



**Framework and approach paper –
preliminary positions for
AusNet Services**

**Regulatory control period
commencing 1 April 2017**

January 2015

© Commonwealth of Australia 2014

This work is copyright. In addition to any use permitted under the Copyright Act 1968, all material contained within this work is provided under a Creative Commons Attribution 3.0 Australia licence, with the exception of:

- the Commonwealth Coat of Arms
- the ACCC and AER logos
- any illustration, diagram, photograph or graphic over which the Australian Competition and Consumer Commission does not hold copyright, but which may be part of or contained within this publication.

The details of the relevant licence conditions are available on the Creative Commons website, as is the full legal code for the CC BY 3.0 AU licence.

Requests and inquiries concerning reproduction and rights should be addressed to the Director, Corporate Communications, ACCC, GPO Box 3131, Canberra ACT 2601, or by email to: publishing.unit@acc.gov.au

Inquiries about this decision should be addressed to:

Australian Energy Regulator
GPO Box 520
Melbourne Vic 3001
Tel: (03) 9290 1444
Fax: (03) 9290 1457

Email: AERInquiry@aer.gov.au

AER reference: 56417/ D14-161030

Contents

| | |
|--|------------|
| Contents | i |
| Shortened forms | ii |
| About the framework and approach paper | iii |
| Part A: Overview | 1 |
| Part B: Attachments | 4 |
| 1 Service target performance incentive scheme | 5 |
| 1.1 Proposed approach | 6 |
| 1.2 Reasons for proposed approach..... | 7 |
| 2 Efficiency benefit sharing scheme | 11 |
| 2.1 Proposed approach | 11 |
| 2.2 Reasons for proposed approach..... | 11 |
| 3 Capital expenditure sharing scheme | 16 |
| 3.1 Proposed approach | 16 |
| 3.2 AusNet Services submission..... | 17 |
| 3.3 Reasons for proposed approach..... | 17 |
| 4 Expenditure forecast assessment guideline | 20 |
| 5 Depreciation | 21 |
| 5.1 Proposed approach | 21 |
| 5.2 Reasons for proposed approach..... | 22 |
| 6 Small scale incentive scheme | 24 |

Shortened forms

| Shortened Form | Extended Form |
|-----------------------------------|--|
| AEMC | Australian Energy Market Commission |
| AEMO | Australian Energy Market Operator |
| AER | Australian Energy Regulator |
| CESS | capital expenditure sharing scheme |
| capex | capital expenditure |
| current regulatory control period | 1 April 2014 to 31 March 2017 |
| EBSS | efficiency benefit sharing scheme |
| F&A | Framework and approach |
| MAR | maximum allowable revenue |
| MIC | market impact component |
| NCC | network capability component |
| NECF | National Energy Customer Framework |
| NEM | National Electricity Market |
| NER or the rules | National Electricity Rules |
| NCIPAP | network capability incentive parameter action plan |
| opex | operating expenditure |
| RAB | regulatory asset base |
| next regulatory control period | 1 April 2017 to 31 March 2022 |
| TNSP | transmission network service provider |

About the framework and approach paper

The Australian Energy Regulator (AER) is the economic regulator for transmission and distribution services in Australia's national electricity market (NEM). We are an independent statutory authority, funded by the Australian Government. Our powers and functions are set out in the National Electricity Law (NEL) and National Electricity Rules (the rules or NER).

The framework and approach (F&A) paper is the first step in a process to determine efficient prices for electricity transmission services. The F&A determines the broad nature of any regulatory arrangements that will apply in this process. It also facilitates early public consultation and assists network service providers to prepare revenue proposals.

AusNet Services is a licensed, regulated operator of the monopoly high voltage electricity transmission network in Victoria. The network comprises the poles, wires and transformers used for transporting high voltage electricity from remote generators to population centres. AusNet Services constructs, operates and maintains much of the transmission network for Victorian electricity consumers. The design and tendering for new construction of the Victorian transmission network is undertaken by the Australian Electricity Market Operator under arrangements that are unique to Victoria. The current three year Victorian transmission regulatory control period concludes on 31 March 2017.

On 29 November 2013, the Australian Energy Market Commission (AEMC) published changes to the rules governing network regulation. The new rules require us to set out our approach to network regulation under the new framework in a series of guidelines. We commenced the Better Regulation program on 18 December 2012 to consult on our approach and published our final guidelines in November and December 2013. We will apply these guidelines in the upcoming revenue determination process.

SP AusNet (now AusNet Services) wrote to the AER on 21 July 2014 to ask the AER to establish an initial F&A for the transmission business. The rules require us to publish an F&A paper for AusNet Services by 30 April 2015. In their letter AusNet Services raise two issues for consideration in conjunction with the F&A process. Under the transitional rules through which the AEMC implemented the Economic Regulation Rule Changes (a.k.a. the Better Regulation package), AusNet Services current regulatory control period is three years. Two issues arise because of this shorter than normal (i.e. three years vs. five years) regulatory control period.

AusNet Services notes that the AER's capital incentive guideline will apply to their next reset. The first issue is whether to apply the ex post review of capital expenditure as set out in the capital incentive guideline or to defer this review until the following determination. We discuss this issue further in attachment three, which concerns the application of the Capital Efficiency Sharing Scheme.

The second issue is the length of the next regulatory control period. AusNet Services consider that a period longer than five years is desirable so as to reduce the load on its staff resources and because their regulatory proposal must anticipate the length of the next regulatory control period.

Due to the transitional arrangements associated with the Economic Regulation Rule Changes, SP AusNet's current regulatory period is only three years in length. This has resulted in an overlap of the regulatory determination processes for its electricity distribution and transmission networks. As SP AusNet uses the same resources for both regulatory determinations, concurrently engaging in the preparation and review processes for two networks requires additional resources. This is sub-optimal from an efficiency perspective.

A regulatory period of five years will maintain a substantial overlap of the review processes for these two networks. For this reason, SP AusNet will propose a regulatory period greater than five years in length to allow SP AusNet's transmission network to return to a more staggered regulatory determination pattern with its electricity distribution network.

SP AusNet would like the length of the regulatory control period to be resolved as part of the F&A process...¹

Changing the length of the regulatory control period potentially has both advantages and disadvantages. As suggested by AusNet Services, a longer regulatory control period is likely to result in reduced regulatory costs for both AusNet Services and the AER. As these costs are ultimately borne by customers any cost reduction will serve the long-term interests of customers. It also provides a longer period of certainty for investor returns and thus, is likely to be viewed favourably by investors. A longer regulatory control period would improve the incentive for AusNet to operate its network efficiently by giving them longer to plan and implement efficiency improvements before facing a subsequent regulatory review. However, offsetting these advantages are the risks associated with locking in the financial parameters and expenditure allowances for an extended period when external factors may make financial markets and operating conditions more volatile. For example, over time, the regulated rate of return is likely to deviate from prevailing market conditions. If this occurs early in the regulatory control period the resulting windfall gains or losses could be substantial.

Extending the regulatory control period will also affect the operation of the incentive schemes described in attachments 1, 2 & 3 because these schemes are designed to apply to a five year regulatory control period. The notional sharing ratio for the benefits or penalties of a five year scheme is 70:30 (i.e. 70% is retained by customers and 30% by the business).² Extending the regulatory control period by one year changes this ratio to 67:33 or by two years to 63:37, which results in a greater share of the benefits of any cost reduction being retained by the business as well as a greater share of the penalties for cost increases. The AER will take this effect into account in determining if a longer period should apply. Another matter still under active consideration by policy makers is whether to align the regulatory control periods for all transmission businesses to facilitate peer to peer comparisons in future regulatory determinations. A decision to change the length of the period for AusNet Services might be best made in the light of the outcome of those policy deliberations.

Our preliminary position is that we will adopt a five year regulatory control period for AusNet Services. Throughout this draft F&A we have assumed the length of the next regulatory control period will be five years. If we adopt a longer regulatory control period the end date of the next period will need to be adjusted accordingly.

Under the NER the determination of the length of a regulatory control period is not a matter that is to be addressed in an F&A. Instead, this decision arises in a determination in response to a proposal by the service provider. However, we consider submissions on this matter will be informative and will assist in guiding a decision whether the next AusNet Services regulatory proposal should be for five years or for a longer period. We would welcome submissions on the appropriate length of the next regulatory control period, particularly whether the next period should be 5 years, 6 years or longer.

As required under the rules, this F&A paper sets out our proposed approach for the next regulatory control period on the application of the following:

- service target performance incentive scheme

¹ SP AusNet, *Transmission Revenue Determination 2017-23 Framework and Approach Initiation*, 21 July 2014, p2

² See table 3 in attachment 2 for an example of this calculation.

- operating expenditure efficiency benefit sharing scheme
- capital expenditure sharing scheme
- expenditure forecast assessment guidelines, and
- whether depreciation will be based on forecast or actual capital expenditure in updating the regulatory asset base.

Following release of the final F&A paper, AusNet Services will submit its revenue proposal by 31 October 2015, as set out below. Table 1 summarises the transmission determination process as it relates to AusNet Services.

Table 1 AusNet Services transmission determination process

| Step | Date |
|--|-----------------|
| AER to publish F&A paper for AusNet Services | 30 April 2015 |
| AusNet Services to submit revenue proposal to AER | 31 October 2015 |
| AER to publish issues paper | December 2015 * |
| AER to hold public forum on issues paper | December 2015 * |
| Submissions on revenue proposal close | February 2016 * |
| AER to publish draft transmission determination | 30 June 2016 ** |
| AER to hold public forum on draft transmission determination | July 2016 * |
| AusNet Services to submit revised revenue proposal to AER | September 2016 |
| Submissions on revised revenue proposal and draft determination close | October 2016 |
| AER to publish transmission determination for next regulatory control period | 31 January 2017 |

Source: NER, chapter 6A, Part E

Notes: * The dates provided for submissions and the public forum are based on the AER receiving compliant proposals. These dates may alter if the AER receives non-compliant proposals.

** The NER does not provide specific timeframes in relation to publishing draft decisions. Accordingly, this date is indicative only.

Part A: Overview

This F&A covers how we propose to apply a range of incentive schemes and other guidelines to AusNet Services, as well as our approach to calculating depreciation.³ The positions we set out in this F&A paper in relation to the regulatory control period are not binding on the AER or AusNet Services.⁴ This means it is open to the AER to change its position on matters set out in this F&A for the regulatory control period where there is reason to change, for example, because of changed circumstances.

Incentive schemes encourage TNSPs to manage their businesses in a safe, reliable manner that benefits the long term interests of consumers. The 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 the 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 schemes below and provide an overview of our expenditure forecast assessment guideline and approach to calculating depreciation. We have based our preliminary positions on a five year regulatory control period. Please note that should we determine a longer regulatory control period is to apply we may need to adjust the operation of the schemes described herein to apply to the longer regulatory control period.

Service target performance incentive scheme

Our national service target performance incentive scheme (STPIS) provides a financial incentive to TNSPs to maintain and improve service performance. The STPIS aims to safeguard service quality for customers that may otherwise be affected as TNSPs seek out cost efficiencies.

For the next regulatory control period we propose to apply version 4.1 of the STPIS. Note that the AER will review the transmission STPIS in 2015. This will be a consultative process. If the AER further revises version 4.1 of the STPIS before the commencement of the next regulatory control period, we intend to apply that revision to AusNet Services.

Efficiency benefit sharing scheme

The operating expenditure efficiency benefit sharing scheme (EBSS) aims to provide a continuous incentive for TNSPs to pursue efficiency improvements in opex, and provide for a fair sharing of these between TNSPs and network users. Consumers benefit from improved efficiencies through lower regulated prices in the future.

³ NER, S6A.10.1A

⁴ NER, clause 6A.10.1A(f).

As part of our Better Regulation program we consulted on and published version 2 of the EBSS. We propose to apply this new EBSS to AusNet Services.

Capital expenditure sharing scheme

The capital expenditure sharing scheme (CESS) provides financial rewards for TNSPs whose capex becomes more efficient and financial penalties for those that become less efficient. Consumers benefit from improved efficiency through lower regulated prices in the future.

As part of our Better Regulation program we consulted on and published version 1 of the capital expenditure incentive guideline for electricity network service providers (capex incentive guideline) which sets out the CESS. We propose to apply the CESS to AusNet Services in the next regulatory control period. This guideline also outlines our approach to ex post reviews of any over-spends. Under amendments to the NER in 2012, AusNet services will be subject to an ex post prudency reviews for any expenditure over-spends in their current period. Because their current regulatory control period is only of three years duration, this review will only encompass a single year. Accordingly, as discussed in greater detail in attachment 3, it is probable that this review will be of limited value. However, our preliminary position is that this assessment will be undertaken as part of the AER's revenue determination process for the next period.

Expenditure forecast assessment guidelines

As part of our Better Regulation program we consulted on and published our expenditure forecast assessment guideline for electricity transmission (expenditure assessment guideline). The expenditure assessment guideline is based on a nationally consistent reporting framework allowing us to compare the relative efficiencies of TNSPs and decide on efficient expenditure allowances. Our proposed approach is to apply the expenditure assessment guideline, including the information requirements to the TNSPs in the next regulatory control period.

The guideline outlines a suite of assessment/analytical tools and techniques to assist our review of AusNet Services' revenue proposal. We intend to apply the assessment techniques set out in the guideline relating to TNSPs.

Depreciation

As part of the roll forward methodology, when a TNSPs regulatory asset base (RAB) is updated from forecast capex to actual capex at the end of a regulatory period, it is also adjusted for depreciation. The depreciation we use to roll forward the RAB can be based on either actual capex incurred during the regulatory control period, or the capex allowance forecast at the start of the regulatory control period. The choice of depreciation approach is one part of the overall capex incentive framework. The incentive based regulatory framework provides benefits to consumers from improved efficiencies through lower regulated prices.

We propose to use forecast depreciation to establish the RAB at the commencement of the 2022–27 regulatory control period for AusNet Services.

Small-scale incentive scheme

The rules provide that we may develop small-scale incentive schemes.⁵ At this stage, we have not developed any such schemes to encourage more efficient investment or operation of networks, as may be envisaged under this provision of the NER. For this reason, we do not propose to apply a small-scale incentive scheme to AusNet Services in the next regulatory control period.

We note, however, changes to the STPIS (version 4) introduced new incentives for TNSPs to improve the capability of existing assets to provide greater value to generators and consumers and avoid the need for asset augmentation. Version 4 of the STPIS currently applies to AusNet Services.

⁵ NER, clause 6A.7.5.

Part B: Attachments

1 Service target performance incentive scheme

This attachment sets out our proposed approach and reasons on how we intend to apply the STPIS to AusNet Services in the next regulatory control period.

The AER creates, administers and maintains the STPIS in accordance with the requirements of the National Electricity Rules (NER). 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.⁶ The STPIS can result in a maximum revenue increment or decrement of up to five per cent of the TNSP's MAR in a regulatory year.⁷

The STPIS works as part of the building block determination.⁸ As part of the revenue determination, we make a decision on the application of the STPIS to a TNSP for the regulatory control period and the values associated with the applicable STPIS parameters.⁹ In each regulatory year the TNSP's MAR is adjusted based on its performance against the STPIS parameters in the previous calendar year.

The STPIS is part of incentive based regulation we use across all energy networks we regulate. The CESS and EBSS provide incentives to incur efficient capex and opex. The incentives provided by the CESS and EBSS for cost efficiencies are balanced with the incentive to improve service standards provided by the STPIS.

The STPIS must:

- provide incentives for each TNSP to:¹⁰
 - provide greater reliability of the transmission system that is owned, controlled or operated by it at all times when transmission network users place greatest value on the reliability of the transmission system
 - improve and maintain the reliability of those elements of the transmission system that are most important to determining spot prices
- result in a potential adjustment to the revenue TNSP may earn, from the provision of prescribed transmission services, in each regulatory year in respect of which the STPIS applies
- ensure that the maximum revenue increment or decrement as a result of the operation of the STPIS will fall within a range that is between 1 per cent and 5 per cent of the MAR for the relevant regulatory year
- take into account the regulatory obligations or requirements with which TNSPs must comply
- take into account any other incentives provided for in the rules that TNSPs have to minimise capital or operating expenditure; and

⁶ NER, clause 6A.7.4(b)(1).

⁷ NER, clause 6A.7.4(b)(3).

⁸ NER, clause 6A.5.4(a)(5) and (b)(5).

⁹ NER, clause 6A.4.2(5); 6A.14.1(1)(iii).

¹⁰ NER clause 6A.7.4(b).

- take into account the age and ratings of the assets comprising the relevant transmission system.

Version 4 of the STPIS currently applies to AusNet Services. It was published on 20 December 2012. Version 4 introduced the network capability component of the scheme and refined a number of the existing parameters of the scheme. In developing version 4 of the STPIS we had regard to the requirements of the rules, as set out in our final decision on the STPIS published in December 2012.¹¹ Under an incentive based regulation framework, TNSPs have an incentive to reduce costs. Cost reductions are beneficial to TNSP's and customers where service performance is maintained or improved. However, cost efficiencies achieved at the expense of service performance standards are not desirable. Version 4 of the STPIS seeks to ensure that increased financial efficiency does not result in deterioration of service performance for customers.¹²

An update to the STPIS, version 4.1, was published in September 2014. Compared to version 4, the further changes made to the scheme in version 4.1 apply only to Directlink.

1.1 Proposed approach

We propose to apply version 4.1 of the STPIS, dated September 2014, to AusNet Services in the next regulatory control period. Therefore, for AusNet Services in relation to each of the parameters of the scheme discussed below, adopting version 4.1 of the STPIS is a continuation of the current approach.

Please note that the following discussion is based on the application of version 4.1 of the STPIS. As noted in the Overview, a review of the STPIS is planned for 2015. If the AER revises the STPIS following that review, we intend to apply that revision to AusNet Services.

In summary:

- For the next regulatory control period we will apply the STPIS as follows.
 - The parameters for each service component for AusNet Services and the maximum revenue increment or decrement that AusNet Services can receive for a given level of performance will be those prescribed in the latest version of the scheme. The applicable parameter values will be set out in AusNet Services' transmission determination.
 - The MIC annual performance target will be the rolling average of performance history over the three previous calendar years. Actual performance will be measured as a rolling average of the most recent two years of actual performance.¹³
 - The maximum allowed revenue that AusNet Services can earn in each regulatory year will be adjusted according to its performance against the values included in its transmission determination, as assessed by us in accordance with the scheme.

¹¹ AER, *Final decision, TNSP service target performance incentive scheme*, version 4, 19 December 2012.

¹² This discussion assumes the value customers place on reliability (VCR) remains constant. Recent work by the market operator – AEMO – suggests that the current value of VCR has decreased, which means customers would prefer less reliability if this results in lower prices

¹³ AER, *Final – Service Target Performance Incentive Scheme*, September 2014, clause 4.2(d) and Appendix F.

1.2 Reasons for proposed approach

In general we consider the amendments to the STPIS as incorporated in version 4.1 improve the scheme's incentives for TNSPs to:

- provide greater reliability of the transmission system that is owned, controlled or operated by it at all times when network users place greatest value on the reliability of the transmission system; and
- improve and maintain the reliability of those elements of the transmission system that are most important to determining spot prices.

For these reasons, we consider that version 4.1 of the STPIS should apply to AusNet Services in the next regulatory period. This will benefit both transmission network users and consumers of electricity, in line with the NEO.

1.2.1 Reasons for applying the STPIS in the next regulatory control period

In this section we discuss each component of version 4.1 of the STPIS, and how each component will apply to AusNet Services in the next regulatory control period.

Service component

The service component 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 one per cent of its MAR for the regulatory year.

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 4.1 of the STPIS includes amended service component parameters to focus more on unplanned outages, including a new parameter focusing on proper operation of equipment. Performance against these parameters can be used as a lead indicator of a deterioration of network reliability.¹⁴

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.

For the next regulatory control period we will assess whether AusNet Services' proposed performance targets, caps, collars and weightings comply with the version 4.1 STPIS requirements for:¹⁵

- average circuit outage rate, with six sub-parameters:
 - line outage – fault

¹⁴ AER, *Final – Service Target Performance Incentive Scheme*, September 2014, p. 13.

¹⁵ AER, *Final – Service Target Performance Incentive Scheme*, September 2014, clause 3.1.

- transformer outage – fault
- reactive plant – fault
- line outage – forced outage
- transformer outage – forced outage
- reactive plant – forced outage
- loss of supply event frequency, with two loss of supply event sub-parameters:
 - frequency of events when loss of supply exceeds 0.3 system minutes
 - frequency of events when loss of supply exceeds 0.05 system minutes
- average outage duration
- proper operation of equipment, with three sub-parameters:
 - failure of protection system
 - material failure of supervisory control and data acquisition (SCADA) system
 - incorrect operational isolation of primary or secondary equipment.

We must accept AusNet Services' proposed parameter values if they comply with the requirements of the STPIS.¹⁶ We may reject them if they are inconsistent with the objectives of the STPIS.¹⁷

Market impact component

The market impact component (MIC) provides financial rewards to TNSPs for improvements in their performance measured against a performance target. A TNSP may earn an additional revenue increment of up to 2 per cent of its MAR. Unlike the service and network capability components, the market impact component has no financial penalty.

The MIC provides an incentive to TNSPs to minimise the impact of transmission outages that can affect the NEM spot price. It measures performance against the market impact parameter, which is 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.¹⁸

In version 4 of the STPIS, we made significant amendments to the way the performance target and actual performance were determined. In version 4.1, the annual performance target is the rolling average of performance history over the three previous calendar years. Thus, unlike the MIC of version 2, the annual performance target is not fixed at the time of the revenue determination but is adjusted each year based on the most recent three years of performance. Actual performance is measured annually and is the rolling average of performance of the two most recent calendar years. This continues to apply in version 4.1.

A rolling target and actual performance measure provides a tighter incentive to ensure outages on prescribed assets have limited impact on wholesale spot market outcomes. Further, a rolling target ensures the target is relevant to the TNSP's current maintenance and construction activities and

¹⁶ AER, *Final – Service Target Performance Incentive Scheme*, September 2014, clause 3.2(a).

¹⁷ AER, *Final – Service Target Performance Incentive Scheme*, September 2014, clause 3.2(m).

¹⁸ AER, *Final – Service Target Performance Incentive Scheme*, September 2014, appendix C

limits the incentive for TNSPs to engage in strategic behaviour to influence the outcomes of the scheme.

Similarly, in version 4.1, exclusion clause 3 strengthens the incentive for TNSPs to influence the timing of third party planned outages to reduce the likelihood of wholesale market impacts.¹⁹ Exclusion clause 3 allows TNSP's to exclude the impact of outages from the market impact parameter if they are caused by a third party system. Third party outages are outages taken or caused by third party owners of non-prescribed assets that are connected to a TNSP's prescribed network. In version 4.1, planned outages caused by a third party are no longer excluded.

Non-prescribed assets owned by a third party connected to a TNSP's prescribed network are usually governed by connection agreements between the parties. When undertaking maintenance of their non-prescribed asset, third parties frequently request connected prescribed assets be taken out of service. We consider that, where third parties request a TNSP to take a planned outage of its prescribed asset associated with the party's non-prescribed asset, the TNSP has significant influence over the timing of that outage. Accordingly, the MIC operates to ensure these outages occur during periods when there is less likely to be a market impact.

Network capability component

The network capability component (NCC) was introduced in version 4 of the STPIS and has applied to AusNet Services since 1 April 2014. This continues to apply in version 4.1. It promotes the NEO by incentivising TNSPs to identify and implement low cost incremental changes to their networks that deliver substantial benefits to consumers. It does this by requiring TNSPs to reveal their existing network capability and identify low cost projects that will:

- improve network capability when most valued by customers or
- improve wholesale market outcomes at least cost.

We recognise TNSPs are best placed to identify limitations in their networks and to implement low cost solutions to ameliorate those limitations. Prior to the introduction of the NCC, TNSPs were not incentivised to engage in this type of behaviour.

Improved wholesale market outcomes should ultimately be passed onto consumers through reduced wholesale energy costs. The NCC also promotes reliability, safety and security priorities in the NEO by incentivising increases in the capability of existing assets in the network when most needed while maintaining adequate levels of reliability.²⁰

As part of its revenue proposal, AusNet Services must submit a network capability incentive parameter action plan (NCIPAP).²¹ The NCIPAP must identify the key network capability limitations on each transmission circuit or load injection point on the TNSPs network.²² It must also include a ranked list of priority projects proposed by AusNet Services to improve the network capability for some of the circuits or injection points.²³ These priority projects must be shown to result in material benefits for customers or on wholesale market outcomes. AusNet Services must consult AEMO in developing the NCIPAP. AEMO's role includes prioritising and ranking the projects that will deliver best value for money for consumers. The total annual average expenditure of the proposed priority

¹⁹ AER, *Draft decision – early application of version 4 of the STPIS*, August 2013, p.22-23.

²⁰ NER, clause 6A.7.4.

²¹ AER, *Final – Service Target Performance Incentive Scheme*, September 2014, clauses 5.2(b).

²² AER, *Final – Service Target Performance Incentive Scheme*, September 2014, clauses 5.2(b)(1).

²³ AER, *Final – Service Target Performance Incentive Scheme*, September 2014, clauses 5.2(b)(2).

projects may not exceed 1 per cent of the average MAR proposed by the TNSP in its revenue proposal.

We must approve a priority project if it is consistent with the NCC requirements of the STPIS.²⁴ Once we have approved a priority project, we may only amend the priority project improvement targets proposed by AusNet Services in limited circumstances.²⁵

In each annual STPIS compliance review, AusNet Services is required to report on the steps it has taken towards reaching the priority project improvement target against each project in the NCIPAP approved by us for each year or part year of the regulatory control period. Under the NCC, AusNet Services receives a financial payment equal to 1.5 per cent of its MAR as follows:

- for each regulatory year, except the final year in the next regulatory control period, AusNet Services will receive an incentive payment equal to 1.5 per cent of its MAR.
- for the final year, AusNet Services will receive an incentive payment of 1.5 per cent of its MAR but only if it achieves its priority project improvement target for each priority project.

In the final year, we will assess whether AusNet Services has achieved each priority project target for each priority project. If it has not then we may reduce the incentive payment in the final year. We can reduce the final payment to – 2 per cent of MAR if AusNet Services does not achieve any of its priority project improvement targets.²⁶

²⁴ AER, *Final – Service Target Performance Incentive Scheme*, September 2014, clause 5.2(k).

²⁵ We amend the priority project improvement targets proposed by AusNet Services only if either AusNet Services agrees to the amendment or AEMO considers the amendment will result in a material benefit and can be achieved by AusNet Services in the subsequent regulatory control period.

²⁶ AER, *Final – Service Target Performance Incentive Scheme*, September 2014, clause 5.2(k)

2 Efficiency benefit sharing scheme

The efficiency benefit sharing scheme (EBSS) aims to provide a continuous incentive for TNSPs to pursue efficiency improvements in opex, and provide for a fair sharing of these between TNSPs and network users. Consumers benefit from improved efficiencies through lower regulated prices in the future.

This attachment sets out our proposed approach and reasons on how we intend to apply the EBSS to AusNet Services in the next regulatory control period.

2.1 Proposed approach

We propose to apply the new EBSS in the 2017–22 regulatory control period.

The EBSS must provide for a fair sharing between TNSPs and network users of opex efficiency gains and efficiency losses.²⁷ We must also have regard to the following factors in developing and implementing the EBSS:²⁸

- 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 capitalise expenditure
- the possible effects of the scheme on incentives for the implementation of non-network alternatives.

2.2 Reasons for proposed approach

The current EBSS applies to AusNet Services in the current regulatory control period.²⁹ As part of our Better Regulation program we consulted on and published the new EBSS, taking into account the requirements of the rules.

The new EBSS retains the same form as the current EBSS, and merges the distribution and transmission schemes. Changes in the new EBSS relate to the criteria for adjustments and exclusions under the scheme.³⁰ We may also exclude categories of opex not forecast using a single year revealed cost approach from the scheme on an ex post basis if doing so better achieves the requirements of the rules. We also amended the scheme to provide flexibility to account for any adjustments made to base year opex to remove the impacts of one-off factors. The new EBSS also clarifies how we will determine the carryover period. These revisions affect how we will calculate carryover amounts for future regulatory control periods.³¹

In this attachment we set out why we propose to apply the new EBSS to the next period.

²⁷ NER, clause 6A.6.5(a).

²⁸ NER, clause 6A.6.5(b).

²⁹ AER, *Electricity transmission network service providers, efficiency benefit sharing scheme*, September 2007.

³⁰ We will no longer allow for specific exclusions such as uncontrollable opex or for changes in opex due to unexpected increases or decreases in network growth.

³¹ AER, *Efficiency benefit sharing scheme*, 29 November 2013.

2.2.1 Reasons for applying the EBSS in the next period

We propose to apply the new EBSS to the next period. In developing the new EBSS we had regard to the requirements under the rules, as set out in the scheme and accompanying explanatory statement.³² This reasoning extends to the factors we must have regard to in implementing the scheme.

The EBSS must provide for a fair sharing of efficiency gains and losses.³³ Under the scheme, TNSPs and consumers receive a benefit where a TNSP reduces its costs during a regulatory control period and both bear some of any increase in costs.

Under the EBSS, positive and negative carryovers reward and penalise TNSPs for efficiency gains and losses respectively.³⁴ The EBSS provides a continuous incentive for TNSPs to achieve opex efficiencies throughout the next period. This is because the TNSP receives carryover payments so it retains any efficiency gains or losses it makes within the regulatory period for the length of the carryover period. This is regardless of the year in which it makes the gain or loss.³⁵

This continuous incentive to improve efficiency encourages efficient and timely opex throughout the regulatory control period, and reduces the incentive for a TNSP to inflate opex in the expected base year. This provides an incentive for TNSPs to reveal their efficient opex which, in turn, allows us to better determine efficient opex forecasts for future regulatory control periods.

The EBSS also leads to a fair sharing of efficiency gains and losses between TNSPs and consumers. For instance the combined effect of our forecasting approach and the EBSS is that opex efficiency gains or losses are shared approximately 30:70 between TNSPs and consumers. This means for a one dollar efficiency saving in opex the TNSP keeps 30 cents of the benefit while consumers keep 70 cents of the benefit.

Example 2.1 shows how the EBSS operates. It illustrates how the benefits of a permanent efficiency improvement are shared approximately 30:70 between a network service provider and consumers.

In implementing the EBSS we must also have regard to any incentives TNSPs may have to capitalise expenditure.³⁶ Where opex incentives are balanced with capex incentives, a TNSP does not have an incentive to favour opex over capex, or vice-versa. The CESS is a symmetric capex scheme with a 30 per cent incentive power. This is consistent with the incentive power for opex when we use an unadjusted base year approach in combination with an EBSS. During the next period when the CESS and EBSS are applied, incentives will be relatively balanced, and TNSPs should not have an incentive to favour opex over capex or vice versa. The CESS is discussed further in attachment 3.

We must also consider the possible effects of implementing the EBSS on incentives for non-network alternatives:³⁷

³² AER, *Efficiency benefit sharing scheme*, 29 November 2013.
AER, *Explanatory statement, Efficiency benefit sharing scheme for electricity network service providers*, 29 November 2013.

³³ NER, clause 6A.6.5(a).

³⁴ NER, clauses 6A.6.5(b) and 6A.6.5(a).

³⁵ NER, clause 6A.6.5(b)(1).

³⁶ NER, clause 6A.6.5(b)(3).

³⁷ NER, clause 6A.6.5(b)(4).

- Expenditure on non-network alternatives generally takes the form of opex rather than capex. Successful non-network alternatives should result in the TNSP spending less on capex than it otherwise would have.
- It is proposed both the CESS and EBSS will apply in the next regulatory control period. As a result a TNSP has an incentive to implement a non-network alternative if the increase in opex is less than the corresponding decrease in capex. In this way, the TNSP will receive a net reward for implementing the non-network alternative.³⁸ This is because the rewards and penalties under the EBSS and CESS are balanced and symmetric. In the past where the EBSS operated without a CESS, we excluded expenditure on non-network alternatives when calculating rewards and penalties under the scheme. This was because TNSPs may otherwise receive a penalty for increasing opex without a corresponding reward for decreasing capex.³⁹

³⁸ When the TNSP spends more on opex it receives a 30 per cent penalty under the EBSS. However, when there is a corresponding decrease in capex the TNSP receives a 30 per cent reward under the CESS. So where the decrease in capex is larger than the increase in opex the TNSP receives a larger reward than penalty, a net reward.

³⁹ Without a CESS the reward for capex declines over the regulatory period. If an increase in opex corresponded with a decrease in capex, the off-setting benefit of the decrease in capex depends on the year in which it occurs.

Example 2.1 How the EBSS operates

Assume that in the first regulatory period, a network service provider's forecast opex is \$100 million per annum (p.a.).

Assume that during this period the service provider delivers opex equal to the forecast for the first three years. Then, in the fourth year of the regulatory period, the service provider implements a more efficient business practice for maintaining its assets. As a result, the service provider will be able to deliver opex at \$95 million p.a. for the foreseeable future.

This efficiency improvement affects regulated revenues in two ways:

1. Through forecast opex. If we use the penultimate year of the regulatory period to forecast opex in the second regulatory period, the new forecast will be \$95 million p.a. If the efficiency improvement is permanent, all else being equal, forecast opex will also be expected to be \$95 million p.a. in future regulatory periods.
2. Through EBSS carryover amounts. The service provider receives additional carryover amounts so that it receives exactly six years of benefits from an efficiency improvement. Because the service provider has made an efficiency improvement of \$5 million p.a. in Year 4, to ensure it receives exactly six years of benefits, it will receive annual EBSS carryover amounts of \$5 million in the first four years (Years 6 to 9) of the second regulatory period.

As a result of these effects, the service provider will benefit from the efficiency improvement in Years 4 to 9. This is because the annual amount the service provider receives through the forecast opex and EBSS building blocks (\$100 million) is more than what it pays for opex (\$95 million) in each of these years.

Consumers benefit from Year 10 onwards after the EBSS carryover period has expired. This is because what consumers pay through the forecast opex and EBSS building blocks (\$95 million) is lower from Year 10 onwards.

Table 2 provides a more detailed illustration of how the benefits are shared between service providers and consumers over time.

(Example 2.1 continued)

Table 2 Example of how the EBSS operates

| Year | Regulatory period 1 | | | | | Regulatory period 2 | | | | | Future |
|---|---------------------|-----|-----|-----|-----|---------------------|----------|----------|----------|----------|---------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| Forecast (F_t) | 100 | 100 | 100 | 100 | 100 | 95 | 95 | 95 | 95 | 95 | 95 p.a. |
| Actual (A_t) | 100 | 100 | 100 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 p.a. |
| Underspend ($F_t - A_t = U_t$) | 0 | 0 | 0 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 p.a. |
| Incremental efficiency gain ($I_t = U_t - U_{t-1}$) | 0 | 0 | 0 | 5 | 0 | 0* | 0 | 0 | 0 | 0 | 0 p.a. |
| Carryover (I_1) | | 0 | 0 | 0 | 0 | 0 | | | | | |
| Carryover (I_2) | | | 0 | 0 | 0 | 0 | 0 | | | | |
| Carryover (I_3) | | | | 0 | 0 | 0 | 0 | 0 | | | |
| Carryover (I_4) | | | | | 5 | 5 | 5 | 5 | 5 | | |
| Carryover (I_5) | | | | | | 0 | 0 | 0 | 0 | 0 | |
| Carryover amount (C_t) | | | | | | 5 | 5 | 5 | 5 | 0 | 0 p.a. |
| Benefits to NSP ($F_t - A_t + C_t$) | 0 | 0 | 0 | 5 | 5 | 5 | 5 | 5 | 5 | 0 | 0 p.a. |
| Benefits to consumers ($F_t - (F_t + C_t)$) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 p.a. |
| Discounted benefits to NSP** | 0 | 0 | 0 | 5 | 4.7 | 4.5 | 4.2 | 4.0 | 3.7 | 0 | 0 |
| Discounted benefits to consumers** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3.5 | 58.8*** |

Notes: * At the time of forecasting opex for the second regulatory period we don't know actual opex for year 5. Consequently this is not reflected in forecast opex for the second period. That means an underspend in year 6 will reflect any efficiency gains made in both year 5 and year 6. To ensure the carryover rewards for year 6 only reflect incremental efficiency gains for that year we subtract the incremental efficiency gain in year 5 from the total underspend. In the example above, $I_6 = U_6 - (U_5 - U_4)$.
 ** Assumes a real discount rate of 6 per cent.
 *** As a result of the efficiency improvement, forecast opex is \$5 million p.a. lower in nominal terms. The estimate of \$58.7m is the net present value of \$5 million p.a. delivered to consumers annually from year 11 onwards.

Table 3 sums the discounted benefits to NSPs and consumers from the bottom two rows of Table 2. As illustrated below, the benefits of the efficiency improvement are shared approximately 30:70 in perpetuity between the service provider and consumers.

Table 3 Sharing of efficiency gains—Year 4 forecasting approach, with EBSS

| | NPV of benefits of efficiency improvement ¹ | Percentage of total benefits |
|------------------------------|--|------------------------------|
| Benefits to service provider | \$26.1 million | 30 per cent |
| Benefits to consumers | \$62.3 million | 70 per cent |
| Total | \$88.3 million | 100 per cent |

3 Capital expenditure sharing scheme

The capital expenditure sharing scheme (CESS) provides financial rewards for TNSPs whose capex becomes more efficient and financial penalties for those that become less efficient. Consumers benefit from improved efficiency through lower regulated prices in the future. This attachment sets out our proposed approach and reasons for how we intend to apply the CESS to AusNet Services in the next regulatory control period.

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 what the TNSP's share of the underspend or overspend should be.
- We calculate the CESS payments taking into account the financing benefit or cost to the TNSP of the underspends or overspends.⁴⁰ We can also make further adjustments to account for deferral of capex and ex post exclusions of capex from the RAB.
- The CESS payments will be 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 70 per cent of the underspend or overspend. This means that for a one dollar saving in capex the TNSP keeps 30 cents of the benefit while, over the longer term, consumers keep 70 cents of the total benefit.

Under the NER an ex post review for any overspends in the next regulatory control period also applies, but this assessment will be undertaken in the subsequent control period. As noted in the introduction, AusNet Services has queried whether in the next regulatory control period the AER will undertake an ex post review in relation to the current regulatory control period. Our preliminary view is that as we intend to apply the CESS we should undertake the review as mandated under the NER and in accordance with the Guideline. However, we recognise that in this unique circumstance this review would be confined to a single year. In such circumstances any particular observed outcome may not merit treatment as significant.

3.1 Proposed approach

We propose to apply the CESS as set out in our capex incentives guideline to AusNet Services in the next regulatory control period.⁴¹

In deciding whether to apply a CESS to a TNSP in the next regulatory control period, and the nature and details of any CESS we apply to a TNSP, we must.⁴²

⁴⁰ We calculate benefits as the benefits to the TNSP of not 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.

⁴¹ AER, *Capital expenditure incentive guideline for electricity network service providers*, pp. 5–9.

- make that decision in a manner that contributes to the capex incentive objective⁴³
- consider the CESS principles,⁴⁴ *capex objectives*,⁴⁵ 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 used to set prices. Therefore, consumers only fund capex that is efficient and prudent.

3.2 AusNet Services submission

AusNet Services note that the AER's capital incentive guideline will apply to their next reset. They query whether to apply the initial ex post review of capital expenditure as set out in the capital incentive guideline or whether it is preferable to defer this review until the following period (i.e. until 2023). Their letter of 21 July explained the issue as follows:

The ex post 'review period' is defined in the NER as being the final two years of the previous regulatory control period and the current regulatory control period, excluding the final two years. This implies that an ex post capex review will be carried out for regulatory year 2014-15 alone during this determination process.⁴⁶

The consequence of the three year control period is that the ex post review as detailed in the AER's guideline would only apply to the single year 2014-15 as part of the next reset process. AusNet Services consider that given the lumpy nature of capital expenditure that a review of only one year would not be sensible. AusNet Services argue that:

Under incentive based regulation, network businesses have the flexibility to re-allocate its capex allowance between regulatory years where it is efficient to do so. This may be the case for several reasons, such as unforeseen network events requiring urgent asset replacements or project developments which result in changes to forecast delivery timeframes. Transmission businesses in particular may efficiently incur relatively large capex deviations from the regulatory allowance in any one year, particularly where its capex program is dominated by a small number of large projects.

and

This could result in inefficiencies and is contrary to the policy intent of the ex post review provisions in the NER, which appropriately sought to assess the efficiency of actual capex compared with the revenue allowance over a number of years.

3.3 Reasons for proposed approach

TNSPs are currently not subject to a CESS. As part of our Better Regulation program we consulted on and published version 1 of the capex incentives guideline which sets out the CESS.⁴⁷ The guideline specifies that in most circumstances we will apply a CESS, in conjunction with forecast depreciation to roll-forward the RAB.⁴⁸ We also propose to apply forecast depreciation, which is discussed further in attachment 5 below.

⁴² NER, clause 6A.6.5A.

⁴³ NER, clause 6A.5A(a); the capex criteria are set out in clause 6A.6.7(c)(1)-(3) of the NER.

⁴⁴ NER, clause 6A.6.5A(c).

⁴⁵ NER, clause 6A.6.7(a).

⁴⁶ SP AusNet, *Transmission Revenue Determination 2017-23 Framework and Approach Initiation*, 21 July 2014, p1

⁴⁷ AER, *Capital expenditure incentive guideline for electricity network service providers*, pp. 5–9.

⁴⁸ AER, *Capital expenditure incentive guideline for electricity network service providers*, pp. 10–11.

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

For capex, the sharing of underspends and overspends happens at the end of each regulatory period when we update a TNSP's RAB to include new capex. If a TNSP spends less than its approved forecast during a period, it will benefit within that period. Consumers benefit at the end of that period when the RAB is updated to include less capex than if the TNSP had spent the full amount of the capex forecast. This leads to lower prices in the future.

Without a CESS the incentive for a TNSP to spend less than its forecast capex declines throughout the period.⁴⁹ Because of this a TNSP may choose to spend capex earlier, or on capex when it may otherwise have spent on opex, or less on capex at the expense of service quality—even if it may not be efficient to do so.

With the CESS a TNSP faces the same reward and penalty in each year of a regulatory control period for capex underspends or overspends. The CESS will provide 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, so any capex included in the RAB is more likely to reflect the capex criteria. In particular, 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.

An important consideration in the operation of the CESS incentive is to ensure that any shifting of capital expenditure between regulatory years is efficient. Although in the strictest sense it is not a component of the CESS, the ex post assessment exists to support the CESS by addressing aspects of potentially undesirable behaviour that not directly addressed in the CESS. One purpose is to provide an incentive for the service provider to avoid cost overruns on major projects. Another is it provides an incentive to ensure cost shifts between years are due to factors of the kind identified by AusNet Services and not due to inaccurate forecasting of its capital expenditure requirements. Without the CESS the TNSP has an incentive to propose higher capital amounts in the earlier years of the regulatory control period than its true need. If these forecasts are adopted it may then reschedule a proportion of the planned works into later years of the regulatory control period for reasons other than efficiency. If this deferral is due to the opportunist rescheduling of works it can result in the TNSP gaining unearned income. If the AER is not satisfied with the reasons for an overspend which has occurred in the review period (as defined in the NER), the AER may reduce the capital expenditure which is added to the regulatory asset base.⁵⁰ As the CESS is to apply in the next regulatory control period it follows that our preliminary position is to apply the ex post review as described in the CESS. However, as this will be the first time the scheme is applied the initial period to be assessed is limited to a single year as explained in section 3.2.

The intention of the ex post assessment of capital expenditure overspends is to review a pattern of behaviour over an extended period (i.e. the review period). The AER must assess whether shifts in expenditure between years are likely to satisfy the capital expenditure criteria.⁵¹ To make this

⁴⁹ As the end of the regulatory period approaches, the time available for the TNSP to retain any savings gets shorter. So the earlier a TNSP incurs an underspend in the regulatory period, the greater its reward will be.

⁵⁰ Clause S6A.2.2A(c)

⁵¹ Clause S6A.2.2A(f)

assessment the AER must consider a period longer than one year. As this initial review will be limited to a single year of data we agree with AusNet Services that it is unlikely that much weight could be applied to this assessment.

We note that the remainder of the current (i.e. 2014-17) regulatory control period will be assessed in the following regulatory control period (i.e. 2022), as will the first three years of the 2017-22 regulatory control period. We therefore consider that a meaningful assessment will only become available when this later assessment is carried out for the following regulatory control period. However, we also consider that deferring the assessment of the 2014-15 year to this later assessment (i.e. 2022) is not desirable as the time elapsed between 2014-15 and the later assessment would be excessive. Also, if the AER deferred this assessment, a rule change would be necessary to allow the AER to incorporate the result of the delayed assessment in a later review. This is because the review period in the next regulatory control period will be for the years 2015-16 to 2019-20 and will not include 2014-15.

Our preliminary position is to apply the ex—post review although it will only be for one year. As the weight that could be attached to this assessment is unlikely to be significant, we welcome submissions on whether we should proceed on this basis or should we defer the 2014-15 assessment until the following regulatory control period, as suggested by AusNet Services.

When the CESS, EBSS and STPIS apply to TNSPs the incentives for improvements in opex, capex and service outcomes are more balanced. This encourages businesses to make efficient decisions on when and what type of expenditure to incur, and to efficiently trade off expenditure reductions with service quality and reliability.

4 Expenditure forecast assessment guideline

This attachment sets out our intention to apply our expenditure forecast assessment guideline (guideline)⁵² including the information requirements to AusNet Services for the 2017–22 regulatory control period. We propose applying the guideline as it sets out our new expenditure assessment approach developed and consulted upon during the Better Regulation program. The guideline outlines for TNSPs and interested stakeholders the types of assessments we will do to determine efficient expenditure allowances, and the information we require from the businesses to do so.

We were required to develop the guideline under the rules.⁵³ The guideline is based on a nationally consistent reporting framework allowing us to compare the relative efficiencies of TNSPs and decide on efficient expenditure allowances. The rules required AusNet Services to advise us by 31 March 2015 of the methodology it proposes to use to prepare forecasts.⁵⁴ In the F&A we must set out our proposed approach to application of the guideline.⁵⁵ This will provide clarity to AusNet Services and assist it with the information it should include in its revenue proposal.

The guideline contains a suite of assessment/analytical tools and techniques to assist our review of revenue proposals by network service providers. We intend to apply the assessment techniques set out in the guideline. The techniques include:⁵⁶

- benchmarking (economic techniques and category analysis)
- methodology review
- governance and policy review
- predictive modelling
- trend analysis
- cost benefit analysis
- detailed project review (including engineering review).

We developed the guideline to apply broadly to all electricity transmission and distribution businesses. However, 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 the RIN that we will issue to AusNet Services for the next regulatory control period.

⁵² We published this guideline on 29 November 2013. It can be located at www.aer.gov.au/node/18864.

⁵³ NER, clauses 6.4.5, 6A.5.6, 11.53.4 and 11.54.4.

⁵⁴ NER, clauses 6A.10.1B(b)(1) and 11.58.4(n).

⁵⁵ NER, clause 6A.10.1A(b)(5).

⁵⁶ AER, *Expenditure assessment guideline for electricity transmission*, 29 November 2013, pp. 12-13.

5 Depreciation

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. This attachment sets out our proposed approach to calculating depreciation when the RAB is rolled forward to the commencement of the 2022–27 regulatory control period.⁵⁷

The depreciation we use to roll forward the RAB can be based on either:

- Actual capex incurred during the regulatory control period (actual depreciation). We roll forward the RAB based on actual capex less the depreciation on the actual capex incurred 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.

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

Consumers benefit from improved efficiencies through lower regulated prices. Where a CESS is applied, using forecast depreciation provides the incentives for TNSPs to pursue continuous capex efficiencies. Using actual depreciation increases these incentives. There is more information on depreciation as part of the overall capex incentive framework in our capex incentives guideline.⁵⁸ 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.

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 shorter lived assets compared to longer lived assets. Forecast depreciation, on the other hand, leads to the same incentive for all assets.

5.1 Proposed approach

We propose to use the forecast depreciation approach to establish the RAB at the commencement of the 2022–27 regulatory control period for AusNet Services. We consider this approach will provide sufficient incentives for AusNet Services to achieve capex efficiency gains over the 2017–22 regulatory control period.

⁵⁷ NER, clause 6A.10.1A(b)(6).

⁵⁸ AER, *Capital expenditure incentive guideline for electricity network service providers*, 29 November 2013, pp. 10–11.

In the F&A paper 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.⁵⁹

We are required to set out in our capex incentives guideline our process for determining which form of depreciation we propose to use in the RAB roll forward process.⁶⁰ Our decision on whether to use actual or forecast depreciation must be consistent with the capex incentive objective. We must have regard to:⁶¹

- 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 guideline
- the capital expenditure factors.

5.2 Reasons for proposed approach

Consistent with our capex incentives guideline, we propose to use the forecast depreciation approach to establish the RAB at the commencement of the 2022–27 regulatory control period.

We had regard to the relevant factors in the rules in developing the approach to choosing depreciation set out in our capex incentives guideline.⁶²

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

We have chosen forecast depreciation as our proposed approach because, in combination with the CESS, it will provide a 30 per cent reward for capex underspends and 30 per cent penalty for capex overspends, which is consistent for all asset classes. In developing our capex incentives guideline, we considered this to be a sufficient incentive for a TNSP to achieve efficiency gains over the regulatory control period in most circumstances.

⁵⁹ NER, clause S6A.2.2B.

⁶⁰ NER, clause 6A.5A(b)(3).

⁶¹ NER, clause S6A.2.2B.

⁶² AER, *Capital expenditure incentive guideline for electricity network service providers*, 29 November 2013, pp. 12–13.

AusNet Services is not currently subject to a CESS but we propose to apply the CESS in the next regulatory control period.

For AusNet Services, at this stage, we consider the incentive provided by the application of the CESS in combination with the use of forecast depreciation and our other ex post capex measures should be sufficient to achieve the capex incentive objective.⁶³

⁶³ Our ex post capex measures are set out in the capex incentives guideline, AER *capex incentives guideline*, pp. 13–19; the guideline also sets out how all our capex incentive measures are consistent with the capex incentive objective, AER *capex incentives guideline*, 29 November 2013, pp. 20–21.

6 Small scale incentive scheme

The rules provide that we may develop small-scale incentive schemes to test innovative approaches to incentives.⁶⁴ Small scale incentive schemes are intended to provide for incentives for improved performance not already covered by the existing incentive schemes in the rules and may cover matters not related to expenditure by TNSPs.⁶⁵

We have not yet developed any such schemes. Therefore, in this F&A paper we are not proposing to apply any such schemes to AusNet Services in the next regulatory control period.

We note, however, that changes to the STPIS (version 4.1) introduce new incentives for TNSPs to improve the capability of existing assets to provide greater value to generators and consumers and avoid the need for asset augmentation.

⁶⁴ NER, clause 6A.7.5. AEMC, *Final determination, National Electricity Amendment (Economic Regulation of Network Service Providers) Rule*, November 2012, p. 13

⁶⁵ AEMC, *Final determination, National Electricity Amendment (Economic Regulation of Network Service Providers) Rule*, November 2012, p. 212.

