
ElectraNet SA

Submission on ACCC Statement of Regulatory Principles Draft Decision (August 2004)

12 November 2004



Table of Contents

1.	INTRODUCTION	5
2.	REVENUE CAP DECISION MAKING PROCESS	6
2.1	Confidentiality.....	6
2.2	Public Forum	6
2.3	Modelling of Revenue Cap Decisions	6
3.	ASSET VALUATION	7
3.1	Lock-in of the Asset Base	7
3.2	Valuation of Easements	8
3.3	Asset Base Roll Forward Methodology	8
4.	INCENTIVE FRAMEWORK FOR CAPITAL EXPENDITURE	9
4.1	Principles and Objectives.....	9
4.2	Desirable Outcomes.....	10
4.3	Evaluation of ACCC Proposals	11
4.4	ElectraNet's Proposed Capex Incentive Framework.....	13
4.5	Approach to Excluded Projects	15
4.6	Definition of Excluded Project	17
4.7	Approach to Off Ramps.....	18
4.8	Conclusion on Capex Framework	18
5.	INCENTIVE FRAMEWORK FOR OPEX	20
5.1	Opex Target and Carry Forward Mechanism.....	20
5.2	Self Insurance and Pass-Through.....	20
5.3	Benchmarking	21
6.	COST OF CAPITAL	23
6.1	Equity Beta.....	24
6.2	Cost of debt.....	24

1. Introduction

The purpose of this submission is to set out ElectraNet's response to the ACCC's new draft *Statement of Regulatory Principles for the Regulation of Transmission Revenues*, dated 18 August 2004 (Draft SRP).

ElectraNet emphasised in its submission on the ACCC's August 2003 Discussion Paper¹ that the current process of review towards finalising the *Regulatory Principles* is an important opportunity to increase regulatory certainty for investors and that high priority should be given to finalising the *Regulatory Principles* and providing the greatest amount of certainty possible in the regulatory framework and in the details of how this framework is to be implemented in future revenue cap decisions.

ElectraNet recognises the considerable effort that has gone into developing the new Draft SRP and is encouraged by the proposals that clarify incentives for investment and remove significant regulatory uncertainty.

However, a number of important issues remain to be resolved before the SRP can be finalised, particularly in relation to the proposed capital expenditure framework. It is important that these issues are resolved satisfactorily if the proposed incentives are to deliver the intended outcomes. This submission proposes changes to address these issues and to ensure that the proposed framework can be practically implemented.

The submission generally follows the structure of the Draft SRP:

- Section 2 addresses issues related to the revenue cap decision making process;
- Section 3 addresses the proposal to lock-in asset values;
- Section 4 addresses the incentive framework for capital expenditure including details of the proposed asset base roll forward methodology;
- Section 5 addresses the incentive framework for operating and maintenance expenditure;
- Section 6 addresses the proposals in relation to the weighted average cost of capital; and
- Section 7 addresses the proposed information requirements.

¹ ElectraNet "*Submission to the ACCC Review of Draft Principles for the Regulation of Transmission Revenues*", 28 November 2003.

2. Revenue Cap Decision Making Process

ElectraNet generally supports the ACCC's proposed timetable for regulatory reviews, the approach to the conduct of public forums and the treatment of late submissions. However, ElectraNet believes that the following points should also be recognised.

2.1 Confidentiality

ElectraNet believes that it is necessary when applying the provisions of confidentiality to differentiate between:

- information the TNSP provides in its revenue cap application and in response to the Information Requirements; and
- more detailed supporting information that may be provided as part of the review process conducted by the ACCC and its consultants.

ElectraNet fully expects that its submissions and information papers will be put on the public record.

However, the Final SRP should recognise that more detailed supporting information that may be commercially sensitive would not be put on the public record, as is the case at present. While it may be necessary for this information to be reviewed by the ACCC and its consultants it would be inappropriate and unnecessary to make this information publicly available.

2.2 Public Forum

ElectraNet has two comments in relation to the public forum that may be requested by any interested party.

An interested party requesting a forum should be required to provide reasons for why the forum should be held, including the benefits to be gained, and the regulator should have the discretion to decide on whether a forum is justified on this basis.

The present format of the public forum is largely limited to interested parties making submissions in relation to the ACCC's draft decision. Having the regulator speak to the draft decision and providing the opportunity for questions to the regulator on the draft decision would significantly improve the value of the public forum.

2.3 Modelling of Revenue Cap Decisions

ElectraNet notes the intention set out in the Draft SRP for the ACCC to publish full and reasonable details of the basis and rationale of its revenue cap decisions including qualitative and quantitative methodologies applied, calculations and formulae, values of input variables and assumptions etc.

The further development and publication of the ACCC's Post Tax Revenue Model (PTRM) will greatly assist in meeting the underlying Code objectives of regulatory accountability and transparency of process.

3. Asset Valuation

This section sets out ElectraNet's views in relation to:

- lock-in of the asset base;
- valuation of easements; and
- the asset base roll forward methodology.

3.1 Lock-in of the Asset Base

ElectraNet strongly supports the ACCC's preferred position to lock in the value of sunk assets, but only once a fair and reasonable asset valuation has been established.

ElectraNet has in previous submissions to the ACCC identified material omissions from the value of ElectraNet's sunk assets, which is based on the jurisdictional asset valuation. These omissions are in two areas – easements and interest during construction (IDC).

Investors in ElectraNet at the time of acquisition had a reasonable expectation that:

- when the ACCC took over regulation of ElectraNet under the National Electricity Code, the assets would be valued in accordance with the ACCC's then draft regulatory principles (and that those draft regulatory principles would soon become the final regulatory principles);
- if the assets were valued in accordance with those principles, then easements and IDC would be assigned a higher value than they carried under the jurisdictional valuation at the time of acquisition; and
- notwithstanding the Code provision which the ACCC cited in constraining initial asset values to the jurisdictional valuation, the valuation at the next revenue reset (1 July 2008) would be determined in accordance with the then draft regulatory principles.

The price investors paid for the assets reflected their reasonable expectation.

Now, before that next revenue reset, the ACCC proposes to materially change the regulatory principles so as to "lock in" ElectraNet's existing asset value.

This substantial change in approach denies ElectraNet the opportunity to have the shortcomings identified in the jurisdictional asset valuation addressed at the next revenue reset – an expectation that was reasonably held by investors at the time of their investment decision.

ElectraNet reiterates that any steps taken to lock in asset values, including Code change, should not rule out a revaluation of ElectraNet's asset base to address the shortcomings of the jurisdictional asset valuation.

ElectraNet will make a separate submission to the ACCC on this subject.

3.2 Valuation of Easements

The Draft SRP considers that a historic cost approach based on records of actual expenditure incurred is the most appropriate asset valuation methodology for easements.

However, the Draft SRP also recognises an alternative benchmark approach where historical records are unavailable.

ElectraNet supports the availability of the benchmark approach to easement valuation on the basis that a TNSP should not be disadvantaged simply because historical records are unavailable.

3.3 Asset Base Roll Forward Methodology

The SRP should clearly set out the asset base roll forward methodology and how this is to be implemented. The Draft SRP does not achieve this objective.

The Draft SRP suggests in places that the depreciation allowance included in the revenue cap should be used in the roll forward of the asset base, but elsewhere suggests that actual outturn depreciation would be used by indicating that TNSPs would keep the benefit of returns on and of capex underspend within the regulatory period.

ElectraNet believes that the current methodology for rolling forward the asset base from one year to the next should be maintained. That is the closing asset base in year t equals:

- The opening asset base in year t ;
- plus new investment rolled into the asset base at actual cost on an as commissioned basis (i.e. actual capitalisations during the year);
- plus non-capital expenditure additions to the asset base (asset acquisitions);
- plus indexation of the asset base by actual CPI;
- less straight-line depreciation;
- less asset disposals;

The opening asset base in year $t+1$ equals the closing asset base in year t .

This approach is simple and practical to implement and maintains consistency with the roll forward of the asset base used as the basis of the regulatory accounts reported annually to the ACCC.

ElectraNet proposes a capital expenditure incentive framework in the following section, which is consistent with this asset base roll forward methodology.

4. Incentive Framework for Capital Expenditure

This section sets out ElectraNet's views on the ACCC's proposed incentive framework for capital expenditure (capex), which is the area of greatest change in the Draft SRP.

The ACCC proposes to adopt capex incentives focused, as far as possible, on the determination at the start of the regulatory period of an efficient level of capex for the duration of the regulatory period. The proposed incentive design consists of three elements:

- An ex ante cap: this will cover most expected investments during the regulatory period and will establish a cap on the level of investment to be included in the regulatory asset base at the end of that period;
- A mechanism for separate, project specific regulation for very large and uncertain investments excluded from the ex ante cap; and
- An "off-ramps" mechanism if unexpected events cause capex blowouts during the regulatory period.

The details of the ACCC's proposed capex framework are set out in the Draft SRP and Background Paper and a subsequent information paper on excluded and off-ramp projects².

ElectraNet has carefully considered the proposed capex framework and has come to the conclusion that it cannot accept this framework in its current form. ElectraNet does support the objective of introducing stronger incentives for capex efficiency savings. However, there are a number of important issues that remain to be resolved before the proposed capex framework can be finalised.

The remainder of this section sets out ElectraNet's views on the ACCC's proposals and an alternative implementation of the capex framework that would satisfy ElectraNet's concerns.

4.1 Principles and Objectives

ElectraNet's views on the incentive framework for capex are based on the principles and objectives set out in Table 1. These principles and objectives have been developed with consideration not only for the interests of the regulated business, but also:

- the need for the regulator to implement the incentive mechanisms and roll forward of the asset base in a way that is consistent with the principles and objectives set out in the Code; and
- the interests of other stakeholders who will assess these mechanisms, including customers and other interested parties.

² ACCC Letter, "*Capital Expenditure Framework in the NEM – Excluded and 'Off-Ramp' Projects*", dated 1 October 2004.

Table 1: Capex Framework Principles and Objectives

Principles/ Objectives	Description
Fair and reasonable rate of return on efficient investment	This objective is set out in clause 6.2.3 of the National Electricity Code. TNSPs must earn a fair and reasonable return on efficient investment.
Equitable sharing of efficiency gains between the TNSP and customers	This an objective set out in clause 6.2.2 of the National Electricity Code. Efficiency gains should be shared equitably between the TNSP and customers.
Simplicity	Calculations should be easily understood and recalculated without sophisticated modelling. Based on assumptions that are prepared at a high level.
Transparency	Open and easily understood logic.
Practicality	Processes that can work with a variety of TNSP financial systems and a variety of spending/ timing outcomes without difficulty in application.
Balanced incentives between opex and capex	Capex and opex incentives should be similar to ensure that there are no perverse outcomes resulting from an unbalanced incentive mechanism.
Uniform incentives throughout the regulatory period	Incentives should be the same in each year of the regulatory period to ensure efficient outcomes.

4.2 Desirable Outcomes

ElectraNet considers that the capex framework should also deliver the desirable outcomes set out in Table 2, which are consistent with the principles and objectives outlined above.

ElectraNet considers that in order to maintain consistency between the roll forward of the RAB and audited financial accounts:

- New assets should be incorporated into the asset base on an “as commissioned” rather than “as spent” basis with interest during construction added to determine the final “as commissioned” cost of bringing the asset into service; and
- Depreciation for roll forward purposes should be calculated using the business’ detailed financial asset registers, which are also used to determine asset class average remaining lives for establishing the depreciation on opening assets in the regulatory period.

Table 2: Capex Framework Desirable Outcomes

Desirable Outcome	Rationale/ Benefits
Maintain consistency between roll forward of the RAB and audited financial accounts established for regulatory, accounting and tax purposes	<p>This outcome is consistent with the principles of simplicity, transparency and practicality.</p> <p>A TNSP's regulatory accounts use actual outturn depreciation as calculated by its accounting systems to roll forward the asset base from year to year.</p> <p>The financial accounts used as the basis for reporting regulatory accounts are audited. As such they form the basis of an independently verifiable report providing confidence to the regulator and interested parties about the accuracy and reliability of the amounts reported.</p> <p>Maintaining consistency between the roll forward of the RAB and financial and regulatory accounts requires actual outturn depreciation to be used in rolling forward the RAB.</p> <p>Outturn depreciation is based on systems subjected to audited processes.</p> <p>This outcome minimises the need for the business to make complicated adjustments to its financial accounts at the end of each regulatory period.</p>
Capital expenditure incentive framework should be consistent with modelling the return on and of assets using the ACCC's PTRM.	<p>Using the Post Tax Revenue Model (PTRM) provides a level of simplicity and transparency. The PTRM is a public model which can be used to replicate results, is understood by various stakeholders who have an interest in the outcome, and consistent with the ACCC's methodologies used to determine revenue cap decision to date.</p>

4.3 Evaluation of ACCC Proposals

The ACCC has proposed two approaches to capex incentives:

- an asymmetric incentive based on setting a cap on efficient investment at the start of the regulatory period (to be applied to the majority of capex); and
- a symmetric incentive based on setting an efficient capex target for an excluded project prior to commencement of project implementation.

The two approaches are outlined in Table 3 below.

Table 3: ACCC’s Proposed Approach to Capex Incentives

Incentive	Description
Asymmetric Incentive	<p>In the case of capex underspend; the TNSP keeps the return on and of the amount underspent within the regulatory period only. Actual expenditure is rolled into the asset base and customers keep the benefit of the amount underspent for the remaining life of the assets.</p> <p>In the case of capex overspend; the capped amount is rolled into the asset base. The TNSP loses the return on the amount overspent for the full life of the assets and never recovers this portion of its capital investment even if the investment is considered prudent.</p>
Symmetric incentive	<p>Overspend and underspends are treated equally.</p> <p>The benefits (or penalties) of capex underspend (or overspend) are retained by the business for 5 years from when they are incurred. In this way the incentive mechanism provides a more balanced sharing of efficiencies (or losses) between the business and customers.</p> <p>Actual capital expenditure is rolled into the asset base at the next revenue reset.</p>

Asymmetric Incentive

ElectraNet has the following concerns with the asymmetric approach:

- The asymmetric incentive could potentially lead to a situation where prudent capital expenditure is excluded from the RAB because it is incurred over and above the ex ante cap set on investment. This outcome is inconsistent with the Code objective of providing a fair and reasonable rate of return on efficient investment.
- There is a high risk that the severe penalty associated with capex overspend will give rise to inefficient underinvestment, particularly in the later years of the regulatory period. As the business consumes the capital allowed within the ex ante cap, it will approach a situation where it may be encouraged to stretch its service standards and run the risk of poor service delivery outcomes rather than commit expenditure that will be lost forever. This perverse incentive, which may be an unintended outcome of the asymmetric approach, is inconsistent with the Code objective to provide an environment that fosters an efficient level of investment.
- To compensate for the asymmetry in the incentive, the ACCC is required to set the capex target so that an underspend is more likely to occur than an overspend. The ACCC has acknowledged this point.

“To ensure that, in expected value terms, TNSPs are not prejudiced as a result of the asymmetric bonus/ penalty, the expenditure target needs

to be set at a level that the TNSP has more than 50% probability of achieving³.

- The asymmetric approach represents a potentially much higher risk profile for the business than the symmetric approach. The degree of additional risk is dependent on how the ACCC adjusts the capex cap or target to take account of the asymmetric bonus/ penalty. The ACCC may need to set the capex target even more generously for TNSPs with a smaller capex program over which to diversify the risks. TNSPs have no assurance as to how this will be done or to what degree this will be taken into account.
- The ACCC's proposed asymmetric approach to capex within the ex ante cap is inconsistent with the objectives of balanced incentives between opex and capex, uniform incentives throughout the regulatory period and equitable sharing of efficiency gains between the TNSP and customers. The TNSP only keeps the return on and of any underspend amount within the regulatory period, which will significantly diminish the incentive to seek efficiencies later in the regulatory period. The incentive for capex underspend is also weaker than the 5-year rolling carry forward mechanism proposed for opex efficiencies.

The concerns outlined above would need to be overcome before the asymmetric approach can be considered further.

Symmetric Incentive

ElectraNet believes that the symmetric incentive overcomes most of the issues raised above in relation to the asymmetric incentive:

The 5-year rolling carry forward mechanism provides:

- uniform incentives throughout the regulatory period;
- a stronger reward for underspend that achieves a better balance with the incentives proposed for opex effectiveness; and
- a more balanced sharing of benefits/ losses between the business and customers.

ElectraNet considers that the symmetric incentive mechanism is strong enough to ensure that capex is prudent; i.e. that the prospect of a 5-year revenue penalty on capex overspend is sufficient to ensure that only prudent capex is incurred.

4.4 ElectraNet's Proposed Capex Incentive Framework

ElectraNet proposes an alternative incentive framework, which does meet the principles and objectives defined earlier.

The incentive mechanism is broadly based on a TNSP retaining the benefits (or penalties) of capex underspend (or overspend) for 5 years from when they are incurred. As noted earlier, the prospect of a 5-year revenue penalty associated

³ ACCC Letter from Sebastian Roberts, "Capital Expenditure Framework in the NEM – Excluded and "Off-Ramp" Projects", dated 1 October 2004, p5.

with capex overspend provides an incentive to ensure that only prudent capex is incurred. In the case of capex underspend, after the expiration of the five-year period, any benefits accrue to customers through lower future prices.

At the next revenue reset, actual capital expenditure is rolled into the asset base.

In greater detail, the incentive mechanism provides for the TNSP to:

- In the case of underspend, keep the return on and of the underspend amount within the regulatory period, and for the remainder of the 5 years (that fall within the next regulatory period) receive a carry forward incentive payment included in the next period cash flows; and
- In the case of overspend, lose the return on and of the overspend amount within the regulatory period, and for the remainder of the 5 years (that fall within the next regulatory period) receive a carry forward penalty in the form of a reduction in the next period cash flows.

The carry forward incentive payments (or penalties) are based on the return on capital savings (or losses) and are calculated simply by multiplying the WACC by the value of the underspend (or overspend). This amount is carried forward for five years from the date of commissioning of the asset. For simplicity no adjustment for the allowed return of assets or CPI (net depreciation) is carried forward into future periods. The incentive mechanism can be demonstrated in the simple example that follows:

Table 4: Example of Incentive Payment Calculation

Figures in real terms	Current Regulatory Period					Next Regulatory Period				
	1	2	3	4	5	6	7	8	9	10
Capex target	100	100								
Actual capex (as commissioned)	80	110								
Capex underspend	20	(10)								
Year 1 return on underspend (at WACC 10%)		2	2	2	2	2				
Year 2 return on overspend (at WACC 10%)			(1)	(1)	(1)	(1)	(1)			
Return on capital savings retained within period		2	1	1	1					
Cash flow adjustment in next regulatory period (net of savings and penalties above)						1	(1)			

At the end of the current regulatory period, actual capital expenditure is rolled into the asset base. Thus the Written Down Value of the regulated assets involved in the underspend or overspend will be carried into the future period. In the example above it will be the net reduction in assets over that which was expected in the current period. This will result in savings to customers over the remaining life of the assets, while the savings made within the current regulatory period remain with the business.

The assets rolled into the asset base at the end of the regulatory period will be the written down, CPI adjusted values of actual expenditure calculated from the business' financial asset registers.

The net carry forward incentive payments (or penalties as the case may be) result in an adjustment (either increase or decrease) to the TNSP revenue cap in the next regulatory period.

For transparency these incentive payments should be shown as a separate line in the revenue calculation.

4.5 Approach to Excluded Projects

The ACCC has proposed an incentive scheme for excluded projects.

ElectraNet considers that the implementation of the ACCC's proposed scheme is unnecessarily complex and is inconsistent with the principles of simplicity, transparency and practicality.

Proposed Approach

ElectraNet proposes that the same approach that has already been outlined for projects within the ex ante cap be applied to excluded projects. That is, any savings made against the target expenditure would be kept for 5 years from commissioning of the project, and any overspends would result in a penalty for 5 years from the commissioning date. This balanced incentive will ensure that there is an incentive to contain costs and seek efficiencies.

A complication with excluded projects is whether or not a revenue allowance is made for excluded projects within the revenue cap. The prospect of not earning a return on an excluded project until the next regulatory period is unacceptable to ElectraNet and presumably other TNSPs. However, including a forecast revenue allowance within the revenue cap would require adjustments at the end of the regulatory period to take account of the difference between the allowed and actual excluded capex.

ElectraNet considers that the approach that is most consistent with the principles outlined earlier is for the excluded project to earn a revenue stream within the regulatory period via a pass through mechanism.

The base pass through amount would be calculated by modelling the excluded project using the PTRM, which was applied in setting the TNSP's revenue cap at the beginning of the regulatory period. The project would be modelled using actual capex (as commissioned).

An incentive payment would be added to the base pass through amount. The incentive payment would be based on the WACC multiplied by difference between actual capex and the capex target set by the ACCC for the excluded project.

However, while the WACC should be calculated using the same parameters as used in the revenue cap decision for the current regulatory period, the risk free rate and cost of debt should be updated to reflect market conditions at the time of the pass through determination.

The incentive for the TNSP is to beat the amount that the regulator allows as the target expenditure for the project.

Example

For example, if the excluded project were to commence operation in year 2 of the current regulatory period, a pass through amount would be allowed to adjust the revenues of the business in years 3, 4 and 5 of the regulatory period. The base pass through amount would be calculated by modelling the excluded project using the PTRM (including calculation of return on and of capital, any explicit project related operating costs if applicable, tax allowance etc.) based on the actual as commissioned capex. An incentive payment (or penalty) calculated by multiplying the WACC by the amount of the project underspend (or overspend) would be added to the base pass through amount in years 3, 4 and 5. This is illustrated in the following table.

Table 5: Example of Excluded Project Incentive Payment Calculation

Figures in real terms	Current Regulatory Period					Next Regulatory Period				
	1	2	3	4	5	6	7	8	9	10
Capex target		100								
Actual capex (as commissioned)		90								
Capex underspend		10								
Base pass through amount calculated using PTRM (at WACC 10% and depreciation over 20 years)			13.5	13.1	12.6					
Incentive payment			1.0	1.0	1.0	1.0	1.0			

The written down value of actual project capex would be rolled into the asset base used to determine the revenue cap in the next regulatory period (i.e. years 6 to 10). The revenue cap in this period would include a carry forward of the incentive payment (or penalty) for the excluded project in years 6 and 7.

As noted earlier, for transparency these incentive payments should be shown as a separate line in the revenue calculation.

In summary any savings made on the excluded project would remain with the business in the remaining three years of the current regulatory period, and the return on the savings would be carried forward to the first two years of the next regulatory period. At the end of the current regulatory period, the RAB would be adjusted by actual expenditure rather than the higher target expenditure. This allows for future savings to be passed through to customers.

Should the business not achieve the target expenditure, the business will fail to receive a return on the overspend amount for the three years of the current period, and will have its revenues in years 1 and 2 of the next regulatory period reduced by the WACC times the amount of the overspend. The RAB will be adjusted at the end of the current period by the actual expenditure.

Revenue Adjustment

ElectraNet's proposed approach should not require any adjustment to the basic building block revenue equation. At present:

$$\text{MAR} = (\text{allowed revenue}) + (\text{service standards financial incentive})$$

Allowed revenue in this equation includes approved opex pass through amounts and in the future would similarly include capex pass through amounts resulting from excluded (and off-ramp) projects.

4.6 Definition of Excluded Project

The Draft SRP proposes to exclude projects from the cap on investment to the extent that including them would lead to inefficient under-investment, declining service quality or excessive windfall gains or losses. The ACCC considers that excluding significant but uncertain investments from the cap will increase the accuracy of the ex ante cap and hence ensure that the cap remains reasonably aligned with efficient costs.

The Draft SRP proposes to exclude projects if the expected error presented by the inclusion of that project in the cap is equal to more than 10% of the ex ante cap.

ElectraNet agrees that it may be appropriate for some projects to be excluded from the cap on investment. However, it is important that flexibility be retained in determining excluded projects. A mechanistic approach to this determination will not be appropriate. The following factors may influence the choice of which projects should be excluded:

- The expected error of including the project in the cap;
- A project's stage of development;
- Ability to predict need for the project;
- Significant projects that may be dependent on a third party

- The type of investment – is it a reliability or market benefits augmentation or an asset replacement project?

The choice of what investments are excluded from the cap should be left to the TNSP revenue cap application and review process.

4.7 Approach to Off Ramps

The Draft SRP makes provision for off-ramp events. These are defined as possible but unlikely exogenous events, such as force majeure events, that require efficient capital investment for which no specific allowance has been made in the revenue cap decision.

ElectraNet agrees that off-ramp events should be defined as part of the revenue cap application and review process and that only the TNSP may initiate an off-ramp event.

The ACCC proposes a reduced threshold of 5% of the average annual capex target for off-ramp events. In the case of ElectraNet this threshold would amount to approximately \$3.3m in the current regulatory period. The Draft SRP suggests that if an off-ramp event occurred necessitating a \$3m investment ElectraNet would be unable to recover or earn a return on this investment. Such an outcome is unacceptable and inconsistent with the Code objective of providing a fair and reasonable return on efficient investment.

ElectraNet believes that a threshold of 2% of the average annual cap would be appropriate if combined with the following approach to implementation of off-ramp investments:

- Off-ramps requiring efficient investment greater than the 2% threshold would be treated as pass through in the same way as proposed for excluded projects;
- A pass through would not be initiated for off-ramp events requiring efficient investment less than the 2% threshold; and
- In any case actual capex would be rolled into the RAB to determine the opening asset base for the next regulatory period.

ElectraNet generally supports the process proposed by the ACCC for determining an off-ramp investment. However, flexibility should be retained in this process.

4.8 Conclusion on Capex Framework

ElectraNet's proposed incentive framework for capital projects within the ex ante cap and for excluded projects provides stronger incentives for capex efficiencies than exist under the current ex-post capex framework.

The proposed implementation is consistent with the principles and objectives described earlier, as outlined in Table 6.

Table 6: Consistency of Proposed Framework with Principles and Objectives

Principle/ Objective	Comments
Fair and reasonable rate of return on efficient investment	Actual capex is always rolled into the RAB. The possibility of prudent capex being excluded from the RAB is removed.
Equitable sharing of efficiency gains between the TNSP and customers	The rolling 5 year incentive mechanism is a more balanced incentive that provides a more equitable sharing of benefits between the TNSP and customers.
Simplicity	The calculations are simple in nature and not confused by different asset lives associated with different assets classes within a project
Transparent	The logic is open and easily understood, and can be replicated without reference to depreciation calculated from detailed asset registers
Practical	The logic can be applied to capital projects in total or a specific excluded capital project
Balanced incentive between opex and capex	The incentive is similar to the 5-year rolling carry forward mechanism proposed for opex.
Uniform incentives throughout the regulatory period	The business has the same incentive to seek capex efficiencies in each year of the regulatory period

5. Incentive Framework for Opex

This section sets out ElectraNet's views on the ACCC's proposed approach to operating and maintenance expenditure (opex).

5.1 *Opex Target and Carry Forward Mechanism*

The ACCC's proposed approach to incentives for TNSPs to seek opex efficiencies is based on the following:

- Not "clawing-back" any differences between forecast and out-turn opex which arise during the regulatory period;
- Carrying forward efficiency benefits/ losses for five years after the year in which the benefits/ losses are incurred; and
- Setting an efficient target for future opex with regard to past opex and any reasons as to why future opex may be different from past opex.

ElectraNet broadly supports the proposed approach to setting future opex targets and the mechanism for carrying forward efficiency benefits/ losses from one period to the next.

ElectraNet has received confirmation from the ACCC that the glide path carry forward mechanism set out in the 1999 Draft Regulatory Principles applies to ElectraNet at the end of the current regulatory period.

As suggested for capex incentive payments, opex carry forward amounts should be shown as a separate line in the revenue calculation for the next regulatory period. These payments should not be confused with the opex target within the period. Combining these payments in the opex target would be misleading when comparing actual and target opex in the next period.

In addition, incentive payments should not be included with the opex target when modelling the TNSP's tax allowance, otherwise forecast profit for tax purposes will be lower than it should be resulting in a miscalculation of the tax allowance.

ElectraNet notes that the proposed scheme could be amended to exclude the carry forward of net losses from one regulatory period to the next consistent with the practice of other regulators.

5.2 *Self Insurance and Pass-Through*

The Draft SRP identifies four mechanisms for managing risk:

- taking out insurance cover with the cost of the insurance policy included in the opex allowance;
- self-insuring against certain risks with a notional insurance premium included in the opex allowance;

- establishing pass-through rules so that the financial impact of designated events is met by customers. If the risk eventuates the revenue cap is adjusted for the financial effect of the event in accordance with the pass through rules; and
- in very limited and extreme cases, the ACCC may be able to revoke and remake the revenue cap under clauses 6.2.4(d) and (e) of the Code.

ElectraNet broadly supports the proposed approach to risk management.

However, it is important to note that the details of the risk management arrangements put in place for ElectraNet in the current regulatory period differ from those proposed by the ACCC for the future. These differences are the subject of separate discussion between ElectraNet and the ACCC.

5.3 Benchmarking

The Draft SRP states that the ability of the ACCC to make use of high-powered incentives to reduce opex depends on developing high-quality indicators of the likely expenditure requirements of each TNSP, which are independent of the costs actually incurred by each TNSP.

Indicators suitable for this purpose are presently unavailable.

The ACCC proposes to establish a working group with the objective of investigating the development of improved indicators and benchmarking the performance of TNSPs. ElectraNet supports this initiative and is keen to contribute to it.

ElectraNet has previously noted that the benchmarking comparisons that the ACCC has to date undertaken in its revenue cap decisions are simplistic and do not take into account the many factors that result in differences between the efficient costs of network businesses.

The ACCC has previously recognised that:

*“a substantial component of the differences in cost observations between firms are due to legitimate or “uncontrollable” differences in factors which affect the level of costs incurred by the firms”.*⁴

The following examples of why the efficient costs of network businesses might differ were included in the ACCC’s August 2003 Discussion Paper:

- The *nature of the services* provided by each firm (for example, a transmission network designed to provide reliability services might appear to have quite different average costs than an otherwise identical network designed to provide transportation services);
- The *range of services* provided by the firm;

⁴ ACCC Discussion Paper, “2003 Review of the Draft Statement of Principles for the Regulation of Transmission Revenues”, August 2003, p61.

- The *volume of services* provided (a transmission or distribution business carrying smaller volumes might appear as higher average cost if there are economies of scale);
- The *quality of services* provided (a firm which offers $n-2$ reliability might appear as higher average cost than a firm which offers $n-1$ reliability);
- The *price of inputs* (firms in rural areas might have to pay more to attract particular labour skills);
- *Governmental regulations* (companies which have more stringent vegetation clearance requirements may face higher average costs than those which do not);
- The *number, density, load factor and size distribution of the customers they serve* (companies which have a higher load factor or customer density may have lower average cost than those companies which do not);
- *Environmental factors* (companies in regions with high temperatures or a greater propensity to electrical storms may have to take more precautions than those in more temperate areas);
- The age and quality of the capital stock.

Factors such as those listed above need to be taken into account in developing any cost model of TNSP operating costs.

6. Cost of Capital

The Code requires that the ACCC provide TNSPs with a sustainable commercial revenue stream, including a fair and reasonable rate of return on efficient investment.

The regulated rate of return has two purposes:

- to provide a fair and reasonable rate of return on sunk investments; and
- to provide sufficient incentive to undertake efficient new investments.

In its previous submissions, ElectraNet has emphasised that the regulated rate of return is the single most important determinant of the strength of incentives for investment provided by the regulatory framework. If the regulated rate of return is too low efficient levels of new investment will not occur.

Uncertainty about future outcomes also substantially diminishes the strength of incentives for investment provided by the regulatory framework.

Again, ElectraNet emphasised this point in its November 2003 submission⁵:

“Network assets have long lives. Investors must have confidence that they will earn a fair and reasonable rate of return over the life of the assets in order to make the necessary investments. This means that incentives are influenced not only by the allowed WACC in the current regulatory period, but also by investors expectations of WACC in future revenue cap decisions

The ACCC should also be aware that there is only a limited capital market in Australia for investment in the infrastructure sector. Over the past few years, this market has tended to avoid making investments in the regulated utilities sector due to the perceived uncertainty and inconsistency of the regulatory environment (both state and federal)”.

ElectraNet proposed that the ACCC should address this uncertainty by:

“adopting a ‘line in the sand’ approach to setting a level of WACC that investors can reasonably expect over the life of new investments. Once set, the ACCC should not vary from this approach except under very exceptional circumstances”.

The ACCC’s treatment of WACC in the Draft SRP, which clearly sets out the WACC methodology and more importantly establishes expected values for the various WACC parameters, represents a significant step forward in providing a much needed increase in certainty for investors about future WACC outcomes.

Even greater certainty can be provided by raising the hurdle set on moving away from the expected values of WACC parameters.

The Draft SRP states that the ACCC will monitor the available research, empirical and market evidence and reserve the right to change the parameter values with refinement in methodology and data.

⁵ ElectraNet “Submission to the ACCC Review of Draft Principles for the Regulation of Transmission Revenues”, 28 November 2003, p38-40.

The Draft SRP should further increase certainty by clarifying that the expected values of WACC parameters will only be changed if overwhelming new evidence supports such a change.

ElectraNet notes that user groups have previously called for the ACCC to conduct simultaneous revenue cap determinations for TNSPs. We understand that one reason for this is to minimise the currently interminable public debate over the setting of WACC parameters and whether the WACC is too high or too low.

Another initiative that would in part address this concern, but also provide increased certainty about future WACC outcomes is for the ACCC to lock-in the values of WACC parameters (other than those that are dependent on market variables) for a full round of TNSP revenue cap decisions; i.e. the parameter values applied in the TransGrid second round revenue cap decision (other than those that are dependent on market variables) would also be applied to the second round revenue cap decisions of other TNSPs. This would have the benefit of substantially reducing the amount of evidence submitted and debated at future revenue cap decisions.

6.1 Equity Beta

The Draft SRP sets an expected value of one for equity beta, but notes that emerging market data suggests the appropriate value of equity beta for a TNSP may be less than one.

It is important to understand that an equity beta of one implies that the company's equity share has the same systematic risk as the market as a whole – not that the company itself has the same level of systematic risk. The latter would only be only true where the gearing of the company is the same as the gearing of the market. Therefore, in comparing the systematic risk of a company with the market as a whole, what is of relevance is the asset beta of the market and the company, not the equity beta.

If the gearing of the Australian market is considered, the asset beta of a TNSP is significantly lower than the average asset beta of the market. ElectraNet's November 2003 submission included an estimate of the average asset beta for a company listed on the All Ordinaries Index (value weighted) of 0.64 – significantly higher than the asset beta of 0.40 typically provided for TNSPs.

6.2 Cost of debt

The ACCC has adopted a benchmark A credit rating for TNSPs based on a sample of ten Australian electricity network companies that includes both private and government owned entities.

However, the Code suggests that the WACC should be based on the assumption of a privately owned company:

"The weighted average cost of capital is a "forward looking" weighted average cost of debt and equity for a commercial business entity. Accordingly, the Network Owner's weighted average cost of capital will represent the shadow price or social opportunity cost of capital as measured by the rate of return required by investors in a privately-

owned company with a risk profile similar to that of the network company⁶. [emphasis added]

The Draft SRP notes that Standard and Poors has stated that the stronger AA credit rating is predominantly given to a government owned utility.

There are four government owned entities with an AA or AA+ credit rating in the sample of ten used by the ACCC to determine its benchmark A credit rating for all TNSPs.

ElectraNet believes that the government owned entities should be removed from the sample, as the Code suggests, resulting in a lower benchmark A-credit rating for TNSPs.

⁶ National Electricity Code, schedule 6.1, clause 2.1.