Ausgrid Endeavour Energy essential energy

17 November 2014

Mr. Warwick Anderson
General Manager – Networks Finance and Reporting Branch
Australian Energy Regulator
GPO Box 3131
Canberra ACT 2601

Dear Mr. Anderson,

**Networks NSW submission on changes to the Distribution Post-Tax Revenue Model (PTRM)**

Networks NSW appreciates the opportunity to comment on the PTRM, particularly as our Regulatory Proposal is currently being considered by the AER.

We understand that the main reason for the updated PTRM is to adjust for the new approach of applying a trailing average in calculating the cost of debt. This aspect of the AER's proposed PTRM appears to apply the approach effectively.

However, we have observed a number of other issues that could be addressed to improve the PTRM, which are outlined below and discussed in greater detail in attachment 1. Attachment 2 is the AER's proposed PTRM amended with the changes outlined in our submission. Attachment 2 highlights the cells we have modified with purple highlighting.

Some of the issues represent inconsistencies with the Rule requirements, others we believe are calculation errors and finally there are some best practice improvements that could be made.

We believe the following Rule requirements should be explicitly addressed in the PTRM:

- Clauses 6.4.3(a)(5), 6.4.3(a)(6) and 6.4.3(a)(6A) require the revenue from incentives and other adjustments to form part of the revenue building blocks, meaning they should contribute to the revenue requirement.

**Calculation errors:**

1. For the purpose of calculating the tax revenue building block, the taxable income should include revenue adjustments (both positive and negative revenue) and the taxable expenses should only include costs that are deductible expenses (these would not include the revenue carry-overs from incentives and other revenue items).

2. The rounding of WACC parameters is not appropriate as an automatic calculation in the PTRM as it can result in millions of dollars in windfall gains or losses. Rounding should not have a revenue impact of greater than $50,000 per annum. If rounding is justified within an individual determination then rounded values could be entered into the PTRM for the AER's final determination.

3. The debt and equity raising costs use the nominal closing RAB from the prior year to estimate the capital raising costs, when the nominal (inflated) opening RAB value should be used to ensure proper application of inflation.

4. The internal rate of return calculation to estimate the effective tax rate on debt should include the terminal residual debt to ensure the corporate tax rate is achieved.

5. The PTRM removes the 'half WACC' adjustment to capex for the purpose of estimating the funding requirements. However, as the equity raising costs are calculated as year-end amounts the half WACC adjustment should not be removed.

**Modelling best practice:**

6. The PTRM file size could be considerably reduced by removing the years beyond 10 and reducing the use of formatting.

7. The macros for smoothing could be simpler.

8. Residual values should be separately identified in the cash flow analysis for transparency.

9. The tax loss carried forward input cell should be moved to the 'Input' sheet.

If you would like to discuss this submission further, please contact either:

Mr Matthew McQuarrie, Reset Director at Ausgrid on (02) 9269 4353 or via email at mmcquarrie@ausgrid.com.au; or

Mr Iftekhar Omar, Manager Group Regulatory Affairs at Networks NSW on (02) 9269 2695 or via email at iomar@ausgrid.com.au.

Yours sincerely,

Vince Graham
**Chief Executive Officer**
**Networks NSW**

Attachment 1 – NNSW submission on AER's proposed changes to the PTRM.

Attachment 2 – NNSW proposed PTRM incorporating suggested amendments.

# ATTACHMENT 1 – NETWORKS NSW SUBMISSION ON PROPOSED CHANGES TO THE PTRM

## 1. REVENUE ADJUSTMENTS – A 'REVENUE' BUILDING BLOCK

The Rules require the following amounts of revenue to be included as revenue building blocks:

1. Incentives revenue (clause 6.4.3(a)(5));
2. Revenue from the application a control mechanism in a previous period (clause 6.4.3(a)(6)); and
3. Revenue associated with shared assets (clause 6.4.3(a)(6A)).

The proposed PTRM does not include all of these revenue items in the annual revenue requirements.

Networks NSW proposes that the AER should include these amounts in the revenue building blocks as required by the Rules.

| |
|---|
| ***Action proposed:*** *Identify the revenue from incentives, revenues from application of a control mechanism from the previous regulatory period and revenues associated with shared assets as revenue building blocks in the PTRM.* |

## 2. TAX BUILDING BLOCK – REVENUE FROM INCENTIVES

The proposed PTRM includes the EBSS revenue increments as an 'opex' input. This means the EBSS revenue is included in all calculations that rely on opex, including the opex revenue building block, the taxable income and deductible expenses calculations. However, as there is not any expenditure associated with this incentive revenue it should not be considered to be a deductible expense.

All of the revenue received for the provision of standard control services, including revenue increments and decrements, is taxable and should be part of the taxable income of the benchmark efficient firm. These increments/decrements should form part of the calculation of the tax building block.

Further, to achieve a postive EBSS carry-over a DNSP must have achieved efficiencies in the previous regulatory period, which would have resulted in actual opex lower than the allowance. Consequently, the DNSP would have been more profitable and paid more tax in the previous period, all else being equal. Therefore, because the efficiencies would result in an uncompensated tax liability in the previous period, the carry-over amounts should result in a tax allowance in the forecast period.

Some revenue items will have a matching expense that will result in a tax deduction and therefore an offsetting reduction in the taxable income. For example, the demand management innovation allowance is actually an opex allowance to undertake demand management. These costs should be appropriately recognized as tax deductible expenses.

***Action proposed:*** *Separate revenue from incentives, revenues from application of a control mechanism from the previous regulatory period and revenues associated with shared assets from opex when estimating deductible expenses for the tax building block (unless the incentive scheme specifically incurs opex, such as the demand management innovation allowance).*

## 3. ROUNDING OF THE RETURN ON EQUITY

The AER's proposed PTRM rounds the return on equity automatically. We do not consider this approach to be appropriate because it would create the potential for significant gains and losses in the order of millions of dollars. For example, Ausgrid's recent Regulatory Proposal did not apply rounding for the return on equity. If the return on equity was automatically rounded in the PTRM the revenue would change by $4m over the period. As a guideline, we consider that rounding should not have an impact of greater than $50,000 per annum.

We note that the AER's rate of return guidelines propose to round the return on equity. We do not agree with this approach because arbitrary rounding of the return on equity could have significant revenue implications. However, if the AER chose to round the allowed return on equity in a determination, it should make this determination transparently within its rate of return decision and apply the rounded values as inputs to the PTRM. This would ensure transparency of the rate of return being applied by the AER.

***Action proposed:*** *Remove the automatic rounding of the return on equity within the PTRM.*

## 4. DEBT AND EQUITY RAISING COSTS

Row 7 on the Equity Raising Costs tab and row 181 on the Input tab use the closing RAB value from the previous year as the estimate for the nominal opening RAB for the relevant year.

The PTRM, being an annual cash flow model, has a single cash flow for each year and represents the opening RAB in any given year in nominal dollars. The closing nominal RAB for the previous year must be indexed by inflation for the current year.

For example, in calculating the funding requirement for 2016, the AER's proposed PTRM uses the non-indexed closing RAB from 2015, whereas the ongoing funding requirement should be calculated from the indexed RAB at the start of 2016.

***Action proposed:*** *Adjust the calculation of the funding requirements for debt and equity raising costs to reflect the indexed RAB funding requirements at the start of a regulatory year rather than the non-indexed RAB from the end of the previous regulatory year.*

## 5. EFFECTIVE TAX RATE OF DEBT

The cash flows from the Analysis page of the PTRM result in an effective tax rate for debt that does not equate to the corporate tax rate (30%). Networks NSW believes this does not quite equate because the unpaid debt at the end of the modelling horizon (2062) has been omitted from the internal rate of return calculations. When the unpaid debt at the end of the cash flow horizon is included in the cash flow analysis, the tax rate for debt correctly equates to the 30% corporate tax rate.

***Action proposed:*** *Adjust the net cash flow to debt on the 'Analysis' tab of the PTRM to include unpaid debt at the end of the cash flow horizon modelled.*

## 6. BENCHMARK FUNDING REQUIREMENT NEEDS TO INCLUDE THE HALF WACC ADJUSTMENT

The PTRM does not provide a return on capital incurred within the same regulatory year. Returns on capital only start to be provided in PTRM revenue allowances from the year after capex is spent. To compensate for this delayed provision of revenues for returns on capital, the PTRM increases the RAB each year by half a year's return on capital (the 'half WACC adjustment').

This calculation has been accepted as an appropriate modelling simplification as.

The PTRM approach defers the return on and return of capital to the following year and results in an uncompensated funding requirement for each year that is only partially recognised in the following year. Therefore the 'half WACC adjustment' that increases the RAB should also form part of the funding requirements for calculating equity raising costs..

***Action proposed:*** *Incorporate the 'half WACC adjustment' in the funding requirement when calculating equity raising costs.*

## 7. FILE SIZE – MODELLING TIME HORIZON AND FORMATTING

The proposed PTRM includes a modelling time horizon of 55 years from 2007 to 2062. This results in a file size of about 4MB. However, the regulatory period can only be a maximum of 10 years and when the additional years are removed from the PTRM the file size shrinks to 660kb, without affecting the calculation of the revenue requirements or the x-factors. Networks NSW suggests the AER limits the modelling horizon to only what is needed as it is more effective and removes redundant calculations.

Another factor contributing to the file size of the proposed PTRM is the use of white formatting of cells. Each cell that has a white fill results in a slightly bigger file size. Removing the white fill helps to reduce the file size with no effect on the calculations or presentation of the PTRM.

After removing the time horizon after 10 years and the white cells, the PTRM uses about 60,000 cells, which is about 4% of the used cells in the AER proposed PTRM.

### Table 1 - Number of cells used

| Sheet | Proposed PTRM cells used | Networks NSW submission PTRM cells used |
|---|---|---|
| **Intro** | 10,036 | 826 |
| **Change Log** | 1,155 | 574 |
| **Input** | 152,656 | 21,970 |
| **WACC** | 7,748 | 792 |
| **Assets** | 1,201,000 | 14,080 |
| **Analysis** | 23,322 | 2,574 |
| **Forecast revenues** | 27,265 | 12,305 |
| **X factors** | 9,900 | 2,436 |
| **Revenue summary** | 10,746 | 2,178 |
| **Equity raising cost** | 13,720 | 918 |
| **Chart 1-Revenue** | 10,600 | 962 |
| **Chart 2-Price path** | 10,600 | 949 |
| **Chart 3-Building blocks** | 10,600 | 338 |
| **Total** | **1,489,348** | **60,902** |

***Action proposed:*** *Adjust the PTRM to incorporate the modelling time horizon and the formatting suggestions outlined above.*

## 8. USE OF MACROS

The use of macros for smoothing is complicated. Networks NSW has provided alternative macros that are simpler and do the same calculations.

***Action proposed:*** *Adjust the PTRM to incorporate the simpler macros proposed by NNSW.*

## 9. CONSISTENT FORMULA

The Analysis sheet contains a number of present value and internal rate of return calculations. Some of these calculations include a different formula in the terminal year to include a closing value of capital. Rather than including a different formula for the terminal year a better practice would be to include a new line for the terminal capital value.

***Action proposed:*** *Incorporate a residual cash flow row for each cash flow item in the 'Analysis' tab of the PTRM for greater clarity and transparency.*