



Final decision

Amendment

Electricity transmission network service providers

Roll forward model

December 2010

© Commonwealth of Australia 2010

This work is copyright. Apart from any use permitted by the Copyright Act 1968, no part may be reproduced without permission of the Australian Competition and Consumer Commission. Requests and inquiries concerning reproduction and rights should be addressed to the Director Publishing, Australian Competition and Consumer Commission, GPO Box 3131, Canberra ACT 2601.

Australian Energy Regulator
GPO Box 520
Melbourne Vic 3001

Tel: (03) 9290 1444
Fax: (03) 9290 1457
Email: AERInquiry@aer.gov.au
Web: www.aer.gov.au

Contents

Shortened forms	iv
1 Introduction	1
2 NER requirements.....	3
3 Reasons for the roll forward model	4
4 Issues raised in submission and AER response	5
4.1 Calculation of tax depreciation on the opening tax asset base.....	5
4.2 Calculation of average remaining asset lives.....	6
4.3 Removal of partially as-incurred RAB inputs	8
4.4 Depreciation of the opening RAB.....	9
4.5 Inflation adjustment for year $t - 2$	10
4.6 Adjustment for difference between actual and forecast inflation for year $t - 1$	11
4.7 Inclusion of an RFM output worksheet to report relevant inputs to the PTRM.....	11
4.8 Ability to automatically add asset classes.....	12
4.9 Inclusion of version number in the title of each worksheet	12
4.10 Audit of formulae.....	13
4.11 Compatibility with different Microsoft Excel versions	13
5 AER final decision	15
Appendix A: Roll forward model	16
Appendix B: Roll forward model handbook	17

Shortened forms

AER	Australian Energy Regulator
capex	capital expenditure
NER	National Electricity Rules
PTRM	post-tax revenue model
RAB	regulatory asset base
RFM	roll forward model
TNSP	transmission network service provider

1 Introduction

The Australian Energy Regulator (AER) is responsible for the economic regulation of prescribed transmission services provided by transmission network service providers (TNSPs) in the National Electricity Market, in accordance with the National Electricity Rules (NER).

Chapter 6A of the NER requires the AER to prepare and publish a post-tax revenue model (PTRM) and roll forward model (RFM) for TNSPs. In September 2007 the AER published the first version (version 1.0) of the PTRM and RFM for TNSPs.

The AER uses the RFM to determine the closing regulatory asset base (RAB) for a regulatory control period. The closing RAB value for a regulatory control period, as calculated by the RFM, becomes the opening RAB to be used in the PTRM for the purposes of making a revenue determination for the next regulatory control period.

In modelling the revenue requirements for a TNSP the AER uses the PTRM. The PTRM employs certain assumptions, including how capital expenditure (capex) is to be recognised. The PTRM recognises capex on a ‘partially as-incurred’ approach—that is, the return on capital is calculated recognising capex on an as-incurred basis and the return of capital (regulatory depreciation) is calculated recognising capex on an as-commissioned basis.

Version 1.0 of the RFM provides a roll forward of the RAB using capital expenditure (capex) inputs which are on an as-incurred basis. In order to continue with recognising capex under the partially as-incurred approach in the PTRM, the next version of the RFM will be required to perform an additional roll forward of the RAB using as-commissioned capex inputs. The as-commissioned RAB then becomes an input into the PTRM for the purposes of calculating regulatory depreciation.

In August 2010 the AER published an explanatory statement setting out proposed amendments to version 1.0 of the RFM and invited submissions from interested parties. The AER proposed amendments to specific aspects of the RFM, including:

- expanding the roll forward calculations to include additional functionality for a RAB that recognises capex on an as-commissioned basis
- inserting a standard approach to roll forward the average remaining asset lives by asset classes to determine the average remaining asset lives at the end of the regulatory control period.¹

The AER received one submission from Grid Australia—attaching a report from NERA Economic Consulting (NERA)—on the proposed amendments.² This final decision sets out the AER’s consideration of the comments raised in the submission.

¹ AER, *Proposed amendment, Electricity transmission network service providers, Roll forward model, Explanatory statement*, August 2010, pp. 4–6.

² Grid Australia, *Proposed amendments to the RFM and PTRM*, 28 September 2010. NERA, *Review of the proposed version 2 of the RFM and PTRM—Grid Australia*, 28 September 2010.

The AER's 2007 transmission network revenue cap for Powerlink Queensland (Powerlink) was the first determination to recognise capex on a partially as-incurred basis. As such, the amended PTRM and RFM (version 2) have been finalised in time for Powerlink to prepare its revenue proposal for the 2012–17 regulatory control period due on 31 May 2011.

2 NER requirements

Clause 6A.6.1(c) of the NER allows the AER to amend or replace the RFM and sets out the requirements the AER must comply with in doing so.

When amending the RFM, the transmission consultation procedures, as set out in clause 6A.20(b) of the NER, require the AER:

- to publish the proposed amended model
- to publish an explanatory statement setting out the purpose of the proposed amended model
- to invite submissions on the proposed amended model.

Interested parties must be allowed at least 30 business days to make submissions to the AER. Within 80 business days of publishing the proposed amended RFM, under clause 6A.5.2(e), the AER must publish:

- its final decision that sets out:
 - the amended model
 - the purpose of the amended model
 - the reasons for the amended model.
- a notice of the making of the final decision.

Clause 6A.6.1(e) of the NER sets out the contents of the RFM, which must include the method for rolling forward the RAB from one regulatory control period to the next regulatory control period, and from one regulatory year to the next regulatory year in the same regulatory control period. The AER must also have regard to provisions related to the RAB contained in schedule 6A.2 of the NER.

3 Reasons for the roll forward model

The RFM is part of the suite of regulatory requirements designed to streamline and improve the quality of economic regulation of energy networks, reduce regulatory costs and enhance regulatory certainty, consistent with the Council of Australian Government's objectives.

The principal reason for the RFM is to calculate the value of the closing RAB for a regulatory control period by rolling forward the RAB for each regulatory year of a regulatory control period to reflect actual capex and depreciation during that period. The closing RAB value for a regulatory control period as calculated by the RFM becomes the opening RAB to be used for the purposes of making a revenue determination for the next regulatory control period.

The RAB values from the RFM are inputs into the PTRM, where they are rolled forward from one regulatory year to the next regulatory year on a forecast indicative basis, and are used in the calculation of the annual building block revenue requirements.

4 Issues raised in submission and AER response

This section outlines the issues raised in the Grid Australia submission and the report by NERA on the AER's proposed amendments to version 1.0 of the RFM, and the AER's response to these issues.

Grid Australia submitted that TNSPs should be allowed to propose relatively minor changes to the RFM for their particular circumstances as part of a revenue determination process.³ The AER considers minor changes to the RFM can be accommodated through pre-lodgement discussions between a TNSP and the AER before a revenue determination process begins. Any proposed changes by a TNSP, in consultation with the AER as part of pre-lodgement discussions, would need to comply with the NER.

4.1 Calculation of tax depreciation on the opening tax asset base

Stakeholder comments

Grid Australia raised three concerns with the RFM's calculation of tax depreciation on assets in existence at the start of the previous regulatory control period.⁴

First, Grid Australia submitted that the opening tax value and average tax remaining life for the final year of the previous regulatory control period ($t-1$) are not generally known by the TNSP and are administratively costly to calculate retrospectively.

Second, Grid Australia submitted that tax depreciation is not calculated consistently in the RFM and PTRM. To ensure consistency over multiple regulatory control periods, it submitted that it is necessary for the tax asset base to be rolled forward in the RFM in a manner consistent with the PTRM.

Third, Grid Australia submitted that depreciating the tax asset base on the basis of actual (rather than forecast capex) for $t-1$ is inconsistent with the requirement in clause S6A.2.1(f)(3) of the NER. Clause S6A.2.1(f)(3) of the NER requires that any benefit or penalty associated with any difference between estimated and actual capex in the previous regulatory control period should be removed.

Grid Australia proposed certain amendments to the RFM to address the issues it raised. It proposed that the opening tax value input to the RFM should be set at its expected value at the start of the current regulatory control period, which was used in the previous PTRM. Similarly, the average tax remaining life input to the RFM should be set at the same value as that used in the previous PTRM that determined revenues in the current regulatory control period. These amendments would eliminate the need to calculate the opening tax value and average tax remaining life from $t-1$.

³ Grid Australia, *Proposed amendments to the RFM and PTRM*, 28 September 2010, p. 2.

⁴ NERA, *Review of the proposed version 2 of the RFM and PTRM*,—Grid Australia, 28 September 2010, pp. 3–6.

Grid Australia also proposed an adjustment to the opening tax value to account for the difference between actual and estimated capex for t-1.

AER response

The AER agrees with Grid Australia's proposal to amend the RFM to remove the need to calculate the opening tax value and average tax remaining life from t-1. Version 1.0 of the RFM requires the opening tax value and average tax remaining life as inputs to roll forward the tax asset base from t-1 to the end of the current regulatory control period. The AER considers that Grid Australia's proposal has merit as most TNSPs would not have had their previous revenue determinations made using version 1.0 of the RFM. The previous RFM used in those determinations did not include a function that rolls forward the tax asset base. As such, it is not possible to directly obtain from the previous RFM those required t-1 inputs for version 1.0 of the RFM.

The AER also considers that the opening tax value and average tax remaining life for t-1 cannot be readily calculated from the opening values of the current regulatory control period. The AER therefore agrees with Grid Australia's submission that calculating these values may be administratively burdensome for some TNSPs. Accordingly, the AER accepts Grid Australia's proposal.

While the AER accepts Grid Australia's proposed amendments to the RFM, it does not agree with Grid Australia's arguments in relation to clause S6A.2.1(f)(3) of the NER. That clause relates to the RAB and is not relevant to the calculation of the roll forward of the tax asset base. In rolling forward the tax asset base, the AER considers it appropriate to adjust the opening tax value by removing forecast capex for t-1 so that actual capex for t-1 is included in the tax asset base.

The AER has made the following amendments to the RFM:

- *Input* worksheet—adjusted the required opening tax value and average tax remaining life inputs to be set at the start of the regulatory control period instead of t-1.⁵
- *Tax value roll forward* worksheet—amended the tax asset base roll forward calculations to begin at the start of the current regulatory control period instead of t-1.⁶ The opening tax value for the start of the current regulatory period is adjusted for actual capex for t-1.⁷

4.2 Calculation of average remaining asset lives

Stakeholder comments

Grid Australia stated that there is 'no correct' method for determining the average remaining lives for a group of assets. It noted that the method set out in the *Asset lives roll forward* worksheet is a default option only. As such, Grid Australia submitted

⁵ This adjustment is set out in the notes to cells S6 and T6 of the *Input* worksheet

⁶ This amendment is made by removing the calculations in column G of the *Tax value roll forward* worksheet.

⁷ This adjustment is set out in cells H8 to 37 of the *Tax value roll forward* worksheet.

that the *Asset lives roll forward* worksheet should be removed from the RFM. This would continue to provide TNSPs with flexibility to determine the average remaining lives consistent with the requirements of clause 6A.6.3 of the NER. Grid Australia also stated that for the avoidance of doubt the AER should acknowledge this flexibility in the guideline.⁸

AER response

The AER does not agree with Grid Australia that the *Asset lives roll forward* worksheet should be removed from the RFM. This worksheet was added to version 2.0 of the RFM to calculate the average remaining asset lives at the end of the regulatory control period. These become the opening average remaining asset lives and used as inputs to the PTRM. The AER accepts Grid Australia's submission that there is no single correct method for calculating the average remaining lives for a group of assets. The AER recognises that a variety of methods can justifiably be employed. However, it disagrees that this necessitates the removal of the *Asset lives roll forward* worksheet.

As noted in the explanatory statement, the AER has assessed the calculation of average remaining asset lives on a case-by-case basis under the requirements of clause 6A.6.3(b) of the NER.⁹ This approach can be time consuming for both the AER and the TNSPs and has led to different approaches being adopted in the calculation of average remaining lives. The AER considers that having a standard method built into the RFM as a default option will assist TNSPs in preparing their regulatory proposals, assist the AER in assessing these proposals and promote greater consistency across TNSPs in relation to this matter. The AER considers that the weighted average method for calculating the average remaining asset lives is most likely to satisfy the requirements of clause 6A.6.3(b). Grid Australia also considered this method was reasonable.¹⁰

The inclusion of the *Asset lives roll forward* worksheet to the RFM does not restrict TNSPs from proposing a method other than the weighted average method to calculate the average remaining lives for a group of assets. TNSPs may propose alternative methods in accordance with the requirements of clause 6A.6.3(b). Adjustments may be made to the RFM for implementing proposed alternative methods in consultation with the AER as part of pre-lodgement discussions. The AER will continue to assess any such proposal on a case-by-case basis as part of its revenue determination.

For the above reasons, the AER considers it appropriate to retain the weighted average method for calculating the average remaining asset lives as the default position in the RFM. The use of the weighted average method is outlined in the RFM handbook.

⁸ NERA, *Review of the proposed version 2 of the RFM and PTRM—Grid Australia*, 28 September 2010, pp. 6–8.

⁹ AER, *Proposed amendment, Electricity transmission network service providers, Roll forward model, Explanatory statement*, August 2010, p. 5.

¹⁰ NERA, *Review of the proposed version 2 of the RFM and PTRM—Grid Australia*, 28 September 2010, p. 7.

4.3 Removal of partially as-incurred RAB inputs

Stakeholder comments

Grid Australia noted that the term RAB is used interchangeably in the models (PTRM and RFM) to refer to either the RAB that uses as-incurred capex or as-commissioned capex. It considered this confusing and submitted that this should be simplified. To simplify the models, Grid Australia proposed to remove the calculations that use as-incurred capex for each asset class and instead use only as-commissioned capex inputs with the inclusion of a new work in progress (WIP) asset class. The WIP asset class would represent the difference between as-incurred and as-commissioned capex across the total asset base. Grid Australia stated that this modification would minimise potential confusion, reduce the TNSP's administrative costs and simplify the models.¹¹

AER response

The AER does not agree with Grid Australia's proposal to remove the calculations of the RAB that uses as-incurred capex from the models.

The partially as-incurred approach for recognising capex means that the return on capital is calculated recognising capex on an as-incurred basis and the return of capital (regulatory depreciation) is calculated recognising capex on an as-commissioned basis. Applying this approach requires capex inputs recognised on an as-incurred basis and on an as-commissioned basis.

Version 1.0 of the RFM provides for the roll forward of the RAB using capex inputs on an as-incurred basis. The AER's proposed RFM expanded the roll forward calculations to include additional functionality for a RAB that recognises capex on an as-commissioned basis. The AER notes that its proposed amendment to the RFM and Grid Australia's proposed modification (the use of a WIP asset class in addition to an as-commissioned RAB) are both methods that provide for the continuation of recognising capex under the partially as-incurred approach in the PTRM. Accordingly, the issue raised by Grid Australia is about the input information required and its presentation, not the functionality of the RFM.

The WIP asset class represents the difference between the as-incurred and as-commissioned RABs at an aggregate level—the total asset base value. As noted by Grid Australia, its proposed modification does not provide information about individual asset classes.¹² While the AER accepts that the proposed modification simplifies the models, it considers that this approach obscures important information and prevents any comparison at a disaggregated level—an asset class level—of the as-incurred capex allowance (approved in a revenue determination) with the actual capex incurred by a TNSP during the regulatory control period. As a result, Grid Australia's proposed modification significantly reduces the transparency of the calculation of the RAB that uses as-incurred capex.

¹¹ NERA, *Review of the proposed version 2 of the RFM and PTRM—Grid Australia*, 28 September 2010, pp. 8–11.

¹² NERA, *Review of the proposed version 2 of the RFM and PTRM—Grid Australia*, 28 September 2010, p. 10.

Grid Australia stated that its proposed modification would lower the TNSP's administrative costs. The AER notes that when using version 1.0 of the PTRM the TNSP inputs its forecast capex on both an as-commissioned and an as-incurred basis. Given that TNSPs have previously been able to provide its capex under both the as-commissioned and as-incurred basis, the AER does not consider that its amendments to the models add to the TNSP's administrative costs.

Grid Australia also stated its proposed modification would simplify the RFM and minimise any potential confusion about the terminology of the RAB. The AER considers that each reference to the RAB using either as-incurred capex or as-commissioned capex is labelled clearly in the models and handbooks. While this does not eliminate the potential for confusion, the AER considers such occurrence to be unlikely, given the partially as-incurred approach to recognising capex is well established in revenue determinations.

Overall, the AER considers in this case the benefits of transparency associated with the AER's amendments to version 2.0 of the models outweigh any advantages arising from Grid Australia's proposed approach. Therefore, the AER does not accept Grid Australia's proposed modification to remove the calculations of the RAB that uses as-incurred capex from the models. The AER maintains its decision to make the amendments to version 2.0 of the RFM and PTRM.

4.4 Depreciation of the opening RAB

Stakeholder comments

Grid Australia stated that the RFM contains a modelling error in calculating the depreciation of the opening RAB at the start of the regulatory control period because the opening RAB value includes forecast assets under construction from the final year of the previous regulatory control period ($t-1$). Grid Australia stated that assets under construction should not be depreciated under the AER's hybrid (partially as-incurred) approach for recognising capex.¹³

AER response

The AER agrees with Grid Australia that assets under construction should not be depreciated when recognising capex under the partially as-incurred approach. It notes that the depreciation calculations in the *Actual RAB roll forward* worksheet refer to the defined names used for the opening RAB at the start of the current regulatory control period. These defined names from the *Adjustment for previous period* worksheet include assets under construction for $t-1$. The AER therefore has amended the formulae for the depreciation calculations to exclude assets under construction.¹⁴

¹³ NERA, *Review of the proposed version 2 of the RFM and PTRM—Grid Australia*, 28 September 2010, p. 12.

¹⁴ This amendment is set out in rows 76, 89, 102, 115, 128, 141, 154, 167, 180, 193, 206, 219, 232, 245, 258, 271, 284, 297, 310, 323, 336, 349, 362, 375, 388, 401, 414, 427, 440, 453 and 466 of the *Actual RAB roll forward* worksheet.

4.5 Inflation adjustment for year t – 2

Stakeholder comments

Grid Australia suggested that the RFM should be amended when calculating the difference between nominal actual and forecast net capex in the *Adjustment for previous period* worksheet. Grid Australia proposed that the formula in respect of actual net capex for t–1 should not include a lagged inflation adjustment for the penultimate year of the previous regulatory control period (t–2) when inflation for t–1 is known.¹⁵

AER response

The AER disagrees with Grid Australia that the RFM should be altered to remove the adjustment for lagged inflation on the actual capex for t–1 when determining the difference between nominal actual and forecast capex for that same period.

Grid Australia stated that the adjustment for inflation does not need to be made in the RFM because both forecast and actual capex for t–1 are adjusted by known inflation at the time of a final decision. The AER considers this statement does not take account of the underlying inputs of the RFM.

The nominal forecast net capex for t–1 used in the RFM is an input based on the forecast net capex approved for the previous revenue determination and used in the previous RFM. This nominal forecast net capex is informed by lagged inflation as can be seen in cells L109:L138 of the *Inputs* worksheet which references the one year lagged inflation index in cell L246 of the same worksheet.¹⁶ The AER implemented the use of lagged inflation for consistency reasons as required under the NER following consideration of submissions from Grid Australia¹⁷ (formerly the Electricity Transmission Network Owners Forum) when establishing the RFM as part of the transmission guideline process in 2007.¹⁸

Given that the nominal forecast net capex for t–1 is adjusted by the lagged inflation there is a need to have the same lagged inflation adjustment applied to nominal actual net capex for t–1 when determining the difference between nominal actual and forecast capex. This is to ensure that the nominal actual net capex and forecast capex for t–1 are on a consistent dollar term basis.

¹⁵ NERA, *Review of the proposed version 2 of the RFM and PTRM—Grid Australia*, 28 September 2010, pp. 12–13.

¹⁶ See also cells H502:L531 of the *Actual RAB roll forward* worksheet which references the one year lagged inflation index in row 7 of the same worksheet.

¹⁷ Electricity Transmission Network Owners Forum, *Roll forward model: Response to AER's first proposed guidelines*, 1 May 2007, pp. 2–3
Electricity Transmission Network Owners Forum, *First proposed transmission guidelines: NERA memo*, 24 August 2007, p. 2.

¹⁸ AER, *Final decision, Electricity transmission network service providers, Roll forward model*, September 2007, pp. 6–7.

4.6 Adjustment for difference between actual and forecast inflation for year $t - 1$

Stakeholder comments

Grid Australia suggested that the AER should amend the RFM in the *Adjustment for previous period* worksheet so that forecast inflation in $t-1$ can be adjusted for in rolling forward the opening RAB for the next regulatory control period.¹⁹

AER response

The AER disagrees with Grid Australia's proposal and notes that this matter was previously considered as part of the transmission guideline process for establishing the RFM in 2007. In an August 2007 submission from NERA on behalf of the Electricity Transmission Network Owners Forum the following statement was made:²⁰

It is my understanding that inflation during the final year of the previous regulatory period will be known at the time of the regulatory determination. Consequently, the inflation adjustment in year $t-1$ is unnecessary.

In its 2007 final decision, the AER accepted that the inflation adjustment for $t-1$ was not required because inflation in $t-1$ (at the end of the previous regulatory control period) would have been known when the previous revenue determination was made for the current regulatory control period. Consequently, the AER removed the inflation adjustment for $t-1$ in the RFM.²¹

The AER considers that this approach remains appropriate and therefore has not amended the RFM for adjusting inflation for $t-1$. The AER notes that its recent transmission revenue determinations for TransGrid and Transend included actual inflation in the final year of the previous regulatory control period.

4.7 Inclusion of an RFM output worksheet to report relevant inputs to the PTRM

Stakeholder comments

Grid Australia submitted the RFM should include an output worksheet, which summarises the relevant outputs from the RFM that would be used as inputs to the PTRM. It stated that this would minimise the risk of transposition error.²²

AER response

The AER agrees with Grid Australia that an output worksheet would be a useful addition to the RFM. As such, it has amended the RFM to incorporate an output

¹⁹ NERA, *Review of the proposed version 2 of the RFM and PTRM—Grid Australia*, 28 September 2010, p. 13–14.

²⁰ Electricity Transmission Network Owners Forum, *First proposed transmission guidelines: NERA memo*, 24 August 2007, p. 3.

²¹ AER, *Final decision, Electricity transmission network service providers, Roll forward model*, September 2007, p. 8.

²² NERA, *Review of the proposed version 2 of the RFM and PTRM—Grid Australia*, 28 September 2010, p. 18.

worksheet. The *Output summary* worksheet mirrors the *Input* worksheet in the PTRM and summarises the key outputs of the RFM such as the closing RAB values and the average remaining asset lives at the end of the regulatory control period.

As a result of this amendment, the AER has also updated the RFM handbook to include functional descriptions of the *Output summary* worksheet.

4.8 Ability to automatically add asset classes

Stakeholder comments

Grid Australia submitted a significant enhancement to the RFM would be the ability to automatically add new asset classes by way of a macro. It stated that some TNSPs have more than 20 asset classes (the maximum number of asset classes catered for in version 1.0 of the RFM) and that the need to manually add new asset classes in the RFM raises the risk of introducing formula errors.²³

AER response

The AER agrees with Grid Australia that the ability to automatically add asset classes would be a significant enhancement to the RFM. The AER also understands that some TNSPs may have more than 20 asset classes for revenue modelling purposes. However, the AER considers that including a macro to add asset classes is a complex task due to the numerous links that need to be created in the RFM for each new asset class. A macro to incorporate this functionality would increase the size of the RFM and likely reduce the stability of the model. For these reasons, the AER has decided not to include a macro to automatically add new asset classes at this time.

To accommodate TNSPs that require more than 20 asset classes, the AER has expanded the RFM to cater for an additional 10 asset classes. This should reduce the need for TNSPs to expand the RFM for further asset classes.

4.9 Inclusion of version number in the title of each worksheet

Stakeholder comments

Grid Australia proposed that each worksheet within the RFM should contain the version number to help keep track of different versions used by TNSPs when developing their revenue proposals.²⁴

AER response

The AER agrees with Grid Australia and has included the version number alongside the title of each worksheet of the RFM. The version number on each worksheet is linked to the version number on the *Intro* worksheet.

²³ NERA, *Review of the proposed version 2 of the RFM and PTRM—Grid Australia*, 28 September 2010, p. 18.

²⁴ NERA, *Review of the proposed version 2 of the RFM and PTRM—Grid Australia*, 28 September 2010, p. 18.

4.10 Audit of formulae

Stakeholder comments

Grid Australia proposed that the AER should seek an independent audit of the RFM to identify computational errors before a final decision is published.²⁵

AER response

The AER notes the RFM was independently audited as part of the AER guideline development process in 2007. In relation to the amendments to the RFM the AER has conducted an open consultation process and GridAustralia's submission (incorporating the report from NERA) has assisted in identifying errors. The AER has also reviewed the RFM for computational errors, focussing on the specific amendments that have been made.

The AER agrees that an external audit of the RFM would assist in identifying computational errors. In accordance with the transmission consultation procedures of the NER, the AER must publish the amended RFM within 50 business days after receiving submissions on the explanatory statement and this limit the time available to conduct an external audit.²⁶ The AER notes that any computational errors identified will not alter the approach of rolling forward two asset bases, which has been adopted in this final decision. Therefore, given the timeframe mandated by the transmission consultation procedures the AER considers that its internal audit of the RFM and the review conducted by NERA is sufficient for the purposes of this final decision.

The AER will seek an external audit of the RFM to be undertaken to identify any computational errors at the earliest possible date after publishing this final decision. The AER expects that an external audit would be completed in the first quarter of 2010. Any errors identified will be noted in the *Intro* worksheet and corrected for in an updated RFM, which will be uploaded onto the AER website.

4.11 Compatibility with different Microsoft Excel versions

Stakeholder comments

Grid Australia proposed that the AER publish the RFM in all versions of Excel currently supported by Microsoft. It submitted that this would remove the need for some TNSPs to update their information technology infrastructure to access regulatory models.²⁷

²⁵ NERA, *Review of the proposed version 2 of the RFM and PTRM—Grid Australia*, 28 September 2010, p. 18–19.

²⁶ Under clause 6A.20 of the NER, the AER must publish a final amended model within 80 business days of publishing a proposed amended model, where interested parties must be allowed at least 30 business days to make submissions. The AER published the proposed amended RFM on 17 August 2010 and is therefore required to publish a final amended RFM by 7 December 2010.

²⁷ NERA, *Review of the proposed version 2 of the RFM and PTRM—Grid Australia*, 28 September 2010, p. 19.

AER response

The AER agrees that the RFM should be compatible with different versions of Excel. The PTRM has been published in a format based on Excel version 1997–2003 and the AER is unaware of any functionality lost when using later versions of Excel. The AER has used Excel version 2007 to access the RFM and has not identified any compatibility issues. For this reason, the AER does not consider it necessary to publish numerous Excel versions of the RFM.

If specific compatibility issues arise while using the RFM in a later version of Excel, the AER will consider addressing these particular issues as they are identified. The AER considers that at this time it is appropriate to continue publishing the PTRM in a format based on Excel version 1997–2003.

5 AER final decision

The AER has published the amended RFM at appendix A in accordance with the consultation procedures in clause 6A.20(e) of the NER. The AER has also published an amended handbook to accompany the RFM at appendix B.

Appendix A: Roll forward model

Appendix B: Roll forward model handbook