



Final decision

**Matters relevant to distribution determinations
for ACT and NSW DNSPs for 2009-2014**

Roll forward model

January 2008

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Shortened forms

ACCC	Australian Competition and Consumer Commission
AER	Australian Energy Regulator
capex	capital expenditure
CPI	consumer price index
DNSP	distribution network service provider
ICRC	Independent Competition and Regulatory Commission
IPART	Independent Pricing and Regulatory Tribunal
MEU	Major Energy Users Inc
NEM	National Electricity Market
NER	National Electricity Rules
PTRM	post-tax revenue model
RAB	regulatory asset base
RFM	roll forward model
SCO	Standing Committee of Officials (of the Ministerial Council on Energy)

1 Introduction

The Australian Energy Regulator (AER) is responsible for regulating the revenues of distribution network service providers (DNSPs) in the National Electricity Market (NEM) in accordance with amendments to the National Electricity Rules (NER), which were notified in the South Australian Gazette on 20 December 2007.

Within the NER, Chapter 6 deals with the classification and economic regulation of distribution services, while Chapter 6A deals with the economic regulation of transmission services. The Ministerial Council on Energy Standing Committee of Officials (SCO) decided that transitional arrangements are necessary in the preparation and assessment of the ACT and NSW 2009-2014 distribution determinations. The transitional arrangements for the 2009-2014 distribution determinations for the ACT and NSW are set out in appendix 1 to Chapter 11 of the NER. Clause references in appendix 1 are therefore numbered commencing with a '6'.

The NER distinguishes between the rules in Chapter 6 and Chapter 11 by referring to the Chapter 6 rules as 'general Chapter 6 rules,' and Chapter 11 rules as 'transitional Chapter 6 rules.' The AER has followed this convention in this document when referring to the two sets of rules.

In November 2007, the AER released a preliminary positions paper on the following guideline, schemes and models relevant to DNSPs in the ACT and NSW for the 2009-14 regulatory control period:

- Post tax revenue model (PTRM)
- Roll forward model (RFM)
- Efficiency benefit sharing scheme
- Service target performance incentive scheme
- Guideline on control mechanisms for direct control services

This paper invited submissions from interested parties. The AER received six submissions regarding the RFM.

This decision sets out the AER's consideration of comments raised in these submissions regarding the RFM. This decision regards the AER's conclusions on the design and use of the RFM rather than the derivation of specific inputs which was questioned by several stakeholders. Issues that need to be addressed in the preparation and assessment of regulatory proposals are noted throughout this decision. The preparation and publication of this decision, the RFM and associated 'handbook' are done pursuant to clause 6.4.1(d) of the transitional Chapter 6 rules.

2 Rule requirements

Clause 6.5.1 of the transitional Chapter 6 rules requires the AER to develop a RFM which will be used to calculate the regulatory asset base (RAB) values of the ACT and NSW DNSPs as at 1 July 2009.

The RFM must comply with the principles prescribed in clause 6.5.1 of the transitional Chapter 6 rules. Clause 6.5.1(d) requires the AER to publish a RFM before 1 February 2008 or the date that is one month after the commencement of the transitional Chapter 6 rules (which is also 1 February 2008). In doing so the AER may carry out consultation as it sees appropriate and may take into account consultation undertaken prior to the commencement date.

Clause 6.5.1(c) allows the AER to amend or replace the RFM with the agreement of each affected DNSP. The AER anticipates that the RFM that will apply after the AER's determinations in 2009 for the ACT and NSW will be that developed under the 'general' chapter 6, which will be published by the end of June 2008. The publication of this ongoing RFM is important as it will inform the DNSPs of how capital expenditure (capex) incurred over the 2009-14 regulatory control period will be rolled into their RAB.

Other specific requirements of the RFM in relation to individual DNSPs are as follows.

ACT specific requirements

The transitional Chapter 6 rules provide that the RFM for ActewAGL must apply the approach adopted by the Independent Competition and Regulatory Commission (ICRC) in the current determination, but taking into account any written representations by the ICRC to ActewAGL before the commencement date of the amendments to the NER.¹

In determining the opening asset base in 2009, the AER will be required to:

- determine the opening asset base in 2004 by using the values specified in clause S6.2.1(c), and adjusting for any difference between estimated capex and actual capex in the previous regulatory control period
- add actual capex (subject to an ex post prudence review) incurred during 2004-09 and where actual is not available, add estimated capex to the 2004 opening asset base
- reduce the previous value of the asset base by the amount of depreciation of the RAB during the previous regulatory control period according to the approach determined by the ICRC
- reduce the previous value of the RAB by the disposal value of any assets disposed
- make adjustments for any reclassification of services or change in the use of assets that affects the classification of the services provided by the assets.

¹ Clause 6.5.1(g).

NSW specific requirements

The transitional Chapter 6 rules adopt the approach to be taken in the general Chapter 6 for determining the opening asset base in 2009.

In determining the opening asset base in 2009, the AER will be required to:

- determine the opening asset base in 2004 by using the values specified in clause S6.2.1(c), and adjusting for any difference between estimated capex and actual capex in the previous regulatory period
- add actual capex incurred during 2004-2009 and where actual is not available, add estimated capex to the 2004 opening asset base
- reduce the previous value of the asset base by the amount of actual depreciation of the regulatory asset base during the previous regulatory control period, calculated in accordance with the rates and methodologies allowed in the Independent Pricing and Regulatory Tribunal's (IPART) determination
- reduce the previous value of the regulatory asset base by the disposal value of any assets disposed
- make adjustments for any reclassification of services or change in the use of assets that affects the classification of the services provided by the assets.

DNSP specific requirements

EnergyAustralia's distribution and transmission services will be subject to one determination by the AER with respect to revenue regulation, but will be treated differently for pricing purposes. EnergyAustralia's transmission assets must be rolled forward separately from its distribution assets as if the AER was regulating EnergyAustralia's transmission system under the relevant provisions of Chapter 6A.²

Under clause 6.1.5, transmission assets owned by Integral Energy, Country Energy and ActewAGL will be deemed distribution assets for the purposes of the 2009-14 regulatory control period. EnergyAustralia's transmission support assets are also deemed distribution assets under clause 6.1.6.

Country Energy's deferred depreciation (from the 2004-09 period) must be recognised by the AER under clause S6.2.1(g).

² Clause 6.5.1(h).

3 Reasons for the roll forward model

Under clause S6.1.3(10) each DNSP is required to submit a completed RFM to the AER as part of its building block proposal. The RFM will be used by DNSPs to propose opening RAB values for the 2009-14 regulatory control period.

The RFM sets out the calculation of the RAB from the beginning of one regulatory period to the beginning of the next period, as well as from year to year within each period, on an actual basis. The RAB values from the RFM form inputs into the PTRM, where they are rolled forward from year to year on an indicative basis, and are used in the calculation of annual revenue requirements. The RFM performs these calculations using actual data whereas the PTRM uses forecast data.

The AER has developed two RFMs under the transitional Chapter 6 rules — one for the NSW DNSPs and another for ActewAGL. EnergyAustralia will be able to use the NSW RFM to calculate its distribution and transmission asset values as it requires the same calculations (although with several different inputs). For administrative convenience the AER has published one ‘RFM handbook’ document which explains the operation of these models.

4 AER preliminary positions

4.1 NSW roll forward model

In its preliminary positions paper, the AER noted that the transitional Chapter 6 rules require it to apply the same methods as per chapter 6A, and therefore based the NSW RFM on the RFM developed by the AER for electricity transmission.

The incentive framework on which the transmission RFM is based involves the use of ‘actual’ depreciation in rolling forward RAB values. That is, the depreciation associated with actual capex spent over the period. This model also performs calculations over a six year period, which provides for adjustments for forecast capex used in the final year of the previous regulatory control period that were incorporated in the RAB values prescribed in the rules. The model removes the benefit or penalty of this adjustment, which is also required by the rules. Both the use of actual depreciation and adjustments for forecast capex are required under the transitional Chapter 6 rules and Chapter 6A for transmission.

Furthermore, the RFM developed under chapter 6A provides for several inputs recognising adjustments to RAB values from previous capex incentive frameworks (e.g. additional prudent capex and foregone returns on capital) and capex reporting frameworks. Regarding the latter, the transmission RFM is based on a hybrid approach to recognising capex.

In its preliminary positions paper the AER noted that the transmission RFM would need to be amended to utilise a full as-incurred approach, consistent with previous determinations. The AER also noted that a minor amendment may be required to ensure consistency between the indexation applied in the RFM and in the PTRM.

4.2 ACT roll forward model

For ActewAGL, the AER is required to use the model applied by the ICRC at the last reset, as required by the transitional Chapter 6 rules. The preliminary positions paper outlined the AER’s understanding of that model. This model also incorporates an actual depreciation incentive framework, however does not include adjustments arising from forecasts used in the final year of the previous regulatory control period which were incorporated in the RAB values prescribed in clause S6.2.1(c). The AER noted in its preliminary positions paper that these adjustments would need to be inserted into the model.

The capex inputs to the ICRC model are reported on an as-incurred basis and are net of contributed assets. The model performs the roll forward calculation of the RAB as a single asset. The AER stated it would need to consider the splitting of ActewAGL’s RAB into sub-classes rather than a single asset for the purposes of populating the PTRM.

5 Issues raised in submissions and the AER response

5.1 Issues specific to the ACT

5.1.1 Stakeholder comments

ActewAGL stated that the AER correctly specified the mechanics of the ICRC model in its preliminary positions paper. The Major Energy Users (MEU) stated that use of the ICRC model was appropriate.

No comments were received on the need to provide for amendments arising out of forecast values included in the prescribed RAB values.

5.1.2 AER conclusion

Clause S6.2.1(c) prescribes ActewAGL's RAB as at 1 July 2004. This clause also requires the AER to make adjustments for forecast capex when using this RAB value, and to ensure that ActewAGL neither benefits nor is penalised from these adjustments. Consistent with the transitional Chapter 6 rules, the AER has inserted a calculation into the ICRC model to adjust the RAB value as at 1 July 2004 for forecast capex, and to remove any benefit or penalty of this adjustment in terms of returns on capital over the 2004-09 regulatory control period.

The AER notes that ActewAGL is proposing to split its RAB into several classes for the purposes of the PTRM but for the RFM it will continue to use one class as per ICRC's approach.

5.2 Issues specific to NSW

5.2.1 Stakeholder comments

Integral Energy stated that the NSW RFM would be used to commence asset calculations from 1 July 2003, rather than commencing from the values prescribed in the rules (i.e. 1 July 2004), and may not recognise adjustments made by IPART in its 2004 determination.

Country Energy sought clarification on how its deferred depreciation from the current regulatory control period would be treated.

EnergyAustralia stated that the AER may need to make adjustments to its distribution RAB to remove transmission and public lighting assets.

5.2.2 AER conclusion

The AER notes that the RFM provides inputs for 'additional prudent capex' which should accommodate the adjustments suggested by Integral Energy. The use of these inputs is explained in the RFM handbook.

The adjustments described by EnergyAustralia and Country Energy appear to be business specific. DNSPs will need to identify any such adjustments when submitting

its completed RFM with its building block proposal and justify them in their explanatory documentation to the AER.

5.3 Issues specific to EnergyAustralia

5.3.1 Stakeholder comments

EnergyAustralia commented generally that the treatment of assets under the transmission and distribution regimes differ in the current regulatory period, thus it sought clarification that it would use separate RFMs to establish an opening RAB for its network as a whole.

The MEU supported the AER's approach and it considered that the joint review of EnergyAustralia's transmission and distribution roll forward calculations is likely to reduce any double counting of assets.

5.3.2 AER conclusion

The AER confirms that EnergyAustralia will be required to submit two completed versions of the RFM, one relating to its distribution assets and another for its transmission assets. These calculations are able to be performed using the same version of the RFM due to the similarities between the approach required in chapter 6 and in the Australian Competition and Consumer Commission's (ACCC) 2004 determination.

The AER notes that legitimate asset transfers between EnergyAustralia's transmission and distribution businesses are expected as part of the upcoming reset. The transfers will not alter the combined value of EnergyAustralia's network. Following any transfers of system assets between EnergyAustralia's transmission and distribution businesses, non-system assets will be reallocated using the same ratio of system asset values. While it is understood that the ACCC liaised closely with IPART on the matter at the last reset, consideration of both transmission and distribution businesses by a single regulator is expected to make the process more efficient and robust.

5.4 Other issues

5.4.1 Tax calculations

Stakeholder comments

EnergyAustralia stated that the NSW RFM's calculations for tax purposes were neither appropriate nor practical. It stated that the use of aggregated data would not provide an accurate assessment of deductions claimed under tax legislation, if this was the AER's intention, and that the AER should instead rely on corporate income tax records to update asset values for tax purposes. EnergyAustralia also made a related statement that the AER has no mandate to calculate asset values for tax purposes (used to derive depreciation as a tax deduction) in the PTRM.

AER conclusion

The AER notes EnergyAustralia's comments but has retained the RFM's asset calculations for tax purposes.

The intention in modelling assets for tax purposes is to provide certainty and transparency to stakeholders regarding the calculation of the tax building block in the PTRM, of which tax depreciation is a significant determinant. The corresponding calculations in the RFM reflect the need to ensure that the values and methods applied by businesses are consistent and measurable over time. As EnergyAustralia points out, these are necessarily a simplification of the actual tax position of the business. The AER considers that the current tax calculations strike an appropriate balance between accuracy and complexity in the modelling.

5.4.2 Inflation

Stakeholder comments

Integral Energy noted the AER's statement that it would make a minor adjustment to the NSW RFM to ensure indexation is consistent with the PTRM.

EnergyAustralia stated that it understood the NSW RFM to apply a year-on-year approach to calculating annual changes in the consumer price index (CPI). It stated that this was inconsistent with the method of indexation used by IPART to escalate the form of control over the 2004-09 period, which was an average of quarterly CPI observations. EnergyAustralia believed that IPART's approach was to use the most recent historical observations as a proxy for the actual rate.

AER conclusion

On further analysis of these issues the AER considers that, provided the RFM is used appropriately, indexation between the NSW RFM and PTRM should be consistent and so any minor adjustment, as suggested in the preliminary positions paper, is not required as a feature of the model.

The AER does not consider that EnergyAustralia's comments require amendment to the RFM as they relate to the inputs of the model and not its design. The RFM requires inputs for annual inflation, and does not require these to be derived using any particular approach (for example, quarterly, year-on-year or lagged observations). Each DNSP will be required to input inflation values in its completed RFM and justify how their derivation and application is compliant with clause 6.5.1(e)(3), that is, how it is consistent with the approach used to escalate the control mechanism over the period.

5.4.3 Level of detail

Stakeholder comments

The MEU stated that the AER should require more detail in asset calculations to ensure equity and inhibit gaming. It noted that the build up of assets and their allocation is more complex for distribution businesses than for transmission businesses.

AER conclusion

The AER notes that more disaggregated asset calculations would tend to provide more transparency and comfort to stakeholders. While DNSPs are free to choose the number of asset classes used in the RFM, the AER expects this will be the same number reported previously to IPART and the ICRC in order to ensure asset

calculations are consistent and measurable between regulatory periods. Consistency in the depreciation rates and methodologies used in determinations and in subsequent roll forward calculations is required by clause S6.2.1(e)(5) and (5A). The number of asset classes will also be affected by the need to demonstrate compliance with clause 6.5.5, namely, where assets are categorised according to common economic lives.

5.4.4 Capex recognition

Stakeholder comments

Integral Energy stated that the NSW RFM will need to be amended to use IPART's as-incurred method for recognising capex, as well as to allow the value of contributed assets to be detailed by asset class.

Country Energy also noted that the RFM should be amended to incorporate a full as-incurred approach to recognising capex.

AER conclusion

The AER has made these amendments to the NSW RFM to recognise capex on a full as-incurred basis and also contributed assets. The ACT RFM already incorporates these features.

5.5 Other minor amendments

The following minor amendments to the NSW RFM have been made as a result of discussions between the DNSPs and AER staff:

- correction of formula errors in rows 89, 248 and 249 in the 'actual RAB roll forward' sheet, and another in row 210 of the 'Tax value roll forward' sheet
- changes to cell comments and labels that previously referred to transmission rules and requirements.

6 AER decision

In response to stakeholder comments and in the context of the AER's conclusions listed in previous sections, the AER has decided to publish transitional RFMs for ActewAGL and the NSW DNSPs set out at Appendix B. The AER has published a RFM handbook to accompany these models.

Appendix A: Submissions received on the RFM

The following interested parties provided submissions on issues relevant to the AER's proposed RFM:

- ActewAGL
- Country Energy
- EnergyAustralia
- ETSA Utilities
- Integral Energy
- Major Energy Users Inc.

Copies of these submissions are available on the AER's website at www.aer.gov.au.

Appendix B: Roll forward models

Appendix C: Roll forward model handbook