Australian Competition and Consumer Commission

Victorian Transmission Revenue Cap 2003 – 2008 Draft Decision

PUBLIC FORUM

Thursday 14 November 2002

Stamford Plaza

111 Little Collins Street

Melbourne VIC

Minutes

John Martin, a Commissioner with the Australian Competition and Consumer Commission (the Commission), chaired the public forum.

The forum commenced at 12:30pm Thursday 14 November 2002.

Attendees:

Commission Staff:

- Sebastian Roberts
- Theo Gazos
- Owen Seadon
- Renate Vogt

Interested Parties:

- Nino Ficca (PowerNet Pty Ltd)
- Tom Hird (NERA)
- Professor R.R. Officer
- John Dick (Energy Action Group)
- Rainer Korte (ElectraNet)
- John Pike (Energy Users Coalition of Victoria)
- Roman Domaski (Energy Users Association of Australia)
- Phil Gall (TransGrid)

Nino Ficca (SPI PowerNet Pty Ltd)

After providing a high level response to the draft decision, SPI PowerNet (PowerNet) focused its presentation on three main areas:

- valuation of the regulatory asset base (RAB), in particular easements and re-optimisation;
- the cost of capital; and
- efficiency carry overs.

PowerNet believes the draft decision generally accepted PowerNet's application. However the draft decision imposed a 7% or $19m revenue cut. In response, PowerNet requests that the Commission make sixteen amendments in its final decision. PowerNet believe these amendments will deliver a more appropriate revenue stream to PowerNet and also secure significant price reductions over the period for consumers.

PowerNet is sticking by the proposals in its application, which they designed to:

- provide safe and reliable transmission services; and
- charge a price for those services that is competitive, fair and reasonable.

Asset valuation

The current Victorian Tariff Order is based on a 1994 Sinclair Knight Merz (SKM) valuation. PowerNet believes, for the purposes of revenue regulation from 2003, that the 1994 valuation has several deficiencies, including:

- several asset categories were omitted, not deliberately valued at zero. These include easements, future terminal station sites, spares, 66kV assets and communications assets; and
- 12% of the network was optimised down or out in 1994 - today these assets operate well above their optimised ratings.

The threshold issues at this review are:

- does a jurisdictional RAB value exist; and
- can it and should it be adjusted to correct for any identified deficiencies

Under the NEC, the key clause is 6.2.3(4)(iii) – the "sunk assets rule"

> *"subject to clauses 6.2.3(d)(4)(i) and (ii), assets (also known as "sunk assets") in existence and generally in service on (1 January 2001) are valued at the value determined by the Jurisdictional Regulator or consistent with the regulatory asset base established in the participating jurisdiction provided that the value of these existing assets must not exceed the deprival value of the assets and the Commission may require*

the opening asset values to be independently verified through a process agreed to by the NCC;"

In the draft decision, the Commission found that:

- a jurisdictional RAB does exist (the 1994 SKM valuation); and
- this value can and should be amended to satisfy the NEC where:
    - assets were omitted from the RAB, with no judgement having been exercised, eg easements; or
    - where judgement was exercised, the circumstances which lead to the particular treatment have changed, eg re-optimisation.

Contrary views do exist, but are essentially urban myths:

Myth 1 - The RAB was fixed in 1994 at disaggregation (and cannot now be adjusted).

NEC section 6.2.2(b)(2) provides that regulated businesses must be provided with

> *"a sustainable commercial revenue stream which includes a fair and reasonable rate of return ….. on efficient investment."*

If a significant percentage of the value of the asset base is missing, the result cannot deliver the appropriate regulatory return to the business

Therefore, the NEC does not provide for the RAB to be fixed in the manner that Myth 1 contemplates

Myth 2 – "the intention" was that the RAB would never be amended

The public record clearly shows the joint intention of Vic Govt and Commission was, in fact, that the 1994 valuation would not set a RAB value for Commission's 2003 revenue determination. There is no RAB value set in the Victorian Tariff Order, nor any method for rolling any derived number forward into future revenue caps (In contrast Victorian distribution businesses had a RAB specified and a method for future determinations). The exposure draft of the Tariff Order contained a RAB number and roll-forward arrangements, which were removed from the final – as required by the Commission in 1997.

PowerNet believes that Commission statements on the public record support this position. In the NEM Access Code Decision 16/9/98:

> *"locking in the asset values until 2007 would be a concern, because irrespective of their veracity when determined in 1994, it is unlikely that the use of the network will remain such that the valuation would still be correct, in either 8 years (2002) or 13 years (2013). …. Consequently, the Commission maintains its view expressed in the draft decision that it would not accept a derogation which prevents the Commission from taking the option of revaluing the assets at the time the Commission takes over as regulator"*

Other statements confirm the approach that Commission would deal with issues at the time it was performing its function as regulator

Myth 3 – the buyer of PowerNet did not pay for the assets at privatisation.

In fact, there is evidence that buyers placed a significant value on easements at the time of privatisation, which was reflected in the price paid:

- GPU PowerNet paid the Victorian Government $2.66B in 1997
- GPU PowerNet valued easements in 1997 at $570M
- SPI PowerNet paid GPU $2.1B in 2000 to acquire GPU PowerNet
- Both the prices paid were based on the expectation that the RAB would be corrected as part of the 2003 revenue determination

PowerNet proposed a hybrid historic cost comprising:

Actual compensation ($79.9m) +
The 1997 estimate of transaction costs ($114.1m)

The 1997 estimate of solatium ($38.0m)

PB Associates (for the Commission) rejected solatium and endorsed $194.7m as the hybrid historic cost, based on documentary evidence. The Commission's draft decision proposes $79.9m because it considers:

- reimbursement of land owners costs is included in the compensation amount; and
- easement purchase management costs are already included in transmission line values

Regarding the factual errors:

- Documentary evidence shows that reimbursements of land owners costs were not included in the compensation costs drawn from (official) easement creation documents; and
- SKM (original valuers) confirmed easement purchase management costs are not in the 1994 transmission line values

PB Associates (for the Commission) reviewed and accepted the documentary evidence on both of these items in reaching their finding that an easement value of $194.7m is justified. PowerNet believes the Commission has not disputed the legitimacy of the various elements of easement cost (except solatium) – the only questions relate to where each element is or should be captured in the RAB

The draft decision questions whether PowerNet's methodology uses actual cost for valuing transaction costs. PowerNet believes this is despite that:

- the reason for adopting the 1997 replacement cost estimate for transaction costs was a lack of relevant actual cost records; and

- the 1997 estimate would probably be lower than the indexed value of actual costs.

PowerNet understands that incomplete records did not prevent the Commission from fixing a value for Sydney Airport land. PowerNet believes its methodology is the closest way to value easements at actual cost. In 2000 the Commission adopted a 1996 replacement cost valuation of TransGrid's easements as historic cost (>$400m). PowerNet believes its easements are intrinsically worth more than TransGrid's, however the Commission regulatory value 80% than for TransGrid.

In the draft decision accepts $153.7m of PowerNet's proposed value for re-optimisation of $249.6m. The $95.9m not accepted relates to part recovery of foregone returns and depreciation over the period to 2002. PowerNet has submitted to the Commission that its methodology:

- follows the Commission's Draft Regulatory Principles;

- is economically efficient; and

- represents a fair outcome for consumers

The Commission's draft decision takes the contrary view in relation to consistency with the DRP. NERA will address this issue in a separate presentation.

Cost of capital

The Commission did not accepted PowerNet's proposed value for the Vanilla WACC. In particular, the Commission has adopted:

- a term for the risk free rate equal to the regulatory period (rather than a 10 year basis);

- a benchmark credit rating of A (rather than BBB+) and a debt margin of 120bp (rather than 185bp)

PowerNet believes that the Commission is setting the WACC too low. Professor Officer will address a number of the cost of capital issues in his separate presentation.

Efficiency carry-overs

PowerNet believes:

- providing appropriate incentives for ongoing efficiency via an efficiency carryover mechanism was a key part of its application;

- that the Commission needs to demonstrate its commitment to incentive regulation.

NERA will elaborate on their proposal for efficiency carryover in a separate presentation.

Tom Hird (NERA)

Depreciated replacement cost

There are differences between the ACCC's and SPI PowerNet's views on the estimation methodology for depreciated replacement cost (DRC). The DRP requires that if assets are re-optimised:

"… their value will be the lesser of the carry forward value or depreciated replacement cost."

SPI PowerNet estimates DRC as replacement cost less 'competition' depreciation.

The ACCC estimates DRC as replacement cost less 'straight line' depreciation.

NERA noted the DRP says *"Changes in the regulatory asset value will be calculated according to the competition depreciation approach…"*

NERA believes that competition depreciation should be used because it is intended to reflect the underlying economic value of the asset

NERA believes that the efficient valuation of re-optimised assets is defined by the value to customers of using the re-optimised asset rather than purchasing a new asset. This is essentially the value of delay in the purchase of a new asset. That is, the difference in NPV between installing (and maintaining) a new asset today rather than at the end of the re-optimised asset's life. This is SPI PowerNet's approach.

NERA believes that using straight line depreciation is likely to:

- fail to reflect value to society of the optimised asset; and
- may punish businesses for efficient early investment (inefficient).

NERA believes using competition depreciation does **not** remove the penalty of optimisation.

- Prescription to use the 'lesser of' depreciated replacement cost or carry-forward value' means that using depreciated replacement cost always imposes a loss on a business as a result of optimisation.
- This prescription imposes $66m loss in the current contextNERA proposes the Commission uses an efficiency carryover mechanism similar to that used by the Essential Services Commission. It uses three objectives:

- Non-distortionary incentives for the *timing* of efficiencies.
- Non-distortionary incentives for the *type* of efficiencies (ie. opex, capex)Appropriate *magnitude* of incentives for efficiency

The ESC divides total benefits from efficiency between business and customers in the same proportion for *almost* all types and timing of efficiencies:

- Magnitude of incentive (30:70)
- Non-distorting timing of incentives (30:70)

Expenditure benchmarks

Efficiency carryover mechanism is only one side of the coin. The process for setting benchmark expenditure is equally important. A business cannot form a view on the incentive for efficiency unless it forms a view on how future expenditure benchmarks will be set.

NERA believes that future benchmarks should be based on two rules:

- future benchmarks should be based on the best estimate of required expenditure *less* deferred amounts already compensated for; andpast trends in costs should only be extrapolated into the future where driven by factors beyond the firm's control.

NERA believes that because of the lumpy nature of SPI PowerNet's capex and opex the Commission should consider the following:

- what past expenditure is not expected in future expenditure (and vice versa)
- trends in expenditure changes in business scope/obligations
- changes in external costs.

Robert Officer

Risk free rate

Officer believes the risk free rate should only be matched to the regulatory period if the infrastructure company is guaranteed the end of period value of the assets. Some events/risks are not covered by this approach. For example:

- Unexpected technological redundancy
- Competition risk of new entrants (bypass)
- Force majeure events.

Officer believes the risk free rate should match the asset life. Argues that the 10 year bond rate should be used.

Debt risk premium

The "spread" between the infrastructure company's debt and the risk-free rate will be a function of its risk, which is a function of the business risk and the gearing. A gearing of 60% debt to total assets has been assumed and underwriters have been

requested to grade such debt and estimate an appropriate margin. Based on a BBB+ benchmark (for a stand-alone transmission business) debt underwriters gave margins as follows:

Bank	Debt Margin (basis points)
Westpac (14/10/02)	161 to 171
National (10/10/02)	184 to 189
ANZ (03/10/02)	190
CBA Spectrum (16/10/02)	169

Market risk premium (MRP)

A number of commentators, particularly those associated with broking houses, have been arguing that the MRP is below the 6% adopted by the Commission. Officer believes that it is highly likely that the MRP is not a constant. In periods where it is likely to be low assets whose returns are further off, e.g. "growth stocks", are in favour. In periods where it is high assets whose returns are more immediate, e.g. "value stocks", are in favour.

The period of the 1990's was a period when share markets were "optimistic" and growth stocks were in favour. In the new decade, particularly recently, the reverse has been true and value stocks are in favour. The recent low MRP estimates have begun to change to higher numbers. (A Macquarie Bank chart was used for reference). Of course, in investment we are after an ex-ante MRP not an ex-post estimate but we believe that ex-post observations of MRP will be reflected in ex-ante estimates.

Imputation credits

Our benchmark returns and estimates of the WACC are taken from securities whose returns typically reflect an after company but before personal tax number. The imputation tax system and the credits it generates give company tax relief to equity holders by allowing the company tax paid on dividends as redemption against personal taxes. Officer views the value of imputation tax credits to shareholders as a withholding of personal tax at the company level. Officer believes that, given the nature of the benchmarks, the value of these credits needs to be added back to the net cash flows to ensure an after company but before personal tax estimate.

John Dick (Energy Action Group)

The Energy Action Group believes it members are hampered by the lack of resources to effectively participate in regulatory inquiries. Noting the NEM Advocacy Panel has yet to start operating and the Victorian Consumer Utility Advocacy Centre has no procedures in place to allocate resources to short time frame regulatory inquiries.

The Commission heard at the ElectraNet pre-decision conference about the impacts of low load factor of the South Australian transmission network. This was presented in slide 11 by Ian Stirling

The Energy Action Group believes PowerNet has the same problem. Based on United Energy's movement to a summer peaking distribution company. Refering to Aaron Reed's, of United Energy, presentation at the EUAA Conference, Wednesday 16 October 2002

The draft decision does nothing to address the issue of decreasing load factors due to the increasing summer peak loads.

The Victorian government believes that the summer peak will increase by 200-300 MW a year for the next 10 years. Based on the NEMMCO Statement of Opportunities 2002 and the VENCorp Annual System Planning Review.

The Energy Action Group believes jurisdictions, state based regulators and the Commission have allowed networks to set their tariffs and charges in a manner to smear the costs of peaks to minimise the political flack from voters!

The VENCorp Electricity Annual System Planning Review always gives 3 options:

- Augmentation
- Demand Management
- Embedded Generation

VENCorp, as a statutory, has a responsibility to action Demand Management/Load Management. The Energy Action Group believes nothing is currently done in this regard.

Cost of capital

The Energy Action Group believes:

- the Commission's process is not transparent
- the equity risk premium and the equity beta is too high/generous
- the vanilla real post tax WACC is high should be around 4.7%

The Energy Action Group believes that there has been little evidence produced to show that a Real Vanilla Post Tax WACC lower than 4.7% with virtually no risk, will produce substantial reduced asset investment.

Efficiency gains

The Commission did not, nor did the PB Power assesment of Capex and Opex appear to put in place any mechanism to review efficiency gains and stop gaming.

Under Commission light handed regulation delaying/deferring or rolling forward capex and opex \to another regulatory cycle is classes as an efficiency gain and the business gets to keep the spoils.

How contestable is each of the tendered projects. Given that there is a building boom in transmission assets.

The small number of specialised contractor operators involved in building and maintaining transmission assets limit competition.

The Commission's decision still needs to address the skills base shortage.

In conclusion, there needs to be an overall package of incentives to action demand /load management.

The Energy Action Group believes that the Commission needs to be more pro-active not just a rubber stamp in ticking off regulated entities capex and opex requests.

Rainer Korte (ElectraNet)

Risk free rate

ElectraNet has taken up the Commission's invitation to provide further input on this issue by commissioning the Network Economics Consulting Group (NECG) to critique the paper prepared by Associate Professor Martin Lally.

The findings of the NECG report are summarised as follows:

Optimal capital structure has a number of components. These include gearing (debt/equity) and maturing of debt.

In a non-regulated market companies generally finance debt component of long lived assets with debt of similar maturity, which:

- allows servicing of debt from revenue generated by assets with minimum uncertainty over interest rates
- expects debt of varying maturity - presence of some short term debt does not invalidate this proposition
- In the example provided by Associate Professor Lally standard business practice does not apply
- In this example, it is efficient for business to structure debt to match length of regulatory period

Results arise due to number of key assumptions, these include:

- output sold known with certainty
- no uncertainty over operating costs

- only risk facing the business is the impact of interest rate fluctuations on output prices. However given that changes in interest rates are used to adjust final product prices the business is exposed to no risk and will always earn its WACC – no more and no less

Under these (extreme) assumptions it is efficient for business to structure debt maturity on length of regulatory period providing:

- upward sloping yield curve; and
- minimal transactions cost of debt issuance.

Example provided by Associate Professor Lally represents extreme form of rate of return regulation clearly not the form of regulation practiced by the Commission

Lally does not demonstrate that results hold if the assumptions are relaxed, for example:

- transactions costs of debt refinancing may not be negligible over life of assets;
- with uncertainty over costs adopting short term bond maturity may distort investment decision; and
- with regulatory risk business will be less willing to structure debt based on bond maturity corresponding to regulatory period.

Onus of proof should be on Lally to demonstrate that his results can be applied beyond the restrictive regulatory environment he has assumed – before they are used in any regulatory decision-making!

- Regulator should set maturity based on what is optimal for the business given the regulatory environment
- Lally paper provides no justification for adopting bond maturity equal to length of regulatory period
- Results are entirely a function of the restrictive assumptions adopted
- Without conclusive proof to the contrary the regulator should set bond maturity based on standard commercial practice – matching maturity and asset life
- Previously there appears to have been a reluctance on the part of the Commission to engage in public debate on this issue (e.g. PowerNet, ElectraNet and GasNet forum)
- Regulatory transparency requires that the Commission consider the arguments presented by experts on their merits and where an alternative position is taken, this should only be on the basis of reasoned argument – the Commission has failed to take up this challenge in the draft decision.

The Commission essentially stands alone on this issue and should change its position – all other Australian regulators use the longer term 10 year bond maturity

Comments on the valuation of easements.

Easement acquisition or transaction costs

Valuation methodology – historic cost approach

John Pike (Energy Users Coalition of Victoria)

The Energy Users Coalition of Victoria (EUCV) was setup by large energy consumers. However it tries to represent the interests of all Victorian energy consumers. The issues discussed included:

- Cost of capital
- Asset base and GST spike
- Capex
- Opex

Cost of capital

EUCV has two concerns with the approach the Commission takes to WACC. First it believes the approach to is too mechanical for what is a complex issue. Second, the EUCV believes more benchmarking should be used, particularly international benchmarking.

EUCV believes that there is evidence that indicates the market risk premium should be 3 percentage points. Referred to Mercer report. Also EUCV considers PowerNet to be a cash stable business and it should be benchmarked as such. EUCV believes the equity beta should be benchmarked against cash stable businesses such as property investments.

Asset base and the GST spike

EUCV believes the asset base was set by the Victorian government and the Commission should not change that value.

EUCV believes the GST spike should be excluded through the asset base roll forward.

EUCV considers the DORC method of valuing assets to be inappropriate.

Capex

EUCV believes there is a need for capex that can be justified. Capex needs to reflect the needs of customers and services paid for. EUCV believes that PowerNEt and VENCorp need to propose detailed capex plans. In the absence of capex plans they should be required to seek the Commissions approval of capex spending annually.

EUCV considers this approach would ensure prices are lower and consumer would prefer to bear the uncertainty of annual price changes, rather than consistently high price. EUCV believes better controls on capex need to be put in place.

Opex

EUCV believes opex should reduce over time rather than increase. EUCV notes PowerNet has achieved higher performance results with lower opex than that adopted in the Commission's draft decision. EUCV is unsure why opex levels are going to increase.

Roman Domanski (Energy Users Association of Australia)

The Energy Users Association of Australia (EUAA) discussed the following issues:

- EUAA's overall reactions to the draft decision
- rate of return & cost of capital;
- asset valuation issues;
- capex & opex;
- service standards;
- transmission prices; and
- what the ACCC should do next?

The EUAA is pleased that the Commission cut PowerNet's claimed MAR. The reduced MAR the Commission proposed will limit price increases. However it also believes that the Commission should scrutinise PowerNet's application further.

The EUAA believes that PowerNet has an incentive to provide an ambit claim to increase its revenues. Further it believes that the Commission has not given full consideration to consumer interests when setting the WACC.

The EUAA believes that the setting of the return on equity component has been set too high. It compared the return on equity selected by the Commission and compared it with international regulatory decisions. This showed the Commissions decision was on the high side. The impact on customers is high prices.

The EUAA believes the WACC selected by the Commission is too high. It compared the selected WACC to international regulatory decisions to reach this conclusion. The EUAA believe an efficient post tax real WACC is 4.5 – 5.5%. It opposes the 6% set by the Commission.

The EUAA supports the Commission's treatment of easements. It opposes the inclusion of future terminal stations because DNSP planning shows a limited need for terminal stations.

The EUAA believes the proposed opex is too high and that it will lead to excessive prices paid by consumers. Further it believes that opex is an area in which the NSPs game the regulator. It also believes the Commission has not justified the increase in opex and that more benchmarking is needed.

The EUAA believes the steep increase in PowerNet's capex must be closely monitored by the Commission. The capex may be needed to meet load growth, however there is no mention of demand management.

The EUAA believes SKM's work for the Commission on service standards is inadequate.

The EUAA suspects that transmission prices will rise because of the proposed revenue. Setting more efficient WACC parameters and opex allowances would address this.

The EUAA proposes that the Commission review its WACC parameters and provide justification of its selection. Further that the Commission reviews opex and capex to increase efficiency. Introduce 'some decent' service standards and clearly assess the impact on prices.

Phil Gall (TransGrid)

TransGrid, as in the ElectraNet SA draft decision process, highlighted the importance of a strong open access interconnected transmission network in further enhancing competition in the wholesale electricity market. They noted that greater competition in the wholesale electricity leads ultimately in lower prices for end user customers. In order to promote efficient regulated transmission investment in the NEM, there needs to be a cessation of the ongoing erosion of regulated rates of return.

Unique planning arrangement in Victoria and implications on end customers

TransGrid acknowledged that the transmission structure in Victoria is unique where VENCorp makes the decision on required new network development. TransGrid noted that the process is not transparent, and that the actual rates of return achieved on thee network augmentations, cannot easily be ascertained by publicly available information. Accordingly, customers could not be assured that this was a truly competitive process for the provision of new transmission investment. TransGrid suggested that the Commission needed to do more work on this before they could justify a "hand off" approach to regulating new capital and operating expenditure arising under this regime.

Regulated Returns on PowerNet Assets Provide an Important Signal to Prospective Transmission Investors

TransGrid noted that the Boards of transmission businesses were concerned about the apparent continuing declines in regulated returns on sunk transmission assets. These returns now are much less than those that applied to the TransGrid decision. Accordingly, the basis upon which a decision to invest in new transmission assets has changed before all the capital associated with such an investment has been recovered.

TransGrid noted that most of the capital invested on projects commenced during its current determination was still to be recovered. In the case of transmission lines at least 90% of initial capital investment made during the current regulatory period remained unrecovered and this amount was now likely to attract the lower returns emerging from more recent Commission decisions. Any further declines in the

regulated returns applying to PowerNet would increase the reluctance of transmission company Boards to approve anything but investments required to meet clearly mandated reliability requirements.

TransGrid asked the Commission and customer representatives to recognise that the certainty of future regulated returns is just as important as the actual level prevailing at a given point in time when deciding to undertake investments which also had a long recovery of capital (regulated depreciation lives).

Policy Guidance Exists for the Commission on the Need to Promote Transmission Development

TransGrid again referred to its submission on the draft ElectraNet SA revenue decision where it is set out clearly the public policy guarantee available to the Commission that investment in transmission infrastructure, and interconnection in particular, should be promoted. It also again noted the economic theory that supports this in deregulated markets by quoting Frank Wolak from Stanford University.

Examples of public policy guidance include provisions in the National Electricity Code, statements by both the COAG Energy Market Review and the NEM Ministers on the need for enhanced transmission interconnection, and the Commonwealth Government's response to the Productivity Commission's review of Part IIIA.