Final decision

Electricity distribution network service providers

Post-tax revenue model

June 2008

Contents

Shortened forms

ARR	annual revenue requirement
AER	Australian Energy Regulator
capex	capital expenditure
DNSP	distribution network service provider
EBSS	efficiency benefit sharing scheme
ENA	Energy Networks Association
NER	National Electricity Rules
PTRM	post-tax revenue model
RAB	regulatory asset base
RFM	roll forward model
STPIS	service target performance incentive scheme
TNSP	transmission network service provider
WACC	weighted average cost of capital

1 Introduction

The Australian Energy Regulator (AER) is responsible for the economic regulation of distribution network service providers (DNSPs) in the National Electricity Market in accordance with the National Electricity Rules (NER).

Under the NER, the AER is required to develop and publish certain models, guidelines and schemes. On 1 April 2008, the AER released and invited submissions on the following proposed guidelines, schemes and models that are required to be published under Chapter 6:

- post-tax revenue model (PTRM)
- roll forward model (RFM)
- cost allocation guidelines
- efficiency benefit sharing scheme (EBSS)
- service target performance incentive scheme (STPIS).

In addition, the AER held a public forum in Melbourne on 23 April 2008 relating to its proposed guidelines, schemes and models and to receive comments from stakeholders.

The AER received 16 written submissions on its proposed guidelines package. This final decision sets out the AER's consideration of comments raised in submissions in relation to the proposed PTRM, and the resulting final PTRM and the associated handbook. Stakeholders that provided submissions in relation to the proposed PTRM are listed in Appendix A of this final decision. In some instances stakeholders raised issues that are more appropriately addressed in the preparation and assessment of regulatory proposals. These concerns are noted throughout this decision.

This final decision, PTRM and the associated handbook have been prepared in accordance with the AER's obligations under clause 6.16(e) of the NER.

This final decision considers the main issues raised in submissions to the proposed PTRM and the AER's response. The PTRM handbook at Appendix C of this final decision provides a detailed description of how the PTRM operates and is to be applied. For additional background information regarding the development of the PTRM, interested parties are encouraged to review the AER's previous decision documents on the PTRM to be applied to both the regulation of electricity distribution networks in New South Wales and the Australian Capital Territory and to the regulation of electricity transmission networks nationally.[1] These decision documents, the supporting consultation papers and the related submissions made by stakeholders are available on the AER's website at www.aer.gov.au.

1 See Australian Energy Regulatory, *Final Decision, Matters relevant to distribution determinations for ACT and NSW DNSPs for 2009-14, Post-tax revenue model*, January 2008 and *Final Decision, Electricity transmission network service providers, Post-tax revenue model*, September 2007.

2 Rule requirements

Clause 6.4.1(c) of the NER requires the AER to publish a PTRM within 6 months of the commencement of that clause, that is, by 30 June 2008. The PTRM must meet the requirements prescribed in clauses 6.4.2 and 6.4.3 of the NER.

The distribution consultation procedures set out at clause 6.16 of the NER require the AER to consider any submissions made on its proposed PTRM when publishing its final PTRM and the final decision. The AER’s final decision must also set out the reasons for the PTRM, a summary of the main issues raised in submissions and the AER’s response to each of these issues.

3 Reasons for the post-tax revenue model

Under clause S6.1.3(10) of the NER, a DNSP is required to submit a completed PTRM to the AER as part of its building block proposal.

The AER recognises that there may be a need for some flexibility in applying the PTRM in order to account for the particular circumstances a DNSP may face. A number of elements of the PTRM where this may be the case has been identified in the PTRM handbook. A DNSP will need to propose and justify a departure from any element of the PTRM for the purposes of addressing its specific circumstances as part of its revenue proposal, which will be considered and assessed by the AER on a case-by-case basis in making its distribution determination.

The PTRM will be used by DNSPs and the AER to propose and determine the annual revenue requirement (ARR) to be used in setting the X factor for each regulatory year of the regulatory control period.

The PTRM calculates the ARR for each regulatory year of a regulatory control period using the building block approach. Under clause 6.4.3, these building blocks are:

- indexation of the regulatory asset base (RAB)
- the return on capital
- the return of capital (depreciation)
- the estimated amount of corporate income tax payable
- any revenue increments or decrements arising from the application of the EBSS, STPIS and demand management incentive scheme
- any revenue increments or decrements arising from the application of a control mechanism in the previous regulatory control period
- forecast operating expenditure.

4 Proposed post-tax revenue model

The proposed PTRM released for comment by the AER on 1 April 2008 was designed to comply with the requirements of Chapter 6 of the NER. Given the similarities between these requirements and those of Chapter 6A, the AER considered it appropriate to base the proposed PTRM on the model it published in September 2007 to be applied to electricity transmission network service providers (TNSPs).

Key features of the proposed PTRM for DNSPs were:

- a post-tax nominal approach to calculating building block revenue requirements
- straight-line depreciation as the default method for calculating regulatory and tax depreciation
- inclusion of customer contributions, which were netted from capital expenditure (capex) and recognised as income in tax calculations
- X factor calculations under three general forms of control, as examples to stakeholders of how the PTRM might relate to control mechanisms
- recognition of capex on a full ‘as-incurred’ basis, for the calculation of the return on and the return of capital.

5 Main issues raised in submissions and the AER response

5.1 Cash-flow timing

In its explanatory statement accompanying the proposed PTRM, the AER considered that it would be beneficial to defer further consideration of the cash-flow timing issues until it was able to consult jointly with the electricity transmission sector, given the similarities between the PTRM for TNSPs and the PTRM proposed for DNSPs.

The AER noted that certain assumptions of the PTRM may result in changes to the timing of revenues earned in year-on-year terms for some DNSPs currently subject to different revenue calculations. The AER considered, however, that the materiality of such changes was unclear, and noted that actual revenues received by businesses would also be affected by the form of control mechanism and X factors.

5.1.1 Stakeholder comments

Stakeholders supported the AER's decision to defer further consideration of the PTRM's cash-flow timing issues.

Energex expressed a concern that the PTRM's particular assumptions would result in a negative cash-flow impact and sought assurances that this will be addressed through smoothing mechanisms. ETSA Utilities expressed the same concern and suggested that this impact should be addressed through minor changes to the PTRM.

Ergon Energy sought clarification regarding whether the inputs for capital expenditure (capex) and disposals in the PTRM should be in end of year or mid year terms. Energex also raised questions regarding the particular inflation assumptions of the PTRM.

5.1.2 AER conclusion

The PTRM performs calculations on the assumption that capex occurs evenly throughout the regulatory year, which is approximated by a mid year assumption. For this reason a half-year return on capex is calculated which is then capitalised at the end of the year, along with the undepreciated capex amount. This may result in a cash-flow impact for businesses that have previously earned both the return on and the return of this capex in the regulatory year it is recognised. However the AER notes that it is not the PTRM's purpose to align the cash value of revenue and expenditures in each regulatory year. The NER make allowances for differences between the ARR and actual revenues. This ensures that the deferral of revenues, that would otherwise be included in the ARR for a particular regulatory year, can be addressed by the 'smoothing' effect the form of control mechanism has on actual revenues recovered over the regulatory control period.

An amendment of the type suggested by ETSA Utilities, for example, to include the half-year return on and of capex in the ARR each regulatory year, raises issues regarding consistency with clauses 6.5.2(a) and 6.5.5(a)(1) of the NER. These clauses require the return on capital and depreciation building blocks to be based on the opening RAB value for each regulatory year. The extent to which these calculations may be alternatively regarded as cash-flow timing assumptions in the PTRM (as specified in clause 6.4.2(b)(2) of the NER), and whether such assumptions override the aforementioned NER requirements for calculating the building blocks, will be further considered as part of the AER's future joint consultation with both the electricity distribution and transmission sector as noted above.

The value of forecast capex inputs in the PTRM are whole year values in real terms as at the end of the chosen base year. Thus the half-year return on this capex is calculated using a real WACC. This is in contrast to the use of actual capex inputs in the RFM which are in nominal terms (assumed to be valued as at the middle of each year) and where a nominal WACC is accordingly applied.

5.2 Asset classes

In its explanatory statements regarding the proposed PTRM and RFM, the AER stated that assets would be required to be grouped to common lives in these models. At the AER's public forum, stakeholders expressed a preference to expand the PTRM and RFM to incorporate 30 asset classes.

5.2.1 Stakeholder comments

Several stakeholders expressed concerns at the AER's implication that assets be grouped according to common lives only and queried whether existing asset classes applied by jurisdictional regulators would be acceptable to the AER.

Stakeholders also sought confirmation that the AER would expand the PTRM and RFM to accommodate 30 asset classes.

5.2.2 AER conclusion

The AER's comments regarding the grouping of assets were intended to reflect that the models undertake asset calculations using a standard (and remaining) life for each asset class. While the grouping of individual assets with different lives affects the accuracy of depreciation calculations required under clause 6.5.5(b), this is necessary for administrative convenience.

The AER has expanded the PTRM and RFM to accommodate 30 asset classes in response to stakeholders' comments in this regard. DNSPs are not restricted under the NER in categorising assets into classes, but in doing so should consider clauses 6.5.5(b)(3) and S6.2.1(e)(5) of the NER which require consistency between the depreciation calculations that form part of a distribution determination and the subsequent roll forward calculation for a particular regulatory control period. The AER considers this requirement will in practice bind DNSPs to the categories and the standard lives they currently use. However, changes in categories may be permitted to aggregate or split a number of classes, for example, where new types of assets are purchased.

Standard asset lives may also change from time to time in light of new information regarding the expected economic life of particular assets. However, once a set of lives is approved as part of a distribution determination for a regulatory control period, these lives must be used in the RFM calculations for that regulatory control period. These points are reflected in the final PTRM and RFM handbooks.

5.3 Other issues

5.3.1 Stakeholder comments

Ergon Energy requested that the PTRM handbook clarify the requirement to separate RAB values where assets are used to provide services regulated under more than one form of price control. Energex also questioned whether and how the assets used to provide alternative direct control services are considered when performing building block calculations.

Energex sought clarification on the purpose of notional revenue information derived in the PTRM, and also on the relationship between notional pricing in the PTRM and pricing information to be provided in regulatory proposals.

Aurora Energy requested information regarding how the AER intends to transfer its business from a pre-tax revenue framework to a post-tax framework.

Alinta and United Energy highlighted the existence of unused cell names in the PTRM and suggested they be removed.

5.3.2 AER conclusion

In response to Ergon Energy's request, the AER considers the purpose of the PTRM (as referred to in the context of a building block determination in Part C of Chapter 6 of the NER) is to derive outputs in the form of ARRs for standard direct control services. These outputs are in turn used to derive an X factor for each regulatory year of the regulatory control period. It follows that the inputs to the PTRM (including asset values) are to reflect the provision of standard direct control services. However, the AER also notes that the NER do not provide specific guidance on how the PTRM should be applied where multiple forms of control may be applicable or where certain inputs are affected by changes in service classification. The AER will consider and consult on how such matters are appropriately addressed on a case-by-case basis during the process of making a distribution determination for each DNSP.

The PTRM has not specifically been developed to deal with alternative direct control services, although DNSPs are not prevented from using the PTRM (or parts thereof) in its proposals for the regulation of these services for the AER's consideration.

In response to Energex's comments, the AER notes the notional revenue values (i.e. other than the ARR) derived in the PTRM are only used for the purposes of calculating X factors for the indicative/illustrative forms of control. These calculations are provided as examples to stakeholders of how the PTRM could interact with the form of control mechanism. The pricing data in the PTRM also forms part of these example calculations and has no relationship with the information that is required to be provided by DNSPs under clause 6.8.2(c)(4) or Part I of the NER.

In response to Aurora Energy's request, the AER notes that the calculation of opening tax values for businesses transitioning from a pre-tax revenue framework will need to be undertaken using a method agreed by the AER. The AER has released a discussion paper in the context of the transitional guidelines for the ACT and NSW distribution resets regarding the impact of transitioning to a post-tax approach as well as issues in setting tax asset values for affected DNSPs.[2]

In response to Alinta and United Energy's concerns, the AER has identified and removed unused cell names, as well as corrected several minor calculation errors in the model.

2 See Australian Energy Regulator, *Preliminary positions: Matters relevant to distribution determinations for ACT and NSW DNSPs for 2009-2014*, November 2007, appendix A, available at http://www.aer.gov.au/content/index.phtml/itemId/716987/fromItemId/716969.

6 AER final decision

The AER has decided to publish the PTRM at Appendix B in accordance with the consultation procedures in clause 6.16(e)(1) of the NER. The AER has also published a PTRM handbook to accompany this model at Appendix C. The PTRM and handbook reflect the AER’s conclusions in this final decision.

Appendix A: Submissions received on the PTRM

The following interested parties provided written submissions on the AER's proposed PTRM and explanatory statement published on 1 April 2008:

- Alinta
- Aurora Energy
- Energex
- Energy Networks Association
- Ergon Energy
- ETSA Utilities
- United Energy Distribution.

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

Appendix B: Post-tax revenue model

Appendix C: Post-tax revenue model handbook