Explanatory statement

Proposed amendments

Electricity transmission and distribution network service providers

Post-tax revenue models (version 4)

January 2019

AUSTRALIAN ENERGY REGULATOR

Inquiries about this publication should be addressed to:

Australian Energy Regulator
GPO Box 520
Melbourne Vic 3001

Tel: 1300 585165

Email: ModelReviews@aer.gov.au
AER Reference: 63688

Invitation for submissions

The Australian Energy Regulator invites interested parties to make written submissions on the proposed amendments to the distribution and transmission post-tax revenue models by close of business, **12 March 2019**.

We prefer that all submissions sent in an electronic format are in Microsoft Word or other text readable document form. Submissions should be sent electronically to ModelReviews@aer.gov.au.

Alternatively, submissions can be sent to:

Mr Warwick Anderson
General Manager, Networks Finance and Reporting
Australian Energy Regulator
GPO Box 520
Melbourne Vic 3001

We prefer that all submissions be publicly available to facilitate an informed and transparent consultative process. Submissions will be treated as public documents unless otherwise requested. Parties wishing to submit confidential information are requested to:

- clearly identify the information that is the subject of the confidentiality claim
- provide a non-confidential version of the submission in a form suitable for publication.

We will place all non-confidential submissions on our website. For further information regarding our use and disclosure of information provided to us, see the ACCC/AER Information Policy (June 2014), which is available on our website.

Please direct enquires about this paper, or about lodging submissions to ModelReviews@aer.gov.au or to the Networks Reporting and Finance branch of the AER on (03) 9290 1444.

Shortened forms

Shortened form	Extended form
AER	Australian Energy Regulator
ATO	Australian Tax Office
Capex	Capital expenditure
DNSP	Distribution network service provider
DV	Diminishing value
ERC	Equity raising costs
ITAA 1997	*Income Tax Assessment Act 1997*
NEL	National Electricity Law
NER	National Electricity Rules
NERL	National Energy Retail Law
NGL	National Gas Law
NPV	Net present value
Opex	Operating expenditure
PTRM	Post-tax revenue model
NSP	Network service provider
RAB	Regulatory asset base
RFM	Roll forward model
SL	Straight-line
TAB	Tax asset base
TNSP	Transmission network service provider
WARL	Weighted average remaining lives
Tax review	Review of regulatory tax approach

Contents

1 Introduction

The Australian Energy Regulator (AER) is the independent regulator for Australia's national energy market. We are guided in our role by the national electricity, gas and energy retail objectives set out in the National Electricity Law (NEL), National Gas Law (NGL) and the National Energy Retail Law (NERL). These objectives focus on the long term interests of consumers.

This explanatory statement sets out our proposed amendments to the transmission and distribution post-tax revenue models (PTRMs) and the reasons for them.[1] We have amended the PTRMs to implement the findings in our final report on the review of the regulatory tax framework (the tax review). We also propose several other amendments to the PTRMs. This chapter provides an overview of the purpose of the PTRM and our proposed amendments. We invite submissions on the proposed amendments from interested parties by 12 March 2019.

1.1 What does the PTRM do?

We adopt a building block approach when determining a network service provider's (NSP's) regulated revenue for each year of a regulatory control period. Under this approach we determine the value of the building block costs that make up the annual revenue requirement for each regulatory year. The building block costs include:

- an indexation of the regulatory asset base (RAB)
- a return on capital
- a return of capital (depreciation)[2]
- the estimated cost of corporate income tax
- forecast operating expenditure (opex)
- revenue increments or decrements arising from applicable incentive schemes[3]
- adjustments related to any mechanisms used in the previous regulatory control period and other revenue adjustments such as those related to shared assets.

We developed the PTRM which brings together the various building block costs and calculates the annual revenue requirement for each year of a regulatory control period.[4] The PTRM also calculates the X factors required under the CPI–X methodology which are used to escalate the expected revenue for each year (other than the first year) of the regulatory control period.[5] An electricity NSP's revenue proposal must be prepared using our PTRM.[6]

1 NER, cll. 6A.20(b) and 6.16(b).
2 The net total of the indexation of the RAB and depreciation building blocks is referred to as 'regulatory depreciation'.
3 Being any efficiency benefit sharing schemes, capital expenditure sharing schemes, service target performance incentive schemes, or small scale incentive schemes applied to the NSP (and, in the case of distributers, any applicable demand management and embedded generation schemes).
4 NER, cll. 6A.5.4 and 6.4.3.
5 NER, cll. 6A.5.3, 6A.6.8 and 6.5.9.

To ensure that the PTRM remains fit for purpose, we amend or replace it from time to time when necessary.[7] Table 1 shows the versions of the transmission and distribution PTRMs, the key changes to these models and when they were made. The next versions of the PTRMs will be labelled version 4 for both transmission and distribution versions.

Table 1 PTRM revisions

Date	Transmission version	Key changes	Distribution version	Key changes
September 2007	1	n/a		
June 2008			1	n/a
June 2009			2	Corrected various errors.
December 2010	2	Allowed as-commissioned opening RAB.		
January 2015	3	Allowed annual return on debt updates.	3	Allowed annual return on debt updates.

1.2 Why are we amending the PTRM?

The estimated cost of corporate income tax is one component we consider when setting the forecast revenue allowances for regulated electricity and gas networks. In May 2018, we commenced a review into the regulatory tax framework (the tax review). On 17 December 2018, we released the final report of the tax review which identified three changes to our current approach in calculating the estimated cost of corporate income tax. Two of the findings require changes to our regulatory models—that is the roll forward model (RFM) and PTRM. Specifically, the final report of the tax review required the following two changes which affect the calculation of tax depreciation in the models:

- **immediate expensing** – allow the recognition of immediate expensing of certain capital expenditure (capex) for tax purposes (section 2.1)
- **diminishing value method** – apply the diminishing value (DV) method for tax depreciation purposes to all new depreciable assets except for certain assets (section 2.2).[8]

The findings in the final report of the tax review also include applying the 20 year statutory cap on certain classes of gas transmission and distribution assets.[9] However, the PTRMs

6 NER, cll. 6A.4.1(b)(1) and 6.3.1(c)(1).

7 NER, cll. 6A.5.2(b) and 6.4.1(b), read with the applicable consultation procedures.

8 For example, assets qualified under section 40-72 of the ITAA (e.g. intangible depreciable assets) are not subject to the DV method. Other assets such as buildings and other capital works, and equity raising costs are also not subject to this depreciation method. This is discussed in more detail in section 2.2.

can accommodate this finding as the tax standard asset lives are inputs in the PTRM. Therefore we consider that no further amendment to the PTRMs is required to implement this finding. We note that while the regulatory models (RFM and PTRM) are developed primarily for electricity network service providers under the NER, the majority of the regulated gas NSPs adopt these models for their access arrangement review purposes.

At this stage, we will make the required changes in the PTRMs first. This is because the tax review final report stated that the required changes to the tax depreciation approach would apply to new assets only. This means that only changes to the PTRMs are required in the first regulatory control period when transitioning into the new approach. As such, no immediate change to the RFM would be required until the subsequent regulatory control period. Therefore, we will make the relevant amendments to the RFM at a later stage.

In addition to the above proposed amendments to give effect to the findings of the tax review, we also propose the following amendments to the PTRMs:

- provide the option for selecting between the year-by-year tracking or weighted average remaining lives (WARL) approach for calculating straight-line (SL) depreciation on the opening RAB and opening tax asset base (TAB) values (section 2.3)
- expand the number of asset classes to 50 in the distribution PTRM, consistent with the transmission PTRM (section 2.4)
- correct typographical errors and other minor formatting issues (section 2.4).

1.3 How can stakeholders contribute?

We want all stakeholders to have opportunity to consider our proposed amendments to the PTRMs and make written submissions to us. As such, we are publishing:[10]

- the proposed amended PTRMs and associated handbooks
- this explanatory statement, setting out the provision of the NER under which the PTRMs are proposed to be amended, and the reasons for the proposed amendments.

The proposed amended distribution and transmission PTRMs, and associated handbooks are at appendices A, B, C and D respectively. We invite submissions on the proposed amendments from all interested parties by 12 March 2019.[11]

We discuss in detail our proposed amendments to implement the tax review findings in section 2. While we welcome submissions from stakeholders on any aspects of the proposed amendments, we have noted some implementation issues relating to the DV method (as discussed in section 2.2). We seek comments from interested stakeholders' on these specific issues.

We will consider the submissions on the proposed amendments before we decide on the final amended PTRMs. By the end of April 2019, we will publish:[12]

---

9 AER, *Final report: Review of regulatory tax approach*, December 2018, p. 80.

10 NER, cll. 6A.20(b) and 6.16(b).

11 Interested parties must be allowed at least 30 business days to make submissions to the AER; NER, cll. 6A.20(c) and 6.16(c).

- a final decision that sets out the provision of the NER under which the PTRM is being prepared, and the reasons for the amendments
- the amended PTRMs and associated handbooks.

The timeline and milestones for this PTRM amendment process are shown in Table 2.

Table 2 PTRM amendment process milestones and timeline

Milestone	Date
AER issues explanatory statement on proposed amendments and draft PTRMs	25 January 2019
Stakeholder submissions on proposed amendments close	12 March 2019
AER issues final decision and the amended PTRMs	End April 2019

Early consultation with the 2019 NSPs undergoing revenue resets

We will apply the final amended PTRMs to the revenue determinations for Power and Water Corporation, Evoenergy, TasNetworks, Ausgrid, Essential Energy and Endeavour Energy (the 2019 NSPs) to be published on 30 April 2019. As such, we consider it necessary to undertake additional consultation with the 2019 NSPs on the proposed amendments. We have been in consultation with the 2019 NSPs on the proposed amendments and required new inputs since late December 2019, and have since received some initial comments from these businesses. Some of these initial comments have been incorporated in the proposed amended PTRMs.

12 The period between publication of the proposed amended model and final amended model will be no more than 80 business days. NER, cll. 6A.20(e) and 6.16(e).

2 Proposed amendments

We have made relevant changes to the PTRMs to implement the findings from the tax review. The main changes are to allow for immediate expensing of forecast capex and apply the DV method to calculate the tax depreciation for new assets. In addition to the changes on the tax depreciation, we also propose some other amendments to the current versions of the PTRMs. We note that there are some differences between the transmission PTRM and distribution PTRM. However, the proposed amendments discussed in this explanatory statement affect both in similar ways and are therefore discussed together.

Table 3 provides a summary of our proposed amendments. These specific changes are also listed in a temporary *'Change log'* worksheet in the proposed PTRMs. This detailed log will be deleted from the final amended PTRMs. A high level summary of changes will be provided in the *'Intro'* worksheet to the PTRM. We have amended the PTRM handbooks to include additional guidance on implementing the new tax depreciation approach. We have also included various comments and labels in the amended PTRMs to provide high level instruction on the new inputs required for calculating the tax depreciation.

Table 3 Summary of proposed amendments to the transmission and distribution PTRMs

Proposed amendments	Worksheet	Change description
Immediate expensing of capex	PTRM Input	Added a new section to allow users to input the forecast capex by asset classes which can be immediately expensed for tax purposes for each year of the regulatory control period
	Assets	Amended formulas for tax depreciation calculation to account for immediately expensed forecast capex for all asset classes
Diminishing value	PTRM Input	Added a new section to input the DV depreciation multiplier as required by ATO for each year of the regulatory control period
	Assets	Amended formulae for tax depreciation to account for the DV method for asset classes 1 to 47 (remaining 3 asset classes maintain the SL method)
Year-by-Year tracking depreciation	PTRM Input	Added new SL depreciation options for opening RAB and TAB to allow user to implement either the WARL or year-by-year tracking approaches for depreciating the opening RAB and TAB Added a new input section for user to provide depreciation values calculated using the year-by-year tracking approach if this option is chosen
	Assets	Amended formulae for depreciation on opening RAB and opening TAB to account for the option of selecting

		the year-by-year tracking depreciation approach
Other minor changes	PTRM Input, Assets, Analysis	Expanded distribution PTRM to allow for 50 asset classes (increase from 30 asset classes) to be consistent with transmission PTRM Made other changes relate to formatting, labelling or formula updates which, while noted for completeness, are not consequential to the operation of the PTRM

2.1 Immediate expensing of forecast capex

Certain capex (such as refurbishment capex) is able to be 'immediately expensed' under tax legislation. The current versions of the PTRMs do not recognise the ability to immediately expense some capex, and instead treat all capex as additions to the TAB for tax purposes. As set out in the final report for the tax review, we propose amending the PTRMs so that immediately deductible capex can be accounted for in the modelling of the forecast tax costs included in the total revenue.[13]

Consistent with the findings in the final report of the tax review, we have made the following changes in the PTRMs:

- added a new input section where the amount of forecast capex for immediate expensing (by asset classes) can be provided for each year of the regulatory control period
- amended the tax depreciation calculation so that the value of immediately deductible capex is removed from the net capex to be depreciated for tax purposes. That is, the net capex for tax depreciation purposes is the amount of gross capex, less disposals, less the immediately deductible capex[14]
- included the immediate expensing amount in the total tax depreciation amount for each regulatory year. This allows the value of immediately deductible capex to be recorded as a tax expense for the year in which it is forecast to be incurred.

The proposed amendments provides for a forecast of immediately deductible capex to be recorded in the PTRMs. Currently, NSPs are not required to provide this information to the AER as part of their regulatory proposal. The final report of the tax review found that an 'actuals informed approach' should be used to determine the appropriate amount for this forecast. The 'actuals informed approach' would involve forecasting a certain proportion of capex as immediately deductible. This proportion would be informed by the amount of actual capex that was treated as immediately deductible over a previous period, and the actual use of immediate expensing across the sector.[15] As part of the reset process, we will assess and consult with the NSPs on the appropriate amount of forecast immediate expensing capex.

13 AER, *Final report: Review of regulatory tax approach*, December 2018, pp. 64–66.

14 For distribution, the net capex for tax purposes reflects the as-incurred approach and includes any customer contributed capex. For transmission, the net capex reflects the as-commissioned approach.

15 AER, *Final report: Review of regulatory tax approach*, December 2018, p. 66.

2.2 Diminishing value method for tax depreciation

The current version of the PTRMs uses the SL method to calculate tax depreciation for all asset classes. The final report of the tax review stated that we should apply the DV method as the new regulatory benchmark for tax depreciation to all new assets.[16] This includes, in the context of tax law: new assets added to the cost base of an existing depreciated asset, and new and separate depreciating assets for the purposes of Division 40 of the Income Tax Assessment Act (ITAA). However, there are some exceptions to this approach such as assets relating to in-house software, buildings and equity raising costs. Our proposed amended PTRMs allow capex entering these asset classes to continue to be depreciated under the SL method.[17] We have also kept the SL method for the tax depreciation calculation on the opening TAB values in the proposed amended PTRMs. This is consistent with the tax review's findings to maintain this approach for existing assets.[18]

Applying the diminishing value method to new assets

For those asset classes that are subject to the DV method, we have amended the tax depreciation calculation in the PTRMs to reflect the Australian Tax Office's (ATO's) formula as below:[19]

Base value × (days held ÷ 365[20]) × (200% ÷ asset's effective life)

We have assumed the number of days that the asset is being held ('days held' value in the formula above) to be 365 days.[21] The 'Base value' and 'asset's effective life' values are already included in the PTRMs, therefore no further changes to the PTRMs are needed. The 'base value' is the net capex[22] value for tax depreciation as calculated in the PTRMs. The 'asset's effective life' is the input for 'tax standard asset life' in the PTRMs. Therefore, we have modified the DV calculation formula to be applied in the PTRMs as below:

$$D_t = \left(Nominal\ net\ capex_i - \sum_{n=0}^{t-1} D_n \right) \times 200\% \div tax\ standard\ asset\ life$$

where:

D_t is the tax depreciation in year t

$D_0 = 0$

$t = 1,2,3, \ldots$

$i = year\ 0$

16 AER, *Final report: Review of regulatory tax approach*, December 2018, p. 76.
17 Asset classes 48–50 in the proposed amended PTRMs provide for this.
18 AER, *Final report: Review of regulatory tax approach*, December 2018, p. 74.
19 ATO website: https://www.ato.gov.au/forms/guide-to-depreciating-assets-2006-07/?page=17.
20 Can be 366 days for a leap year.
21 There are 366 days for a leap year.
22 The net capex for tax depreciation is equal to the gross capex, less disposals, less immediately expensed capex (as discussed in section 2.1).

We have added a new input section for the '200%' value in the above formula to be recorded for each year of the regulatory control period in the 'Tax' section of the 'PTRM Input' worksheet. We have labelled this input as the 'diminishing value multiplier' in the PTRMs. While currently the DV multiplier is set as 200 per cent by the ATO, this new input section will allow revisions to be made in the PTRMs if the ATO changes this multiplier in future.

Issue 1 – Treatment of residual tax asset value

Under the DV formula, the value of an asset class is depreciated in perpetuity in the PTRM. This means the residual value of the asset class would not be fully written off unless a constraint is set in the DV formula. We have considered the following two options in dealing with this issue:

1. RAB standard asset life as the constraint – Fully depreciate the asset at the end of its RAB standard asset life for each asset class. That is, the residual value is written off at the end of the asset class's economic life.
2. Tax standard asset lives as the constraint – Fully depreciate the asset at the end of its tax standard life for each asset class.

In our proposed amended PTRMs, we have adopted option 1 as our preferred approach. This means that each asset class is fully depreciated at the end of the RAB standard asset life assigned to the asset class.

While we consider that using the tax standard life as the constraint is a possible option in dealing with this issue, we found that this is not ideal under certain scenarios. We note that the two options would provide a similar outcome if the RAB standard life of the asset class is close to the tax standard life. However, when the RAB and tax asset lives are significantly different, these two options will result in very different outcomes. For example, assuming the tax asset life of an asset is 20 years and the RAB asset life is 40 years. The residual value of the asset would be written off at year 20 under option 2, and at year 40 under option 1. Figure 1 shows that for an asset with an initial value of $100 million, under option 2 (green line) the annual depreciation amount declines from year 1 to year 19, but the removal of the residual value at year 20 results in a large step-up in depreciation for that year. However, under option 1 (orange line) the annual depreciation amount declines from year 1 to year 39, and the removal of the residual value at year 40 results in a relatively smaller step-up in depreciation for that year. This means a higher tax depreciation would be calculated in year 20 under option 2 resulting in a lower forecast tax allowance when compared with the calculations under option 1.

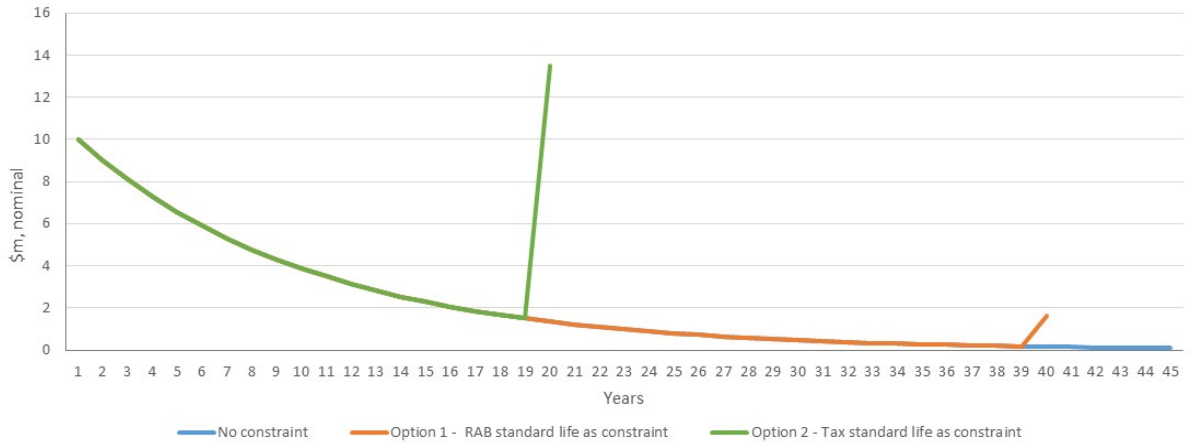
We note that the ATO allows an asset to be written off for tax purposes if the business no longer holds or uses the asset.[23] While the RAB standard asset life of an asset class is set to reflect the economic life of the asset class, the tax standard asset life does not always reflect this. For example, the statuary cap on certain gas transmission and distribution assets is set at 20 years by the ATO, which can be much shorter than the economic life of these assets.[24] Therefore, we have applied the RAB standard asset life as our preferred approach

23 AER, *Final report: Review of regulatory tax approach*, December 2018, p. 76.

24 As discussed above, while the PTRMs are developed primarily for electricity network service providers under the NER, the

in the proposed amended PTRMs. This approach allows the residual tax asset value of the asset class to be fully written off at the end of its useful life.

Figure 1 Annual depreciation expenses under the DV method with different constraints ($m, nominal)



Source: AER analysis.

Question 1: Do you have any concerns with the approach of using the RAB standard asset life input to the PTRM as the constraint in the DV formula?

Exceptions to the diminishing value method

Our proposed amended PTRMs provide for asset classes 48, 49 and 50 to be depreciated using the SL method for tax purposes rather than the DV method. These asset classes are to contain new assets associated with in-house software, buildings and equity raising costs respectively. The reasons for these exceptions are explained below.

In-house software (asset class 48) — As discussed in the final report of the tax review, assets qualified under section 40.72 of the ITAA (e.g. intangible depreciable assets) are not subject to the DV method of depreciation.[25] While section 40.72 of the ITAA provides a list of assets that are not subject to the DV method,[26] most assets from this list appear to be not relevant to the regulated NSPs, except for in-house software assets. Therefore, we have provided a separate asset class (asset class 48) labelled 'In-house software' to allow such expenditure to be depreciated under the SL method.[27] Currently, the majority of the NSPs have an IT related asset class which may include assets associated with IT hardware, in-house and/or off-the-shelf software. We note that the NSP may need to separate its capex for in-house software from other IT capex if it wishes to adopt the SL depreciation for capex associated with in-house software.

majority of the regulated gas NSPs adopt these models for their access arrangement review purposes.

25 AER, *Final report: Review of regulatory tax approach*, December 2018, p. 73.

26 This list includes in-house software, items of intellectual property, spectrum licences, datacasting transmitter licences and, telecommunications site access rights.

27 See ATO website: https://www.ato.gov.au/forms/guide-to-depreciating-assets-2018/?page=14.

Buildings (asset class 49) — We consider that capex associated with buildings as defined under section 43-20 of the ITAA is not subject to the DV method of depreciation. Division 43 of the ITAA requires buildings to be depreciated by specific rates.[28] This suggests that the DV method is not appropriate to calculate the tax depreciation rate for these types of assets. Therefore, we have provided a separate asset class (asset class 49) labelled 'Buildings' to allow such expenditure to be depreciated under the SL method. Similar to the above, if an NSP wishes to adopt the SL depreciation for capex associated with buildings, it may need to separately identify the relevant capex for buildings if this expenditure is typically allocated to other asset classes.

Equity raising costs (asset class 50) — We consider that the benchmark allowance for equity raising costs should not be depreciated using the DV method as the ATO's ruling requires that businesses can claim deductions on equity raising costs over a five-year period on an SL basis.[29] The 'Equity raising costs' asset class is an existing class in the distribution and transmission PTRMs, which applies the SL method of depreciation. Therefore, we have maintained this approach (for asset class 50) in the proposed amended PTRMs.

Issue 2 – Exceptions to the DV method

Question 2: Besides the three asset classes identified above, are there any other asset classes that you consider should not be subject to the DV method of tax depreciation?

2.3 Changes to accommodate the year-by-year tracking depreciation approach

The current version of the PTRMs calculates the SL depreciation on existing assets based on a 'weighted average remaining lives' (WARL) approach. This approach calculates the remaining asset life for an asset class by weighing together its remaining asset life at the beginning of the regulatory control period with the new capex added to the asset class during the regulatory control period. The residual asset values are used as weights to calculate the remaining assets lives at the end of that period. The WARLs for the asset classes are calculated in the RFM and are inputs to the PTRM.

In recent decisions, NSPs have proposed the year-by-year tracking approach to calculate the SL depreciation on existing assets.[30] Under this approach, the capex for each year of a

28 Different deduction rates may be applicable (2.5% or 4%) depending on the date on which construction began, the type of capital works, and the manner of use; ATO website: https://www.ato.gov.au/business/depreciation-and-capital-expenses-and-allowances/capital-works-deductions/.

29 Section 40-880 of the ITAA; ATO website: https://www.ato.gov.au/business/depreciation-and-capital-expenses-and-allowances/other-capital-asset-and-expense-deductions/.

30 AER, *Draft decision: Power and Water Corporation distribution determination 2019–24 – Attachment 4*, September 2018; AER, *Draft decision: TasNetworks transmission determination 2019–24 – Attachment 4*, September 2018; AER, *Draft decision: TasNetworks distribution determination 2019–24 – Attachment 4*, September 2018; AER, *Final decision, ElectraNet transmission determination 2018–23 – Attachment 5*, April 2018; AER, *Draft decision, AusNet Services transmission determination 2017–22 – Attachment 5*, July 2016; AER, *Final decision: Jemena distribution determination 2016–20 – Attachment 5*, May 2016; AER, *Final decision: Powercor distribution determination 2016–20 – Attachment 5,* May 2016; AER, *Final decision: United Energy distribution determination 2016–20 – Attachment 5*, May 2016; AER, *Final*

regulatory control period is depreciated separately. We have accepted the year-by-year tracking approach because it meets the requirements of the NER in that it will result in depreciation schedules that:

- reflect the nature of the assets and their economic life[31]
- ensure that total depreciation (in real terms) equals the initial value of the assets[32]
- allows the economic lives of existing assets to be consistent with those determined on previous decisions.[33]

The current version of the PTRMs does not account for the year-by-year tracking approach to calculate the depreciation of existing assets in a seamless manner. Instead, ad hoc adjustments are required to be made to the template PTRM. That is, in order to implement this approach, we have to 'hard-code' the total amounts of year-by-year tracking depreciation on the opening RAB/TAB directly in the *'Assets'* worksheet for each asset class. We do not prefer this approach of making amendments to standardised models because it risks introducing potential errors.

Accordingly, we have added two new options (i.e. drop-down menus) in the *'PTRM input'* worksheet in the proposed PTRMs to allow the user to select either the WARL or year-by-year tracking approach to calculate the forecast SL depreciation on the opening RAB/TAB. Further, we have also created new input sections for recording the year-by-year tracking depreciation amounts for the opening RAB/TAB if the year-by-year tracking option is selected. These inputs should be entered in real, start of year dollar terms for the opening RAB and nominal dollar terms for the opening TAB. The formulae for the forecast SL depreciation on opening RAB/TAB in the '*Assets'* worksheet have also been amended to allow for either of these options.

We consider these amendments to the PTRMs are necessary to improve transparency when applying the year-by-year tracking depreciation approach. Furthermore, these amendments remove the need for manual adjustments to the formulae in the PTRM and hence reduces the risk of errors.

2.4 Other minor changes

We have made a few minor presentational and other minor operational changes to the PTRMs. These include:

- The proposed distribution PTRM has been expanded to accommodate up to 50 asset classes. This is an increase from the 30 asset classes in the current version of the distribution PTRM. This makes the distribution PTRM consistent with the transmission PTRM in terms of the capability to handle the same number of asset classes. We

---

decision: CitiPower distribution determination 2016–20 – Attachment 5, May 2016; AER, *Final decision: AusNet Services distribution determination 2016–20 – Attachment 5*, May 2016; and AER, *Final decision, SA Power Networks distribution determination 2015–20 – Attachment 5*, October 2015.

31 NER, cll. 6.5.5(b)(1) and 6A.6.3(b)(1).

32 NER, cll. 6.5.5(b)(2) and 6A.6.3(b)(2).

33 NER, cll. 6.5.5(b)(3) and 6A.6.3(b)(3).

consider that this is a sufficient number of asset classes to meet future requirements for most DNSPs.

- The proposed PTRMs remove the caution messages in the *'PTRM input'* worksheet of the current version of PTRMs that states that the return on equity input must be rounded to one decimal place. This is because the recent Rate of return instrument states that 'all calculations made pursuant to this instrument must be done in Microsoft Excel or a software program that undertakes equivalent calculations, and must be unrounded'.[34]
- The proposed PTRMs include other minor amendments relating to formatting or labelling which are not consequential to the operation of the PTRM (such as corrections to spelling or grammatical errors in cell notes).

34 AER, *Rate of Return Instrument*, December 2018, p. 19.

Appendices

The appendices include the proposed amended PTRMs and handbooks. As noted above, the proposed amended PTRMs include a '*Change log*' worksheet that will be removed from the final versions, with only a high level summary of changes in the '*Intro*' worksheet. The proposed handbooks currently include highlighted text to indicate where proposed changes were made. This highlighting will be removed in the final versions.

Appendix A: Post-tax revenue model (distribution)

Appendix B: Post-tax revenue model (transmission)

Appendix C: Post-tax revenue model handbook (distribution)

Appendix D: Post-tax revenue model handbook (transmission)