

Draft Decision

South Australian Transmission Network Revenue Cap 2003-2007/08

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Glossary

AR	Allowed Revenue
ASX	Australian Stock Exchange
Capex	Capital Expenditure
CAPM	Capital Asset Pricing Model
COAG	Council of Australian Governments
Code	National Electricity Code
Commission	The Australian Competition and Consumer Commission
CPI	Consumer Price Index
DRP	Draft Statement of Principles for the regulation of Transmission Revenues
EAG	Energy Action Group
EBIT	Earnings before Interest and Tax
ECCSA	Electricity Consumers Coalition of South Australia
EPO	Electricity Pricing Order
ESC	Essential Services Commission
ESIPC	Electricity Supply Industry Planning Council
EUAA	Energy Users Association of Australia
Gamma (γ)	Likely Utilisation of Imputation Credits
GST	Goods and Services Tax
GWh	Giga Watt hour
HMA	Hill Michael and Associates
IDC	Interest During Construction
Information requirements	Information Requirements Guidelines
IPART	Independent Pricing and Regulatory Tribunal
ITOMS	International Transmission Operations and Maintenance Study
km	Kilometre
kV	Kilovolt
MAR	Maximum Allowable Revenue
MAPS	Moomba to Adelaide Pipeline System
MEAV	Modern Equivalent Asset Valuation
MFS	Maloney Field Services
MRP	Market risk Premium
MTC	Murraylink Transmission Company
MVA	Mega Volt Ampere
MW	Mega Watt
MWh	Mega Watt hour
NECA	National Electricity Code Administrator
NECG	Network Economics Consulting Group
NEM	National Electricity Market
NEMMCO	National Electricity Market Management Company
NERA	National Economic Research Associates
NPAT	Net Profit after Tax
ODRC	Optimised Depreciated Replacement Cost
ODV	Optimised Deprival Value
OFGEM	Great Britain's Office of Gas and Electricity Markets
Opex	Operating and Maintenance Expenditure

OTTER	Office of the Tasmanian Energy Regulator
PI Scheme	Performance Incentive Scheme
PSTN	Public Switched Telephone Network
QCA	Queensland Competition Authority
RAB	Regulated Asset Base
RBA	Reserve Bank of Australia
<i>Regulatory Principles</i>	Statement of Principles for the regulation of Transmission Revenues
S&P	Standard and Poor's
SAIIR	South Australia Independent Industry Regulator
SKM	Sinclair Knight Merz
SMHEA	Snowy Mountain Hydro-Electric Authority
SNI	SA - NSW Interconnector
SOO	Statement of Opportunities
TNSP	Transmission Network Service Providers
TUOS	Transmission Use of System
VAR	Voltage Amperes Reactive
WACC	Weighted Average Cost of Capital
WDV	Written Down (Depreciated) Value
WMC	Western Mining Corporation Copper Uranium

Executive Summary

Introduction

Under the provisions of the National Electricity Code (code) clause 6.2, the Australian Competition and Consumer Commission (Commission) is responsible for determining the maximum allowable revenue (MAR) for ElectraNet SA (ElectraNet).

As prescribed by the code the revenue cap takes into account expected demand growth, service standards, weighted average cost of capital, potential efficiency gains, a fair and reasonable risk adjusted return on efficient investment and ongoing commercial viability of ElectraNet. It will be set for a period of five-and-a-half years, from 1 January 2003 to 30 June 2008.

In setting the revenue cap the Commission has adopted an accrual building block approach. Under this approach the allowed revenue consists of:

- a return on capital – that is the (depreciated) value of the regulatory asset base (RAB) multiplied by the post-tax nominal weighted-average cost of capital (WACC)
- a return of capital – depreciation allowance (to recoup the expired capital outlay)
- an allowance for operational expenses and taxation.

The allowed revenue established for the first year will be increased by inflation (consumer price index - CPI) and decreased by an efficiency factor (X) for the second year. This CPI-X adjustment will be made year-on-year during the regulatory period.

The Commission issued a draft Statement of Principles for the Regulation of Transmission Revenues (DRP) in May 1999¹. The DRP sets out the Commission's regulatory framework.

ElectraNet is currently the predominant transmission network service provider (TNSP) in South Australia. It purchased (under a long-term lease) the business from the South Australian State government in October 2000. ElectraNet is a private limited company.

¹ ACCC, *Draft Statement of Principles for the Regulation of Transmission Revenues*, 27 May 1999, p. 84.

Process

On 16 April 2002, ElectraNet submitted its application for the revenue cap. It also made supplementary submissions subsequently. According to the DRP, the Commission is required to make a decision within eight months of receiving a revenue cap application.

The Commission engaged Meritec Pty Ltd (Meritec) to review the asset base, capital expenditure (capex) and operational and maintenance expenditure (opex). Several interested parties made submissions on ElectraNet's application and on Meritec's reports.

ElectraNet's application and supplementary submissions, Meritec's review reports and comments by interested parties have been placed on the Commission's website. This draft decision should be read in conjunction with this material.

The Commission held discussions with officers of several South Australian government instrumentalities such as the Electricity Supply Industry Planning Council (ESIPC), the Department of Treasury and Finance, Office of the Technical Regulator, and the jurisdictional regulator the South Australian Independent Industry Regulator (SAIIR).

Cost of capital

The code requires the Commission to provide TNSPs with a fair and reasonable rate of return. The Commission uses the capital asset pricing model (CAPM) to estimate a fair return on assets. It uses a post-tax revenue model.

Table i shows the WACC parameters requested by ElectraNet and those used by the Commission in this draft decision and comments including the reasons for any difference. Most of the WACC parameters apply to all regulatory areas within the Commission.

Table i Parameters for WACC and the Commission's findings

Parameter	ElectraNet's proposal	Draft decision	Comment
Nominal risk free interest rate (R_f)	5.90%	5.41%	40 day average of 5 year Commonwealth bond
Expected inflation rate	2.34%	2.30%	Difference between 5 year nominal and 5 year index linked bonds
Debt margin (over R_f)	1.72%	1.30%	Industry benchmark based on range of 80-160 bps
Cost of debt $R_d = R_f + \text{debt margin}$	7.62%	6.71%	5 year risk free rate plus debt margin. ElectraNet used a 10 year bond rate.
Market Risk Premium (MRP): $R - R_f$	6.50%	6.00%	Benchmark MRP, consistent with the Commission's other decisions.
Gearing ratio: Debt/Equity	60%	60%	Benchmark gearing ratio, consistent with the Commission's other decisions.
Value of imputation credits (γ)	50%	50%	Benchmark gamma, consistent with the Commission's other decisions.
Asset beta (β_a)	0.45	0.40	Derived from average infrastructure and utilities.
Debt beta (β_d)	0.00	0.00	Consistent with the Commission's other decisions.
Equity beta (β_e)	1.12	1.00	Based on asset beta of 0.4
Nominal post tax return on equity	13.66%	11.40%	Calculated from parameter inputs
Post tax nominal WACC	8.66%	6.39%	Calculated from parameter inputs
Pre tax real WACC	8.46%	7.12%	Calculated from parameter inputs
Nominal vanilla WACC	10.03%	8.59%	Calculated from parameter inputs

Figures vary over time, according to market conditions.

Opening asset base

Introduction - opening asset base

Clause 6.2.3(d)(4) of the code limits the ability of the Commission to exercise discretion in valuing the RAB at the beginning of the first regulatory period (opening asset base). Put simply:

- if the jurisdictional authorities had determined the value of opening RAB, then the Commission is required to use that value
- if not, the Commission is required to value the opening assets consistent with the asset base established by the jurisdictional authorities.

The Commission understands that the South Australian jurisdictional authorities had not determined the value of the opening RAB. The authorities, however, have established an asset base valued at \$685m as of 1 July 1999.

ElectraNet proposed three main changes to the opening RAB:

- revaluation of easements increasing the value from \$3.1m to \$215m
- inclusion of interest during construction (IDC) of \$44.6m
- re-admission of items optimised in 1998 amounting to \$13m.

Easements

The South Australian Department of Treasury and Finance wrote to the Commission in August 2001 noting that:

- easements were incorporated at book value of \$3.1m as it had insufficient time to value them according to the DRP issued by the Commission in May 1999
- independent valuations of the easements suggested a substantially higher value than \$3.1m
- it believed that the code clause 6.2.3(d)(4)(iii) allowed the Commission to revalue easements consistent with the RAB established by the participating jurisdiction.

Given the above, the Commission may have the discretion to value easements using indexed historical costs as suggested in the DRP.

ElectraNet used a hybrid model to value easements:

- deprival value of compensation costs, valued by Maloney Field Services (MFS) in 1997 and indexed to inflation
- replacement value of acquisition costs, valued by Sinclair Knight Merz (SKM) in 2002.

The code stipulates that assets should not be valued above their deprival value. Thus the code imposes an upper limit on asset values. However the Commission considers that it would be inappropriate to value easements at this maximum limit, ie. deprival value. This view is based on theoretical considerations such as the appropriateness of the method given the special characteristics of easements and practical considerations such as the reasonableness of returns to TNSPs.

The Commission notes that the deprival method results in a very high value for easements compared to other valuations in its previous decisions relating to the *NSW and the ACT*² and *Queensland*³ revenue caps. It considers that valuing easements on the basis of deprival value would mean unreasonably high returns to TNSPs, resulting in unacceptably high cost to transmission customers.

Moreover, the Commission notes that the South Australian authorities had the MFS valuation (\$132m in 1997) when they established the jurisdictional RAB. Still the authorities preferred to qualify the book value of \$3.1m by stating that it was lower than other independent valuations, rather than replacing it with the MFS valuation.

The Commission, as stated in the DRP, prefers to value easements on actual costs suitably indexed for timing differences. ElectraNet, however, has stated that it is unable to provide actual (historical) costs.

It is not the Commission's role to supplement ElectraNet's application. Therefore the Commission has used the (same) figure of \$3.1m in its draft decision. When indexed to current period the amount is calculated to be \$3.4m.

Interest during construction

ElectraNet claims that the jurisdictional RAB does not make a fair and reasonable allowance for IDC resulting in the RAB being understated by \$44.6m as of 1 July 1998. This is because IDC was included only on those projects valued at over \$50m.

As stated previously, the Commission has limited discretion in valuing the opening RAB. The jurisdictional authorities adopted a policy of not including IDC on projects valued less than \$50m. The Commission considers that it cannot question that policy. Hence it will not include the IDC requested by ElectraNet in its application.

Readmission of assets optimised previously

ElectraNet claimed that the SKM review in 1998 (conducted for ETSA) resulted in optimisation of assets with a depreciated replacement value of \$25m. ElectraNet engaged SKM in 2001 to conduct an updated optimisation effective as of 1 July 2001. This review found that assets with a depreciated value of \$13m should be re-admitted to the RAB.

² ACCC, *decision – NSW and ACT Transmission Network Revenue Caps 1999/00-2003/04*, January 2000

³ ACCC, *decision – Queensland Transmission Network Revenue Cap 2002-2006/07*, November 2001.

The Commission reiterates that it has limited discretion in valuing the opening RAB. In the case of easements, the jurisdictional authorities explicitly stated their reservations in respect of the values contained in the asset base. At this stage the Commission is not aware if any such qualifications regarding optimisation. Therefore the Commission, for the purposes of this draft decision, considers that it has no basis upon which to reopen the jurisdictional RAB concerning optimisation.

Capital expenditure

ElectraNet's application re capital expenditure

ElectraNet has forecast capex of \$374m in real terms (or \$409m nominal) over the regulatory period. The forecast amount is the sum of expected values, based on a range of scenarios (ie. probabilistic basis). Furthermore, ElectraNet's proposed capex does not include about \$77m refurbishment expenses. It has included this amount under operating expenses. If this amount is treated as capex, total capex will increase to \$451m. This matter is discussed below.

Refurbishment

ElectraNet claims that by treating refurbishment as capex it risks losing that amount when the refurbished asset is revalued on a 'modern asset equivalent valuation' (MEAV) basis under the optimised depreciated replacement cost (ODRC) revaluation. This is because refurbishment usually does not increase the replacement value of the asset – rather it increases its effective utilisation.

Therefore ElectraNet argues that treating refurbishment as capital provides a perverse incentive to replace assets with new ones, rather than refurbishing which is more efficient.

However the Commission prefers to capitalise the amounts due to the following reasons.

- Benefits of refurbishment are gained over a long period of time. By expensing refurbishment ElectraNet will expose its customers to a one-off impost in that year and (at their expense) benefit future customers. Inter-temporal equity is obtained by capitalising the expense and depreciating it over its useful life.
- If refurbishment is expensed it would be very difficult to identify the amount in the future. In contrast, capitalising leaves an audit trail in the form of an asset record. This is important during future valuations in subsequent revenue resets.
- Under the building block approach opex is treated as an allowance with limited opportunity to claw-back. There would be significant difficulties in monitoring actual amounts spent on refurbishment, under the light handed approach adopted by the Commission, if they are treated as an expense.
- Similar refurbishment expenses have been capitalised by ElectraNet and its predecessors (the previous owners of South Australia's transmission businesses) in the past.

The Commission, however, recognises the possible risk of optimisation. It therefore proposes to treat refurbishment as a separate line-item of capital expenditure and:

- quarantine the amount against optimisation for 15 years
- depreciate the amount over the same period, recognising that its value may be extinguished well before the life of the (original) asset.

This above treatment is subject to the condition that:

- ElectraNet undertakes appropriate regulatory evaluation procedures similar to those for other new investments before spending (for example the regulatory test)
- maintains records in such a way that the refurbishment can be identified to the asset.

The Commission considers that the above approach balances its concerns with the requirements of ElectraNet, and is a fair solution.

Staff directed Meritec to treat the refurbishment as a separate capital item in its capex report. Meritec analysed the refurbishment and identified about \$15m, which is actually opex and treated it as such.

Meritec review

Table ii Capital expenditure for the regulatory period

	(\$m)
Application	374
Add: Refurbishment	62
Less: Reduction by Meritec as a result of its review	100
Major reasons	
Adjusting the probabilities associated with NEMMCO's load forecast to be more consistent with those proposed by ElectraNet's consultant ROAM Consulting	12
Removal of specific projects as a result of:	
Uncertainty about who is responsible for the funding (connection for wind generation projects, SNI etc)	81
Inconsistency with the probabilistic approach	7
Recommended amount	336

In its reports, Meritec has expressed reservations about the ability of ElectraNet to actually carry out its proposed capex program, given the potential limitations in the availability of resources to carry out projects (for example, key project management, equipment and construction resources).

The Commission's assessment of capex

The proposed capex represents nearly 50 per cent increase on ElectraNet's asset base (excluding easements) as at 31 December 2002. The proposed amount is much higher than ElectraNet's recent capital spending. ElectraNet claims that this amount would enable it to meet the approximately three per cent load increase over the regulatory period.

In its application ElectraNet notes that the majority of the capex program is driven by load growth. A very rough calculation shows that the incremental cost of meeting this additional load is about \$1,000 per MWh. This calculation provides an indication of the cost of meeting peak load requirements.

ElectraNet argues that there are significant controls on the capex. First, projects must be submitted to organisations such as the ESIPC for assessment. In many instances this could involve a public consultation process. Secondly projects should pass the regulatory-test hurdle. Thirdly, unspent amounts could be clawed back at the end of the reset-period. And finally, the new assets face the risk of optimisation when they are revalued under ODRC method in the future.

A regulated entity (subject to future optimisation risks) is almost guaranteed of a return on capital expenditure. This is in contrast to businesses in competitive markets which have to 'work the capital' to earn a return. Hence proper assessment of capital expenditure is crucial for regulated entities.

Although the controls on capex are useful, in practice there are significant limitations on their effectiveness. As such the controls complement, rather than substitute, proper assessments during the revenue cap process.

The Commission received several submissions from interested parties. In summary they:

- shared the reservations of Meritec regarding the practicability of delivering the entire capex program
- suggested that although South Australia's transmission networks may require some investment, the size of the amount requested by ElectraNet was excessive
- expressed concerns about the impact of such a large program on end-user transmission prices, which they considered, were already high in South Australia relative to other states.

Currently ElectraNet is under a performance incentive scheme administered by the SAIIR. Under this scheme, ElectraNet has reported improved service quality and reduced opex. As a result it obtained incentive payments. The Commission therefore considers that ElectraNet has demonstrated that it could achieve service improvements with its current level of asset base, capex and opex.

The Commission's draft decision regarding capex

The Commission considers that a capex program of about \$347m over the regulatory period should be adequate for ElectraNet to meet its obligations under the national electricity code and the South Australian transmission code. This amount:

- is close to the amount recommended by Meritec
- takes into account the risks and practical limitations in delivering the large capex program
- provides an incentive for ElectraNet to prioritise projects and pursue non-network options.

An additional amount of \$4m per annum is allowed for grid support. This amount will be clawed back if it is not spent.

Operating and maintenance expenditure

ElectraNet's application

In its application, ElectraNet asked for opex of about \$71m in real terms for 2003-04. The amount requested is relatively stable in real terms over the reset period (and thus the claim for 2007-08 was also \$71m) and included:

- a provision for refurbishment of about \$14m per annum
- grid support payments of about \$4m per annum

Hence opex excluding the above is \$53m.

ElectraNet claimed that the increase in opex was justified due to:

- its ageing asset profile (average age about 28 years) resulting in reduced reliability
- its 'peaky' load profile (substantial summer peak loads)
- low load density in its network
- large geographical area it covers
- past under-investment in asset maintenance, replacement and refurbishment
- prescriptive customer reliability standards specified by South Australia transmission code.

ElectraNet also provided supplementary submissions refuting Meritec's opex review report and the comments made by interested parties.

Opex review by Meritec

Meritec stated that it was unable to compare the individual items in ElectraNet's forecast with expenses incurred by the South Australian transmission business in previous years. This was because the ElectraNet's classification of costs was different to those used by its predecessors and there was no trail linking them together.

Meritec therefore focussed on total opex and recommended an opex amount of about \$43m per annum (excluding grid support) during the regulatory period.

Comments by interested parties

Several interested parties commented on ElectraNet's proposed opex. A summary of their comments follow.

- ElectraNet has furnished inadequate information to support the large increase in opex. There is not enough specific detail in the application to substantiate that the proposed opex is efficient and reasonable.
- The proposed opex is an extraordinary increase over historical levels. This is despite ElectraNet obtaining incentive payments for a reduction in opex costs under the SAIIR's performance incentive scheme.
- The claimed opex is far higher than other TNSP's according to their own benchmarking.
- ElectraNet has asked for an excessive level of costs to be 'passed-through'.

The Commission's assessment of opex

The Commission is required to assess whether the opex proposed by ElectraNet is reasonable, efficient and cost-effective in setting the revenue cap. The revenue cap provides an incentive mechanism whereby ElectraNet is allowed to retain any savings in opex. Likewise it would bear the cost of overruns or inefficiencies.

Therefore, the Commission has focused on assessing a reasonable level of opex for ElectraNet. In doing so the Commission is mindful of ElectraNet's claims that it has achieved substantial cost efficiencies as a result of pursuing best practices.

Historical costs

Table iii compares the proposed opex with past figures. Though the amounts are in nominal dollars they are comparable as expected efficiencies over time could be expected to offset the low inflation rates during these years.

At a late stage of the assessment, the Commission found that there were significant differences between opex amounts in ElectraNet's annual reports and the amounts reported to SAIIR by ElectraNet.

Opex reported to SAIIR should be normal recurring expenses incurred in providing prescribed services, whereas the annual reports contained all expenses incurred by the company. For example:

- non-recurring expenses such as voluntary severance payments, acquisition costs were excluded from SAIIR reports
- non-prescribed services which accounted for appropriately about 1.5 per cent of the opex (about \$1m in 2001-02) were also excluded from the reports to SAIIR
- the reporting period for SAIIR's performance incentive (PI) scheme was the year ending 31 March whereas the annual reports covered the year ending 30 June - SAIIR usually has both PI reports and regulatory accounts.

Table iii Historical opex (excluding depreciation and refurbishment) of South Australian electricity transmission business

Year	Annual Report ² (\$m)	SAIIR ³ (\$m)
1997-98	41	
1998-99	40	
1999-00	34	30
2000-01	41	35 ⁴
2001-02		35
2003-08 Meritec ¹	43	
2003-08 Application ¹	57	

1. Average over the regulatory period
2. From annual reports and regulatory accounts
3. Amounts submitted to SAIIR
4. One-off expenses of about \$4.3m identified by SAIIR has been excluded

Table iii shows that, on average, historical opex for the transmission business is about \$35m according to the amounts reported to SAIIR, whereas ElectraNet's annual reports show about \$39m. For the purposes assessing ElectraNet's opex allowance to establish its MAR, \$35m is more appropriate as it excludes non-prescribed services and other non-recurring expenses.

The Commission notes that the opex has been steady since 1997-98, despite inflation and capex.

However ElectraNet is now proposing to undertake a substantial capex program. Some of the capex will result in an increase in opex whereas others may result in a decrease. Overall the Commission considers that the capex program is likely to result in a small net increase in opex.

Benchmarking against other TNSPs

The Commission examined several ratios such as opex per unit of line length (\$/km), asset base (%), substation (\$), electricity transported (\$/GWh) and peak-load (\$/MW). Given the differences among TNSPs, any single ratio is unlikely to reflect the true difference in performance. Each ratio would have its limitations. Therefore, the Commission looked at a suite of ratios. Details of the Commission's analysis are in section 5.9.3.

That said, some ratios provide a more useful insight into relative performances. The Commission considers that opex / line-length and opex / asset base, while having some limitations, are more useful than the others.

The Commission considers that Powerlink is more comparable to ElectraNet than the other Australian TNSPs. There are differences between the two - with some factors favouring ElectraNet and others favouring Powerlink. For example, lower voltage levels and topography may favour Powerlink, while a younger asset-profile may favour ElectraNet. But on the whole the comparison is useful in assessing relative opex performance.

Table iv Benchmarking of opex: ElectraNet vs Powerlink (2003-04)

TNSP	Opex/route length \$/km	Opex ¹ / RAB ² (%)
ElectraNet (application)	9,930	6%
ElectraNet (Meritec)	7,600	5%
Powerlink	5,630	2%

1. Excludes refurbishment and grid support
2. Includes refurbishment

The Commission notes that even at the reduced opex (\$43m) recommended by Meritec:

- the ratios in table iv are significantly higher for ElectraNet
- most other ratios discussed in section 5.9.3 also appear to indicate that \$43m is on the high-side
- the \$43m is significantly higher than the amounts reported to SAIIR.

The Commission's draft decision regarding opex

The Commission uses the building-block approach to determine TNSPs' revenue caps. This is part of the light-handed incentive-based regulation preferred by the Commission. Under this approach the TNSPs are given a sum of money enabling them to earn a reasonable return when they are functioning efficiently. This approach enables them to earn higher returns than those envisaged by the Commission, if they are functioning more efficiently than they were expected to. The converse is also true.

On 19 August 2002, ElectraNet in its response to Meritec's opex review gave details of cost increases over previous years. The Commission disagrees with the claims due to the following reasons.

- As explained in the previous paragraph, the Commission prefers to use efficient costs rather than actual costs. (If the Commission were to adopt cost-plus regulation, then details of costs would be important. A more heavy handed and interventionist approach to verification would be necessary.)
- The Commission considers that some amounts included in ElectraNet's submissions, such as the one for self-insurance, are high compared to previous

years and other TNSPs' costs. However, the Commission prefers to focus on total opex rather than individual cost components.

After considering all of the above, the Commission, for the purpose of this draft decision, considers that \$43m (excluding grid support) to be an appropriate opex allowance. This figure is consistent with the recommendation of Meritec (see table 5.6). The Commission however notes that \$43m is significantly higher than the amount reported to SAIIR by ElectraNet and that by most measures appears to be higher than that of other TNSPs in Australia. Therefore, the Commission will re-examine the opex allowance before its final decision.

Service standards

In determining the revenue cap, the code requires the Commission to take into account the service standards that TNSPs are expected to maintain. The Commission has engaged SKM to develop a set of service standards for TNSPs. SKM is expected to release its final report shortly. Meanwhile it has developed a set of standards for ElectraNet along similar lines.

SKM has selected five indicators: three will be operational now and other two will be implemented later when data is collected. The average performance during the previous three years becomes the benchmark. If ElectraNet exceeds the benchmark it will earn an incentive payment. If it does not meet the benchmark it suffers a penalty. The maximum amount of penalty or incentive is one per cent of the revenue cap. The scheme is designed to have an expected value of zero.

The draft decision and total revenue

The following table summarises the Commission draft decision.

Table v Maximum allowable revenue and its components

	Application (\$'m)	Draft (\$'m)	Explanation
Easements	215	3	Jurisdictional value adjusted for inflation.
Optimisation	13	0	No justification to vary RAB
Other system assets	843	802	
RAB at 1 Jan 2003 ¹	1071	805	
Capex (real)	374	285	
Refurbishment	77	62	Commission has treated \$62.1m as capital expenditure.
Total capex ²	528	347	ESIPC and Meritec
Grid support pa	4	4	
Opex ³ pa	52	43	Own analysis (consistent with Meritec review)
EPO under recovery		5	
Nominal post tax return on equity	13.7%	11.4%	See Table 2.4
MAR 2002-03	195	143	Actual for 2001-02 under EPO - \$139m

1. Sum of easements, optimisation and other systems assets
2. Sum of capex and refurbishment over the regulatory period.
3. Excludes refurbishment

The actual revenue earned by ElectraNet for 2001-02 was about \$139m. However SAIIR has advised the Commission that the forecast MAR under its electricity pricing order (EPO) for this year was about \$132m. The EPO figure is based on 'yield'. That is revenue is determined for per unit of load or demand (kW). If the actual demand exceeds that of the forecast (in the EPO) then the revenue will increase proportionately. The converse is also true. Revenue earned in the last two years exceeded the forecasts as a result of greater than expected load growth. ElectraNet estimates that its forecast MAR for 2002-03, based on the EPO model, would be about \$144m.

The Commission notes that the MAR under this draft decision is similar to the amount ElectraNet has forecast under the EPO.

Other factors impacting on the MAR:

- An efficiency dividend of two per cent per annum applied to ElectraNet's opex.
- An additional allowance for grid support.
- An under-recovery allowance of \$5m within the period 1 January 2003 to 30 June 2003.

The recent decrease in five year bond rate has resulted in a lower WACC and a consequent reduction in MAR. The effect on MAR is approximately \$3m over the past year. In this context the Commission notes that most analysts predict that businesses would earn less return in the future.