Final decision

Electricity transmission and distribution network service providers

Amendments to the roll forward models (Distribution - version 3) (Transmission - version 4)

April 2020

AUSTRALIAN ENERGY REGULATOR

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Shortened forms

Shortened form	Extended form
AER	Australian Energy Regulator
capex	capital expenditure
DV	diminishing value
NEL	National Electricity Law
NEO	National Electricity Objective
NER	National Electricity Rules
NGL	National Gas Law
NGO	National Gas Objective
NSP	network service provider
opex	operating expenditure
PTRM	post-tax revenue model
RAB	regulatory asset base
RFM	roll forward model
TAB	tax asset base

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About us

We, the Australian Energy Regulator (AER), work to make all Australian energy consumers better off, now and in the future. We are the independent regulator of energy network service providers (NSPs) in all jurisdictions in Australia except for Western Australia. We set the revenue requirements these NSPs can recover from customers using their networks.

The National Electricity Law and Rules (NEL and NER) and the National Gas Law and Rules (NGL and NGR) provide the regulatory framework which govern the NSPs. Our role is guided by the National Electricity and Gas Objectives (NEO and NGO).

NEO:[1]

> …to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to:
>
> (a) price, quality, safety, reliability and security of supply of electricity; and
>
> (b) the reliability, safety and security of the national electricity system.

NGO:[2]

> …to promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas.

The decisions we make and the actions we take affect a wide range of individuals, businesses and organisations. Effective and meaningful engagement with stakeholders across all our functions is essential to fulfilling our role, and it provides stakeholders with an opportunity to inform and influence what we do. Engaging with those affected by our work helps us make better decisions, provides greater transparency and predictability, and builds trust and confidence in the regulatory regime. This is reflected in our *Stakeholder engagement framework* and in the consultation process we have conducted.[3]

1 NEL, s. 7.

2 NGL, s. 23.

3 AER, *Revised stakeholder engagement framework*, September 2017.

1 Introduction

The NER requires us to prepare and publish a roll forward model (RFM) for the regulatory asset base (RAB) of network service providers.[4] To ensure that the RFM remains fit for purpose, we amend or replace the RFM when necessary.[5] The versions of the RFMs being replaced are version 2 for distribution and version 3 for transmission.

We released an explanatory statement of proposed amendments to the RFMs in December 2019.[6] We received one submission on these proposed amendments.[7] This final decision sets out our position on the amendments to the RFMs and the reasons for the changes, in accordance with the NER.[8]

We have amended the RFMs to implement the findings from our final report on the review of the regulatory tax framework (the tax review). We also made several other amendments to the RFMs. This section provides an overview of the purpose of the RFM, including how and why the amended RFMs were developed. Section 2 sets out in more detail the reasoning behind our amendments. Appendix H provides a detailed list of changes made in the amended RFMs.

1.1 What does the RFM do?

The RFM establishes the method used to roll forward the value of the RAB:[9]

- from one regulatory control period to the next regulatory control period
- from one regulatory year to the next regulatory year in the same regulatory control period.

The closing RAB value for a regulatory control period as calculated by the RFM becomes the opening RAB for the next regulatory control period. This opening RAB value is the input to the post-tax revenue model (PTRM), where it is rolled forward from one regulatory year to the next regulatory year on a forecast indicative basis. The RAB is used in the PTRM as part of the calculation of the annual revenue requirement.

The RFM deals with many aspects of RAB estimation, including:[10]

- establishment of the opening RAB for the next regulatory control period
- adjustments for prudent and efficient capital expenditure (capex)
- the depreciation approach based on forecast or actual capex
- how the roll forward should occur within the regulatory control period.

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4 NER, cll 6.5.1(b) and 6A.6.1(b).
5 NER, cll 6.5.1(c) and 6A.6.1(c).
6 AER, *Explanatory statement – Proposed amendments to electricity roll forward models*, December 2019.
7 Jemena, *Submission to proposed amended RFMs*, January 2020.
8 NER, cll. 6.16(b) and 6A.20(b).
9 NER, cll. 6.5.1(e) and 6A.6.1(e).
10 NER, cll. S6.2 and S6A.2.

The roll forward of the RAB from year-to-year will reflect:

- additions for actual capex, net of capital contributions[11] and the value of asset disposals
- reductions for depreciation (based on approved asset lives and methods)
- indexation for actual inflation
- adjustment for the difference between estimated and actual capex in the last year of the previous regulatory control period
- other adjustments for removal or addition of assets made under certain circumstances (e.g. change in service classification or ex-post review) in accordance with the NER.

The RFM also incorporates a similar roll forward calculation of the tax asset base (TAB) over the regulatory control period. The purpose of the TAB is to calculate tax depreciation of the assets when estimating the NSP's cost of corporate income tax. As with the RAB, the output TAB values from the RFM are inputs to the PTRM used with other inputs to calculate the corporate income tax building block.

An electricity NSP's regulatory proposal must be prepared using our RFM.[12]

1.2 How was the amended RFM developed?

We wanted all stakeholders to have the opportunity to consider our proposed amendments to the RFMs and make written comments in response. On 5 December 2019, we commenced the consultation process by publishing:[13]

- the proposed amended RFMs, depreciation tracking modules and associated handbooks
- an explanatory statement, setting out the provisions of the NER under which the RFMs were proposed to be amended, and the reasons for the proposed amendments.[14]

We asked stakeholders to make submissions on the proposed amendments by 20 January 2020.[15] We received one written submission from Jemena.[16] This submission was mainly focussed on the template gas financial models that were being developed in tandem with the electricity RFM amendments and did not raise any issues particular to the amended electricity RFMs.[17]

The final amended transmission and distribution RFMs, depreciation tracking modules and associated handbooks are therefore unchanged from the drafts released in December 2019. They are published with this final decision, in accordance with the NER. This final decision sets out our confirmation of the amendments detailed in the explanatory statement.

Version 3 of the distribution RFM and version 4 of the transmission RFM will therefore be the template for all subsequent regulatory determinations for electricity NSPs.

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11 These include gifted assets or contributions from customers or government.
12 NER, cll. S6.1.3(7), S6.1.3(10) and S6A.1.3(5).
13 NER, cll. 6.16(b) and 6A.20(b).
14 AER, *Explanatory statement – Proposed amendments to electricity roll forward models*, December 2019.
15 AER, *Explanatory statement – Proposed amendments to electricity roll forward models*, December 2019, p. 3.
16 Jemena, *Submission regarding proposed financial models*, January 2020.
17 NER, cll. 6.16(f) and 6A.20(f).

1.3 Why are we amending the RFM?

To ensure that the RFM remains fit for purpose, we amend or replace it when necessary.[18]

On 17 December 2018, we released the final report of our tax review which identified three changes to our approach in calculating the estimated cost of corporate income tax. Two of the findings required changes to our regulatory models—that is the RFM and PTRM.[19] Specifically, the final report of the tax review required the following two changes which affect the calculation of tax depreciation in the models:

- **diminishing value method** – apply the diminishing value (DV) method for tax depreciation purposes to all new depreciable assets except for certain assets[20]
- **immediate expensing** – allow immediate expensing of certain capital expenditure (capex) for tax purposes.

In April 2019, we published new versions of the distribution and transmission PTRMs (version 4) which implemented the changes to the tax depreciation approach. The amended RFMs with this final decision implements these changes to the roll forward of assets for tax purposes.

In addition to changes to accommodate the findings of the tax review, we have also included a standard approach to calculate year-by-year tracking of depreciation for both RAB and tax depreciation.[21] We have done this in response to the growing number of NSPs which have adopted the 'year-by-year tracking' approach to model straight-line depreciation. This has resulted in bespoke tracking models with differing approaches for each individual business. Not only does this complicate our assessment of regulatory proposals, it also creates unnecessary complexity for stakeholders, requiring them to examine every unique model during a determination process. Additionally, we consider that the change to DV tax depreciation for new assets arising from the tax review will require year-by-year tracking of tax depreciation to be implemented correctly.[22]

Our standard approach for year-by-year tracking is included as a separate template file (*depreciation tracking module*) which is an attachment to the RFM template file. The outputs from the depreciation tracking module will feed back into the RFM where tax depreciation includes capex depreciated using the DV method. It will also be used to calculate inputs to the PTRM where the year-by-year depreciation tracking is used to determine forecast depreciation of the opening asset base.

18 NER, cll. 6.5.1(c) and 6A.6.1(c).

19 Capping of certain gas asset tax lives was also a finding from the final report, but does not require a model change.

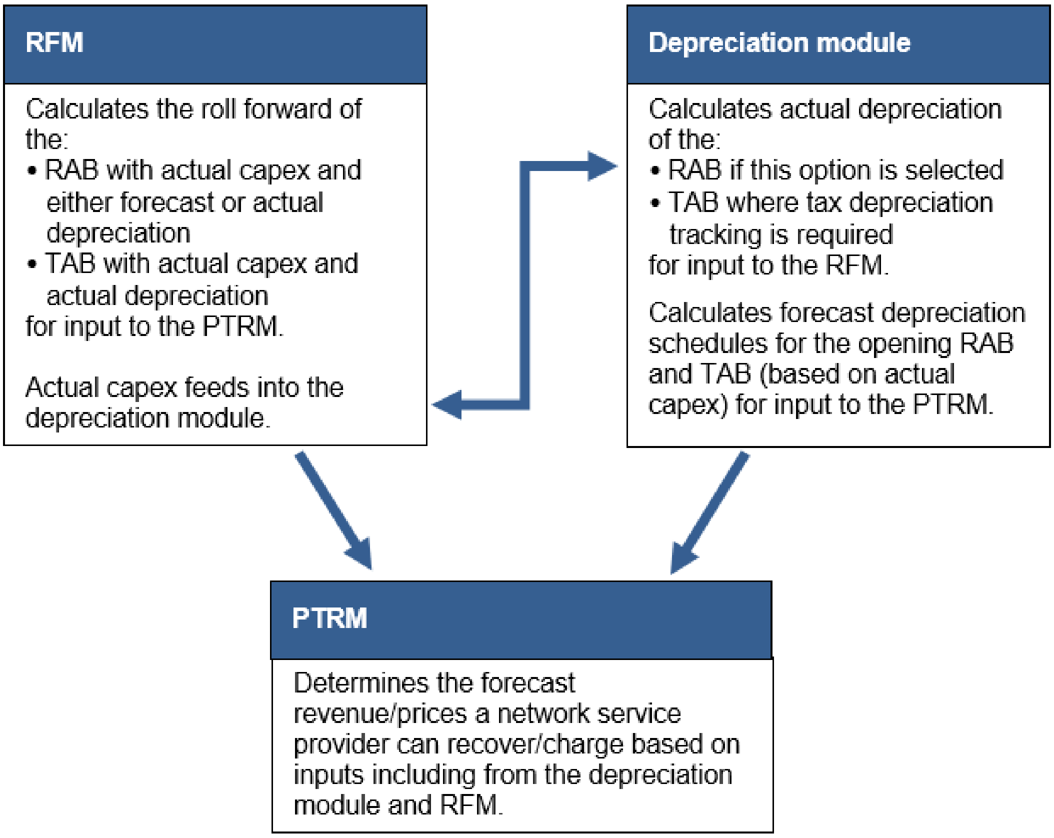
20 For example, assets qualified under section 40-72 of the ITAA (e.g. intangible depreciable assets) are not subject to the DV method. Other assets such as buildings and other capital works, and equity raising costs are also not subject to this depreciation method. Historically, our models have used the straight-line method of tax depreciation for all assets.

21 The year-by-year tracking approach implements the straight-line method for RAB depreciation and provides for straight-line/diminishing value approaches for tax depreciation (in addition to grouping assets by type via asset classes) and tracks the asset classes on a yearly basis.

22 In our explanatory statement accompanying the draft models, we included a flow chart displaying the implementation of the tax review findings across our regulatory models at appendix A.

Figure 1 shows the purpose and interrelationship between the RFM, depreciation module and the PTRM.

Figure 1 Interrelationship between the RFM, depreciation module and PTRM



We also amended the electricity distribution and transmission RFMs to accommodate the case where we determine that inefficient capex is to be excluded from the RAB and TAB as a result of an ex-post review of actual capex.[23] For the reset of a 5 year regulatory control period, the ex-post review period comprises the final 2 years of the previous regulatory control period (t–2 and t–1) and the first 3 years of the current regulatory control period. While the current RFMs can handle the possibility of any final year (t–1) actual capex adjustments, they do not accommodate the possibility for any adjustments to the second last year (t–2) actual capex arising from an ex-post review.[24] We have not made any capex adjustments from an ex-post review to date. However, we consider it appropriate that the RFM templates are capable of making this adjustment should it occur in future determinations.

We also made the following minor amendments to the RFMs:

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23 Here, 'inefficient' past capex refers to three specific assessments (labelled the overspending, margin and capitalisation requirements) detailed in NER, cll. S6.2.2A and S6A.2.2A. The details of our assessment approach for an ex-post review are set out in the Capital expenditure incentive guideline AER, *Capital expenditure incentive guideline*, November 2013, pp. 13–17.

24 For the current RFMs, any ex-post review resulting in year t–2 actual capex adjustments would require some formulas to be overwritten.

- expanded the number of asset classes to 50 in the distribution RFM, consistent with the transmission RFM
- corrected typographical errors and other formatting issues.

2 Amendments

For this final decision, we confirm the main amendments to the RFMs are the implementation of the findings of the tax review changes, accommodating possible adjustments to t–2 capex, and the inclusion of a standard approach to modelling year-by-year depreciation tracking. Changes required to implement the findings of the tax review (recognition of immediate expensing of capex and DV depreciation method) only impact the tax depreciation of capex for regulatory control periods commencing after July 2019. These changes—specifically DV tax depreciation—will require year-by-year tracking of tax depreciation to be implemented correctly as noted in the recent electricity PTRM amendment process.[25]

As a result, the main calculations to implement these changes have been made in the depreciation tracking module. The RFM template files have been amended to provide for inputs associated with the year-by-year tracked depreciation to be used to roll forward the TAB and RAB where relevant. The RFMs have also been amended to accommodate possible t–2 capex adjustment inputs.

A high level summary of changes is provided in the **Intro** worksheet to the amended RFM. We have included various comments and labels in the amended RFMs to provide high level instruction on the new inputs required for calculating the tax depreciation. We have amended the RFM handbooks to include additional guidance on the above new functions.

The final amended RFMs and handbooks for distribution and transmission are at appendices A to F. To assist stakeholders to identify all changes from the previous version, there is a detailed change log at appendix G.

Our explanatory statement accompanying the draft models published in December 2019 contains further details on the following amendments:[26]

- diminishing value method for tax depreciation
- immediate expensing of actual capex
- year-by-year depreciation tracking approach
- changes to year t–2 capex arising from ex-post capex review.

25 AER, *Final decision - Amendments to the electricity transmission and distribution post-tax revenue models*, April 2019, p. 13.

26 AER, *Explanatory statement – Proposed amendments to electricity roll forward models*, December 2019, pp. 13–22.

Appendices

The appendices include the final amended electricity RFMs, depreciation tracking modules, associated handbooks and a detailed list of changes from the previous versions of the RFMs. There is a high level summary of changes in the **Intro** worksheet of each RFM.

Appendix A: Amended transmission roll forward model

Appendix B: Amended transmission roll forward model – depreciation tracking module

Appendix C: Amended distribution roll forward model

Appendix D: Amended distribution roll forward model – depreciation tracking module

Appendix E: Amended transmission roll forward model handbook

Appendix F: Amended distribution roll forward model handbook

Appendix G: List of changes from previous roll forward models