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Dr John Tamblyn
Chairman
Australian Energy Market Commission
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Email: submissions@aemc.gov.au

Dear Dr Tamblyn

REVIEW OF THE ELECTRICITY TRANSMISSION REVENUE AND PRICING RULES

Thank you for the opportunity to comment on the Australian Energy Market Commission's (**AEMC**) *Review of the Electricity Revenue and Pricing Rules Report* (**Report**). CitiPower and Powercor Australia (**Powercor**) are Victorian electricity distributors who are customers of transmission network service providers (**TNSPs**), hence will be directly affected by the outcomes arising from this review.

Information requirements (clause 6.19 & 6.20)

Clause 6.19(d) requires TNSPs to collect, compile and provide to the Australian Energy Regulator (**AER**) information that the AER reasonably requires for the purposes of its regulatory functions. While CitiPower and Powercor do not disagree with the intent of the clause, the discretion granted under this clause is substantial and could be abused.

Compiling information is expensive. From CitiPower and Powercor's own experiences as regulated entities, considerable resources are expended managing and collating information requested by regulators. In many instances, the information sought is not readily available or used for internal purposes within a regulated business. It is also often unclear what the intended purpose for the information being sought is.

In the absence of oversight, there is a potential for the scope of information sought to gradually extend, placing an increasing compliance cost on TNSPs for no demonstrable benefit. Consequently some controls should be placed on information requests. This may be best achieved by requiring the AER to prepare a definitive information requirements document that is subject to oversight by the AEMC.

Propose respond procedures (clause 6.11-6.18)

CitiPower and Powercor support the adoption of the propose-respond procedure and the codification of the decision making process. It is a positive step that will increase certainty for all parties and should result in better and more efficient regulatory decision making.

As identified in the commissions reasoning, this approach also provides the TNSP with an incentive to provide its best available information and better aligns the processes for Electricity and Gas.

RAB roll forward (clause 6.2.3)

The AEMC states on page 57 of the Report, and CitiPower and Powercor agree, that periodic optimisation of the regulatory asset base (**RAB**) is undesirable. This proposition does not however appear to be reflected in the provisions under 6.2.3 which allows the AER to conduct ex post efficiency and prudency studies.

The potential for asset stranding has a significant ‘chilling effect’ on investment that discourages or delays investment that may otherwise be needed. The National Electricity Rules (**NER**s) should establish incentives that negate the necessity for ex post adjustments through a sufficiently powered incentive regime for capital expenditure. Whilst it may be argued the criteria established under clause 6.2.3(d) reduce the risk of asset stranding, they do not eliminate that risk.

CitiPower and Powercor believe the risk of inefficient or imprudent investments by TNSPs can be eliminated through an appropriately powered efficiency carryover mechanism applied to capital expenditure. Experience in the Victorian distribution sector over the period 2001-05 provides ample evidence such a mechanism can work effectively to ensure only efficient investment occurs. An efficiency carry over mechanism on capital expenditure will avoid the necessity for ex post adjustments, reducing the expense and time involved in regulatory reviews.

The AEMC has not proposed an efficiency carry over mechanism for capital expenditure. CitiPower and Powercor consider this unfortunate as it could achieve the same objectives the AEMC is seeking i.e. efficient and prudent investment, at considerably less time and expense than an ex post prudency and efficiency review.

Return on capital and rate of return (clause 6.2.4)

The return on capital strongly influences the TNSP’s incentive to invest. Therefore, rate of return should be consistent with the following principles:

(a) To provide the TNSPs with an appropriate incentive to invest in their networks, the regulated rate of return should at least matches investors’ risk-adjusted required rate of return from alternative investments; and

(b) The long term nature of transmission investments necessitates consistency in the determination of the regulated rate of return over time. The standard regulatory approach for regulatory rate of return is to use a weighted average cost of capital (**WACC**) and to use the capital asset pricing model (**CAPM**) to estimate the cost of equity.

CitiPower and Powercor are supportive of a calculated WACC based on CAPM, and locking in the non-market WACC parameters for at least the next five years because this approach has the potential to maintain an appropriate incentive to invest.

CitiPower and Powercor are also supportive of locking in a value of 1.0 for equity beta and 6 per cent for the market risk premium (**MRP**) over the next five years since these values reflect standard regulatory practice in relation to transmission regulation.

Forecast capital expenditure (clause 6.2.6)

Clause 6.2.6(b)(3) presents ten criteria which the AER is expected to take into consideration in determining what is a ‘reasonable estimate’. A strict legal interpretation would give each criterion an equivalent level of importance which CitiPower and Powercor believe is not the intention. Guidance should be provided to stakeholders addressing each criterion’s relative importance to assist in the management of conflicting criteria and to assist in preparation of price service offerings.

CitiPower and Powercor wish to also comment on a number of the specific criteria identified:

(a) Clause 6.2.6(b)(3)(iv): This clause enables the AER to consider analysis undertaken by, or for, the AER that is provided as part of the Final Decision. Such a provision places TNSPs at a disadvantage. Should the AER undertake, or have undertaken for it, an analysis that is presented for the first time as part of a Final Decision, the TNSPs will have no opportunity to respond to that analysis. Such a situation provides a TNSP with no avenue to contest the analysis other than through an appeal process. It is recognised the AER will be required to conduct further analysis between the Draft and Final Decisions. This analysis however needs to be made transparently available prior to the Final Decision to allow relevant stakeholders the opportunity to comment prior to the finalisation of the review process.

(b) Clause 6.2.6(b)(3)(v): This clause is predicated on the presumption historical capital expenditure is an indicator of the long term steady state level of replacement and reinforcement expenditure which, if provided in perpetuity, would enable the integrity of the network to be maintained. This proposition is ill founded and potentially threatens network security. Changes in asset age, asset condition and capacity constraints will require capital expenditure requirements to vary from period to period. The level of capital expenditure will vary over time reflecting the cost of specific projects that are economically justified at a particular point in time. Clause 6.2.6(3)(v) should be deleted and replaced by criteria requiring the AER to consider network age and condition.

(c) Clause 6.2.6(b)(3)(vii) should be redrafted to require the AER to consider the impact of demand on capital expenditure requirements rather than reasonableness of the demand forecasts as currently drafted.

Forecast operating expenditure (clause 6.2.7)

Clause 6.2.7(b) should be augmented to include the impact of growth and productivity. Growth in outputs has a direct relationship with operating expenditure hence should be an explicit consideration. Clause 6.2.7(b)(2)(vii) makes reference to the reasonableness of demand forecasts, but it does not form a directive on the AER to include a provision for growth. No reference is made to productivity. Almost all Australian regulatory decisions have included a productivity element which again has a direct relationship with forecast operating expenditure.

Consideration should be given to codifying how growth and productivity will impact on forecast operating expenditure. Australian regulators have employed a variety of approaches to considering growth and productivity which has the potential for creating uncertainty. A common and consistent approach to growth and productivity would enhance the transparency of the regulatory arrangements and reduce uncertainty.

Clause 6.2.7(b)(2)(iv) enables the AER to consider analysis undertaken by, or for, the AER that is provided as part of the Final Decision. Such a provision places TNSPs at a disadvantage. Should the AER undertake, or have undertaken for it, an analysis that is presented for the first time as part of a Final Decision, the TNSPs will have no opportunity to respond to that analysis. Such a situation provides a TNSP with no avenue to contest the analysis other than through an appeal process. It is recognised the AER will be required to conduct further analysis between the Draft and Final Decisions. This analysis however needs to be made transparently available prior to the Final Decision to allow relevant stakeholders the opportunity to comment prior to the finalisation of the review process.

Efficiency benefit sharing scheme (clause 6.2.8)

Clause 6.2.8(e) permits the AER to amend the efficiency benefit sharing scheme from time to time provided notice is given to the TNSP 15 months prior to the amendment coming into operation. A change in the efficiency benefit sharing scheme can have a profound effect on commercial outcomes. Over a given regulatory period the TNSP will take actions in accordance with the incentives provided to it under a given efficiency benefit sharing scheme. Should, for example, the AER decide to increase the sharing ratio under an existing scheme, a TNSP who realised greater efficiencies would be disadvantaged compared to a TNSP who may not have pursued efficiencies as vigorously.

TNSPs need to be provided with certainty in relation to the efficiency benefit sharing scheme. Changing the scheme at relatively short notice will tend to ‘blunt’ the incentives provided to TNSPs reducing the effectiveness of any efficiency benefit sharing scheme. Consequently CitiPower and Powercor believe the AER should be required to give notice of any proposed changes a regulatory period in advance i.e. 5 years. This will provide all stakeholders with greater certainty and ensure the incentives provided under the scheme operate as intended.

Gamma (clause 6.2.9)

It is noted the Commission proposes a gamma of 0.5 for the purposes of calculating the TNSP’s tax liability benchmark, but that the Commission recognises that the value of gamma has been subject to less extensive consultation than have other WACC parameters in recent years. In the following discussion CitiPower and Powercor provide independent sources of evidence which unambiguously lead to the conclusion that a gamma of 0.5 is inconsistent with a MRP of 6 per cent and that it would be most appropriate to adopt a gamma of zero with a MRP of 6 per cent, consistent with market practice.

Imputation credits provide domestic equity investors with a taxation credit for each dollar of dividends they receive that is paid out of profits that have already been subject to corporate tax. Any value that investors attribute to imputation credits will be reflected in their expected return on equity. Under the CAPM framework this expectation would be reflected in the MRP. Therefore, there is a relationship between MRP and the value of imputation credits (gamma).

In a regulatory setting, it is important that the return on equity benchmark and the tax liability benchmark are consistent in their assumptions about gamma. This consistency can be achieved in two ways:

(a) Include the value of imputation credits in the return on assets benchmark (by including the value of imputation credits in MRP) and remove an equal monetary value from the tax liability benchmark (by including a consistent value of gamma in the calculation of tax liability); or

(b) Exclude the value of imputation credits from the return on assets benchmark (by using a MRP exclusive of the value of imputation credits) and set gamma to zero in the tax liability benchmark.

The next section explains why the second option (b) should be adopted in the Rules.

Market practice

To provide the TNSPs with an appropriate incentive to secure and enhance network reliability for their customers the Commission should set the benchmark WACC at a level that at least matches investors' risk-adjusted required rate of return from alternative investments. Therefore, the Commission should set the benchmark WACC in a way that is comparable with market practice, irrespective of financial theory.

Accordingly, attached are (Appendix A) the results of an investigation by KPMG (2005)[1], commissioned by the five Victorian electricity distributors, into market practice in relation to imputation credits. KPMG examined 118 independent expert reports on company takeovers from 1 January 2000 to 30 June 2005 to identify market practice in relation to the valuation of imputation credits. Key findings of their investigation are that of the 33 reports that adopted CAPM to estimate cost of equity:

(a) None adjusted for imputation credits;

(b) All adopted a market risk premium in the range of 6 per cent to 8 per cent; and

(c) 76 per cent adopted a market risk premium of 6 per cent.

These findings are similar to the study by Lonergan (2001)[2] (Appendix B) of market practice between 1990 and 1999, which found that 88 per cent of reports that used the CAPM approach made no adjustment for imputation credits.

In a recent paper (Appendix C) Truong, Partington and Peat (2005)[3] surveyed the capital budgeting practices of 356 listed Australian firms and found that:

(a) 72 per cent use the CAPM approach;

(b) The average market risk premium used is 6 per cent; and

(c) 83 per cent make no adjustment for imputation credits in project evaluation.

[1] KPMG (2005). *Cost of Capital – Market practice in relation to imputation credits.* Prepared for the Victorian Electricity Distributors. July 2005.
[2] Lonergan W (2001). *The disappearing returns.* JASSA, Issue 1, Autumn, pp8-17.
[3] Truong G, Partington G and Peat M (2005). Cost of Capital Estimation and Capital Budgeting Practice in Australia", Working Paper, University of Sydney, and Conference Proceedings, AFAANZ 2005.

These studies provide strong evidence that market practice is to used a MRP of at least 6 per cent and set gamma to zero.

Value of gamma

If gamma is to be assigned a value, then assigning it a value of 0.5 is contrary to recent evidence.

Australian regulators have placed considerable weight on the research of Hathaway and Officer (1996)[4] in setting the value of gamma. Hathaway and Officer (2004) have recently presented a revised version of their earlier work (Appendix D).[5] Their conclusion is that franking credits are valued at 50 per cent of their face value, and that 71 per cent are distributed, thus implying a value of gamma of 0.35.

Attached is a paper (Appendix E) prepared by the Strategic Finance Group (2005)[6] for the Victorian electricity distributors which argues that:

(a) Setting gamma equal to 0.5 and MRP to 6 per cent requires a dividend yield that is more than twice what we observe in the market; and

(b) Setting gamma to zero is the most straightforward and most complete way to restore consistency.

Although there is a difference between the Hathaway and Officer (2004) and the Strategic Finance Group (2005) findings on the value of gamma, both studies conclude that the value of gamma for the average investor is no greater than 0.35.

MRP of 6 per cent consistent with a gamma of zero

KPMG (2005) identified that independent experts adopting the CAPM framework do not adjust for gamma and use a MRP of at least 6 per cent. Truong, Partington and Peat (2005) found that in capital budgeting 83 per cent of listed Australian companies do not adjust for gamma and the average MRP used is 6 per cent.

CitiPower and Powercor attach a paper (Appendix F) by Gray and Officer (2005)[7], commissioned by the Energy Networks Association, which concludes that:

(a) Historical data supports an Australian market risk premium of at least 6 per cent;

(b) It is inappropriate to make ad hoc adjustments to historical data for unanticipated events because unanticipated events are the reason that a market risk premium exists;

(c) The effect of imputation credits on the market risk premium is likely to be small relative to both estimation error and the way in which other evidence is reflected in a market risk premium estimate; and

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4 Hathaway N and Officer R (1996). *The value of imputation credits.* Working paper, Melbourne Business School.

5 Hathaway N and Officer R (2004). *The value of imputation credits, updated 2004.* Working paper, Melbourne Business School, 2 November 2004.

6 Strategic Finance Group (2005). *The Relationship between Franking Credits and the Market Risk Premium: Implications for Regulatory Cost of Capital.* Prepared for the Victorian Electricity Distributors. 18 August 2005.

7 Gray S and Officer R (2005). *A Review of the Market Risk Premium and Commentary on Two Recent Papers.* Prepared for the Energy Networks Association, 15 August 2005.

(d) To take the market risk premium to a decimal point would give a spurious impression of precision in the estimate of a parameter which has a high general measurement error.

Based on the abovementioned market practice and evidence a MRP of at least 6 per cent is consistent with a gamma of zero.

Service Target performance incentive scheme (clause 6.2.10)

The proposal provides the AER with considerable discretion in developing a service incentive scheme for TNSP's that complies with principles set out in the Rules. The proposed principles effectively restrict the scheme to be relatively low powered with rewards and penalties capped at +/-1%. With such a low powered scheme it may be acceptable to allow the regulator significant discretion in the design of the scheme. However, if a more high powered scheme were to be proposed then the degree of prescription set out in the Rules must extend beyond the high level principles to provide more substantial direction to the regulator and provide greater certainty to TNSP's

Clause 6.2.10(e) allows the AER to amend the scheme from time to time provided it gives 15 months notice prior to the commencement of the next regulatory period. TNSP will invest in the network based on the incentives provided under the scheme. These investments are typically long lived hence sufficient certainty must exist that the benefits of that investment will be realised under a scheme. Granting the AER the ability to change the scheme over a relatively short 15 month period has the potential to strand the investment made by the TNSP as the benefits through the scheme that may have contributed to the project being economic, could be taken away. Clause 6.2.10(e) should therefore be amended to require the AER to give notice of any changes a regulatory period in advance i.e. 5 years.

Reopening of revenue Cap for Capital Expenditure (clause 6.2.12)

The draft rules provide for reopening of the revenue cap determination under certain circumstances one of which requires the capital cost to be at least 5% of the value of the regulatory asset base. This is an extremely high hurdle which could see important projects delayed to the following regulatory period. A much lower hurdle would facilitate efficient investment in essential infrastructure.

Cost pass throughs (clause 6.2.14)

CitiPower and Powercor support the inclusion of the events listed under the definition of a *pass through event*. However, a number of additional items should be considered for inclusion.

(a) **Safety and technical standards event**: It is not clear that safety or other technical standards would be covered under *service standards*. Such standards are generally not under the direct control of the AER and could be amended through other regulatory instruments during a price control period imposing material costs on the TNSP. Therefore, a separate heading of 'safety and technical standards event' should be considered for pass through.

(b) **Legislative or regulation event**: Legislation or regulation can impact on the cost of discharging licence obligations. For example, legislation could amend powers under which the TNSP undertakes works, requiring all new works to be placed underground or work procedures could be affected by changes in occupational health and safety legislation. A separate heading ‘legislative or regulation event’ should therefore be considered.

Clause 6.2.14(b) enables the AER to initiate a cost pass through event if it identifies a negative pass through amount. This provision increases the regulatory risk faced by the TNSP as it assigns significant regulatory discretion in the hands of the AER and undermines the certainty of the regulatory bargain agreed between the parties. Further, given the AER is both the initiator and assessor of a negative pass through event; there is no independent process of review. As a consequence CitiPower and Powercor disagree with the proposition the AER be able to initiate a cost pass through event.

Clause 6.2.14(j)(3) envisages a retrospective review of a TNSP’s actions to mitigate the impact of a positive pass through event. Such a provision is unnecessary as the actions of the TNSP will be ‘sunk’ by the time a positive pass through event is identified hence denying recovery will not change a TNSP’s behaviour and secondly, denial of recovery could potential threaten the financial viability of the TNSP. Consequently clause 6.2.14(j)(3) should be deleted.

Should you have any further questions in relation to this submission, please do not hesitate to contact me on (03) 9683 4282.

Yours sincerely

Rolf Herrmann
Manager Regulation

Appendix F.pdf (137 KB)

Appendix A.pdf (306 KB)

Appendix B.pdf (171 KB)

Appendix C.pdf (403 KB)

Appendix D.pdf (440 KB)

Appendix E.pdf (211 KB)