Framework and Approach ElectraNet

Regulatory control period commencing 1 July 2023

July 2021

AUSTRALIAN ENERGY REGULATOR

Inquiries about this publication should be addressed to:

Australian Energy Regulator
GPO Box 520
Melbourne Vic 3001

Tel: 1300 585 165
Email: AERInquiry@aer.gov.au

AER reference: AER202188

About the framework and approach paper

The Australian Energy Regulator (AER) is responsible for the economic regulation of electricity transmission and distribution services in Australia's National Electricity Market (NEM). We are an independent statutory authority established by the Australian Government. Our relevant powers and functions are set out in the National Electricity Law (NEL) and National Electricity Rules (NER).

The framework and approach (F&A) paper is the first step in the process to determine efficient prices for the supply of electricity transmission services by ElectraNet in South Australia, for the 2023–28 regulatory control period starting 1 July 2023 to 30 June 2028. It facilitates early consultation with consumers and assists ElectraNet in preparing its revenue proposal.

ElectraNet owns and operates the electricity transmission network in South Australia. The network comprises the poles, wires and transformers used for transporting high voltage electricity from remote generators to population centres. Its customers include SA Power Networks (the distribution network service provider in South Australia), generators and direct connect customers (such as large industrial customers and mines). ElectraNet's current 2018–23 regulatory control period concludes on 30 June 2023.

This F&A paper sets out our proposed approach to the economic regulation of ElectraNet's revenues for the 2023–28 period, including our proposed application of incentive schemes and allowances, as set out below:[1]

- service target performance incentive scheme (STPIS)
- efficiency benefit sharing scheme (EBSS)
- capital expenditure sharing scheme (CESS)
- small-scale incentive scheme (SSIS)
- demand management innovation allowance mechanism (DMIAM)
- expenditure forecast assessment guidelines
- whether depreciation will be based on forecast or actual capital expenditure (capex) in updating the regulatory asset base (RAB).

Previous consultation

On 30 November 2020, we invited stakeholder submissions following our notice to amend or replace the current F&A for ElectraNet for the 2023–28 period. We did not receive any submissions.[2]

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1 In accordance with sub-clauses 6A.10.1A(a)(1) and (e) of the NER, our F&A paper for ElectraNet for the 2023–28 period must be published by 31 July 2021.

2 The stakeholder submissions period on our notice to amend or replace the current F&A for ElectraNet ran from 30 November to 15 December 2020.

On 30 December 2020, we decided to amend the current F&A for ElectraNet for the 2023–28 period due to the introduction of the DMIAM.

Next steps

Following the release of this final F&A paper, ElectraNet must submit its 2023–28 revenue proposal by 31 January 2022. Table 1 summarises the transmission revenue determination process.

Table 1 ElectraNet's 2023–28 transmission revenue determination process

Step	Indicative date
AER publishes F&A paper	30 July 2021
ElectraNet submits revenue proposal to the AER	31 January 2022
AER publishes issues paper	March 2022*
AER holds public forum	April 2022*
Submissions on issues paper and revenue proposal close	May 2022*
AER publishes draft decision	September 2022*
AER holds public forum (predetermination conference)	October 2022*
ElectraNet submits revised revenue proposal to the AER	December 2022*
Submissions on draft decision and revised revenue proposal close	January 2023*
AER publishes final decision	28 April 2023

Source: NER, Chapter 6A, Part E.

Notes: * Dates are based on the AER receiving compliant proposals. The NER does not provide a specific timeframe for publishing a draft decision; only a final decision.

Contents

1 Overview

The purpose of the F&A is to provide ElectraNet and consumers with an indication of our likely position on matters that ElectraNet is required to address in its upcoming 2023–28 revenue proposal. It provides a degree of regulatory predictability.

This F&A paper sets out how we propose to apply a range of incentive schemes and allowances and other guidelines to ElectraNet's 2023–28 revenue proposal, as well as our approach to calculating depreciation. The positions we set out in this paper are not binding on the AER or ElectraNet.[3] This means that during the determination process, it is open to us to change our position, and for ElectraNet to propose a different position, on matters set out in the F&A paper. If our position changes from the one set out in this paper, we will provide clear reasons.

Incentive schemes and allowances encourage transmission network service providers (TNSPs) to manage their respective businesses in a safe and reliable manner that benefits the long-term interests of consumers. Such schemes also provide TNSPs with incentives to spend efficiently and to meet or exceed service quality/reliability targets. In some instances, TNSPs may incur a financial penalty if they fail to meet set targets. The overall objectives of these schemes are to:

- encourage appropriate levels of service quality
- maintain network reliability as appropriate
- incentivise TNSPs to spend efficiently on capital expenditure (capex) and operating expenditure (opex)
- share efficiency gains and losses between TNSPs and consumers
- incentivise TNSPs to consider economically efficient alternatives to augmenting their networks.

We summarise the specific incentive schemes and allowances below, and also provide an overview of our expenditure forecast assessment guideline and approach to calculating depreciation.

1.1 Upcoming incentive scheme review

We are currently planning for a review of our incentive schemes to ensure that they remain relevant and fit-for-purpose. This will include the design and application of the CESS, EBSS and STPIS to transmission network service providers, and will consider stakeholder concerns and feedback.

We aim to finalise the review in the second half of 2022 providing scope to incorporate elements of the review in ElectraNet's revenue determination. However, our ability to

[3] NER, cl. 6A.10.1A(f).

reflect changes in the draft determination depends on the issues raised by stakeholders and the nature of any changes to the schemes. The AER will work closely with all affected stakeholders throughout the incentive scheme review and this determination process.

Section 1.2 sets out how the AER intends to apply the schemes at present.

1.2 Summary of F&A paper final positions

Table 1 below sets out a summary of our F&A paper final positions in terms of the application of incentive schemes and allowances, expenditure forecast assessment guideline, and approach to calculating depreciation, to ElectraNet's 2023–28 revenue determination.

Table 1. Summary of AER position to ElectraNet for the 2023–28 period

Name of scheme or mechanism	Applied	Further information
Service target performance incentive scheme (STPIS)[4]	Version 5	Section 2 (pp. 10–14)
Efficiency benefit sharing scheme (EBSS)[5]	Version 2	Section 3 (pp. 15–17)
Capital expenditure sharing scheme (CESS)[6]	Version 1	Section 4 (pp. 18–20)
Small-scale incentive scheme (SSIS)[7]	Not applied	Section 5 (p. 21)
Demand management innovation allowance mechanism (DMIAM)[8]	Applied	Section 6 (p. 22)
Expenditure forecast assessment guideline	Applied	Section 7 (pp. 23–24)
Depreciation	Applied forecast depreciation	Section 8 (pp. 25–27)

4 STPIS provides a financial incentive to TNSPs to maintain and improve service performance.

5 EBSS aims to provide a continuous incentive for TNSPs to pursue efficiency improvements in opex, and provide for sharing these efficiencies between TNSPs and network users.

6 CESS provides financial rewards to TNSPs whose capex becomes more efficient and financial penalties to those whose capex becomes less efficient.

7 Scheme would reward network service providers for improving their customer service, or penalise then if service deteriorates.

8 DMIAM provides TNSPs with funding for research and development in demand management projects that have the potential to reduce long-term network costs.

1.3 ElectraNet's views on the existing F&A paper

On 5 November 2020, ElectraNet requested the AER to amend or replace the existing F&A paper that will apply to it for the 2023–28 period.[9] In its letter, ElectraNet set out its preliminary views on the matters requiring the AER's consideration prior to finalising the F&A paper, as set out below.

1.3.1 Incentive schemes and allowances

1.3.1.1 Service target performance incentive scheme

ElectraNet notes Energy Networks Australia's preference for the STPIS to capture the cost of congestion rather than instances of material congestion in the context of the market impact component (MIC). Similar issues have also been raised by other transmission network service providers.[10] ElectraNet also notes that potential reforms to elements of the STPIS are being considered in the context of the COGATI Review and System Strength Investigation by the Australian Energy Market Commission (AEMC). Consequently, ElectraNet requests the AER engage transmission network service providers in any review of the STPIS.

We will engage ElectraNet as part of our review of incentive schemes (section 1.1).

As set out in section 2, our position is to apply version 5 of the STPIS to ElectraNet for the 2023–28 period.

1.3.1.2 Efficiency benefit sharing scheme

ElectraNet notes that the new integrated system plan (ISP) Rules give it the obligation to commence early works on actionable ISP projects. ElectraNet states that these projects may not proceed if they do not receive full regulatory approval. It proposes that any written-off opex costs incurred in relation to early works for ISP projects should be excluded from the EBSS calculation.

ElectraNet also notes that the current proposals for the development and implementation of Renewable Energy Zones (REZs) would impose new obligations on it for the planning and staged development of REZs. It proposes that any opex incurred in relation to such new obligations should be excluded from the EBSS calculation to the extent these costs lie outside the approved opex amount for the 2018–23 regulatory period.

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9 ElectraNet, *Request for revised framework and approach paper*, 5 November 2020 available at https://www.aer.gov.au/networks-pipelines/determinations-access-arrangements/electranet-determination-2023-28/initiation.

10 In AusNet Services' request for a replacement F&A for the 2022–27 period, it also raised concerns regarding the ability of STPIS version 5 to provide appropriate incentives in the current environment of increasing investment in renewable generation.

As set out in section 3, our proposed approach is to apply version 2 of the EBSS to ElectraNet at the commencement of the 2023–28 period. We note that the current version of the EBSS only allows exclusions for opex categories which are not forecast using a single year revealed cost approach for the following regulatory control period, where doing so better achieves the requirements of clauses 6.5.8 and 6A.6.5 of the NER.[11] We will assess whether costs associated with written-off values of early ISP works and new obligations related to the REZs should be excluded from the EBSS calculation in ElectraNet's 2023–28 revenue determination.

1.3.1.3 Capital expenditure sharing scheme

ElectraNet proposes the CESS does not apply to any approved contingent projects approved in the upcoming regulatory period that spans multiple regulatory periods to avoid unintended consequences for customers and transmission network service providers.

ElectraNet is concerned that where the approved allowance for the project is exceeded in the first regulatory period, a corresponding reduction is applied to the balance of the approved allowance in the following regulatory period. This results in a double penalty for any overspend, which has a disproportionate impact on network businesses. Conversely, a double benefit applies for any underspend in the first regulatory period, which has a disproportionate impact on network customers.

We will consider the issues raised by ElectraNet as part of our incentive scheme review (section 1.1).

As set out in section 4, our proposed approach is to apply version 1 of the CESS for the 2023–28 period.

1.3.1.4 Small-scale incentive scheme

ElectraNet notes that the NER allows the AER to develop a SSIS for TNSPs, and as the AER has chosen not to develop such a scheme, it would not be applicable for the purposes of ElectraNet's forthcoming regulatory period. ElectraNet wishes to be consulted on the merits and basis of the SSIS in the event that the AER determines such a scheme would apply.

ElectraNet has not proposed a detailed transmission incentive scheme design developed in conjunction with its customers. In the absence of a detailed scheme design, our position is to not apply a SSIS to ElectraNet for the 2023–28 period.

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[11] AER, *Efficiency benefit sharing scheme,* November 2013, p. 7 available at https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/efficiency-benefit-sharing-scheme-ebss-%E2%80%93-november-2013/final-decision.

1.3.1.5 Demand management innovation allowance mechanism

ElectraNet supports the application of the DMIAM to it in the 2023–28 period.

As set out in section 6, our position is to apply the DMIAM to ElectraNet for the 2023–28 period.

1.3.2 Expenditure forecast assessment guideline

ElectraNet accepts the continued application of the expenditure forecast assessment guideline.

As set out in section 7, our proposed approach is to apply the current version of the expenditure assessment guideline, including the information requirements, to ElectraNet at the commencement of the 2023–28 period.

1.3.3 Depreciation

ElectraNet notes the AER's approach has generally been to apply forecast depreciation in establishing the RAB. It is not seeking to depart from this approach for the next regulatory control period.

2 Service target performance incentive scheme

This section sets out our proposed approach and reasons on how we intend to apply the STPIS to ElectraNet in the 2023–28 period.[12]

The AER creates, administers and maintains the STPIS in accordance with the requirements of the NER.[13] The STPIS is part of an incentive based regulation structure we use across all the electricity transmission networks we regulate.

The purpose of the STPIS is to provide incentives to TNSPs to provide greater transmission network reliability when network users place greatest value on reliability, and improve and maintain the reliability of the elements of the transmission network most important to determining spot prices.[14]

In developing the STPIS, we had regard to the requirements of the NER. Under an incentive based regulation framework, TNSPs have an incentive to reduce costs. Cost reductions are beneficial to TNSPs and customers where service performance is maintained or improved. However, cost efficiencies achieved at the expense of service performance standards are not desirable.

2.1 AER's position

Our position is to apply version 5 of the STPIS to ElectraNet for the 2023–28 period. We also note the AER is currently scoping a broad review of incentive schemes to address any stakeholder concerns.

2.2 AER's assessment approach

The STPIS works as part of the 'building block' determination.[15] As part of a revenue determination, we make a decision on the application of the STPIS to a TNSP for the regulatory control period, as well as the values associated with the applicable STPIS parameters.[16] In each regulatory year, the TNSP's maximum allowed revenue (MAR) is adjusted based on its performance against the STPIS parameters in the previous calendar year.

We currently apply version 5 of the STPIS as follows:

- the parameters for each service component (SC) and the maximum revenue increment or decrement that a TNSP can receive for a given level of performance will be those prescribed in version 5 of the scheme. The applicable parameter

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12 AER, *Transmission network service target performance incentive scheme, version 5 (corrected),* October 2015 available at https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/service-target-performance-incentive-scheme-version-5-september-2015-amendment/final-decision#step-40803.

13 NER, cl. 6A.7.4(a).

14 NER, cl. 6A.7.4(b)(1).

15 NER, cll. 6A.5.4(a)(5) and 6A.5.4(b)(5).

16 NER, cll. 6A.4.2(a)(5) and 6A.14.1(1)(iii).

values will be set out in the TNSP's transmission determination. The TNSP's MAR will be adjusted according to its performance against these parameter values, as assessed by us, in accordance with the scheme

- the market impact component (MIC) annual performance target[17] will be calculated in accordance with the scheme (see Appendix C, and example 2 in Appendix F)[18]
- the network capability component (NCC) of version 5 of the scheme will apply to the TNSP.

In its revenue proposal, ElectraNet must:

- submit proposed values for the SC parameters[19]
- submit data for its MIC for the preceding seven regulatory years.[20] ElectraNet must submit a proposed value for a performance target, unplanned outage event limit and dollar per dispatch interval incentive.[21]
- submit a network capability incentive parameter action plan (NCIPAP).[22]

We will accept ElectraNet's proposed parameter values for the service, market impact and network capability components if the proposed values comply with clauses 3.2, 4.2 and 5.2, respectively, of version 5 of the STPIS.[23]

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17 The market impact parameter is the number of dispatch intervals where an outage on the TNSP's prescribed transmission network results in a network outage constraint with a marginal value greater than $10/MWh. For more information, see: AER, *Transmission network service target performance incentive scheme, version 5 (corrected),* October 2015, Appendix C available at https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/service-target-performance-incentive-scheme-version-5-september-2015-amendment/final-decision#step-40803.

18 AER, *Transmission network service target performance incentive scheme, version 5 (corrected),* October 2015, cl. 4.2(g) and Appendix F available at https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/service-target-performance-incentive-scheme-version-5-september-2015-amendment/final-decision#step-40803.

19 AER, *Transmission network service target performance incentive scheme, version 5 (corrected),* October 2015, cl. 3.2 available at https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/service-target-performance-incentive-scheme-version-5-september-2015-amendment/final-decision#step-40803.

20 AER, *Transmission network service target performance incentive scheme, version 5 (corrected),* October 2015, cl. 4.2(a) available at https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/service-target-performance-incentive-scheme-version-5-september-2015-amendment/final-decision#step-40803.

21 AER, *Transmission network service target performance incentive scheme, version 5 (corrected),* October 2015, cl. 4.2(b) available at https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/service-target-performance-incentive-scheme-version-5-september-2015-amendment/final-decision#step-40803.

22 AER, *Transmission network service target performance incentive scheme, version 5 (corrected),* October 2015, cl. 5.2(b) available at https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/service-target-performance-incentive-scheme-version-5-september-2015-amendment/final-decision#step-40803.

23 AER, *Transmission network service target performance incentive scheme, version 5 (corrected),* October 2015 available at https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/service-target-performance-incentive-scheme-version-5-september-2015-amendment/final-decision#step-40803.

Version 5 of the STPIS can result in a maximum revenue increment or decrement of up to 3.75 per cent of the TNSP's MAR.[24]

2.3 Reasons for AER's position

Version 5 of the STPIS seeks to ensure that cost reductions do not result in deterioration of service performance for customers. We consider it will provide appropriate incentives for ElectraNet to:

- provide greater transmission system reliability
- improve and maintain the reliability of those elements of the transmission system that are most important to determining spot prices
- undertake relevant low cost projects to promote efficient levels of network capability from existing assets.

Additional information on the service, market impact and network capability components of the STPIS is provided below.

2.3.1 Additional information on STPIS components

2.3.1.1 Service component

The service component (SC) of the STPIS incentivises TNSPs to maintain and improve network availability and reliability by measuring performance against certain parameters. Under this component of the scheme, a TNSP can receive a revenue increment or decrement of up to 1.25 per cent of its maximum allowed revenue (MAR) for the relevant calendar year.[25]

A TNSP receives a financial incentive (reward) in proportion to the extent its annual performance exceeds its performance target (calculated as the s-factor). If the TNSP fails to meet its performance target, it incurs a financial penalty in proportion to the extent its annual performance does not meet the performance target.

Version 5 of the STPIS amended the SC parameters to focus more on unplanned outages, including a new parameter focusing on proper operation of equipment.

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[24] AER, *Transmission network service target performance incentive scheme, version 5 (corrected),* October 2015 available at https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/service-target-performance-incentive-scheme-version-5-september-2015-amendment/final-decision#step-40803. Calculated as Service Component: max +/-1.25% MAR, Market Impact Component: max +/-1.00% MAR, and Network Capability Component: max +/-1.5% MAR, MAR, max decrement depends on allowance and number of projects not completed and their project range as per cll. 5.3(b)-(c).

[25] AER, *Transmission network service target performance incentive scheme, version 5 (corrected),* October 2015, cl. 3.3(a) available at https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/service-target-performance-incentive-scheme-version-5-september-2015-amendment/final-decision#step-40803.

Performance against these parameters can be used as a lead indicator of a deterioration of network reliability.[26]

The scheme contains definitions for each parameter. The definitions specify the applicable sub-parameters, unit of measure, source of performance data, the formula for measuring performance, definitions of relevant terms, inclusions (which specify particular equipment or events which are to be measured) and exclusions.

We will assess whether ElectraNet's proposed performance targets, caps and weightings comply with STPIS version 5 requirements.[27] We must accept ElectraNet's proposed parameter values if they comply with the requirements of the STPIS.[28] We may reject them if they are inconsistent with the objectives of the STPIS.[29]

2.3.1.2 Market impact component

The MIC will be applied to ElectraNet to incentivise it to minimise the impact of its transmission outages that can affect NEM outcomes. In this component, ElectraNet will receive a financial incentive which falls within a range of -1 per cent (penalty) and +1 per cent (reward) of its MAR.[30]

We will assess ElectraNet's proposed parameter values using the methodology set out in section 4, Appendix C and Appendix F of version 5 of the STPIS.

2.3.1.3 Network capability component

The NCC will be applied to ElectraNet to incentivise the identification and implementation of low cost one-off projects that will improve the capability of the transmission network at times most needed. AEMO will play a part in prioritising the projects to deliver best value for money for customers. In this component, ElectraNet will receive an annual allowance of up to a total of +1.5 per cent of its MAR, but we may reduce the final payment where priority projects are not achieved.[31]

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[26] AER, Transmission network service target performance incentive scheme, version 5 (corrected), October 2015, pp. 7–8 available at https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/service-target-performance-incentive-scheme-version-5-september-2015-amendment/final-decision#step-40803.

[27] AER, *Transmission network service target performance incentive scheme, version 5 (corrected),* October 2015, cl. 3.1 available at https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/service-target-performance-incentive-scheme-version-5-september-2015-amendment/final-decision#step-40803.

[28] AER, *Transmission network service target performance incentive scheme, version 5 (corrected),* October 2015, cl. 3.2(a) available at https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/service-target-performance-incentive-scheme-version-5-september-2015-amendment/final-decision#step-40803.

[29] AER, *Transmission network service target performance incentive scheme, version 5 (corrected),* October 2015, cl. 3.2(l) available at https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/service-target-performance-incentive-scheme-version-5-september-2015-amendment/final-decision#step-40803.

[30] AER, *Transmission network service target performance incentive scheme, version 5 (corrected),* October 2015, cl. 4.3 available at https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/service-target-performance-incentive-scheme-version-5-september-2015-amendment/final-decision#step-40803.

[31] AER, *Transmission network service target performance incentive scheme, version 5 (corrected),* October 2015, cll. 5.3(b)–(c) available at https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/service-target-performance-incentive-scheme-version-5-september-2015-amendment/final-decision#step-40803.

We will assess ElectraNet's NCIPAP in accordance with section 5.2 of version 5 of the STPIS.

3 Efficiency benefit sharing scheme

The EBSS is intended to provide a continuous incentive for TNSPs to pursue efficiency improvements in opex, and provide for a fair sharing of these between businesses and consumers. Consumers benefit from improved efficiencies through lower network prices in future regulatory control periods.

We address our position on the application of the EBSS in relationship to our proposed opex forecasting approach and benchmarking below. We also explain the rationale underpinning the scheme.

3.1 AER's position

We intend to apply the EBSS to ElectraNet in the 2023–28 period if we are satisfied the scheme will fairly share efficiency gains and losses between the business and consumers.[32] This will occur only if the opex forecast for the following period is based on the businesses revealed costs. Our transmission determination for ElectraNet for the 2023–28 period will specify if and how we will apply the EBSS.[33] We also note the AER is currently scoping a broad review of incentive schemes to address any stakeholder concerns.

3.2 AER's assessment approach

The EBSS must provide for a fair sharing of opex efficiency gains and efficiency losses between a network service provider and network users. We must also have regard to the following factors in developing and implementing the EBSS:

- the need to ensure that benefits to electricity consumers likely to result from the scheme are sufficient to warrant any reward or penalty under the scheme
- the need to provide service providers with a continuous incentive to reduce opex
- the desirability of both rewarding service providers for efficiency gains and penalising service providers for efficiency losses
- any incentives that service providers may have to inappropriately capitalise operating expenditure
- the possible effects of the scheme on incentives for the implementation of non-network alternatives.

3.3 Reasons for AER's position

The EBSS applies to ElectraNet in the current 2018–23 period.

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32 NER, cl. 6A.6.5(a).

33 AER, *Efficiency benefit sharing scheme*, 29 November 2013.

The decision to apply the EBSS will depend on whether we expect to use ElectraNet's revealed costs in the 2023–28 period to forecast opex in the 2028–33 period.

3.3.1 Why we would apply the EBSS

We will only apply the EBSS in the 2023–28 regulatory control period if we expect we will use a revealed cost forecasting approach to forecast opex for the 2028–33 period.

The EBSS is intrinsically linked to our revealed cost forecasting approach. This approach relies on identifying an efficient opex amount in the base year (the 'revealed costs' of the TNSP), which we use to develop a total opex forecast. When a business makes an incremental efficiency gain, it receives a reward through the EBSS, and consumers benefit through a lower revealed cost forecast for the subsequent period. This is how efficiency improvements are shared between consumers and the business.

Under a revealed cost approach without an EBSS, a TNSP has an incentive to spend more opex in the expected base year. Also, a TNSP has less incentive to reduce opex towards the end of the regulatory control period, where the benefit of any efficiency gain is retained for less time.

If we use a revealed cost forecasting approach, we apply the EBSS because:

- it reduces the incentive for a TNSP to inflate opex in the expected base year in order to gain a higher opex forecast for the next regulatory control period
- it provides a continuous incentive for a TNSP to pursue efficiency improvements across the regulatory control period. This is because the EBSS allows a business to retain efficiency gains for a total of six years, regardless of the year in which it was made.

In implementing the EBSS, we also consider any incentives a TNSP may have to inappropriately capitalise opex.[34] Where opex incentives are balanced with capex incentives, a TNSP does not have an incentive to favour opex over capex, or vice-versa. If the CESS and EBSS are both applied, these incentives will be relatively balanced. We discuss the CESS further in section 4.

3.3.2 Why we would not apply the EBSS

We will not apply the EBSS if it is likely we will *not* use a revealed cost forecasting approach to forecast opex for the 2028–33 period.

If we apply the EBSS but do not forecast opex using revealed costs, a TNSP could in theory receive an EBSS reward for efficiency gains (at a cost to consumers), but consumers would not benefit through a lower revealed cost forecast. If the TNSP expects this, it has an incentive to increase its EBSS carryover by reducing opex in its

[34] NER, cl. 6A.6.5(b)(3).

base year, knowing that it will not reduce its opex forecast.[35] Consumers would pay the EBSS reward, but not receive a share of the underspend and would be worse off. This outcome is contrary to the NER, which requires that the EBSS must provide for a fair sharing of efficiency gains and losses between a transmission business and consumers.[36]

If a TNSP's revealed costs in the current (2018–23) period are materially higher than the opex incurred by a benchmark efficient TNSP, we will be unlikely to use revealed costs to forecast opex for the 2023–28 period. In which case, we will be unlikely to apply the EBSS. Where we allow forecast opex that is materially lower than revealed costs, even in the absence of the EBSS the TNSP would have an incentive to reduce opex and therefore may have an incentive to capitalise expenditure it would have previously expensed. Given these incentives to reduce opex (and therefore to substitute opex with capex), we consider that applying the CESS would likely provide more balanced incentives between incurring capex and opex than not applying the CESS.[37]

Appendix A of the explanatory statement to the EBSS provides a detailed example of how the EBSS works with a revealed cost forecasting approach.[38]

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35 In our explanatory statement to the EBSS, we detail why excluding the expenditure categories not forecast using a single year revealed cost forecasting method is in the best interest of network users. AER, *Explanatory statement - efficiency benefit sharing scheme*, November 2013, pp. 18–19.

36 NER, cl.6A.6.5(a).

37 For example, we chose to apply the CESS and not the EBSS to Northern Territory electricity distributor, Power and Water in its 2019–24 distribution determination. https://www.aer.gov.au/networks-pipelines/determinations-access-arrangements/power-and-water-corporation-determination-2019-24/draft-decision.

38 AER, *Explanatory statement – Efficiency benefit sharing scheme,* November 2013, pp. 25–26. https://www.aer.gov.au/system/files/AERexplanatorystatement-efficiencybenefitsharingschemeNovember2013.docx.

4 Capital expenditure sharing scheme

The CESS provides financial rewards to TNSPs whose capex becomes more efficient, and financial penalties for TNSPs whose capex becomes less efficient. Consumers benefit from improved efficiency through lower regulated prices. The CESS approximates efficiency gains and efficiency losses by calculating the difference between forecast and actual capex. It shares these gains or losses between TNSPs and network users.

The CESS works as follows:

- we calculate the cumulative underspend or overspend for the current regulatory control period in net present value terms
- we apply the sharing ratio of 30 per cent to the cumulative underspend or overspend to work out the TNSP's share of the underspend or overspend
- CESS payments are calculated taking into account the financing benefit or cost to the TNSP of the underspend or overspend.[39] Further adjustments can also be made to account for deferral of capex and ex post exclusions of capex from the RAB
- CESS payments are added or subtracted to the TNSP's regulated revenue as a separate building block in the next regulatory control period.

Under the CESS, a TNSP retains 30 per cent of an underspend or overspend, while consumers retain the other 70 per cent. This means that for every one dollar saving in capex, the TNSP keeps 30 cents while consumers gain 70 cents.

4.1 AER's position

The CESS applies to ElectraNet in the current 2018–23 period. Our position is to continue to apply the CESS, as set out in our capex incentives guideline, to ElectraNet in the 2023–28 period.[40] We consider this will contribute to the capex incentive objective.[41]

Currently, version 1 of the CESS applies to all incurred capex including contingent capex, with few exceptions. However, we recognise ElectraNet's concern regarding the application of the CESS to contingent projects which span multiple regulatory periods. The AER is currently scoping a broad review of incentive schemes to consider and address any stakeholder concerns.

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39 We calculate benefits as the benefits to the TNSP of financing the underspend since the amount of the underspend can be put to some other income generating use during the period. Losses are similarly calculated as the financing cost to the TNSP of the overspend.

40 AER, *Capital expenditure incentive guideline for electricity network service providers*, November 2013, pp. 5–9.

41 NER, cll. 6A.5A(a) and 6A.6.7(c).

4.2 AER's assessment approach

In deciding whether to apply the CESS to a TNSP, including the nature and details of the applied CESS, we must:

- make that decision in a manner that contributes to the capex incentive objective
- consider the CESS principles, capex objectives, other incentive schemes, and (where relevant) the opex objectives, as they apply to the particular TNSP, and the circumstances of the TNSP.

Broadly, the capex incentive objective is to ensure that only capex that meets the capex criteria enters the RAB (where the RAB is used to set prices). Consumers, therefore, only fund capex that is efficient and prudent.

4.3 Reasons for AER's position

In developing the CESS, we took into account the capex incentive objective, capex criteria, capex objectives and the CESS principles. The CESS is designed to work alongside other incentive schemes that apply to TNSPs, including the EBSS and STPIS.

If a TNSP spends less than its approved forecast capex during a regulatory control period, that TNSP will benefit within that period. At the end of the regulatory control period, the TNSP's RAB will be updated to include new capex. The RAB will include a lower capex amount than would be the case if the TNSP had spent the full forecast capex amount. This is where any sharing of capex underspends (or overspends) with consumers occurs. Thus consumers will also benefit from a capex underspend, but this will occur at the end of the regulatory control period as the result of lower future prices.

As the end of the regulatory control period approaches, the time available for the TNSP to retain any savings gets shorter. The earlier in the period that a TNSP incurs an underspend, the greater is its reward. Without a CESS, the TNSP may choose to spend earlier on capex, spend less on capex (at the expense of service quality), or displace opex with capex. The TNSP may make these choices when it is not efficient to do so. The CESS maintains the TNSP's incentive to spend less than its forecast capex as the TNSP approaches the end of its regulatory period.

The CESS means the TNSP faces the same reward and penalty for capex underspends or overspends in every year of the regulatory control period. The CESS provides TNSPs with an ex ante incentive to spend only efficient capex. TNSPs that make efficiency gains will be rewarded through the CESS. Conversely, TNSPs that make efficiency losses will be penalised through the CESS. In this way, TNSPs will be more likely to incur only efficient capex when subject to a CESS, increasing the likelihood that capex included in the TNSP's RAB reflects the capex criteria. Specifically, if a TNSP is subject to the CESS, its capex is more likely to be efficient and to reflect the costs of a prudent TNSP.

When the CESS, EBSS and STPIS apply to a TNSP the incentives for improvements in opex, capex and service outcomes are balanced. This encourages businesses to

make efficient decisions concerning when and what type of expenditure to incur. Businesses are incentivised to efficiently balance expenditure reductions against service quality and reliability.

5 Small-scale incentive scheme

The NER provide that we may develop a SSIS.[42] On 21 July 2020, we published an electricity distribution SSIS for customer service, referred to as the 'customer service incentive scheme' (CSIS).[43] Development of the CSIS was a collaborative effort between networks, consumers and market bodies. It was driven by a proposal to apply customer service incentives coming out of AusNet Service's trial of 'New Reg' – a joint initiative between the AER, Energy Networks Australia (ENA) and Energy Consumers Australia (ECA) to explore ways to improve sector engagement and identify opportunities for regulatory innovation. The scheme rewards electricity distribution network service providers for improving their customer service, or penalise them if service deteriorates.

AusNet Services trialled New Reg in developing its 2021–26 electricity distribution regulatory proposal. As part of the negotiations, AusNet Services negotiated the customer service incentives with its Customer Forum and proposed to apply these incentives in its regulatory proposal. Under these CSIS incentives, AusNet Services will be penalised or rewarded based on how its customers rate its communication concerning planned and unplanned outages, its customer service for connections and complaints.

The relationship between TNSPs and their customers may be different to the relationship DNSPs have with their customers. As such, the development of a transmission CSIS warrants its own, separate consultation.

ElectraNet has not proposed a detailed transmission incentive scheme design developed in conjunction with its customers. In the absence of a detailed scheme design, our position is to not apply a SSIS to ElectraNet for the 2023–28 period.

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42 NER, cl. 6A.7.5.

43 AER, *Explanatory statement – customer service incentive scheme*, 21 July 2020.

6 Demand management innovation allowance mechanism

On 1 March 2019, Energy Networks Australia (ENA) submitted a rule change request to the AEMC proposing amendments to the NER that would require the AER to develop a demand management incentive scheme (DMIS) and a DMIAM to apply to TNSPs.[44] On 5 December 2019, the AEMC published a final rule determination to apply the DMIAM – but not the DMIS – to TNSPs.[45]

Introducing a DMIAM for transmission is expected to encourage transmission businesses to expand and share their knowledge and understanding of innovative demand management projects that may reduce long-term network costs and, consequently, lower prices for consumers. The AEMC was not satisfied that the benefits of applying the DMIS to transmission businesses would outweigh the upfront costs to consumers.[46]

In accordance with the NER[47] and following stakeholder consultation on a draft DMIAM, the AER published the final DMIAM on 27 May 2021.[48] The DMIAM provides TNSPs with funding for research and development in demand management projects that have the potential to reduce long-term network costs.

Our position is to apply the DMIAM to ElectraNet for the 2023–28 period.

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44 AEMC, *Demand management incentive scheme and innovation allowance for TNSPs, Rule determination*, December 2019.

45 AEMC, *Demand management incentive scheme and innovation allowance for TNSPs, Rule determination*, December 2019.

46 AEMC, *Demand management incentive scheme and innovation allowance for TNSPs, Rule determination*, December 2019.

47 NER, cl. 6A.7.6.

48 AER, *Demand management innovation allowance mechanism, Electricity transmission network service providers*, May 2021 available at https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/demand-management-innovation-allowance-mechanism-transmission/final-decision.

7 Expenditure forecast assessment guideline

The expenditure forecast assessment guideline (guideline) sets out our expenditure forecast assessment approach as developed, and consulted upon, during the Better Regulation program.[49] It outlines the assessment techniques we will use to assess a transmission business's proposed expenditure forecasts, and the information we require from the business. This section sets out our intention to apply the guideline to ElectraNet for the 2023−28 period.

The guideline uses a nationally consistent reporting framework that allows us to compare the relative efficiencies of transmission businesses and decide on efficient expenditure forecasts. The NER requires ElectraNet to advise us of the methodology it proposes to use to prepare its forecasts by 30 June 2021.[50]

The F&A paper must set out our proposed approach to the application of the guideline.[51] This will provide ElectraNet with clarity regarding the information it should include in its revenue proposal. This contributes to an open and transparent process and makes our assessment of expenditure forecasts more predictable.

The guideline contains a suite of assessment/analytical tools and techniques to assist our review of the expenditure forecasts that transmission businesses include in their regulatory proposals. We intend to have regard to the assessment tools set out in the guideline. The tool kit includes:

- benchmarking (including broad economic techniques and more specific analysis of expenditure categories)
- methodology, governance and policy reviews
- predictive modelling and trend analysis
- cost benefit analysis and detailed project reviews.[52]

We exercise judgement to determine the extent to which we use a particular technique to assess a regulatory proposal. We use the techniques we consider appropriate depending on the specific circumstances of the determination. The guideline is flexible and recognises that we may employ a range of different estimating techniques to assess an expenditure forecast. As such, some customisation of the data requirements contained in the guideline might be required. While we do not anticipate any such requirements at present, any data customisation issues would be addressed through

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[49] We were required to develop the expenditure forecasting assessment guideline under clauses 6.4.5 and 11.53.4 of the NER. We published the guideline on 29 November 2013. It can be located at https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/expenditure-forecast-assessment-guideline-2013.

[50] NER, cl. 6A.10.1B.

[51] NER, cl. 6A.10.1A(b)(5).

[52] AER, *Explanatory statement: Expenditure assessment guideline for electricity transmission and distribution*, 29 November 2013.

the regulatory information notice that we will issue to the TNSP for the next regulatory control period.

8 Depreciation

This section sets out our proposed approach to calculating depreciation when the RAB is rolled forward to the commencement of the 2028–33 period.

As part of the roll forward methodology, when the RAB is updated from forecast capex to actual capex at the end of a regulatory control period, it is also adjusted for depreciation. The depreciation we use to roll forward the RAB can be based on either:

- actual capex commissioned during the regulatory control period (actual depreciation). We roll forward the RAB based on actual capex less the depreciation on the actual capex commissioned by the TNSP; or
- the capex allowance forecast at the start of the regulatory control period (forecast depreciation). We roll forward the RAB based on actual capex less the depreciation on the forecast capex approved for the regulatory control period.

For TNSPs, the recognition of capex in our regulatory models is based on a partially as incurred approach.[53] Under this approach, the return on capital is calculated based on as incurred forecast capex and the return of capital (depreciation) is calculated based on as commissioned forecast capex.[54]

The choice of depreciation approach is one part of the overall capex incentive framework.

Where a CESS is applied, using forecast depreciation maintains the incentives for TNSPs to pursue capex efficiencies, whereas using actual depreciation would increase these incentives. There is more information on depreciation as part of the overall capex incentive framework in our capex incentives guideline.[55] In summary:

- if there is a capex overspend, actual depreciation will be higher than forecast depreciation. This means that the RAB will increase by a lesser amount than if forecast depreciation were used. So, the TNSP will earn less revenue into the future (i.e. it will bear more of the cost of the overspend into the future) than if forecast depreciation had been used to roll forward the RAB
- if there is a capex underspend, actual depreciation will be lower than forecast depreciation. This means that the RAB will increase by a greater amount than if forecast depreciation were used. Hence, the TNSP will earn greater revenue into the future (i.e. it will retain more of the benefit of an underspend into the future) than if forecast depreciation had been used to roll forward the RAB.

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53 AER, *Final decision: Electricity transmission network service providers – Roll forward model handbook*, April 2020, p. 13; AER, *Final decision: Electricity transmission network service providers – Post-tax revenue handbook*, April 2021, p. 22.

54 Forecast capex is net of asset disposals.

55 AER, *Capital expenditure incentive guideline for electricity network service providers*, November 2013, pp. 11–12.

The incentive from using actual depreciation to roll forward the RAB also varies with the life of the asset. Using actual depreciation will provide a stronger incentive for the TNSP to underspend capex on shorter lived assets compared to longer lived assets as this will lead to a relatively larger increase in the RAB. Use of forecast depreciation, on the other hand, leads to the same incentive for capex regardless of asset lives. This is because using forecast depreciation does not affect the TNSP's incentive on capex as the TNSP does not lose the full cost of any overspend and is not able to keep all the benefits of any underspend. To this end, using forecast depreciation means the capex incentive is focussed on the return on capital.

8.1 AER's position

Our position is to use the forecast depreciation approach to establish the RAB at the commencement of the 2028–33 period for ElectraNet.[56]

8.2 AER's assessment approach

We must set out our proposed approach as to whether we will use actual or forecast depreciation to establish a TNSP's RAB at the commencement of the following regulatory control period.[57] Our decision must be consistent with the capex incentive objective.[58] We must have regard to:[59]

- any other incentives the service provider has to undertake efficient capex
- substitution possibilities between assets with different lives
- the extent of overspending and inefficient overspending relative to the allowed forecast
- the capex incentive guidelines
- the capital expenditure factors.

Our approach is to apply forecast depreciation except where:

- there is no CESS in place and therefore the power of the capex incentive may need to be strengthened, or
- a TNSP's past capex performance demonstrates evidence of persistent overspending or inefficiency, thus requiring a higher powered incentive.

In making our decision on whether to use actual depreciation in either of these circumstances we will consider:

- the substitutability between capex and opex and the balance of incentives between these

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56 NER, cl. 6A.10.1A(b)(6).
57 NER, cll S6A.2.2B and 6A.5A(b)(3).
58 NER, cl S6A.2.2B(b).
59 NER, cl S6A.2.2B.

- the balance of incentives with service outcomes
- the substitutability of assets of different asset lives.

8.3 Reasons for AER's position

The opening RAB at the commencement of the 2023–28 period will be established using forecast depreciation, as stated in our previous determination that applies to ElectraNet for the current 2018–23 period.

The use of forecast depreciation to establish the opening RAB for the commencement of the 2028–33 period, therefore, maintains the current approach. ElectraNet is currently subject to the CESS, and as set out in section 4 above, we propose to continue applying the CESS in the 2023–28 period. We consider that the CESS will provide sufficient incentives for ElectraNet to achieve capex efficiency gains over that period.

We are satisfied that the incentive provided by the application of the CESS, in combination with the use of forecast depreciation and our other ex post capex measures, would be sufficient to achieve the capex incentive objective.[60]

[60] AER, *Capital expenditure incentive guideline for electricity network service providers*, November 2013, pp. 13–20 and pp. 21–22.

A 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
CSIS	Customer service incentive scheme (small-scale incentive scheme for customer service)
DMIAM	Demand management innovation allowance mechanism
DMIS	Demand management incentive scheme
DNSP	Distribution network service provider
EBSS	Efficiency benefit sharing scheme
F&A	Framework and approach
ISP	Integrated System Plan
MAR	Maximum allowed revenue
MIC	Market impact component
NCIPAP	Network capability incentive parameter action plan
NCC	Network capability component
NEM	National Electricity Market
NER	National Electricity Rules
Opex	Operating expenditure
RAB	Regulatory asset base
SC	Service component
SSIS	Small-scale incentive scheme
STPIS	Service target performance incentive scheme
TNSP	Transmission network service provider