Jemena Electricity Networks (Vic) Ltd

Appendix 1

Jemena submission - AER proposed amendments to post-tax revenue models - Electricity transmission and distribution

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Contact Person

Eli Grace-Webb
Acting General Manager Regulation
Ph: 03 8544 9164
eli.grace-webb@jemena.com.au

Jemena Electricity Networks (Vic) Ltd

ABN 82 064 651 083
321 Ferntree Gully Road
Mount Waverley VIC 3149

Postal Address

Locked Bag 7000
Mount Waverley VIC 3149
Ph: (03) 8544 9000
Fax: (03) 8544 9888

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1. EXECUTIVE SUMMARY

Jemena Electricity Networks (**JEN**) welcomes the opportunity to comment on the Australian Energy Regulator's (**AER's**) proposed amendments to the post-tax revenue models (**PTRMs**) for electricity transmission and distribution businesses (together, network service providers or **NSPs**).

JEN supports the ENA's submission

JEN contributed to and supports the Energy Networks Association (**ENA**'s) submission on these proposed amendments. Rather than re-state the points made by the ENA here, we comment on points that we feel particularly strongly about or those not covered by the ENA.

We specifically support the ENA's position on:

1. agreeing with the AER's proposed approach to give effect to the rate of return guideline
2. excluding the sharing of unregulated revenues from shared assets in the taxation building block calculation within the PTRMs—in line with the AER's shared asset guideline
3. amending the PTRM handbooks to make it clear that NSPs are free to propose (and justify) alternative depreciation methods and make any necessary changes to the PTRM
4. allowing NSPs to nominate both the unit price and unit quantity underpinning their relevant tariff structures, to minimise any risks for error in the forecast revenue calculations within the PTRM
5. requesting the AER to identify and ensure all dependencies to the length of the regulatory control period (as an input variable) are properly accounted for.

JEN's further recommendation to the AER

We also propose:

6. using a pre-tax to discount forecast smoothed and unsmoothed revenues in the PTRMs' revenue when equalising these in present value terms.

Our response provides more detail on items (2), (3) and (6) set out above.

2. DEDUCTING UNREGUALTED REVENUES FORM SHARED ASSETS

Our recommendation

- Exclude unregulated revenues from shared assets from the tax building block calculation—and instead deduct that revenue directly from the total annual revenue requirement
- This will ensure consistency with both the NER and AER's shared asset guideline—the latter of which says that no more than ten per cent of unregulated revenues earned from shared assets are returned to customers.

The AER's proposed PTRMs treat any unregulated revenues earned from the use of shared assets as taxable income when calculating the tax allowance. We consider that this overstates the value of unregulated revenues when deducted from the annual revenue requirement.

The proposed PTRM overstates the value of pre-tax revenue adjustments

In the proposed distribution PTRM, any revenue adjustments (included at rows 193 to 195 of the 'Input' sheet) affect the allowed revenue requirement in two places:

- First, as a direct deduction from total building blocks revenue (at row 126 of the 'Analysis' sheet)
- Second, as part of the tax building block (at row 39 of the 'Analysis' sheet), where they are treated as a reduction to taxable revenue—and so lower the tax building block.

This means that for any dollar of revenue adjustment, the actual adjustment to the allowed revenue requirement is greater than that dollar. This makes sense if the revenue adjustment was post-tax (i.e. after tax compensation were removed), but not if it is pre-tax.

Taking this to the extreme, if total (pre-tax) unregulated revenue from a shared asset were $100 and the full amount were shared with customers (and input to the model), then the proposed PTRM would reduce the allowed revenue requirement by more than $100—leaving the NSP out of pocket. This appears inconsistent with the AER's shared asset guideline and the National Electricity Objective because it would dis-incentivise an NSP from seeking unregulated revenues from shared assets, to the detriment of customers who would otherwise benefit from reduced charges.

The proposed PTRM appears inconsistent with the shared asset guideline

The AER's shared asset guideline says that it will reduce the allowed revenue requirement by 10 per cent of total unregulated revenue from shared assets. The explanatory statement to this guideline says:[1]

> *Under our method, we will reduce a service provider's regulated revenues from assets providing standard control (or prescribed transmission) services by a fixed 10 per cent of the value of unregulated revenues earned with shared assets. We consider that setting a fixed proportion further enhances transparency and certainty for both service providers and consumers.*

[1] AER, *Shared Asset Guideline Explanatory statement*, p. 32.

As noted above, the proposed PTRM reduces the allowed revenue requirement by more than the value of unregulated revenues input to the model. Therefore, to give effect to the guideline, something less than 10 per cent of total value of unregulated revenues earned with shared assets would need to be input to the model—otherwise the actual deduction would exceed 10 per cent.

This appears inconsistent with the example set out in appendix A to the guideline, which simply takes the total allowed revenue requirement and reduces this by 10 per cent of the total value of unregulated revenues earned with shared assets. There is no extra adjustment for tax like that included in the proposed PTRM.

If amended, the PTRM can give effect to the guideline

To give effect to the guideline, the proposed PTRM should remove unregulated revenue earned from shared assets as a taxable revenue (i.e. by deleting row 39 of the 'Analysis' sheet and amending any formulas that depend on it). Alternatively, the proposed PTRM should add this revenue as a taxable expense (i.e. by insert it at or around row 45).

3. DEPRECIATION METHOD

Our recommendation

- The NER do not mandate a specific regulatory depreciation method—instead allowing for depreciation profiles that meet certain requirements, including that an asset is depreciated over its economic life
- The PTRMs and handbooks should recognise this by:
  - Allowing NSPs to enter alternative depreciation profiles in the PTRM, provided these are consistent with the NER
  - Clarifying in the handbook that NSPs can propose alternative profiles in their regulatory proposals by amending the PTRM
- Alternative depreciation profiles are increasingly more important as uncertainty over the life and future use of assets changes due to new disruptive technologies and changing consumer behaviour—the PTRM should allow for flexibility to reflect such changes.

There is a tension within the NER on depreciation methods

Clauses 6.5.5 and 6A.6.4 of the NER provide flexibility for different depreciation methods, which is acknowledge in both the current and proposed handbooks.

However, there is tension between clauses 6.5.5 and 6A.6.4, and clauses 6.3.1(c)(1) and 6A.4.1(b)(1) of the NER which require the NSP's building block proposal to 'be prepared in accordance with the post-tax revenue model and other relevant requirements of this Part'—which makes it unclear whether an NSP can propose alternative methods.

The PTRM should allow for alternative methods

To overcome this tension, the PTRM should allow for alternative depreciation profiles. If the PTRM is coded with a particular depreciation profile, such as real straight line, then a NSP that wishes to propose an alternative profile can only do so by making changes to the PTRM which would render the proposal non-conforming.

The proposed amendment to the handbook suggests that the AER must first agree to amend the PTRM in pre-lodgement discussions and then make any necessary changes before an alternative depreciation profile can be implemented in a building block proposal:[2]

> *The PTRM is configured to use the straight-line method as the default position for calculating depreciation for regulatory and tax purposes. After consultation with the AER, DNSPs may propose that depreciation profiles other than the straight-line method be accommodated within the PTRM as part of the pre-lodgement discussions and subject to satisfying the requirements at clause 6.5.5(b) and 6.5.3 of the NER respectively.*

This presents a significant barrier to the NSP proposing an alternative depreciation profile and could be characterised as predetermination on the part of the AER. Moreover, the proposition that any changes can only be accommodated if agreed with the AER in pre-lodgement discussions effectively denies the NSP the opportunity to have its alternative proposal tested through the full consultation process takes into account the

[2] AER, *Electricity distribution network service providers Post-tax revenue model handbook*, October 2014.

contribution of other stakeholders. The PTRM should not be coded with a particular depreciation profile—it should provide full flexibility for the NSP to propose (and justify) the profile of its choice.

Flexibility should accommodate changes from disruptive technologies and consumer behaviour

Although all recent AER decisions have used real straight line depreciation, this may change as the use and life of network assets changes.

Asset management decisions made today need to be prudent from the perspectives of both customers and investors—and so must consider whether investors can recover their significant up-front investment in the electricity network. And the primary driver for this certainty is the economic regulatory framework.

Investors expect this framework will provide them a reasonable opportunity to recover their investment. Creating this expectation is not only important for investors, it is important for the long-term interests of customers. Without it, there is a risk of under-investment in the network—which affects the service quality that customers can expect now, and into the future.

As such, it is important that the regulatory framework—including the depreciation methods used—promote efficient long-term investment in networks. As alternative energy sources (and other disruptive technologies) become commercialised and increasingly affordable and accessible, this framework must flex to ensure that investors can expect to recover their investment.

4. DISCOUNT RATE

Our recommendation

- When equalising revenues, the discount rate used must match the future cash flows
- Because these revenues are before tax is deducted, the discount rate used should be pre-tax.

The proposed PTRM uses a nominal vanilla weighted average cost of capital (**WACC**) to equalise smoothed and unsmoothed revenues (in present value terms). We consider that the model should use a *pre-tax* WACC instead.

Discount rates should match cash flows

A fundamental principle of finance is that, when discounting future cash flows, the discount rate should match the cash flows being discounted—see, for instance, Damodaran (1999, p. 440)[3] and Lonergan (2009, p. 42)[4].

Revenue, by definition, is before tax is paid—and so using a pre-tax WACC to discount revenue is consistent with that principle. At the same time, if revenues are in real dollars, then using a real WACC is also consistent with that principle.

This approach to revenue equalisation is also consistent with Officer (1994)[5]. As noted on page 5 of that paper, operating income—defined as earnings before interest and taxes—is discounted by the required return before taxes, or the pre-tax WACC. Only when that operating income is reduced by tax (on page 6), is it discounted by an after tax discount rate.

Although the proposed PTRM undertakes this revenue equalisation using a vanilla WACC, the cash flows being discounted are before tax is deducted. Hence, using a vanilla WACC to discount them is inconsistent with the principle above.

Forecast revenues are pre-tax, irrespective whether they are calculated using pre or post tax revenue modelling

There is a distinction between:

- how the building blocks revenue is derived (i.e. pre-tax or post-tax modelling), and
- what discount rate should be used to discount them.

Under both pre-tax and post-tax modelling, the revenues are before tax is deducted—and therefore a pre-tax WACC should be used to discount them. The difference between the two approaches only affects whether tax is modelled as a separate building block or embedded within the return on capital building block when forecasting total building block (or unsmoothed) revenue.

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3 Damodaran, A, 1999, *Applied corporate finance: A user's manual,* John Wiley and Sons, New York.

4 Lonergan, W, 2009, *Pre and post-tax discount rates and cash flows – a technical note*, The Journal of Applied Research in Accounting and Finance, vol. 4, no. 1, pp 41-15.

5 Officer R, 1994, *The cost of capital of a company under an imputation tax system*, Accounting and Finance, May, pp. 1-17.