, is the successful tenderer for the new assets.
- As in other jurisdictions, once the assets are in service, if AusNet Services is the operator of the non-prescribed assets, then the counts on the prescribed network due to planned or unplanned outages will be included in the scheme. This provides AusNet Services an incentive to minimise the impact of maintaining the network within its control.

We further clarified that 'projects initiated by AEMO are funded outside the revenue determination, and should not be included in the scheme'.⁵⁵

In its revenue proposal, under exclusion 3A, AusNet Services sought confirmation of the exclusion of binding dispatch intervals associated with contestable projects (AEMO directed or generator connection) and non-contestable AEMO projects. AusNet Services also sought confirmation that works required to facilitate the connection of additional renewable generation (for example, installation of required communications upgrades) will be excluded under exclusion 3A.

At the time of making version 5 of the scheme, we confirmed that binding dispatch intervals associated with contestable projects proposed by AEMO or a third party are excluded.

We did not exclude binding dispatch intervals associated with non-contestable projects. This was because these are investments that AusNet Services undertakes like any other TNSP and would have led to unfairly favourable treatment of AusNet Services compared with other TNSPs.

To the extent that a project is required for renewable generation to be operational, that would be deemed to be part of the connection of the renewable generation and so would be excluded under exclusion 3A.

⁵⁴ AER, Explanatory statement: Service Target Performance Incentive Scheme version 5, p. 33.

⁵⁵ AER, *Explanatory statement: Service Target Performance Incentive Scheme version 5*, p. 33.

Outage on assets that are not providing prescribed transmission services

Exclusion 4 is for binding constraints associated with outages on assets that are not providing prescribed transmission services.

In its revenue proposal, under exclusion 4, AusNet Services sought clarification of our statement in the Final Decision of version 5 of the STPIS.

We stated:⁵⁶

- For all jurisdictions where the TNSP has a dual role of transmission planner and transmission operator counts associated with augmentations/replacements of the prescribed network are included in the parameter, both pre-commissioning counts and post-commissioning counts.
- Where a new non-prescribed asset is connecting to the prescribed transmission network then the associated outages on the prescribed network will be excluded from the parameter. For example, a new wind-farm requests connection to the prescribed transmission network.

Once the new non-prescribed asset has been commissioned:

- Where the TNSP is both the owner and operator of the prescribed network assets and the non-prescribed assets, the counts on the prescribed network for post-commissioning planned/unplanned maintenance will be included. This provides the TNSP an incentive to minimise the impact of maintaining the network that is within its control.

In Victoria contestable arrangements exist for network augmentations where the "construction, ownership and operation" of new transmission assets is competitively tendered. Therefore, in Victoria:

- any connection arrangements that result in MIC counts on the existing prescribed network will be excluded from the parameter. This is irrespective of whether AusNet Services, or any other TNSP subject to the STPIS, is the successful tenderer for the new assets.
- As in other jurisdictions, once the assets are in service, if AusNet Services is the operator of the non-prescribed assets, then the counts on the prescribed network due to planned or unplanned outages will be included in the scheme. This provides AusNet Services an incentive to minimise the impact of maintaining the network within its control.

AusNet Services noted that where it is the operator of the non-prescribed assets, then the counts on the prescribed network due to planned or unplanned outages on the non-prescribed assets will be included in the scheme.

⁵⁶ AER, *Final Decision – Electricity transmission network service providers service target performance incentive scheme*, September 2015, p. 33.

AusNet Services submitted that it is disadvantaged during the tendering process for contestable projects as it faces MIC penalties for operational outages where other tenderers do not have to factor in these costs.

A contestable project is a non-prescribed asset (for example an unregulated asset) is subject to exclusion 4 under version 5 of the scheme. This means that any binding dispatch intervals caused by an outage of assets providing non-prescribed services are excluded.

In the AusNet Services 2017–22 revenue determination, we stated that binding dispatch intervals on a prescribed asset that are a consequence of an outage on a planned or unplanned outage are to be included in the MIC count.

This was because the objective of the STPIS under the NER is to incentivise the maintenance or improvement of reliability. The scheme has been designed to minimise the impact of maintenance to achieve this objective. We consider that AusNet Services should be able to control the timing of maintenance on its network.

We stated that all TNSPs should be subject to the same incentive regime where possible. Notwithstanding that AusNet Services is subject to different operational arrangements in Victoria, we considered that it should be incentivised to minimise outages, in the same way as other TNSPs.

We did not consider that it is the role of the STPIS to address issues relating to tendering for contestable projects. We considered this to be a separate issue that should be addressed with a separate policy instrument if it is assessed to be a material issue by AEMO.

Constraints for managing system security

Under the current scheme, exclusion 6 provides for the exclusion of binding dispatch intervals that are a consequence of outages that are only for the purpose of assisting with operational security, for example where a lower voltage parallel circuit is taken out of service to assist with transfers across an interconnector. This exclusion covers AEMO instructions to TNSPs to remove network elements from service to improve security. It does not cover constraints applied to manage system security resulting from network outages for other reasons.

In its revenue proposal, under exclusion 6, AusNet Services sought exclusion of binding dispatch intervals as a consequence of constraints invoked by AEMO for managing system security. AusNet Services submits that there has been an increase in the number of constraints, increasing the likelihood of constraints binding during planned outages, making it increasingly difficult to optimise planned outages.

Exclusions for constraint of assets subject to particular transmission connection agreements

Exclusion 11 is for binding dispatch intervals resulting from the constraint of assets subject to particular transmission connection agreements. These transmission connection agreements, where a lower service standard has been negotiated, give the

TNSP the right to disrupt service under certain network conditions where the constraint only affects the parties subject to the agreement. Exclusion 11 was not designed to apply to all generators or connections. It was specifically designed for situations like the south east generators in South Australia (e.g. Canunda Wind Farm, Lake Bonney) that used cheaper T-connections on the understanding that their performance would be worse all the time. That is, there was a trade-off between network performance on a continual basis and the connection cost.

In its revenue proposal, under exclusion 11, AusNet Services has sought exclusion of binding dispatch intervals relating to any constraint that constrains an individual participant.

Shortened forms

Shortened form	Extended form
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
capex	capital expenditure
CESS	capital expenditure sharing scheme
EBSS	efficiency benefit sharing scheme
MAR	maximum allowed revenue
NEL	national electricity law
NEM	national electricity market
NEO	national electricity objective
NER	national electricity rules
opex	operating expenditure
RIN	regulatory information notice
STPIS	service target performance incentive scheme
TNSP	transmission network service provider
MIC	market impact component