Explanatory statement

Proposed amendment

Electricity transmission network service providers

Post-tax revenue model

August 2010

AUSTRALIAN ENERGY REGULATOR

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Request for submissions

Interested parties are invited to make written submissions to the Australian Energy Regulator (AER) on the amendments proposed in this explanatory statement by the close of business 28 September 2010.

Submissions can be sent electronically to: aerinquiry@aer.gov.au

Alternatively, submissions can be mailed to:

Mr Warwick Anderson
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The AER prefers 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.

All non-confidential submissions will be placed on the AER's website: www.aer.gov.au. For further information regarding the AER's use and disclosure of information provided to it, see the *ACCC/AER Information Policy*, which is also available on the AER's website.

Enquiries about this explanatory statement, or about lodging submissions, should be directed to the Network Regulation North Branch of the AER on (02) 6243 1233.

Contents

Shortened forms

AER	Australian Energy Regulator
capex	capital expenditure
CPI	consumer price index
MAR	maximum allowed revenue
NER	National Electricity Rules
NPV	net present value
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 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.

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 PTRM was developed to transition TNSPs to adopt the partially as-incurred approach for recognising capex. Given that all TNSPs have now transitioned to recognising capex under the partially as-incurred approach, the next version of the PTRM will require inputs for separate regulatory asset bases (RABs)—one that is based on rolling in as-commissioned capex and another based on rolling in as-incurred capex.

This explanatory statement sets out proposed amendments to version 1.0 of the PTRM in accordance with the requirements under clauses 6A.5 and 6A.20 of the NER.

The AER is seeking to amend specific aspects of the PTRM, which include:

- modifying the input section for the opening RAB (based on as-commissioned capex) and adjustments to formulae to calculate depreciation with reference to this RAB

- inserting summary tables to enhance presentation.

The details of the proposed amendments are discussed in section 4 of this explanatory statement.

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) will need to be 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.5.2(b) of the NER allows the AER to amend or replace the PTRM and sets out the requirements the AER must comply with in doing so.

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

- publish the proposed amended model
- an explanatory statement setting out the purpose of the proposed amended model
- 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 PTRM the AER must publish its final decision, handbook and model.

Clause 6A.5.3 of the NER sets out the contents of the PTRM, which must include: the manner in which the total revenue cap for the regulatory control period, the maximum allowed revenue (MAR) for each regulatory year of the regulatory control period and the annual building block revenue requirement for each regulatory year of the regulatory control period are to be calculated.

The PTRM must specify:

- a methodology that the AER determines is likely to result in the best estimates of expected inflation
- the timing assumptions and associated discount rates that are to apply in relation to the calculation of the building blocks
- the manner (if any) in which working capital is to be treated
- the manner in which the estimated cost of corporate income tax is to be calculated
- the consumer price index (CPI) – X methodology that is to be applied in escalating the MAR for the TNSP for each regulatory year (other than the first regulatory year) of a regulatory control period.

The PTRM must be such that:

- the net present value (NPV) of the expected MAR for the TNSP for each regulatory year of the regulatory control period is equal to the NPV of the annual building block revenue requirement for the TNSP for each regulatory year
- the MAR for the TNSP for the first regulatory year is expressed as a dollar amount
- the MAR for the TNSP for each regulatory year (other than the first regulatory year) is calculated by escalating the MAR for the TNSP for the previous regulatory year using a CPI – X methodology

- the total revenue cap for the TNSP for a regulatory control period is calculated as the sum of the MAR for the TNSP for each regulatory year.

The PTRM must also include the X factors to apply in the regulatory control period.

3 Reasons for the post-tax revenue model

The AER published version 1.0 of the PTRM for TNSPs in September 2007. The PTRM was developed following consultation with interested parties in accordance with clauses 11.6.17 and 6A.20 of the NER.

The PTRM 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 PTRM is to calculate the MAR for a TNSP in each regulatory year of a regulatory control period as part of its revenue determination. A TNSP's MAR, calculated using the PTRM, must be determined using the building block approach set out in clause 6A.5.4 of the NER. The building blocks include:

- an indexation of the RAB
- a return on capital
- a return of capital (regulatory depreciation)
- the estimated cost of corporate income tax
- revenue increments or decrements arising from the application of the efficiency benefit sharing scheme
- forecast operating expenditure
- compensation for other risks.

4 Proposed amendments

This section sets out the AER proposed amendments to version 1.0 of the PTRM and the handbook. The amendments are contained in the *Inputs*, *Assets* and *Smoothing* worksheets, and a *Revenue summary* worksheet has been added. The amended PTRM is at appendix A and the amended handbook is at appendix B.

4.1 Incorporating an as-commissioned opening RAB

Recognising capex on a partially as-incurred approach 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. Under the partially as-incurred approach, TNSPs earn a return on capital as capex is incurred (spent), while regulatory depreciation is earned from the regulatory year the assets are commissioned (put into service).

In transitioning TNSPs to the partially as-incurred approach it was necessary to establish an opening RAB that recognised capex on an as-incurred basis at the start of the regulatory control period. The opening RAB that recognised capex on as-incurred basis equated to the opening RAB that recognised capex on an as-commissioned basis plus assets under construction (work in progress). Version 1.0 of the PTRM included the function to establish the opening RAB that recognised capex on an as-incurred basis.[1] Given that TNSPs have all transitioned to the partially as-incurred approach the PTRM no longer requires the function to include work in progress.

The continuation of the partially as-incurred approach to recognising capex in the PTRM requires the establishment of two opening RABs. The AER has proposed amendments to the RFM to incorporate this functionality. The AER therefore proposes the following amendments to the PTRM:

- *Inputs* worksheet—modified the formula that determines the opening RAB value (partially as-incurred).[2] The defined names for each asset class in cells J7 to J26 remains unchanged, for example, cell J7 remains defined as *A1value*. The input values for these cells are outputs taken from the proposed amended RFM.

- *Inputs* worksheet—amended to incorporate opening asset values (as-commissioned) for each asset class.[3] The defined names for each asset class in cells K7 to K26 has been changed, for example, cell K7 is defined as *A1acvalue*. The input values for these cells are outputs taken from the proposed amended RFM.

- *Assets* worksheet—amended cell formulae in the depreciation section to reference the opening asset values (as-commissioned) for the purpose of calculating regulatory depreciation of existing assets.[4] These changes are required to implement

1 Cells J27 and K6:K26 of the *Inputs* worksheet in version 1.0 of the PTRM.

2 This amendment is set out in cell J27 of the *Inputs* worksheet.

3 This amendment is set out in cells K7:K26 of the *Inputs* worksheet.

4 This amendment is set out in cells G56:BI56, G69:BI69, G82:BI82, G95:BI95, G108:BI108, G121:BI121, G134:BI134, G147:BI147, G160:BI160, G173:BI173, G186:BI186, G199:BI199, G212:BI212, G225:BI225, G238:BI238, G251:BI251, G264:BI264, G277:BI277, G290:BI290 and G303:BI303 of the *Assets* worksheet.

the partially as-incurred approach to recognising capex, where the return of capital is calculated using as-commissioned capex.

4.2 Other amendments and clarifications

This section sets out other amendments to the PTRM and the handbook.

Insertion of summary tables

The AER proposes to amend the *Assets* worksheet of the PTRM to include a summary table of the forecast asset roll forward over the regulatory control period to enhance presentation.[5] A summary table of this nature is included in the AER's revenue determination.

The AER also proposes that the PTRM includes a new *Revenue summary* worksheet. This worksheet provides a summary of the TNSP's annual building block revenue requirement, MAR and X factor determined in the PTRM. A summary table of this nature is included in the AER's revenue determination.

Length of regulatory control period input

The AER proposes to amend the *Inputs* worksheet of the PTRM to incorporate an input for the length of the regulatory control period in cell R7. The input value for this cell should be set equal to the number of regulatory years in the applicable regulatory control period. The cell is referenced in the *Assets*, *Smoothing* and the *Revenue summary* worksheets to assist with the presentation of summary information.[6]

Post-tax revenue model handbook

To incorporate the proposed amendments set out in sections 4.1 and 4.2 of this explanatory statement the AER proposes to amend the PTRM handbook. In particular, the figures in the PTRM handbook and the functional description of the *Inputs* worksheet have been updated.

The AER also proposes to make two minor amendments to the PTRM handbook:

- terminology in the handbook has been updated to be consistent with that of the NER
- clarification is made to the dollar terms of the input cells in the *Inputs* worksheet has been added.

[5] This amendment has been made to cells A592:P598 of the *Assets* worksheet.

[6] This amendment affects the formulae in cells L594:P598 of the *Assets* worksheet, cells L7:P7 of the *Smoothing* worksheet and cells L7:P17, L21:P21 and L23:P23 of the *Revenue summary* worksheet.

Appendix A: Post-tax revenue model

Appendix B: Post-tax revenue model handbook