AUSTRALIAN ENERGY REGULATOR

First Proposed

Electricity Transmission Network Service Providers

Roll-Forward Model

EXPLANATORY STATEMENT AND ISSUES PAPER

January 2007

1 Introduction

The Australian Energy Regulator (AER) is responsible for regulating the revenues of transmission network service providers (TNSPs) in the National Electricity Market (NEM), in accordance with the National Electricity Rules (NER).

This Explanatory Statement accompanies the First Proposed Roll-Forward Model (roll-forward model) and provides the AER's reasons for the roll-forward model. It has been prepared to satisfy the AER's obligations under clauses 11.6.17(c), and 6A.20(b)(2) and (3) of NER.

The AER has also prepared an Issues Paper which forms part of this Explanatory Statement, which provides additional information and requests written submissions on specific issues.

2 Rule requirements

Clause 6A.6.1(d) of NER requires the AER to publish the first roll-forward model by 28 September 2007. The first roll-forward model must comply with the relevant requirements prescribed in the NER, including clause 6A.6.1 and Schedule 6A.2.

Under clause 11.6.17 the AER must also publish a first proposed roll-forward model on or before 31 January 2007. Under clause 11.6.18, the AER will apply this first proposed roll-forward model to SP Ausnet, VENCorp and ElectraNet for the purposes of making their transmission determinations in 2008.

The first proposed roll-forward model will be used by the AER to develop the first roll-forward model by 28 September 2007 that will apply to all other TNSPs in future regulatory periods.

3 Definitions

In this explanatory statement and issues paper, the words and phrases presented in italics *such as this* have the meaning, if any, given to them in the NER.

4 The nature of and reasons for the roll-forward model

The roll-forward model will be used by the AER to determine the closing RAB for each TNSP at the the end of their current regulatory period. The roll-forward model rolls forward the TNSP's regulatory asset base (RAB) for each year of the current regulatory period to reflect capital expenditure and depreciation incurred in each year. The closing RAB for the current regulatory period then becomes the opening RAB to be used for the purposes of making a transmission determination for the following regulatory period.

5 Consultation process

The AER anticipates that it will engage in the following consultation process:

- publish the first proposed roll-forward model, this Explanatory Statement and an issues paper inviting written submissions
- consider comments received by 1 May 2007
- publish the first roll-forward model on or before 28 September 2007.

6 Invitation for written submissions

Interested parties are invited to make written submissions to the AER on the proposed model, having regard to the issues outlined in the attached Issues Paper. The requirements for submission are outlined in the Issues Paper.

ATTACHMENT:

ISSUES PAPER

ROLL-FORWARD MODEL

1 Introduction

This Issues Paper accompanies the Explanatory Statement and provides an overview of the key concepts contained in the proposed model.

2 Development of the model

The Australian Energy Regulator (AER) is required to develop and maintain a *Post Tax Revenue Model* (PTRM) in accordance with clause 6A.5.2 and 11.6.17 of the *National Electricity Rules* (NER) and a *Roll—Forward Model* (RFM) in accordance with clauses 6A.6.1 and 11.6.17 of the NER. The models are very closely related – values from the RFM are used as inputs into the PTRM – with the consequence that if the models are to be consistent with each other then principles applied in one model should closely mirror, if not be identical with, the principles applied in the other model.

To develop the first proposed PTRM and RFM the AER has taken as a starting point a version of each model used in recent regulatory determinations and made alterations to comply with specific provisions contained in chapter 6A, in particular, in clauses 6A.5 and 6A.6 and schedule 6A.2. For example, as clause 6A.5.4 specifies particular values are to be used for the *WACC parameters* these values have been applied in the proposed models.

Earlier drafts of the proposed models were circulated to SPAusNet, ElectraNet and VENCorp for their comments. These are businesses facing regulatory determinations in 2008 and are nominated in clause 11.6.18 as firms to whom the first proposed guidelines have immediate application.

3 Issues for comment

The specific issues upon which the AER now seeks comment are:

- return on capital
- return of capital (depreciation)
- regulatory control period
- consistency of timing
- other matters

3.1 Return on capital

3.1.1 Issue

The PTRM and RFM must implement specific requirements set out in the NER relating to the establishment of the opening *regulated asset base* (RAB) base and the calculation of the return on capital.

3.1.2 Draft position

The NER sets out in clause 6A.6.2 and schedule 6A.2 explicit requirements for the calculation of the return on capital. The setting of the opening RAB is required to be on an "as-incurred" basis. The AER considers that the "as-incurred" requirement should also be applied in rolling forward the RAB from year-to-year, as this will be internally consistent with the mandated approach to establishing the opening RAB. The "as-incurred" approach to recognising capital expenditure has been adopted in the first proposed PTRM. For reasons of consistency the same principle has been applied to the first proposed RFM.

Q1.	*Does the approach taken to implementing the NER requirements for the calculation of return on capital accurately implement the NER requirements?*
Q2.	*If not, what further adjustments are considered necessary to comply with the NER requirements?*

3.2 Return of capital (depreciation)

3.2.1 Issue

The PTRM and RFM must implement specific requirements set out in the NER for the calculation of the return of capital (depreciation).

3.2.2 Draft position

The NER sets out in clause 6A.6.3 the requirements that apply to depreciation, which is the calculation of the return of capital. The AER must accept a proposal from a TNSP in respect of depreciation if it conforms to the requirements of Clause 6A.6.3. This would mean that the TNSP in the first instance must propose a depreciation schedule in respect of its regulated assets. Under clause 6A.6.3 the depreciation profile must be consistent with two key principles[1]:

- each asset (or group of assets) is to be depreciated over its economic life and
- each asset is to be depreciated only once, and the total sum of the allowed depreciation over the asset's life is to equal the initial value at which the asset entered the RAB.

Clause 6A.6.3(b) includes references to depreciation being calculated over the economic life of an asset. There is an issue as to when this time commences – whether it is at the time when an asset is first acquired or when the asset first

[1] AEMC 2006, *Draft National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006*, Rule Determination, 16 November 2006, Sydney. Page 78.

commences useful service. Reference to accounting standards suggests that the economic life of an asset would generally commence at the time an asset is commissioned and enters service. An "as-commissioned" approach has therefore been adopted in the first proposed PTRM. For reasons of consistency the same principle has also been applied to the first proposed RFM.

This would mean that those TNSP's currently using an "as-incurred" approach to depreciation may need to modify their models and internal systems to comply with an "as-commissioned" approach.

Q3.	*Does the approach taken to implementing the NER requirements for the calculation of depreciation accurately implement the NER requirements?*
Q4.	*If not, what further adjustments are considered necessary to comply with the NER requirements?*
Q5.	*If this approach to depreciation is adopted, what further provisions are required in each model to allow an effective transition for affected businesses?*

3.3 Regulatory control period

3.3.1 Issue

The first proposed RFM applies for a 5 year period but under Chapter 6A of the NER a business may propose a different duration for its next *regulatory control period*. The first proposed PTRM is intended to accommodate any period up to 10 years.

3.3.2 Draft position

Practical difficulties arise in developing a single model for the RFM which can cope with differing *regulatory control periods*. Given that businesses are free to propose their *regulatory control period* over a range of different terms a number of versions of the model would be required to meet all contingencies. A single model which includes provision for every feasible *regulatory control period* is likely to be excessively large and contain a great deal of material that is irrelevant to a particular application. Conversely, there would also be an additional and largely wasted administrative burden in seeking to maintain a large number of models to cover all feasible periods.

The AER notes that the primary purpose of the model is to clearly establish the basis on which the necessary calculations to determine the *Maximum Allowed Revenue* (MAR) must be carried out. Provided the methodology established in the model is faithfully applied in adjusting the duration for a different *regulatory control period* the AER considers a *revenue proposal* made in accordance with an adjusted model would be acceptable.

The AER therefore proposes that there be one model on which all revenue proposals should be based with adjustments made where necessary to accommodate a different *regulatory control period.*

Q6.	*Is the AER's approach to accommodating a range of regulatory control periods appropriate or should the AER develop multiple versions of the roll—forward model to accommodate a wider range of regulatory control periods?*

Q7.	*If so, what other periods are required?*

3.4 Consistency of timing

3.4.1 Issue

The AER is required under rule 6A.5.3 (b) (2) to specify the timing assumptions and associated discount rates that are to apply in the PTRM in relation to the calculation of the building blocks referred to in rule 6A.5.4.

3.4.2 Draft position

In considering the development of timing assumptions for various inputs in the PTRM, it is noted there is a difference between the treatment of capital expenditure and certain other cash-flows, although its significance is not clear. The difference relates to the timing assumptions of when various cash-flows are recognised – revenues, operational expenditure (opex) and capital expenditure (capex). In particular, opex and revenue is assumed to take place on the last day of the year, while capex is assumed to take place throughout the year, which in practice is approximated by a half-WACC adjustment mid way through the year.

The approach to the timing of operational expenditure and revenues are clearly simplifying assumptions which reduces the complexity of the modelling that is involved, and are not intended to closely reflect the actual timing of revenues and costs which occur throughout a given period for a transmission network service provider (TNSP). This means costs such as operating costs are incurred throughout the year and the funds utilised incur an opportunity cost which is not currently taken into account when determining a revenue requirement valued at the last day of the year. Similarly, revenues are received throughout the year and not on the last day of the year. The funds received provide a cash flow benefit that is not currently taken into account when determining a revenue requirement valued at the last day of the year. In contrast, capital expenditure is rolled into the RAB inclusive of a half WACC adjustment, which attempts to compensate businesses for the fact that capital expenditure is realistically more likely to occur throughout the year (approximated by the middle of the year assumption) rather than on the last day of the year.

The key question is whether these simplifying assumptions compromise the integrity of regulatory decisions to the point where other adjustments need to be made to the models to compensate for any material errors that thereby result. It is not clear, however, that the current practice results in any material errors or other effects that need to be addressed. Also, whether attempting to achieve this level of consistency would be unduly complex and costly for individual TNSPs, particularly where business practices within individual entities differ markedly anyway. The AER would therefore be interested if there is any concern with the current practice of treating the timing of capex and other cashflows differently.

Q8.	*Should the timing assumptions adopted by the AER in the model be on a consistent basis?*
Q9.	*If opex and revenue was to be recognised throughout the year should this be on the same basis as capex (half-year adjustment) or more frequently, such as quarterly or monthly?*

Q10.	*Is the nature of the adjustments of sufficient importance compared to the costs of achieving consistency?*
Q11.	*Are there other relevant matters that the AER should consider in relation to the adjustment of all cash flows?*

3.5 Other matters

The AER is interested to receive comments on any other matters not raised in the preceding sections which stakeholders consider relevant to the development of these models.

Q12.	*Are there any other matters the AER should take into consideration before finalising these models?*

3.6 Submissions

Any submissions must be received by close of business **1 May 2007** and should be addressed to:

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