

2009 NETWORKS REGULATORY RESET

REVISED REGULATORY PROPOSAL

1 JULY 2009 TO 30 JUNE 2014

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This Proposal contains 84 pages

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1 Executive Summary

This is Power and Water Corporation's (Power and Water) Revised Regulatory Proposal (Regulatory Proposal) to the Northern Territory Utilities Commission (the Commission) for the third regulatory control period. This period commences on 1 July 2009 and ends on 30 June 2014.

This Regulatory Proposal covers all of Power and Water's regulated networks, namely the Darwin/Katherine, Alice Springs and Tennant Creek networks. It relates to Power and Water's direct control services, which comprise standard control services and alternative control services.

This Regulatory Proposal has been prepared based on:

- the methodology specified in the Commission's "Networks Pricing 2009 Regulatory Reset - Price Control Mechanism - Final Decision Paper" (Final Decision Paper) issued in May 2008. The Final Decision Paper requires that Power and Water set out, both in this Regulatory Proposal and in a financial model provided to it by the Commission, cost "building blocks" for the 2008-09 year and estimated revenue for the 2008-09 year, with the difference between these numbers being the initial price increase for the third regulatory control period (Po); and
- the amendments required by the Commission's "Networks Pricing: 2009 Regulatory Reset - Draft Determination" (Draft Determination) issued in November 2008. The Draft Determination required that Power and Water make a number of amendments to its Initial Regulatory Proposal (IRP) submitted in August 2008 and re-submit this to the Commission by 31 January 2009.

Power and Water's proposed Po adjustment factor has been based on independent asset valuations recently prepared by Sinclair Knight Merz (SKM), as opposed to the Commission's preferred roll-forward of the initial value of the regulatory asset base of \$350 million as at 1 July 2002. One of the main reasons for engaging SKM, recognised experts in the field of asset valuations, was to address concerns raised by the Commission during the 2004 Regulatory Reset and subsequent Off-ramp Review. This Regulatory Proposal sets out clearly the importance of using the SKM valuation. This asset valuation is consistent with generally accepted regulatory practice which the Commission must have regard to under Schedule 7, clause 6(2)(c) of the Northern Territory Electricity Networks (Third Party Access) Code (NT Code).

At the time of preparation of this Proposal, the Final Report of an Independent Inquiry (Davies Inquiry) by the Northern Territory Government into equipment failures at Casuarina Zone Substation and into Power and Water's maintenance practices had not been released. A Preliminary Report of the Davies Inquiry dated 10 November 2008 recommended rigorous condition assessment of Power and Water's zone substation switchboards and their protection equipment, which is currently taking place. It is not possible at this stage to determine the costs associated with responding to the recommendations of the Davies Inquiry. This Proposal therefore excludes those costs, but provides details of a proposed pass

through arrangement and a trigger mechanism for consideration in the Final Determination.

Power and Water's electricity network cost "building blocks" for the 2008-09 year total \$124.8 million, comprising a return on assets of \$65.8 million, depreciation of \$22.2 million, operating and maintenance costs of \$54.9 million and the removal of \$18.1 million in "holding gains" as required by the Commission's Po Adjustment Model. Power and Water's revenue from standard control network services in 2008-09 is expected to be \$80.0 million. Therefore, Power and Water proposes that the Po adjustment required for the third regulatory control period is 56.0%.

Once approved, this Po adjustment (Po) will mean that there is a significant increase in weighted average prices. This is driven by two principal factors.

Firstly, Power and Water's electricity network capital and operating expenditure in 2008-09 is much larger than in 2003-04 when the last Po was established. It has become more expensive per unit to offer network services in the Northern Territory over the second regulatory control period, both because the network has grown faster than energy use and also because the costs of sourcing the inputs for these services (both labour and capital) have increased significantly.

Secondly, and more importantly, it is now clear that the Po and weighted average prices set in 2004 were not reflective of actual expenses over the second regulatory period, and that there was a significant gap between Power and Water's costs and the network prices allowed by the Commission. This is because the Commission's 2004 Final Determination:

- established a Total Factor Productivity (TFP) methodology to derive allowable revenue which did not take account of (then) future costs; and
- applied benchmarking studies that aggressively reduced the allowed operations and capital expenditure costs to less than Power and Water was required to spend over the period.

Power and Water's prudent expenditure in both capital and operating terms, in contrast, increased significantly faster than the 2004 Final Determination. Consequently a real increase in the weighted average tariff is now required.

Power and Water has taken considerable care in this Regulatory Proposal to comply with the Final Decision Paper, including carefully setting out and justifying the 2008-09 capital expenditure and operating expenditure forecasts against the requirements of the National Electricity Rules (the Rules). It has been able to provide detail on each capital expenditure project and each major line item of operating and maintenance expenditure for the Commission's information and assessment. To further aid the Commission, and to demonstrate consistency of projects and capability to deliver them, a similar detailed presentation of 2007-08 capital expenditure by project has also been provided as an Appendix.

The Po proposed in this Regulatory Proposal will provide sufficient revenue in 2009-10 for Power and Water to meet its prudent costs in 2008-09. It does not provide any means, other than through the X factor for tariff escalation, for meeting the costs of future works during the regulatory control period if those costs outstrip demand growth. The Regulatory Proposal presents evidence that the base year

assessment of the 2008-09 cost building blocks will not allow Power and Water to recover sufficient revenue to meet its forward looking capital and operating expenditure obligations. The shortfall over the third regulatory period is estimated to be \$157.3 million using the AER's Post Tax Revenue Model (PTRM) and the Commission's proposed Po and X Factors. Power and Water looks forward to these issues being resolved prior to the Final Determination.

Power and Water has also taken this opportunity to simplify the structure of its network tariffs by progressively moving away from regional tariffs and introducing Territory wide tariffs. To initiate this, Power and Water has embarked on a process of converging its network tariffs for customers consuming greater than 750 MWh per annum.

As a first step, Power and Water has converged Tennant Creek Peak and Off-Peak Energy and Demand tariffs for customers consuming greater than 750 MWh per annum with those in Darwin-Katherine. Over time and within the regulatory side constraints, Power and Water will also bring Alice Springs tariffs for customers consuming greater than 750 MWh in line with those in Darwin-Katherine and then gradually introduce Territory wide tariffs for customers consuming below 750 MWh per annum.

2 Introduction

2.1 Purpose of this Document

This is Power and Water's Regulatory Proposal to the Commission for the third regulatory control period. This period commences on 1 July 2009 and ends on 30 June 2014.

This Regulatory Proposal covers all of Power and Water's regulated networks, namely the Darwin/Katherine, Alice Springs and Tennant Creek networks.

This Regulatory Proposal relates to Power and Water's direct control services, which comprise standard control services and alternative control services. It has been developed in accordance with, and complies with the relevant requirements of:

- the Commission's Final Decision Paper issued in May 2008;
- the Northern Territory regulatory and legislative framework including the *Electricity Networks (Third Party Access) Act 2000* (NT Act) and the NT Code;
- the Commission's Draft Determination issued in November 2008. The Draft Determination required that Power and Water make a number of amendments to its IRP submitted in August 2008 and re-submit this to the Commission by 31 January 2009;
- Chapter 6 of the Rules where applicable; and
- various other regulatory obligations or information instruments published by the Commission, including the Commission's Po Adjustment Model.

2.2 Required Amendments in Draft Determination

The Draft Determination required a number of amendments. Details of these amendments are set out below.

Amendment 5-1

- With regard to the year's opening RAB value for 2008-09 (and the associated series for each of the preceding years in the second regulatory period), the revised proposal must be based on either:
 - the Commission's Estimates of Opening RAB Values for the Second Regulatory Period;
 - or values which Power and Water demonstrates to the Commission's satisfaction are consistent with application of the November revised Po adjustment model and all related requirements in the Final Decision Paper and elsewhere in the Draft Determination.

In order to demonstrate to the Commission's satisfaction that proposed alternative values are consistent with application of the November revised Po adjustment

model, Power and Water must correctly fill out the roll-forward calculations in the Po adjustment model, including all capital contributions and asset disposals for each of the asset classes over the time period, and using the depreciation calculations and presentation in the model, and complete all associated reconciliations as part of its documentation.

Amendment 5-2

- With regard to the annual estimate of annual gross capital expenditure in 2008-09, the revised proposal must be based on either:
 - the value of \$56.582 million;
 - or a value which Power and Water demonstrates to the Commission's satisfaction is consistent with the November revised Po adjustment model and all related requirements in the Final Decision Paper and elsewhere in the Draft Determination.

Amendment 5-3

- With regard to the annual nominal-terms straight-line depreciation charge in 2008-09 (and the associated series for each of the preceding years in the second regulatory period), the revised proposal must be based on either:
 - the Commission's Estimates of Depreciation for the Second Regulatory Period;
 - or values which Power and Water demonstrates to the Commission's satisfaction are consistent with the November revised Po adjustment model and all related requirements in the Final Decision Paper and elsewhere in the Draft Determination.

Amendment 5-4

- With regard to the estimate of actual operating expenditure ("opex") in 2008-09 (and the associated second regulatory period actual opex series), the revised proposal must be based on either:
 - the Commission's Estimates of Actual Opex for the Second Regulatory Period;
 - or values which Power and Water demonstrates to the Commission's satisfaction are consistent with the November revised Po adjustment model and all related requirements in the Final Decision Paper and elsewhere in the Draft Determination.

Amendment 5-5

- With regard to the 'return of efficient/prudent operating expenditure' component of the building blocks calculation for 2008-09, the revised proposal must be based on either:

- a percentage factor of 16.9% which is applied to actual opex for 2008-09 in the November revised Po adjustment model in order to arrive at the prudent and efficient level of opex for 2008-09;
- or a percentage factor which Power and Water demonstrates to the Commission's satisfaction is an appropriate percentage based on additional information and estimates on the adverse operating conditions faced by Power and Water relative to its peers.

Amendment 5-6

- With regard to the estimate of actual revenue in 2008-09 (and the associated second regulatory period actual network revenue series), the revised proposal must be based on either:
 - the Commission's Estimate of Actual Revenue for the Second Regulatory Period;
 - or values which Power and Water clearly demonstrates to the Commission's satisfaction are consistent with the November revised Po adjustment model and all related requirements in the Final Decision Paper and elsewhere in the Draft Determination.

Amendment 5-7

- The revised regulatory proposal must be accompanied by a fully completed version of the November revised Po adjustment model, which contains not only all 2008-09 components of the Po calculation but all associated items required to complete the Po calculation and all reconciliations requested in the model.

Amendment 5-8

- The revised regulatory proposal must be accompanied by both:
 - a completed version of the AER's post-tax revenue model for the five years of the third regulatory control period; and
 - a statement as to how (and why) the policies and methodology underpinning Power and Water's financial forecasts for the 2009-10 to 2013-14 period are an improvement on the policies and methodologies underpinning Power and Water's 2004 forecasts for the 2004-05 to 2008-09 period.

Amendment 6-1

- The revised proposal must be accompanied by a stand-alone document capable of being published on Power and Water's website which detail the principles and methods that Power and Water proposes to apply when establishing the reference tariffs to apply to individual network access tariffs, consistent with clause 75(5) of the NT Code.

Amendment 6-2

- The stand-alone network pricing principles and methods document must include or be accompanied by a framework for negotiating discounted network tariffs to replace the Commission's discounting framework.

Amendment 6-3

- The stand-alone network pricing principles and methods document must include or be accompanied by a Capital Contributions Statement, consistent with clause 81(2) of the NT Code.

Amendment 6-4

- The revised proposal must be accompanied by:
 - indicative Network Tariff Schedules for the regulatory year commencing 1 July 2009, for direct control services, that are consistent with all other elements of the regulatory proposal;
 - a statement of expected network price trends giving an indication of how Power and Water expects network prices – both average prices and the structure of prices – to change over the regulatory period and the reasons for the expected changes; and
 - a statement, and a supporting spreadsheet, demonstrating the pricing proposal's compliance with the various control mechanisms established by the Commission's Final Decision Paper and Draft Determination.

Amendment 6-5

- The activity descriptions of the 'fee-based services' types of alternative control services must be clearly and exhaustively stated, in detail similar to the descriptions in Table 3-1 in chapter 3 of the Draft Determination.

Amendment 6-6

- The activity descriptions of the 'quoted services' types of alternative control services must be clearly and exhaustively stated, in detail similar to the descriptions in Table 3-1 in chapter 3 of the Draft Determination.

Amendment 6-7

- The proposed control mechanism for 'quoted services' types of alternative control services cannot include a WACC-based markup on direct labour and materials costs.

Amendment 6-8

- The cost pass through events proposed by Power and Water additional to the events specified in clause 6.6.1 of the National Electricity Rules must be limited to the occurrence of specific events which are:

- unanticipated at the time the regulatory proposal is approved (unless specifically exempted by the Commission);
- beyond the control (i.e., not as a result of actions) of Power and Water's board or management; and
- must include an explicit materiality provision in relation to the change in cost involved.

The following table identifies where these amendments have been made in this Regulatory Proposal.

Table 1: Amendments

Amendment	Action Taken by Power and Water	Section of this Regulatory Proposal
Amendment 5-1	Power and Water has not adopted the Commission's proposed values. It has instead proposed SKM asset values as at 30 June 2007 and input these numbers into the Po Model.	Section 7, 8 and the Po Model.
Amendment 5-2	Power and Water has not adopted the values proposed by the Commission. It has updated its 2008-09 capex values.	Section 6, 8 and the Po Model.
Amendment 5-3	Power and Water has not adopted the values proposed by the Commission. The Po Model calculates new proposed depreciation values.	Section 8 and the Po Model.
Amendment 5-4	Power and Water has not adopted the values proposed by the Commission. It has updated its 2008-09 opex values.	Section 5, 8 and the Po Model.
Amendment 5-5	Power and Water has not adopted the values proposed by the Commission. It has proposed an alternative efficiency reduction of zero.	Section 5, 8 and the Po Model.
Amendment 5-6	Power and Water has accepted the revenue amount for 2008-09 proposed by the Commission.	Section 8 and the Po Model.
Amendment 5-7	Power and Water has updated the Commission's Po Model and provided all reconciliations requested in the model.	Provided in the Po Model.
Amendment 5-8	Power and Water has provided an updated AER PTRM Model (with errors corrected in the public version of that model) and has made the required statement in this Regulatory Proposal.	AER's PTRM.
Amendment 6-1	Power and Water has prepared the required stand-alone document.	Appendix G - Pricing Principles and Methods Statement.
Amendment 6-2	Power and Water has complied with this requirement.	Appendix G - Pricing Principles and Methods Statement.
Amendment 6-3	Power and Water has complied with this requirement.	Appendix H - Capital Contributions Policy.
Amendment 6-4	Power and Water has complied with this requirement.	Section 11.
Amendment 6-5	Power and Water has complied with this requirement.	Section 2.3.
Amendment 6-6	Power and Water has complied with this requirement.	Section 2.3.
Amendment 6-7	Power and Water has complied with this requirement.	Section 11 and Appendix G - Pricing Principles and Methods Statement.
Amendment 6-8	Power and Water has complied with this requirement.	Section 10.

2.3 Classification of Power and Water's Services

Appendix A of the Commission's Final Decision Paper includes a default services classification based on its 2004 "Excluded Services Determination", but expressed in the terminology of the services classification used by the Rules.

Paragraph 2.3 of the Final Decision Paper required Power and Water to lodge a services classification proposal with the Commission by 30 June 2008, in accordance with the classification in Part B Division 1 of the Rules, if it was seeking to propose a different classification from that in Appendix A.

On 30 June 2008, Power and Water submitted a proposal to the Commission to classify its services in line with the default services classification in Appendix A of the Final Decision Paper with one exception. Above-standard connection services and other quoted services were proposed to be classified as alternative control services.

In accordance with paragraph 2.4 of its Final Decision Paper, the Commission issued an Interim Approval of Power and Water's service classification proposal in July 2008, subject to the following amendments:

- the classification of high load escort services as an alternative control service rather than an unregulated service; and
- the classification of disconnections and reconnections as a standard control service rather than an alternative control service.

Power and Water accepted the first amendment, however contacted the Commission shortly after the Interim Approval to request that the Commission reconsider the classification of disconnections and reconnections as a standard control service to an alternative control service. The Commission approved this classification in the Draft Determination and accordingly, the following classifications of services have been applied in this Regulatory Proposal:

- Contestable networks engineering consulting services are unregulated;
- Conveyance services, comprising conveyance of electricity to connection points within regulated areas in the Northern Territory, are classified as standard control services;
- Power and Water's current excluded services – also termed "miscellaneous services" – are classified as alternative control services and regulated under a "schedule of fees" price control. This form of price control means that, depending on the type of activity, the customer will either pay a fee based on a published schedule of charges or a fee will be quoted to the customer once the service has been scoped by Power Networks; and
- Above-standard connection services and other quoted services (including high load escort services and disconnections and reconnections) are classified as alternative control services and regulated under a "schedule of fees" price control. This form of price control means that, depending on the type of activity, the customer will either pay a fee based on a published

schedule of charges or a fee will be quoted to the customer once the service has been scoped by Power Networks.

It should be noted that Power and Water has amended some of the classifications of alternative control services in the Draft Decision, principally to add several new services and to ensure that the maximum number of services possible were fee based rather than quoted. This reflects a desire by Power and Water to provide the maximum degree of transparency and certainty through its charges to all customers. The specific amendments are:

- for 'non-standard data services' – Power and Water considers that a fixed fee can be calculated for the average time taken to retrieve load profiles or billing data, and therefore that this should not be a quoted service;
- for 'supply abolishment' – Power and Water considers that the cost of the service will be dependent on the complexity of the works required to abolish supply. Given that it is unlikely the cost of the service can be calculated in advance without scoping the work, Power and Water proposes to re-classify this as a 'quoted service'; and
- for 'temporary supply services', Power and Water considers that a fixed fee can be calculated in advance for the cost of supplying low voltage services however scoping of work would be required for high voltage services. Power and Water therefore proposes classifying 'temporary supply services' as 'quoted services' for high voltage supply and 'fee-based' for low voltage supply.

The table below provides a summary of the classification of services in accordance with the Commission's required Amendments 6-5 and 6.6 of the Draft Determination.

Table 2: Classification of Services

Grouping of Services	Activity Description	Power and Water Proposed Group	Current Classification	Classification in Regulatory Proposal
Network Services	Constructing the network	Conveyance services	Regulated network access services	Standard control service
	Maintaining the network	Conveyance services	Regulated network access services	Standard control service
	Operating the network	Conveyance services	Regulated network access services	Standard control service
	Planning the network	Conveyance services	Regulated network access services	Standard control service
	Designing the network	Conveyance services	Regulated network access services	Standard control service
	Emergency response	Not specifically identified	Not specifically identified	Standard control service
	Administrative support	Not specifically identified	Not specifically identified	Standard control service
Connection Services	Commissioning of connection assets	Standard connection services	Regulated network access services	Standard control service
	Service connection	Standard connection services	Regulated network access services	Standard control service
	Installation inspection	Standard connection services	Regulated network access services	Standard control service
	Operating & maintaining connection assets	Standard connection services	Regulated network access services	Standard control service
Metering Services	Commissioning of metering and load control equipment	Metering services	Regulated network access services	Standard control service
	Scheduled meter reading	Metering services	Regulated network access services	Standard control service
	Unscheduled meter reading – non-chargeable	Metering services	Not specifically identified	Standard control service
	Metering investigation	Metering services	Not specifically identified	Standard control service
	Maintaining and repairing meters and control equipment	Metering services	Regulated network access services	Standard control service
Quoted Services	High load escorts	Quoted services	Not specifically identified	Alternative control service
	Covering of low voltage mains	Quoted services	Not specifically identified	Alternative control service
	Rearrangement of network assets	Quoted services	Excluded services	Alternative control service
	Ancillary metering services	Quoted services	Excluded services	Alternative control service

Grouping of Services	Activity Description	Power and Water Proposed Group	Current Classification	Classification in Regulatory Proposal
	Supply enhancement	Quoted services	Excluded services	Alternative control service
	Metering enhancement	Quoted services	Excluded services	Alternative control service
	Emergency recoverable works	Quoted services	Not specifically identified	Alternative control service
	Supply abolishment	Quoted services	Not specifically identified	Alternative control service
	Temporary supply services – High Voltage	Quoted services	Excluded services	Alternative control service
	Rectifying illegal connections	Quoted services	Not specifically identified	Alternative control service
	Unmetered supply services	Quoted services	Not specifically identified	Alternative control service
Fee Based Services	Disconnection and reconnection	Fee based services	Excluded services	Alternative control service
	Temporary supply services – Low Voltage	Fee based services	Excluded services	Alternative control service
	Fault response – not service providers fault	Fee based services	Not specifically identified	Alternative control service
	Wasted attendance	Fee based services	Not specifically identified	Alternative control service
	Provision, construction and maintenance of street lighting assets	Fee based services	Not specifically identified	Alternative control service
	Non-standard data services	Fee based services	Not specifically identified	Alternative control service
	Installation of minor equipment to network assets – eg: Tiger Tails	Fee based services	Not specifically identified	Alternative control service
	Cable location services	Fee based services	Not specifically identified	Alternative control service
	Unscheduled metering services – chargeable	Fee based services	Not specifically identified	Alternative control service
Unregulated Services	Contestable networks engineering consulting services	Unregulated services	Unregulated service	Unregulated service

2.4 Structure of this Regulatory Proposal

This Regulatory Proposal is structured as follows:

Section 3 details Power and Water's understanding of the regulatory requirements for this Regulatory Proposal based on the Final Decision Paper and Draft Determination and explains how it complies with these requirements;

Section 4 provides relevant background information about Power Networks' business and operating environment;

Section 5 provides a detailed justification of Power Networks' forecast operating expenditure for 2008-09 against the requirements of the Rules;

Section 6 provides a detailed justification of Power Networks' forecast capital expenditure for 2008-09 against the requirements of the Rules;

Section 7 explains Power Networks' proposal in respect of the asset base valuation for standard control services over the third regulatory control period;

Section 8 sets out the information that Power Networks must provide in this Regulatory Proposal to determine the Po adjustment factor for its standard control services;

Section 9 sets out the information that Power Networks must provide in this Regulatory Proposal in relation to its alternative control services;

Section 10 sets out the additional cost pass through provisions that Power Networks is seeking to have included in the regulatory determination for the third control period;

Section 11 sets out matters relating to Power and Water's standard and alternative control services pricing proposals;

Appendix A provides a detailed explanation of Power Networks' forecast capital expenditure for 2008-09;

Appendix B provides a detailed explanation of Power Networks' capital expenditure for 2007-08;

Appendix C is the SKM Asset Verification and Valuation Report;

Appendix D is the Commission's Po November 2008 Adjustment Model and associated reconciliation information submitted in conjunction with this Regulatory Proposal;

Appendix E is Power and Water's tariff schedule for standard control services for 2009-10;

Appendix F is Power and Water's tariff schedule for "fixed fee" alternative control services for 2009-10;

Appendix G is Power and Water's Pricing Principles and Methods Statement to apply during the third regulatory period;

Appendix H is Power and Water's Capital Contributions Policy that is to be applied to any new or upgraded network access services sought by network users; and

Appendix I is a version of the AER's PTRM Model containing five years of forecasts for Power and Water.

3 Regulatory Requirements for this Regulatory Proposal

Consistent with paragraphs 2.22 and 3.35 of the Final Decision Paper, where a matter has not been dealt with in the Final Decision Paper, Power and Water has complied with:

- the NT Code, where the matter has been dealt with in the NT Code;
- Chapter 6 of the Rules, where the matter has been dealt with in the Rules but has not been dealt with in the NT Code; and
- the pricing principles in the NT Code, where the matter has not been dealt with either in the NT Code or the Rules.

3.1 Scope and Timing of this Regulatory Proposal

Power and Water has met the following requirements of the Final Decision Paper and the Draft Determination in relation to the scope and timing of this Regulatory Proposal:

- Paragraph 1.25 of the Draft Determination requires Power and Water to lodge a Revised Regulatory Proposal with the Commission by 31 January 2009. Power and Water has complied with this requirement by submitting this Regulatory Proposal by this date;
- Paragraph 2.6 of the Final Decision Paper requires that this Regulatory Proposal must:
 - cover all of Power and Water's regulated networks. This Regulatory Proposal covers each of the Darwin/Katherine, Alice Springs and Tennant Creek networks; and
 - include separate proposed prices for each regulated network. This requirement was superseded by Amendment 6.1 in the Draft Determination which required a separate pricing proposal to be prepared and indicative prices to be provided for the 2009-10 year. Power and Water has provided its proposed tariffs for 2009-10 in Appendix E of this Regulatory Proposal.
- Paragraph 2.7 of the Final Decision Paper requires that this Regulatory Proposal must:
 - include all elements specifically required by the Final Decision Paper. This section explains how Power and Water has met this requirement; and
 - identify any confidential information that is not suitable for publication. Power and Water will provide a copy of this Regulatory Proposal with confidential information removed, and therefore suitable for publication.

3.2 Requirements for Standard Control Services

Power and Water has met the following requirements of the Final Decision Paper in this Regulatory Proposal in relation to its standard control services:

- Paragraph 2.18 – Power and Water has prepared this Regulatory Proposal in accordance with the Final Decision Paper, any other regulatory information instruments and its approved services classification;
- Paragraph 2.19 – Power and Water’s proposed Po adjustment factor has been calculated in accordance with the Commission’s Revised November 2008 Po Adjustment Model and complies with all additional requirements issued by the Commission;
- Paragraph 2.24 – consistent with the requirements under this paragraph and the Commission’s Po Adjustment Model, Power and Water has:
 - applied the parameter values with respect to a pre-tax rate of return as specified by the Commission in Table 4-1 of the Draft Determination. In accordance with paragraph 5.31 of the Final Decision Paper, the other rate of return parameters have been calculated in accordance with Chapter 6 of the Rules;
 - prepared its annual depreciation expense to conform with the requirements of clause 6.5.5(b) of the Rules and with Amendment 5-3 of the Draft Determination;
 - calculated and justified its operating expenditure forecasts in accordance with clause 6.5.6(c) of the Rules, the manner used by the Commission to calculate the value of X_2 , Power and Water’s approved cost allocation procedures and with Amendments 5-4 and 5-5 of the Draft Determination. Section 5 of this Regulatory Proposal sets out how Power and Water has complied with these requirements; and
 - ensured that its estimates of annual revenue are consistent with the NT Code’s pricing principles, the requirements of the Final Decision Paper and with Amendment 5-6 of the Draft Determination;
- Paragraph 2.19 – consistent with the requirements under this paragraph of the Final Decision Paper:
 - Power and Water has separately provided a draft Network Pricing Principles and Methods Statement to apply to the setting of individual prices. This has been removed from the previous Section 12 of the IRP and has been provided to the Commission as a stand-alone document in Appendix G in accordance with Amendment 6-1 of the Draft Determination;
 - the Statement complies with Amendment 6-1, the applicable requirements of the Final Decision Paper, the NT Code and clauses 6.18.3, 6.18.4 and 6.18.5 of the Rules. The Statement also includes a framework for negotiating discounted network tariffs to replace the

- Commission's discounting framework in line with Amendment 6-2 of the Draft Determination;
- Power and Water has separately submitted to the Commission a revised Capital Contributions Policy (refer Appendix H) as required by Amendment 6-3 of the Draft Determination;
 - Appendix E of this Regulatory Proposal contains indicative Network Tariff Schedules for the regulatory year commencing 1 July 2009, consistent with all other elements of the Regulatory Proposal and with Amendment 6-4 of the Draft Determination. Section 11 includes a statement of the expected trends in network prices over the regulatory period as required by Amendment 6-4 of the Draft Determination; and
 - Power and Water's proposed Network Tariff Schedules comply with the Commission's price control mechanism for standard control services and are in all other respects consistent with the draft Network Pricing Principles and Methods Statement. This is also required by paragraph 2.26 of the Final Decision Paper;
- Paragraph 7.42 – consistent with the requirements under this paragraph of the Final Decision Paper and section 6.18.2(b) of the Rules, section 11 of this Regulatory Proposal:
 - sets out Power and Water's proposed Network Tariff Schedules for direct control services, including the tariff classes that are to apply for 2009-10, the proposed tariffs for each tariff class and, for each proposed tariff, the charging parameters (i.e. the constituent elements of a tariff) and the elements of service to which each charging parameter relates;
 - describes the nature and extent of change in the proposed Network Tariff Schedules from the tariffs applying in 2008-09; and
 - demonstrates compliance with the Final Decision Paper and the Draft Network Pricing Principles and Methods Statement;
 - Paragraph 2.8 – Section 8 of this Regulatory Proposal provides details and an explanation of all amounts, values and inputs relevant to the calculation of the Po adjustment factor and the indicative pricing proposal, together with a demonstration that they comply with the requirements of the Final Decision Paper;
 - Paragraph 2.26 – this paragraph specifies certain requirements in relation to the way in which the price control must be applied for standard control services. Section 11 of this Regulatory Proposal details how Power and Water has complied with these requirements, being:
 - Power and Water's weighted average prices for standard control services are the financial variable subject to price control;
 - the price control is applied via a tariff basket, which is the same as a weighted average price cap and has been applied in the second regulatory control period; and

- an ex-ante building block assessment of Power and Water's forecast 2008-09 network costs and revenues is used to determine the Po adjustment to be applied at the start of the third regulatory control period;
- Paragraphs 5.58 and 5.64 – these paragraphs require Power and Water to specify the total annual revenue expected from all related network tariffs during 2008-09. Power and Water has provided this information in section 11 of this Regulatory Proposal;
- Paragraph 2.9 – this allows Power and Water to propose a demand management scheme and a service target performance incentive scheme. Power and Water has elected not to propose either of these schemes in this Regulatory Proposal; and
- Paragraph 6.42 – this allows Power and Water to propose additional cost pass through events to apply with respect to standard control services during the next regulatory control period. Power and Water has proposed additional cost pass through events in section 10 of this Regulatory Proposal.

The Draft Determination required that Power and Water either accept the values proposed by the Commission or propose alternative values. Power and Water has proposed alternative values in this Regulatory Proposal for the value of assets, 2008-09 operations and maintenance costs, the operating costs efficiency factor, capital expenditure for 2008-09 and depreciation.

3.3 Requirements for Alternative Control Services

Paragraph 2.10 of the Final Decision Paper requires Power and Water to propose a control mechanism in relation to its alternative control services. Power and Water has provided this information in its Pricing Principles and Methods Statement. Consistent with paragraph 2.20 of the Commission's Final Decision Paper, Power and Water's control mechanism meets the requirements of clause 6.2.5 of the Rules.

This Regulatory Proposal also complies with Amendment 6-4 of the Draft Determination which requires that Power and Water include indicative network tariff schedules for the regulatory year commencing 1 July 2009 for direct control services, including alternative control services. This information is provided in section 11 of this Regulatory Proposal.

3.4 Requirements for Negotiated Network Services

Paragraph 2.10 of the Final Decision Paper requires Power and Water to propose a negotiating framework in relation to its negotiated network services. Power and Water does not have any negotiated network services and therefore has not proposed a negotiating framework for these services.

3.5 Expected Revenue and Costs over the Third Regulatory Period

Power and Water is concerned that the Draft Determination does not provide it with revenue sufficient to meet its forecast costs over the next regulatory period. This is because:

- Power and Water is forecasting that operating and capital expenditure will increase substantially over the next ten years. These forecasts do not yet include any expenditure impacts from the impending Davies Inquiry, and are therefore likely to be under-estimated; and
- the impact of these forecasts is that there is a significant difference between the revenue that Power and Water will recover under the Commission's Draft Determination and its forecast costs over the third regulatory period.

Power and Water's operating and maintenance and capital expenditure forecasts are set out in the table below.

	2009-10	2010-11	2011-12	2012-13	2013-14
Operating Expenditure (\$M)	61.831	66.105	65.963	70.489	74.115
Capital Expenditure (\$M)	95.939	68.547	65.357	61.275	72.840

Power and Water also expects that it will take advantage of the proposed pass through mechanism in order to allow it recover costs consequent to the Davies Inquiry once the Final Report is released.

Power and Water has undertaken a review of its revenue and costs using the AER's PTRM Model, as required by Amendment 5-8 of the Draft Determination. This model assumes that the \$350 million roll-forward asset valuation is used, as set out in the Draft Determination, and that Power and Water's operating expenditure forecasts are adjusted for a 17% "efficiency factor" each year.

The net present value of the loss faced by Power and Water is \$157.3 million, demonstrating that the Commission's Draft Determination does not provide Power and Water with sufficient revenue necessary to meet its obligations over the third regulatory control period. This suggests that:

- the X factors are currently insufficient to take account of Power and Water's actual requirements to spend money on its distribution network and its customers, regardless of the asset valuation method or operational cost efficiency scenarios chosen; and
- the TFP method adopted by the Commission should be balanced with a check by the Commission that Power and Water will not be under-funded in this Determination process. The outcomes from the PTRM show clearly, in the absence of the outcomes of the Davies Inquiry, that a large Po at the cessation of the third regulatory period is a certainty if the current Draft Determination parameters are maintained.

4 Power Networks Business and Operating Environment

4.1 Background to Power and Water

Power and Water:

- is the sole provider of electricity, water supply and sewerage services to almost 80,000 customers across the Northern Territory – an area of more than 1.3 million square kilometres;
- is a vertically and horizontally integrated electricity, water and sewerage business, with:
 - Electricity Network services, in both “regulated” and “unregulated” areas of the Northern Territory through its business unit, “Power Networks”;
 - Electricity Generation services, including from generation facilities that it owns or that are owned by others and contracted to Power and Water;
 - Water and Sewerage services;
 - Retail electricity services to contestable customers, which are open to competition from other retailers; and
 - Retail electricity services to non-contestable customers, which use less electricity than a threshold amount per annum set by Government.
- provides services across varying environments, from the tropics of the north to the deserts of Central Australia. With total assets of more than \$1 billion, Power and Water is one of the largest businesses in the Northern Territory, employing more than 750 Territorians.

Power and Water became the Northern Territory’s first Government Owned Corporation under the *Government Owned Corporations Act 2001* (GOC Act) on 1 July 2002. In accordance with the GOC Act, Power and Water’s objectives are to:

- operate at least as efficiently as any comparable business; and
- maximise the sustainable return to the Territory on its investment in Power and Water.

The Shareholding Minister for Power and Water is appointed in accordance with section 8 of the GOC Act. The Shareholding Minister’s powers and responsibilities include:

- setting clear objectives for Power and Water, through the annually negotiated Statement of Corporate Intent (SCI);
- tabling the SCI and the annual report; and

- issuing directions after consulting the Board and requesting it to advise whether or not compliance with the direction would be in its best interests.

The Board of Power and Water is a decision making body and is involved in strategic oversight, establishing the environment in which management will perform, holding management to account, and reporting to the Shareholding Minister. The Board:

- sets strategic directions, objectives and targets for the business;
- maintains awareness of the major risks involved in the business, and establishes procedures, systems and controls to manage risks;
- monitors Power and Water's performance and the performance of management in implementing strategic directions and achieving objectives and targets;
- ensures compliance in legal matters;
- reviews its own performance and that of the Managing Director; and
- reports to the Shareholding Minister.

The agreement between the Board and the Shareholding Minister in relation to expected operational and financial performance is set out in the SCI which is published each year. This sets out Power and Water's proposed strategies, risks, investment plans and performance targets. The Shareholding Minister approves the budget for the financial year to which the SCI relates and notes the financial projections for the following four years. The assumptions and financial projections in the SCI are also subject to independent external audit and assurance.

Stakeholders, including the Shareholding Minister, consider that the 2008-09 SCI builds on the improvements made in the 2007-08 SCI. The analysis of Power and Water's strategies, risks, financial projections and capital investment program was considered to be of a higher quality. Underlying internal financial projections, including balance sheets, were prepared and detailed in relevant Business Unit Plans.

An SCI Steering Committee, chaired by the Managing Director and comprising General Managers from all Business Units, as well as representation by Northern Territory Treasury, was responsible for preparing the 2008-09 SCI. High level oversight was provided at key stages by a new Board sub-committee, the Capital Investment, Asset Management and Fuel Supply Committee. As such, the SCI process now provides a rigorous basis for Power and Water's forecasts.

4.2 Power Networks

Power Networks is the largest business unit in Power and Water employing 225 staff including trades, technical, administration and engineering personnel. As advised to the Commission in June 2008, Power Networks was restructured following a review by Power and Water management and consultants from PricewaterhouseCoopers. The new structure is designed to provide a clearer demarcation of duties between Power Networks' groups and improved allocation of

staff and resources to realise greater efficiencies and improved service delivery outcomes for Power Networks' customers.

Power Networks operates under a Network Licence issued by the Commission which authorises it to:

- own and operate an electricity network within the geographic area specified in Schedule 2 of that Network Licence as set out below; and
- connect the electricity network to another electricity network, in accordance with the terms and conditions of the Network Licence.

Schedule 2 of the Network Licence¹ lists the regulated electricity network(s) covered by the Licence:

- Darwin (city, suburbs and surrounding rural areas);
- Katherine (township and surrounding rural areas);
- Darwin-Katherine Transmission Line (132kV) which extends from the network 132kV bus at Channel Island Power Station to a 132/22kV substation adjacent to the Katherine Power Station, with a 132/22kV substation at Manton and a 132/66kV substation at Pine Creek;
- Tennant Creek (township and surrounding rural areas); and
- Alice Springs (township and surrounding rural areas).

Power and Water's network:

is not connected to the national grid. It is a stand alone network with three interconnected systems;

- has around 5,686 kilometres of lines, of which the largest system, Darwin/Katherine, accounts for around 4,710 kilometres of line;² and
- operates in diverse climates, each of which brings with it unique challenges such as cyclones, over 22,000 lightning strikes a year, tropical storms with winds in excess of 100 kilometres per hour in the north, and dust storms and drought in Central Australia.

Power and Water's distribution network is summarised by voltage and type in the following table.

¹ Minor centres have been excluded from this list.

² As reported in the *Northern Territory Electricity Market* through the 2008 Annual Retail Licence Return.

Table 3: Power and Water's Network Assets

POWER AND WATER DISTRIBUTION ASSETS BY KM (2007-08)	
132kV Overhead	344
66kV Overhead	304
66kV Underground	17
33kV Overhead	55
HV Overhead (22/11kV and below)	2,806
HV Underground (22/11kV and below)	573
LV Overhead (22/11kV and below)	1,107
LV Underground (22/11kV and below)	480
Total	5,686

4.2.1 Related Party and Outsourcing Contracts

Power Networks' most important related party contract is its Service Level Agreement with Power and Water Retail, which is the agreement by which Retail purchases the transportation of electricity through the networks, and other services such as disconnections and reconnections, for its contestable and non-contestable customers.

Power Networks uses external contractors for some aspects of the delivery of its capital and operating expenditure. It has a panel contract arrangement in place from which it selects companies for design, civil works and construction works with a value of less than \$1 million, and publicly tenders contracts larger than this amount in line with the Northern Territory Government's procurement procedures framework. This framework is administered by the Northern Territory Department of Corporate and Information Services (DCIS) and comprises the *Procurement Act 1995*, Procurement Regulations and Amendments (March 2006), Procurement Directions and Northern Territory Procurement Code.

Some of Power and Water's significant outsourcing contracts include:

- a contract with MM Electrical for the supply and management of stores and materials for Power and Water's requirements; and
- a contract with Brelle for meter reading in Katherine, and a separate contract with Fieldforce for meter reading in Tennant Creek and Alice Springs.

These agreements can be made available to the Commission on request.

5 2008-09 Operations and Maintenance Expenditure Forecast

5.1 Background

As required by the Final Decision Paper, Power and Water has provided its operating expenditure forecast to the Commission in the Commission's Po Adjustment Model. Its forecast for 2008-09 is \$54.9 million.

This amount differs from the amount proposed by the Commission in Amendment 5-4 of \$56.998 million. This is due to Power and Water updating its forecasts for 2008-09, resulting in a slight decrease due to a revision in allocated corporate overheads. As at 31 December 2008, actual operations and maintenance expenditure was \$31.2 million which suggests that the 2008-09 forecast proposed by Power and Water is appropriate and will be required to deliver its electricity network service objectives.

Paragraph 2.24 of the Final Decision Paper requires that Power and Water's estimated operating expenditure must be calculated, determined or estimated consistent with, amongst other things, the requirements of clause 6.5.6(c) of the Rules.

This is explained further in paragraph 5.51 of the Final Decision Paper, which provides that Power and Water's:

.....operating expenditure must reasonably reflect the operating expenditure criteria stated in clause 6.5.6(c) of the National Electricity Rules, namely:

- *the efficient costs of achieving the operating expenditure objectives (as stated in clause 6.5.6(a));*
- *the costs that a prudent operator in the network service provider's circumstances would require to achieve the operating expenditure objectives; and*
- *a realistic expectation of the demand forecast and cost inputs required to achieve the operating expenditure objectives.*

Paragraph 2.2 of the Final Decision Paper further states that:

.....to the maximum extent possible under the NT Code, and consistent with this Final Decision, the Commission will follow the procedures set out in the National Electricity Rules for arriving at a Final Determination, in order to achieve consistency with procedural practice now evident elsewhere in Australia in the regulation of electricity distribution networks.

As a result, Power and Water has also had regard for the operating expenditure factors set out in 6.5.6(e)(10) of the Rules, although this is not specifically required by the Commission in its Final Decision Paper or the Draft Determination.

This section sets out Power and Water's forecast 2008-09 operating expenditure and the components within it. Power and Water's operating and maintenance costs have increased steadily and significantly over the current regulatory control period, as a consequence of several critical cost drivers, being:

- real wages growth, consequential to the changes in Power and Water's 2007-2010 Union Collective Agreement (2007-2010 UCA). In order to attract and retain required skilled personnel in a tight labour market, Power and Water has agreed salaries and allowances in the 2007-2010 UCA. This is a result of an increased demand for employment in the Northern Territory infrastructure, construction and mining sectors by employers which compete for skilled personnel directly with Power and Water;
- ageing infrastructure – much of Power and Water's network is now over 30 years old, as it was rebuilt following Cyclone Tracy in 1974. Due to the increasing age of its network, Power and Water is required to invest increasingly to maintain network reliability and security of supply and to prudently address the risks associated with ageing infrastructure located in tropical and arid environments. Power and Water is continuing to develop new asset management procedures and systems to assist it in cost effectively meeting these needs;
- increasing asset base – growth in forecast load demand is driving the need for significant network investment to meet security of supply and reliability standards, particularly in the Darwin area. Increased capital investment is in turn resulting in higher levels of required operating expenditure. As the network grows through capital investment, the costs of operating and maintaining the network therefore also grows; and
- rising material and equipment costs – strong global demand has seen copper, aluminium and steel prices, as well as equipment costs rising well above the CPI. Power and Water notes that price increases of certain equipment/materials have been as much as 80.5% per annum since 2002.

The increased operating expenditure requirement between the second regulatory control period and the forecast expenditure for 2008-09 reflects the combined effect of an increased volume of work and higher prices.

Despite the higher forecast operating expenditure and the Commission's Draft Determination, Power and Water maintains that its 2008-09 expenditure forecast is both efficient and prudent and meets the required operating expenditure objectives, factors and criteria set out in the Rules. Power and Water addresses the requirements of the Rules in the following sections.

It should be noted that, Power and Water has not included any operating expenditure that may be required as a result of the recommendations in the Davies Inquiry. It has not been included because paragraph 5.57 of the Draft Determination stated these costs would be dealt with by a cost pass through application in the third regulatory period.

5.2 2008-09 Operations and Maintenance Expenditure

Power and Water's 2008-09 operating expenditure forecasts comprise 15 categories of operating expenditure:

- Personnel – Direct;
- Operational Recovery;
- Contract and Apprentice Labour;
- Repairs and Maintenance;
- Information Technology (IT) and Communications;
- Vehicle Costs;
- Travel Costs;
- Training Costs;
- Professional Fees;
- Insurance – Premium Payments;
- Materials;
- Stores Outsourcing;
- External Service Agreements;
- Property Charges; and
- Other Costs.

This section provides a detailed explanation of the nature and approach to forecasting each category of Power and Water's operating expenditure for 2008-09.

5.2.1 Personnel – Direct

Personnel – Direct expenditure relates to the salaries, leave allowances, leave loading and superannuation allowances for all Power Networks' staff, as well as payroll tax paid by Power and Water in relation to these staff. It does not include costs related to apprentices or contract labour as these costs are dealt with separately under a separate item, "Contract and Apprentice Labour".

The 2008-09 forecast of Personnel - Direct expenditure was determined as follows:

- expenditure was calculated based on the existing staff classification in 2007-08 using the award provisions contained in Power and Water's 2007-2010 UCA, adjusted for:
 - 9 new full time equivalent (FTE) positions at various levels identified (by independent consultants) as being required in 2008-09. Power Networks currently has 216 FTE staff, and this is expected to increase to 225 in 2008-09;
 - 3% salary and allowance adjustments, as required by clause 40.1 of the 2007-2010 UCA;

- 5% salary and allowance increases for 60% of staff. This assumes that 60% of staff are likely to progress to the next level within their current classification band in 2008-09; and
- 4.6% vacancy rates. This recognises that some positions will be vacant during the year as people leave Power Networks and that some positions, such as linesmen, are difficult to fill.

The increase in the required number of staff in Power Networks, combined with the increase in the award salaries and allowance provisions provided for in the 2007-2010 UCA, has resulted in an increase in forecast Personnel - Direct expenditure for 2008-09 from 2007-08.

Power and Water's personnel model was audited by its internal auditor, Ernst & Young Australia (EY), in March 2008 following the significant changes to the allowances provided for in Power and Water's 2007-2010 UCA. EY assessed the model to be robust and accurate.

Power and Water is subject to the provisions of the *Public Sector Employment and Management Act* (PSEMA) and as such its conditions of employment negotiations involve the Office of the Commissioner for Public Employment and unions representing Power and Water employees. While working within the PSEMA creates additional costs and complexity for Power and Water compared to other utilities, it provides formal assurance of efficient costs in the NT legislative framework.

5.2.2 Operational Recovery

Operational Recovery expenditure relates to direct labour costs that are recovered through repairs and maintenance expenditure and capital expenditure projects. Power and Water deducts its Operational Recovery expenditure from its Personnel Direct expenditure in order to ensure that there is no double counting of these costs in its overall operating expenditure forecasts.

The labour rate utilised for Operational Recovery is calculated in accordance with the Australian International Financial Reporting Standards.

5.2.3 Contract and Apprentice Labour

The Contract and Apprentice Labour expenditure forecast relates to costs associated with:

- full time apprentices – in 2008-09 Power Networks has allowed for a total of 34 apprentices at different stages of their four year training program. This is an increase of nine apprentices from 2007-08. These new apprentices will commence their training program on 1 January 2009. This supports the requirement of clause 22.2 of the 2007-2010 UCA, which states that Power and Water (the consolidated business) shall continue to have a targeted intake of 12 apprentices each year; and

- contract labour – this is short term vacancy and immediate need labour engaged by Power and Water which cannot otherwise be covered by existing FTE staff.

The expenditure forecast for apprentices and contract labour is derived as follows:

Apprentices

- the 2008-09 forecast apprentice salary and allowance expenditure is calculated based on salary and allowances for all apprentices, at their 2008-09 classification³, being the higher of:
 - the award salary structure and allowances set out in the 2007-2010 UCA; and
 - the award salary structure and allowances provided by the Communications, Electrical, Electronic, Energy, Information, Postal, Plumbing and Allied Services Union of Australia.
- this amount is then adjusted for costs associated with:
 - nine new apprentices that will commence Power Networks' apprentice program. These apprentices will commence their employment on 1 January 2009;
 - 3% salary and allowance adjustments, effective from the first pay period commencing on or after 9 August 2008 as required by clause 40.1 of the 2007-2010 UCA;
 - the Industry Specific Skills Allowance (ISSA). All apprentices will receive a percentage of the ISSA, which was introduced to ensure that Power and Water has the ability to attract and retain employees with relevant industry specific skills. This gives effect to clause 50.2(c) of the 2007-2010 UCA;
 - the following cost allowances:
 - Tool Allowance - Metal Tradesman;
 - Tool Allowance - Other Tradesman;
 - Meal Allowance; and
 - Availability Allowance.

Contractor Labour

The 2008-09 forecast contract expenditure is calculated based on the 2007-08 budget of \$15,000. No adjustment has been applied to this amount.

³ Expected movement of apprentices within their training qualification is taken into account.

5.2.4 Repairs and Maintenance

Power and Water's Repairs and Maintenance expenditure falls into the following four categories:

- Cyclic Maintenance (Time Based Maintenance) – this comprises asset inspection and condition monitoring that is planned and scheduled on a cyclic basis (i.e. at regular time intervals) and consequently provides a basis for ongoing asset repair and maintenance;
- Corrective Maintenance – this comprises once-off planned asset inspections. These inspections are not scheduled on a cyclic basis but can be used to determine subsequent asset repair and maintenance activity;
- Specific Maintenance – this is once-off maintenance work that is undertaken during planned unit shutdowns; and
- Unforeseen Maintenance – this is undertaken to repair plant that has failed in service.

Each of these expenditure categories has been calculated for:

- each geographic location being Darwin/Katherine, Alice Springs and Tennant Creek; and
- the following main assets/activities: Buildings and Grounds (particularly in relation to Zone Substations); Transmission and Distribution; and Zone Substations.

Importantly, for the purposes of its 2008-09 expenditure forecast, Power and Water has separately identified several items that had previously been included but not transparently shown in cyclic, corrective, specific and unforeseen maintenance, being:

- cable testing and locations;
- earth testing;
- numbering of transmission assets; and
- helicopter patrols.

The 2008-09 Repairs and Maintenance expenditure forecast has been derived as follows:

- *Buildings and Grounds* – this relates to expenditure on activities such as grounds maintenance, repairs of rusted power poles, vegetation maintenance and weed management. The 2008-09 expenditure forecast is based on existing contract costs or the expected costs of engaging a contractor to undertake the work;
- *Transmission and Distribution* – this includes cyclic, corrective and unforeseen expenditure and the "other" identified activities – cable testing and locations,

earth testing, numbering of transmission assets and helicopter patrols. The majority of this work is undertaken by Power Networks staff and the associated costs are based on required labour (based on the size of the crew and the expected number of days) and the cost of purchasing materials. All materials and equipment are purchased from MM Electrical at the catalogue price, and labour costs are in accordance with the 2007-2010 UCA. Activities which are undertaken by contractors are based on the costs of existing contracts (which have been tendered) or the expected cost of engaging a contractor to undertake the work under a competitive tender process; and

- *Zone Substations* – this mainly relates to corrective and unforeseen maintenance and “other” identified activities, such as detailed inspections, continuous monitoring of internal switch gear and on-line power transformer oil maintenance. Staff provided by Power Networks are costed on the basis of required labour, based on the size of the crew and the expected number of days. The cost of purchasing materials and activities which are undertaken by contractors are based on the costs of existing contracts (which have been tendered) or the expected cost of engaging a contractor to undertake the work under a competitive tender process.

5.2.5 IT and Communications

IT and Communications expenditure relates to computer and telecommunication expenses incurred by Power and Water. In particular, it relates to expenditure on:

- computer stationery such as ink cartridges, toners and other stationery;
- internet and intranet services;
- software requirements;
- IT licensing and software support;
- telecommunications;
- other communication equipment; and
- Land Access Information System (LAIS) charges.

The expenditure forecast for each of the above items has been derived in the following manner:

- computer stationery and other communications – based on Power and Water’s 2007-08 SCI budget adjusted for minor efficiency savings. No escalation has been applied;
- computer software and internet/intranet expenditure – based on the 2007-08 SCI budget. No escalation has been applied on the basis that actual expenditure for 2007-08 was equal to budget. Power and Water is a member of the Northern Territory Government’s Telstra service contract. This contract was tendered in October 2004 and allows Telstra to provide internet services, as well as fixed and mobile voice and data services. The tender process was

managed by DCIS. This contract is of five years duration. It commenced in mid-2005 and is due to expire in mid-2010;

- IT licensing and software – the 2008-09 forecast expenditure also reflects the 2007-08 SCI budget and no adjustment factor has been applied. This category relates to specific ongoing licensing and support programs, including transformer rating and cable rating software;
- telecommunications expenditure – this is calculated on the basis of the number of handsets, mobiles, satellite phones and telemetry and voice communications services provided by Telstra multiplied by the average call costs per month. Again, this reflects the 2007-08 budget. No escalation has been applied in determining the 2008-09 expenditure forecast on the basis that actual expenditure for 2007-08 was equal to budget, and no major new needs have been identified. As noted above, Telstra provides all of Power and Water's fixed and mobile voice and communication services, in accordance with the whole of Northern Territory Government service contract. The prices charged by Telstra have been set by a competitive market process and are not negotiable within the contract period; and
- LAIS expenditure – this reflects the statutory charges associated with accessing land titles from the Government's LAIS. The 2008-09 expenditure forecast reflects the 2007-08 budget, with no adjustment or escalation, and reflects Power and Water accessing the service 1,000 times at a fixed cost of \$10 for each access, as it did in 2007-08.

5.2.6 Vehicles

Vehicles expenditure relates to:

- leasing, servicing and running the vehicle fleet used by Power Networks' staff. The fleet comprises both light and heavy vehicles such as cars (including small sedans, hatchbacks and wagons), four wheel drives / land cruisers and trucks that are used for operational purposes. Most vehicles need to be capable of travelling long distances on outback roads; and
- hire charges, including costs associated with vehicle hire and taxi use by Power Networks. Vehicles such as mini buses are also hired for use by apprentices attending intra-territory training and interstate trade school.

The expenditure forecast for each of these items is detailed below.

Fleet Vehicle expenditure

- Fleet vehicles are leased from Northern Territory Fleet (NT Fleet) which is responsible for the management of fleet for all arms of the Northern Territory Government except police, fire and emergency services. The leasing rates, terms and conditions are determined by NT Fleet. For the purposes of deriving the 2008-09 budget, Power and Water used the actual 2007-08 lease rates adjusted for:

- 10 additional vehicles to support the increase in Power Networks staff, comprising heavy and light vehicles. These were costed based on the 2007-08 actual costs for the same vehicle type;
- a 5.6% increase in the average 2007-08 fuel expenditure. Fuel consumption volume is based on 2006-07 actual consumption. Power and Water considers that a 5.6% increase for fuel is extremely conservative in light of the increasing cost of fuel in the Australian market; and
- a repairs and maintenance budget for all vehicle types based on average historical costs. This is important to keep all vehicles in safe running order and in a suitable condition to hand back to NT Fleet once they reach their 40,000 km limit, otherwise excess charges are incurred.

Hire charges

- Hire charges – this expenditure forecast is based on the 2007-08 SCI budget and takes account of the expected travel needs of all Power Networks staff in 2008-09.

5.2.7 Travel

Travel expenditure relates to Power Networks' staff travel for operational purposes. Due to the dispersed nature of Power and Water's network, staff are frequently required to travel for operational purposes between major centres, including Darwin, Katherine, Alice Springs and Tennant Creek, as well as to smaller remote locations.

Travel expenditure comprises:

- intra-territory airfares for staff including technicians, engineers and regional managers. This relates to the need to attend:
 - work – there is a need for staff to travel between locations to relieve staff shortages and vacancies as well as provide services not otherwise available in some locations. For instance, there are no engineers located in Alice Springs despite recruitment efforts. Engineers based in Darwin therefore need to travel to Alice Springs to undertake necessary work;
 - meetings – these include occupational health and safety meetings, personnel meetings and planning workshops; and
 - on site visits and inspections – this includes asset inspections, inspections of power supplies to hospitals as well as for specific projects, particularly those that are in their infancy.

This forecast expenditure is based on the latest available 2007-08 actual travel requirements adjusted for identified specific staff travel needs in 2008-09;

- accommodation for intra-territory travel, which has been forecast based on the average historic cost per night of accommodation and the forecast travel requirements;
- the cost of representation on the interstate Energy Network Association Asset Management Committee meetings, which occur three times annually, and other delegated staff attending leadership programs. This forecast was calculated based on anticipated travel in 2008-09 and airfare costs;
- reimbursements paid to staff for using their own vehicles for operational purposes, such as relief work in outback areas. This forecast was based on the latest available 2007-08 actual expenditure, and travel requirements, with no further adjustment applied; and
- travel allowance and accommodation for interstate travel requirements – this is based on seven interstate trips being required for attendance at Energy Network Association Asset Management Committee meetings and leadership programs. The average required travel allowance for each trip has been determined in accordance with the requirements set out in the 2007-2010 UCA. Forecast accommodation costs are based on average historical cost.

5.2.8 Training

Training expenditure relates to network operations training and the associated travel and travel allowance costs. Staff are required to attend training for new/upgraded operations systems and software, induction and for mandatory occupational health and safety purposes. The 2008-09 expenditure forecast has been established by identifying the required training needs of network staff and the associated travel and travel allowance costs. Power and Water will undertake the following training courses in 2008-09:

- Simcal Course – Power and Water will upgrade its Siemens Networks Calculator Software which is becoming obsolete and no longer fully supported by the manufacturer. While there is no specific cost associated with upgrading the software, Power and Water will be required to hold training for staff on how to use the upgraded software. The software provider will conduct this training at an advised estimated cost of \$20,000, being the cost of providing similar courses in the past. Hill Michael Associates, the Australian representatives for the Siemens' software program, will provide the training as they are the only training providers in Australia;
- the Distribution Reliability course, which is required to enhance the skills of Network Engineers in analysing the reliability of supply to customers and identifying cost effective opportunities to improve reliability. This cost was estimated from historic attendance costs; and
- the Underground Cables and Distribution Reliability Course and Cable Termination and Joining Course. These courses are required to upgrade the skills of Network Engineers. Staff attend these courses as part of their required training. These costs have been estimated based on historic per person attendance costs.

The 2008-09 expenditure forecast for training is less than half of the 2007-08 SCI budget. In terms of the required travel fares and allowances, Power and Water has allowed for the following forecast expenditure:

- travel expenses associated with Power Networks staff and apprentices attending training. This relates to travel between Darwin and Alice Springs for networks managers and coordinators conducting training including induction, first aid, OH&S as well as for staff attending this training. The average cost of airfares is based on actual historic costs;
- travel allowance is payable to apprentices attending interstate training. An allowance is also payable to managers and coordinators conducting intra-territory training and to staff attending the Cable Termination and Joining Courses, which will be held in Darwin. Travel allowance expenditure has been calculated in accordance with relevant provisions in the 2007-2010 UCA; and
- other training expenses - this relates to accommodation and travel allowances for on-call and overtime requirements. This cost has been based on the 2007-08 SCI budget allowance and has been adjusted to reflect increased personnel numbers.

5.2.9 Professional Fees

Professional Fees expenditure relates to conveyancing and settlement fees, the purchase of land easements, network licence fees paid to the Commission, other legal fees relating to civil litigation against Power and Water and intra-territory consultants' fees.

The expenditure forecast for each of these services is detailed below:

- Conveyancing and Settlement Fees – this expenditure relates to fees for placing Overriding Statutory Charges (OSC) on properties which have unpaid capital contributions. Capital contributions relate to the costs of designing, constructing, installing and commissioning connection assets. All properties in an area to which the network is being extended must contribute to the cost of extending the distribution network through a capital contribution, regardless of whether they choose to take supply⁴. Placing an OSC in the land register over a property title allows Power and Water to take proceedings to recover any such amount if the owner does not pay the outstanding amount, in accordance with the agreed settlement on the land. The cost to Power and Water of registering an OSC in the Land Register, which is maintained by the Register General's Office, is \$125 per application. Power and Water has based its 2008-09 forecast expenditure on the 2007-08 SCI budget. Actual expenditure for 2007-08 came in on budget;⁵

⁴ Refer section 86(1)-(9) of the *Electricity Reform Act 2000*.

⁵ Also refer to Capital Contributions Policy in Appendix H and *Land Titles Act* section 88 found at: http://www.austlii.edu.au/au/legis/nt/consol_act/lta109.txt/cgi-bin/download.cgi/download/au/legis/nt/consol_act/lta109.rtf

- Land Easements – this expenditure relates to the purchase of land easements. Power and Water has identified that it will need to purchase 12 land easements in 2008-09. The cost of these easements is based on the past actual cost of easements. Power and Water’s 2008-09 expenditure forecast is the same as its 2007-08 budget;
- Other Legal Fees – this expenditure relates to:
 - the forecast allowance for average commercial legal fees, which include matters such as reviewing and drafting customer connection contracts; and
 - several ongoing civil litigation cases against Power Networks.
- Regulatory Licence fees – this relates to expenditure for Power and Water’s network licence, as required under section 14(3) of the *Electricity Reform Act 2000*. Licence fees are established by the Minister and comprise a fixed and variable component.⁶ Power and Water has based its 2008-09 forecast expenditure on the actual licence fee for 2007-08, adjusted by an escalation factor of 2%; and
- Intra-Territory Consultant Fees – this relates to consulting fees for specific network related projects, for which the expertise is not available within Power and Water. Only a small budget has been allowed as consultancies are more likely to be business related. The budget was determined by assessing the likely needs of each of the network’s line managers.

5.2.10 Insurance Premiums

Insurance Premiums expenditure relates to general insurance, motor vehicle insurance and public liability insurance premium payments.

All of Power and Water’s insurance providers are sourced through an international insurance broker – Aon Australia. This enables Power and Water to satisfy itself that it has secured the best possible insurance coverage and rates. Aon Australia was selected as the preferred broker in a competitive tender, and operates under a five year contract that commenced in 2005-06 and is due to expire in 2009-10. The expenditure forecast for each item of insurance is detailed below:

- General Insurance Premium Payments – Power and Water is only able to source insurance coverage for its physical buildings/assets, such as transformers and substations. Power and Water’s overhead poles and wires and its underground cables are not insured. General claims therefore relate to significant damage to Power and Water’s physical buildings/assets, such as transformers and substation, caused by fire, cyclones or other events. The 2008-09 expenditure forecast is based on the 2007-08 budget;
- Motor Vehicle Insurance Premium Payments – this relates to insurance claims for accidents to NT Fleet vehicles used by Power Networks. Power and Water currently insures its NT Fleet vehicles through Zurich Insurance. This is for a

⁶ http://www.nt.gov.au/ntt/utilicom/s_docs/elec_lic_fees_sched_jul%2001_010803.pdf

12 month period, after which time Power and Water's insurance broker will reassess the best insurance provider for Power and Water. Power and Water is required to pay an excess insurance payment of \$20,000 for any claim made in relation to NT Fleet vehicles. The forecast allowance has been determined based on the 2007-08 SCI budget with a small efficiency saving included; and

- Public Liability Premium Payments – this is for general liability claims by the public for damage or loss as a result of interruptions to power supply or other personnel/property damage resulting from Power and Water's network. This expenditure forecast is based on the 2007-08 SCI budget. Power and Water notes that the actual 2007-08 expenditure is almost double the budgeted amount for that year.

Power and Water has not sought any self-insurance expenditure allowances for uninsurable events, or for poles and wires, in this Regulatory Proposal, as the costs of any unforeseen and approved event will be dealt with as a pass-through.

5.2.11 Materials

Materials expenditure relates to the purchase of chemicals for operational requirements, the purchase of stores and materials, and office stationery.

The expenditure forecast for each of these matters is detailed below:

- Chemicals for operational requirements – this is based on the 2007-08 SCI budget;
- Stores and Materials – this relates to a range of items including cables, wire, cable ties and bolts that are not attributable to any particular infrastructure project. Power and Water has based its 2008-09 forecast on its 2007-08 SCI budget plus a 9.5% increase. CPI was not an appropriate basis for determining the escalation because it does not reflect the change in the cost of delivering infrastructure projects; and
- Office Stationery – this includes computer paper, pens and other general stationery requirements. The expenditure for this item is based on several years of actual historic expenditure and the 2007-08 budget.

5.2.12 Stores Outsourcing

Stores Outsourcing expenditure relates to the payment of MM Electrical for the supply and management of stores and materials for Power Networks' needs. MM Electrical was appointed by competitive tender, with the contract to be re-tendered in 2008-09.

There are two components of MM Electrical's supply and management fees, being:

- Service fee – Power and Water purchases goods from MM Electrical at cost price. In lieu of adding a margin to the base cost of materials, MM Electrical receives a service fee based on the timeliness of their delivery and meeting

other specified targets in accordance with its contract terms and conditions, which are not negotiable. Power and Water has based its 2008-09 expenditure forecast on actual 2007-08 expenditure adjusted for CPI; and

- Performance bonus – this payment relates to the timeliness of the delivery of different types of stores and materials in accordance with its contract terms and conditions, which are not negotiable. Power and Water has based its 2008-09 expenditure forecast on actual 2007-08 expenditure adjusted for CPI.

Freight charges to regional centres are paid at cost. MM Electrical has depots in Darwin and Alice Springs. It transports materials from these depots to Katherine, Tennant Creek, and all other areas, as required.

Rising fuel prices and the increased demand for goods have driven an increase in expenditure on freight charges over the last few years. Power and Water has based its 2008-09 expenditure forecast on 2007-08 actual expenditure. No escalation has been applied.

5.2.13 External Service Agreements

External Service Agreements expenditure relates to agents' fees, procurement and other service arrangements. The expenditure forecast for each of these matters is detailed below:

- Agents' fees – this relates to contractual fees to providers of operational services.

The 2008-09 budget is much smaller than the 2007-08 SCI budget as Power and Water has reviewed all existing contracts and is only continuing with those that remain relevant;

- Procurement – this relates to the costs incurred by Power and Water in complying with the Northern Territory Government's procurement framework. This framework is administered by DCIS and comprises the *Procurement Act 1995*, Procurement Regulations and Amendments (March 2006) and Procurement Directions and Northern Territory Procurement Code. It ensures that Power and Water's procurement of works, services and goods are undertaken pursuant to given principles. The 2008-09 forecast has been increased from the 2007-08 SCI budget as Power and Water expects to have a greater number of contracts, which will need to go through the procurement process. Cost forecasts have been determined based on 2006-07 and 2007-08 average costs of complying with the procurement process; and
- Other Service Arrangements – this relates to service agreements for other office equipment, including photocopiers. The 2008-09 forecast is much lower than the 2007-08 budget due to the expiration of many of the service agreements.

5.2.14 Property Charges

Property Charges expenditure relates to the expenses incurred by Power and Water for property management, property maintenance and property leasing/rental payments. The expenditure forecast for each of these matters is as follows:

- Property Management – this expenditure relates to the Local Government rates payable by Power and Water, such as for its land/properties including substation and zone substations. The forecast 2008-09 expenditure is based on actual rates payable for all Power and Water’s properties escalated by CPI;
- Property Maintenance – this expenditure relates to contracts for cleaning services, industrial waste removal, ground maintenance for substations, rubbish collection at Power Networks’ depots and the provision of property security services. The forecast 2008-09 expenditure for these services is based on the actual 2007-08 contract costs for these services with no further adjustment; and
- Property Lease / Rental Payments – this expenditure relates to rental and lease expenditure for properties used by Power Networks staff for work purposes and depot rental payments. Power and Water takes out long term lease agreements for property to accommodate staff, particularly in areas where it is difficult to secure short term accommodation. The forecast 2008-09 expenditure for these services is based on actual 2007-08 residential property rental contract agreements escalated by CPI, actual depot rent and rent paid to Darwin City Council.

5.2.15 Other Costs

Other Costs expenditure relates to expenditure on a range of items including furniture and fittings, recruitment (which relates to advertising, relocation expenditure, such as removal costs, travel allowance, storage and airfares), uniforms and protective clothing, safety expenses, conference fees, membership subscriptions and other general expenses.

The forecast of this expenditure has been derived as follows:

- Furniture and fittings – this expenditure relates to plant and equipment less than \$2,000, capital items less than \$2,000, minor asset repairs and maintenance, and other items less than \$2,000. The forecast 2008-09 expenditure for these items is based on an allowance of \$1,337 per staff member, based on the 2007-08 actual expenditure per staff member and then escalated by a 3.4% growth factor. This expenditure category ensures that Power Networks’ workforce has the appropriate tools and other equipment to effectively carry out required work programs;
- Recruitment advertising – Power and Water has committed to continuing its advertising campaign within Australia and off shore to try to attract and retain skilled workers, particularly linesmen and electricians that are needed to carry out its capital and repairs and maintenance programs. This campaign began in 2007-08 when Power and Water acknowledged that attracting and retaining skilled workers is a critical issue, in light of the need to compete for skilled

labour given the current infrastructure and resources boom in the Northern Territory. Power Networks' 2008-09 forecast expenditure of \$193,000 is based on actual unadjusted 2007-08 expenditure;

- Recruitment airfares, removal and storage, travel allowance, relocation fares and relocation travel allowance – the rates for all of these expenditure items, except airfares, are set out in the 2007-2010 UCA. The budget for these items is higher than in previous years in light of the need to recruit more skilled labour and recognising that new labour is likely to be sourced from outside the Northern Territory;
- Conference fees, airfares, travel allowance – the 2008-09 expenditure allowance for these items is based on managers and staff attending a total of five (identified) interstate conferences (Melbourne and Sydney). Associated airfares expenses have been allowed at average historical cost. Travel allowance has been calculated as per the requirements in the 2007-2010 UCA. The 2008-09 expenditure forecast is a conservative allowance and is significantly lower than the actual expenditure in 2007-08. This travel expenditure is separate and additional to that set out in section 5.2.8;
- Membership and Subscriptions – the 2008-09 expenditure forecast is based on the actual 2007-08 membership fees, including:
 - Energy Supply Association of Australia;
 - Energy Network Association;
 - Electric and Magnetic Fields Program; and
 - CIGRE (International Council on Large Electric Systems) which is a worldwide Organization on Electric Power Systems, covering their technical, economic, environmental, organisational and regulatory issues.
- Freight – this expenditure relates to freight costs that cannot be allocated to specific projects. These forecasts are based on prior year actual expenditure and the 2007-08 SCI Budget, with no allowance for any escalation factor;
- Uniforms and Protective Clothing – this expenditure relates to protective clothing, as required by Safety Standards, and uniforms for all staff. The 2008-09 expenditure allowance is based on 2007-08 average expenditure per employee, escalated by CPI;
- Document Production – this expenditure relates to producing and publishing documents for Power Networks. The 2008-09 expenditure allowance is based on 2007-08 actual expenditure;
- Safety and Health – this expenditure relates to equipment for operational staff, including safety jackets, helmets, boots and other items. The 2008-09 expenditure allowance is based on the average cost per staff member for 2007-08; and

- Operational General – this expenditure relates to general expenses including water coolers, gas bottles and other miscellaneous expenditure items. The 2008-09 expenditure allowance is based on the average cost per staff member for 2007-08.

5.3 Operating Expenditure Objectives

Power and Water's operating expenditure forecast for 2008-09 achieves the operating expenditure objectives in clause 6.5.6(a) of the Rules for the reasons outlined below.

5.3.1 Meet or manage the expected demand for standard control services in 2008-09

Power and Water has forecast its energy consumption to increase by around 1.5% in 2008-09 and has forecast its peak demand to increase by 2.5% in 2008-09.

Power and Water has taken account of the expected demand growth in its operating expenditure allowance, particularly through higher labour and material volumes. This is because an increase in demand leads to growth in the asset base and therefore a greater number of assets for Power and Water to operate and maintain. This therefore requires an increase in available:

- personnel numbers to carry out the increased operating and maintenance program, in turn increasing expenditure on direct personnel, contractors and apprentices. An increase in available labour in turn drives an associated increase in personnel costs including:
 - training expenditure – a greater number of staff are required to attend relevant training, including compliance (e.g. first aid, occupational health and safety) and operational training (e.g. Simcal training, underground cables and distribution reliability training and the cable termination and joining course);
 - travel expenditure – more operational personnel will impact on travel reimbursement expenditure for staff using their own vehicles to undertake work, particularly in remote areas. More operational personnel undertaking training also directly increases the associated travel costs;
 - vehicle expenditure – more personnel directly results in an increased number of vehicles to enable them to undertake their work; and
 - other expenditure – other additional cost items resulting from more personnel and a higher work load include an increase in the tools allowances, fixtures and fittings, other items, uniforms and protective clothing.
- Materials to maintain and repair assets. This refers to the physical materials required to undertake repairs and maintenance activities. In addition, there is an associated increase in Stores Outsourcing forecast costs, which relates to the storage and management of required materials.

5.3.2 Comply with all applicable regulatory obligations or requirements associated with the provision of standard control services

Power and Water has a number of regulatory obligations that impact on its operating expenditure forecast. These include technical and safety requirements and standards contained in Regulations made under the *Electricity Reform Act 2000*, *Occupational Health and Safety Act 1991* (Cth) responsibilities and OH&S obligations.

These costs are reflected into:

- training expenditure including occupational health and safety and first aid training that is required for regulatory compliance purposes;
- travel expenditure to attend compliance related courses and training; and
- other expenditure – this includes uniforms and protective clothing that are required for regulatory compliance purposes.

The 2008-09 operating expenditure forecast in relation to these matters is based on its 2007-08 levels, adjusted for an increase in the labour force.

5.3.3 Maintain the quality, reliability and security of supply of standard control services; and Maintain reliability, safety and security of the distribution system through the supply of standard control services

Power and Water's quality, reliability, safety and security of supply obligations are set out in various planning documents including the Network Technical Code, the Network Planning Criteria and the Standards of Service Code.

The costs incurred by Power and Water in complying with these obligations have been reflected into the following key items of its 2008-09 operating expenditure forecast:

- labour related expenditure - this relates to personnel that maintain Power and Water's network to ensure reliability and security of supply requirements are met. These costs are reflected into personnel, contractor and apprentices' expenditure. An increase in available labour in turn drives an increase in associated personnel costs, including:
 - training expenditure;
 - travel expenditure;
 - vehicle expenditure; and
 - other expenditure – including tools allowances; fixtures and fittings, other attractive items, uniforms and protective clothing.
- materials that are required to operate and maintain assets as well as associated Stores Outsourcing which relates to the storage and management of required materials.

5.4 Operating Expenditure Criteria

Power and Water's operating expenditure forecast for 2008-09 satisfies the operating expenditure criteria in clause 6.5.6(c) of the Rules. Clause 6.5.6(c) provides that the Commission must accept Power and Water's forecast operating expenditure for 2008-09 if it is satisfied that the total of the forecast reasonably reflects the operating expenditure criteria.

5.4.1 Defining Prudency and Efficiency

Power and Water has drawn its understanding and interpretation of prudency and efficiency from two sources, both of which reference existing literature. These sources are the submission by ENERGEN to the Queensland Competition Authority for a pass through of Full Retail Competition (FRC) Costs in October 2007, which dedicated a section to interpreting prudency and efficiency, and a report by PricewaterhouseCoopers for TransGrid in September 2004 which defined and utilised a framework for investment efficiency. This section references these documents liberally.

Prudency and efficiency have been considered at length by Regulators since the publication of the 1993 National Competition Policy Review (widely called the Hilmer Report).⁷ The AER, in particular, has considered at length the meaning and interpretation of prudency and efficiency and has set out an approach in its Statement of Regulatory Principles for the Regulation of Transmission Revenues (SRP)⁸ in relation to how it should be applied. The AER's *Draft Decision SP AusNet Transmission Determination 2008-09 to 2013-14*, on 31 August 2007⁹, used this approach and stated that:

....according to the following three step process which is based on a systematic chronological examination of decisions made in selecting and delivering investment. The purpose of the examination is to establish whether the TNSP made decisions at each stage consistent with good industry practice. The approach is as follows:

- *first, assess whether there is a justifiable need for the investment. This stage examines whether the TNSP correctly assessed the need for investment against its statutory and regulatory obligations. The assessment focuses on the need for investment, without specifically focusing on what the correct investment to meet that need should be. An affirmation of the need for an investment does not imply acceptance of the specific project that was developed;*
- *second, assuming the need for an investment is recognised, assess whether the TNSP proposed the most efficient investment to meet that need. The content of the assessment is whether the TNSP objectively and competently analysed the investment to a standard that is consistent with good industry practice; and*

⁷ Report by the Independent Committee of Inquiry, National Competition Policy, August 1993.

⁸ <http://www.aer.gov.au/content/index.phtml/itemId/660012>

⁹ [http://www.aer.gov.au/content/item.phtml?itemId=714698&nodeId=cf54d675cb859054d44a54db5fd05550&fn=Draft%20Decision%20-%20SP%20AusNet%20transmission%20determination%202008%20-%202014%20\(31%20August%202007\).pdf](http://www.aer.gov.au/content/item.phtml?itemId=714698&nodeId=cf54d675cb859054d44a54db5fd05550&fn=Draft%20Decision%20-%20SP%20AusNet%20transmission%20determination%202008%20-%202014%20(31%20August%202007).pdf)

- *third, assess whether the project that was analysed to be the most efficient was indeed developed, and if not, whether the difference reflects decisions that are consistent with good industry practice. The analysis in this third step examines in detail the factors that caused changes in the project design and/or delivery and assesses how the TNSP responded to those factors in comparison to what could be expected of a prudent operator.*

In its *Draft Decision SP AusNet Transmission Determination 2008-09 to 2013-14* the AER further elaborated on these principles, stating that prudent costs are those that a "prudent operator in similar circumstances (would incur), and without the benefit of hindsight"¹⁰.

In its 2005-2010 South Australian Price Determination, the Essential Services Commission of South Australia (ESCOSA) stated that:

*"There are a number of factors that must be considered in making a capital expenditure benchmark determination in the context of the South Australian environment. Consideration must be given to growth in forecast peak electricity demand, the service obligations placed on ETSA Utilities (including standards for reliability of supply) and the condition of assets."*¹¹

ESCOSA further stated that in making its expenditure determination for the 2005-10 regulatory period, it was concerned with understanding the expenditure which "an efficient electricity distributor in ETSA Utilities' circumstances might require"¹².

ESCOSA went on to state that:

*In the case of operating expenditure, differences in regulatory requirements (eg FRC obligations) could contribute greatly towards differences between expenditure levels incurred by different distributors. The existence of such differences can make it difficult to draw valid comparisons between businesses*¹³.

ESCOSA's view appears consistent with the AER's views to the extent that ESCOSA considers that in determining whether costs are or are not efficient, specific regard must be given to the unique circumstances in which a utility operates.

The PricewaterhouseCoopers Report for TransGrid further notes that in interpreting and applying efficiency, it is necessary to look beyond process and to outcomes.

The Report noted that "*...the emphasis in the definition (of efficiency) is on outcomes rather than process:*

¹⁰ [http://www.aer.gov.au/content/item.phtml?itemId=714698&nodeId=cf54d675cb859054d44a54db5fd05550&fn=Draft%20Decision%20-%20SP%20AusNet%20transmission%20determination%202008%20-%202014%20\(31%20August%202007\).pdf](http://www.aer.gov.au/content/item.phtml?itemId=714698&nodeId=cf54d675cb859054d44a54db5fd05550&fn=Draft%20Decision%20-%20SP%20AusNet%20transmission%20determination%202008%20-%202014%20(31%20August%202007).pdf), page xiii.

¹¹ http://www.escosa.sa.gov.au/webdata/resources/files/050405-EDPD_Part_A_StatementofReasons_Final.pdf p.76

¹² http://www.escosa.sa.gov.au/webdata/resources/files/050405-EDPD_Part_A_StatementofReasons_Final.pdf p.76

¹³ http://www.escosa.sa.gov.au/webdata/resources/files/050405-EDPD_Part_A_StatementofReasons_Final.pdf p.90

- *if a TNSP developed an investment using processes that were in accordance with good industry practice, the outcome would be, by definition, efficient investment; however*
- *if a TNSP did not follow good industry practice (indeed, in the absurd case, however imprudent the TNSP was), it is still necessary to assess the extent to which the amount invested exceeded the efficient amount (if at all).*

This is an important distinction – even if ... TransGrid had inadequate processes, it would still be necessary to consider whether or not, in the event, the amount invested exceeded the amount that would have been invested by a prudent operator.”¹⁴

The themes emerging from the above are that:

- there is no one definition of prudent and efficient used by Regulators – rather prudence and efficiency has been an evolving concept over time;
- the AER and other Regulators tend to adopt an approach that prudent and efficient costs are those that a *"prudent operator in similar circumstances (would incur), and without the benefit of hindsight"*. It is therefore critical to understand the particular circumstances of a DNSP, and to rely less on theoretical outcomes when determining prudence and efficiency; and
- efficiency is measured in terms of outcomes, not process. This means that the projects and dollars that Power and Water has invested in are what is important for the Commission to assess, not necessarily how these have been derived.

The new Rules also provide Power and Water with guidance, clearly noting that the prudent service provider is "in the circumstances of the DNSP". In section 6.5.6(c) of the Rules, the Commission must accept the forecast of required operating expenditure included in a revenue proposal, if it is satisfied that the total of the forecast operating expenditure for the regulatory control period reasonably reflects *"the costs that a prudent operator in the circumstances of the relevant Distribution Network Service Provider would require to achieve the operating expenditure objectives"*.

Power and Water has therefore focused on ensuring that its justification of prudence and efficiency in this Regulatory Proposal assists the Commission in understanding its circumstances, which have given rise to the need for expenditure. It has also sought to explain how it has derived its costs, given its circumstance, in order to demonstrate efficiency.

5.4.2 The efficient costs of achieving the operating expenditure objectives

Each of the items comprising its 2008-09 operating expenditure forecast must be efficient. As noted above, efficiency relates to the manner in which an activity is undertaken, once it is established that it is necessary to undertake the activity. In particular, efficiency concerns whether an activity could have been undertaken at a lower cost whilst delivering the required output.

¹⁴ Refer to:

<http://www.accc.gov.au/content/item.phtml?itemId=471851&nodeId=58d7c97fcc17c74e57061278054417e9&fn=PWC%20MetroGrid%20Review%20Context.pdf>, page 11.

Power and Water considers that each of the items that make up its 2008-09 operating expenditure forecast are cost efficient and could not have been undertaken at a materially lower cost whilst delivering the required output.

Personnel – Direct

Power and Water's 2008-09 Personnel – Direct expenditure forecast is based on the salary and allowance provisions set out in the 2007-2010 UCA. This is efficient because salary and allowances established in the 2007-2010 UCA are binding. The personnel funding model has also been audited for compliance with the provisions set out in the 2007-2010 UCA by EY.

Contract and Apprentice Labour

Power and Water considers that its forecast 2008-09 expenditure for Contract and Apprentice Labour is efficient for the following reasons:

- in relation to apprentice labour – salary and allowances established in the 2007-2010 UCA and the Communications, Electrical, Electronic, Energy, Information, Postal Plumbing and Allied Services Union Agreement are binding. Power and Water must therefore base its expenditure forecast on the relevant provisions of these agreements; and
- in relation to contract labour – Power and Water considers that its 2007-08 budget expenditure provides an appropriate threshold for its contract labour costs.

Repairs and Maintenance

The 2008-09 Repairs and Maintenance budget is based on asset related cyclical inspection programs, budgeted defect rates and staff budget programs determined by Power and Water Network management. All personnel rates are as per the personnel budget and EBA arrangements, and frequency inspection programs and defect rates are as required for specific assets and in line with industry norms.

IT and Communications

Power and Water's forecast 2008-09 expenditure for IT and Communications is efficient because:

- the Telstra contract for internet, fixed and mobile services was market tested and the costs are the outcome of a competitive process;
- government charges are not negotiable and cannot be sourced more efficiently; and
- contractual agreements in relation to IT licenses and support were market tested and are therefore also efficient.

Vehicle

The forecast 2008-09 expenditure for Vehicles is efficient because:

- Power and Water obtains these services from NT Fleet and cannot source them from another provider. This means that these costs are as low as they could be for any other network provider in "Power and Water's circumstances";
- a 5.6% increase in the fuel cost allowance is extremely conservative in light of current fuel prices; and
- Power and Water's 2007-08 budget and 2007-08 actual expenditure for hire charges and vehicle repairs and maintenance respectively are considered to be the minimum costs associated with these services.

Travel

The 2008-09 Travel expenditure forecast is efficient as it based on historical cost under contractual arrangements negotiated via a competitive tender process.

Training

Power and Water's 2008-09 Training expenditure forecast is efficient because:

- only one service provider, Hill Michael Associates, is able to provide the Simcal course as it is the Australian representative for the Siemens software. Power and Water has established competitive arrangements with this company which it considers are as low as could be achieved;
- costs for other identified training courses, such as the Underground Cables and Distribution Reliability Courses, are competitively offered by market providers, and are the outcome of competitive tender processes. The costs for these have been forecast based on the historic cost of running these courses, which are frequently attended by staff as part of ongoing training requirements; and
- travel allowance payments are calculated in accordance with Power and Water's 2007-2010 UCA.

Professional Fees

Power and Water's 2008-09 Professional Fees expenditure forecast is efficient because:

- government charges are not negotiable and are therefore, by definition, as low as can be possibly achieved by Power and Water as a purchaser of these services;
- land easement negotiations are undertaken by Power and Water on a "needs basis" as far ahead as possible, and are purchased at market rates. This is the same as for all electricity distributors; and
- Power and Water's 2007-08 budget adjusted by CPI is a reasonable basis to estimate Power and Water's 2008-09 licence fees.

Power and Water's 2008-09 expenditure is around 54% less than its 2007-08 budget as a result of accommodating for scope changes and efficiency savings.

Insurance Premiums

Power and Water's 2008-09 Insurance Premiums expenditure forecast is efficient because its insurance coverage for motor vehicles, public liability and general items has been sourced through insurance broker Aon Australia. The forecast expenditure reflects its reasonable expectations of actual costs, based on premium payments to the current insurance providers.

Materials

Power and Water's 2008-09 Materials expenditure forecast, which is 8.1% higher than the previous year's budget, is efficient because it is based on 2007-08 actual expenditure, and has only been adjusted by around 10% for materials expenditure to reflect the increasing cost of purchasing materials including copper, steel, and aluminium. This is extremely conservative in light of the soaring prices of copper, steel, and aluminium.

Stores Outsourcing

Power and Water's 2008-09 Stores Outsourcing expenditure forecast is efficient because it is calculated based on the provisions in MM Electrical's current contract. MM Electrical was selected as Power and Water's preferred supplier and manager of stores and materials in a competitive tender process in July 2001.

External Service Agreements

Power and Water's 2008-09 External Service Agreement expenditure forecast is efficient because:

- the forecast for agents' fees and other service arrangements is the minimum expenditure required to satisfy its contractual agreements. In developing its expenditure forecast, Power and Water reviewed and assessed the continued need for all of its existing contracts and is only continuing with those that it has assessed as still being relevant and required. This has led to the termination of several contracts that were in place in 2007-08 and the exclusion of their associated costs from the 2008-09 expenditure forecast; and
- Power and Water has identified that in 2008-09 it will be required to administer 15 contracts in accordance with its procurement process. The average cost, per contract, of complying with its procurement process is derived based on several years of actual costs.

Power and Water's 2008-09 expenditure forecast is around 51% lower than its 2007-08 budget, as a result of identified scope change savings.

Property Charges

Power and Water's 2008-09 Property Charges expenditure forecast is efficient because:

- government rates are not negotiable and therefore cannot be reduced by Power and Water or any other network company in its circumstances;
- property maintenance contracts were competitively tendered. Further, Power and Water has assessed the continued need for all of its existing contracts and is only continuing with those that it has assessed as still being relevant and required in 2008-09; and
- rental contracts are market derived and therefore efficient. Further, Power and Water has reviewed its property lease/rental contracts and is only continuing with those that it has assessed as still being relevant and required in 2008-09.

5.4.3 The costs that a prudent operator in the circumstances of the relevant Distribution Network Service Provider would require to achieve the operating expenditure objectives

The operating expenditure forecast must be for activities/items that Power and Water is required to undertake in that year and therefore could not have been deferred, avoided or substituted for other activities and are for the minimum quantity/amount/levels of these activities/items.

Power and Water considers that each of the expenditure items/activities comprising its 2008-09 operating expenditure forecast are prudent because they could not have been deferred, avoided or substituted for other activities:

- Labour related expenditure is for the minimum required labour force to undertake its repairs and maintenance program in 2008-09. It relates to:
 - Personnel direct expenditure – Power and Water has only allowed for an increase of 9 staff despite the significant increase in its works program in 2008-09. This is the minimum FTE staff increase required to undertake the required works; and
 - Contract and apprentices expenditure – Power and Water has only allowed for an increase of 8 apprentices in 2008-09. This gives effect to clause 22.2 of the 2007-2010 UCA, which states that Power and Water (the consolidated business) shall continue to have a targeted intake of 12 apprentices each year. This is the minimum apprentice intake in light of the future year's works program and the current skills shortage.
- Personnel associated costs – an increase in personnel in-turn drives greater expenditure on the following personnel associated costs. In some cases Power and Water has been able to control any increase over the 2007-08 expenditure levels through efficiency savings and scope changes:
 - training expenditure for staff to attend compliance and other specific operational training. This has been based on identified individual staff training needs and is the minimum required expenditure;
 - travel expenditure for staff to undertake work in different locations. This has been based on identified individual staff travel needs and is the minimum required expenditure;

- vehicle expenditure required for staff to travel for operational purposes. Power and Water has only budgeted for an additional 10 vehicles to support the increase in Power Networks' staff in 2008-09, comprising heavy and light vehicles;
 - IT and communications required for staff to effectively undertake operational work. Power and Water has not increased the level of its IT and communications requirements and therefore there is no material change in its expenditure in 2008-09 compared to 2007-08; and
 - other expenditure – including tools allowances, fixtures and fittings, other attractive items, uniforms and protective clothing. Power and Water has calculated its requirements in accordance with the provisions under the 2007-2010 UCA (tools allowance, personnel relocation and storage provisions, personnel removal provisions, and protective clothing) and has based its requirements for other such expenditure on the average of several years of past actual expenditure.
- Repairs and Maintenance – the repairs and maintenance related expenditure is the minimum required to undertake its maintenance program in 2008-09 and relates to:
 - materials expenditure which relates to materials attributable to a specific project. Power and Water has not increased the quantity of materials required although has allowed for an increase in expenditure in light of the increasing cost of purchasing materials including copper, steel, and aluminium; and
 - stores outsourcing expenditure which relates to the storage and management of required materials.

5.4.4 A realistic expectation of the demand forecast and cost inputs required to achieve the operating expenditure objectives

Power and Water's forecast has been developed having regard for growth in both forecast energy consumption and peak demand. Power and Water has forecast energy consumption in 2008-09 to increase by around 1.5% and has forecast peak demand to increase by 2.5%.

Power and Water has internally developed its baseline (medium growth rate scenario) energy consumption forecast having regard for, amongst other things:

- 2006-07 energy consumption (kWhs); and
- growth in customer numbers, having regard for projected population growth.

Power and Water's peak demand forecast of 2.5% was independently undertaken by Power and Water Generation and has been relied upon by Power Networks.

Baseline electricity consumption and peak demand growth forecasts are consistent with the Utilities Commission's forecast in its 2007 Annual Power System Review, set out in the table below.

Table 4: Electricity Consumption and Peak Demand Growth Rates, 2007-08 to 2010-11

Region	Assumption
Darwin – Katherine	3% baseline plus major projects (equivalent to a 3.9% per annum compound growth rate)
Alice Springs	2.0%
Tennant Creek	1.0%

To ensure that its network is capable of meeting its reliability, security of supply and safety requirements given the forecast growth in demand, Power and Water has taken the growth forecast into account in developing its 2008-09 operating expenditure forecast. Power and Water has adjusted its energy and demand forecasts for the purposes of the weighted average price cap model as a consequence of the Draft Determination which required it to assume that it would receive revenue of \$79.994 million in 2008-09.

5.5 Power and Water's Proposed Efficiency Factor

Amendment 5-5 of the Draft Determination requires Power and Water to either apply a reduction of 16.9% to the 2008-09 operating and maintenance costs, or to propose an alternative efficiency factor.

Power and Water proposes an alternative efficiency factor of zero. It proposes this because the percentage proposed by the Commission cannot be implemented by Power and Water without it materially reducing its standards of service and significantly reducing the reliability and security of the network.

Power and Water is concerned with the way in which the Commission and its consultants have assessed the efficiency factor to be applied to the 2008-09 operational expenditure. Principally, Power and Water does not consider that such a significant reduction can be supported given the Commission's consultant has neither assessed nor sought to assess either the need for Power and Water's specific expenditure, the extent to which the expenditure is required, and the operational and practical implications of applying the recommended reduction. Power and Water considers that an important part of an up-front efficiency factor is that it be achievable. It is not clear how the Commission's proposed factor is achievable.

In addition, it would seem that any assessment of operating expenditure efficiency would need to consider the recommendations from the Davies Inquiry. Any remedial works recommended by the Davies Inquiry will have implications for Power and Water's forward looking operational expenditure profile.

Power and Water considers that, at a minimum before the Final Determination is made, the Commission should;

- assess in detail the individual cost components of the total forecast to determine whether the expenditure is required, that is whether there is a "justified need for the expenditure";

- understand whether activities/items that underpin the operating expenditure forecast could not have been deferred, avoided or substituted for other activities and are for the minimum quantity/amount/levels of these activities/items; and
- assess whether the costs would also be required by a prudent operator in similar circumstances to the DNSP and in accordance with good industry practice.

Power and Water does not consider that a reduction of 16.9% could be maintained even if such an assessment was conducted. A reduction of zero is more appropriate and in line with what Power and Water can reasonably achieve.

6 2008-09 Capital Expenditure Forecast

6.1 Background

Power and Water has embarked on a Corporation-wide capital program improvement plan. The plan involves the formulation of a governance framework as well as a project management framework. Key outputs include approval, reporting and escalation protocols, refined business case templates, risk management and change management protocols, project management policies and procedures, resource and training plans and a post-implementation review template.

During 2007-08, Power and Water completed a review of its capital investment processes, conducted with the assistance of EY. Many of the recommendations from this review have been implemented for 2008-09 and include clearer roles and processes in the planning and implementation of the capital investment program, and further improvement in the rigour of project approvals and monitoring. This builds on advances made during 2007-08 with the commencement of a new Board sub-committee to oversight the planning, approval and implementation of the program.

Power and Water has provided its 2008-09 capital expenditure forecast to the Commission in the Commission's Po Adjustment Model and also in Appendix A of this Regulatory Proposal. The 2008-09 forecast capital expenditure cost is \$56.8 million.

Power and Water's capital expenditure has increased rapidly since 2005-06:

- in 2005-06, capital expenditure was \$22.4 million;
- in 2006-07 capital expenditure was \$28.4 million;
- in 2007-08 capital expenditure was \$44.9 million; and
- in 2008-09 capital expenditure is expected to be \$56.8 million.

This increase, in particular the increase in expenditure between 2006-07 and 2007-08, is attributable to a movement by Power and Water away from a funding envelope that it imposed on itself prior to 2007-08. This funding envelope set Power and Water's overall capital expenditure allowance based on a number of financial indicators. Once determined at an aggregate level, this allowance was allocated to Power and Water's various business arms, including Power Networks, meaning that:

- there was a restriction on the level of Power Networks' capital expenditure allowance that was unambiguously lower than efficient but possibly not sustainable or prudent;
- Power Networks' capital expenditure allowance was not developed in accordance with a detailed bottom up approach based on an assessment of the specific projects needed to be undertaken in any given year. Such a bottom up approach would involve setting expenditure in order to meet its regulatory obligation and requirements including, amongst other things, its

reliability and security of supply requirements and occupational health and safety requirements;

- Power Networks did not undertake all of the capital works that it would otherwise have undertaken under an "objective need" and "capacity to deliver" based approach; and
- Power Networks "substituted" capital for operating expenditure, where possible, in order to maintain the network and undertook work that was considered to be a higher priority or that presented a greater immediate risk. It therefore deferred a significant amount of other capital expenditure.

Power Networks' capital expenditure allowance prior to 2007-08 was therefore lower than it would have been had expenditure been forecast on a detailed bottom up approach based on long term sustainable plans.

The movement away from a funding envelope to an "objective need" and "capacity to deliver" funding methodology in 2006-07 recognised a significant increase in capital expenditure in 2007-08. Under the new funding methodology, Power and Water determines its expenditure requirements having regard for:

- an "objective need" to undertake investment – Power and Water now assesses its ability to meet its current regulatory and legislative obligations and requirements, such as standard of service requirements and supply reliability targets, and seeks expenditure in order to meet these. This supports prudent and efficient investment in line with good industry practice;
- the "capacity to deliver" its capital works program – Power and Water now considers its resource ability/capacity to undertake each individual capital project within the context of the resource requirements and constraints of the total works program (i.e. the total capital works program), and seeks to include only those projects that it can deliver. The adoption of a funding methodology based on "objective need" and "capacity to deliver" has led to a significant amount of "catch up" expenditure in 2007-08 and 2008-09. These are works that are necessary, but were deferred under the funding envelope approach;
- forecast load growth and high levels of network utilisation – Power and Water has forecast its overall energy consumption in 2008-09 to increase by around 1.5% and has forecast peak demand to increase by 2.5%. Power and Water has also identified higher than average load growth in some areas including:

Darwin's Central Business District (CBD) – the demand for electricity in Darwin's CBD has grown significantly since 2006-07 due to projects such as the Waterfront Development;

the Palmerston area – the load growth at Palmerston has grown significantly over the last decade (at a rate of around 6.05% per annum) due to the development of the Robertson Barracks, the expansion of the Palmerston shopping centre, numerous new developments in the Palmerston CBD and extensive residential developments; and

the East Arm Peninsula - the load growth at the East Arm Peninsula has grown significantly over the last regulatory control period due to the development of the Trade Development Zone (TDZ), the Business Park, the Hudson Creek industrial subdivision, East Arm Port, major customers such as Northern Cement, and facilities associated with the rail link to Adelaide.

The load growth in these areas has further required increases in capital expenditure over 2008-09 in order to continue to provide a reliable, secure and safe electricity supply. In particular it has led to an increase in investment in zone substations which convert high voltage power to lower voltage electricity for transportation by distribution lines to homes and businesses. Prior to building the Frances Bay indoor zone substation, which commenced in 2003-04 (and which is due to be commissioned in 2008-09), it had not built a zone substation since 1987-88. Power and Water has identified required investment in five zone substations in its 2008-09 capital works program;

- more prescriptive network planning standards – Power and Water’s 2008-09 capital investment program reflects the phased adoption of N-1 deterministic standards across its network. This more prescriptive standard will form the basis of the revised Network Planning Criteria. The current Network Planning Criteria allows considerable discretion resulting in N-1 capability in some parts of the network but lower levels elsewhere.

In the Northern Territory Government’s 10 year Infrastructure Strategy Draft Report (July 2008), the consulting team, comprising economists ACIL Tasman and engineers Evans and Peck, ranked Power and Water Corporation in the highest rating category (category one) for Northern Territory Agencies in terms of the evolving robustness and overall maturity of its long-term forward planning for infrastructure that addresses the strategic priorities of the Northern Territory Government. That Report defined “Category one” as “Internal processes, systems and procedures are broadly consistent with average or above average interstate peers in relation to infrastructure planning activities”;

- ageing infrastructure – much of Power and Water’s network is now well over 30 years old, as it was rebuilt following Cyclone Tracy in 1974-1975, and is operated in both harsh tropical and arid environments. Power and Water is therefore required to invest to replace assets:

which no longer operate efficiently and which may present reliability and security of supply, occupational health, and safety risks;

for which it has become increasingly harder to source spare parts; and

for which the associated maintenance and repairs costs outweigh the benefits and therefore it is more efficient to replace the existing asset;

- real wages growth for both Power Networks staff and contract labour – this is a result of:

changes in Power and Water’s 2007-2010 UCA; and

the tight labour market for skilled contract labour and consequent price rises for this labour; and

- rising material and equipment costs – strong global demand has seen copper, aluminium and steel prices, and equipment costs rise well above CPI, and annual price increases of certain equipment/materials have been as much as 80.5% per annum since 2002¹⁵. Recent regulatory submissions by the NSW Electricity Distribution Businesses (refer to Attachment 5.15 of EnergyAustralia's Regulatory Proposal) note the very high increases in base metal and component prices both historically and over coming years. Power and Water has the same issues with its purchasing.

This highlights that the increased capital expenditure requirements since 2005-06, but in particular between 2006-07 and 2007-08, reflect the combined effect of the increased required volume of work and higher prices as outlined above.

Despite the higher forecast expenditure, the 2008-09 expenditure forecast is both efficient and prudent and meets the required capital expenditure objectives, factors and criteria set out in the Rules.

The Commission has not explicitly requested that Power and Water explain its forecast capital expenditure for 2008-09 in terms of the requirements of clause 6.5.7 of the Rules. However, there is a very strong relationship between the size of the Po and the 2008-09 capital expenditure forecast.

For that reason, Power and Water has undertaken a detailed review of the 2008-09 capital expenditure program on the basis that it considers that paragraphs 2.22 and 3.35 of the Final Decision Paper require that Power and Water must comply with Chapter 6 of the Rules in the event that a matter has been dealt with in the Rules but has not been dealt with in the NT Code. The Rules require that capital expenditure be justified against clause 6.5.7.

This review has been undertaken in three parts:

- this chapter reviews the 2008-09 capital expenditure forecast against the capital expenditure objectives, factors and criteria in section 6.5.7 of the Rules;
- Appendix A to this Regulatory Proposal provides a detailed project by project assessment of the 2008-09 capital expenditure forecast. This provides the Commission with all of the projects that contribute to the 2008-09 capital expenditure forecast and in particular highlights what each relates to, why it is necessary, what alternatives were considered and how the costs were forecast; and
- Appendix B to this Regulatory Proposal provides a detailed project by project assessment of 2007-08 capital expenditure. While not requested by the Commission, it provides further credibility and support for Power and Water's 2008-09 capital expenditure forecast and evidences the fact that Power and Water is resourced to manage and provide capital expenditure at the forecast 2008-09 scale.

¹⁵ Power Networks

It should be noted that Power and Water has not included any capital expenditure that may be required as a result of the recommendations from the Davies Inquiry. Pursuant to paragraph 5.57 of the Draft Determination these costs would be dealt with by a cost pass through application in the third regulatory period.

6.2 Capital Expenditure Objectives

Power and Water's capital expenditure forecast for 2008-09 meets the following capital expenditure objectives in clause 6.5.7(a) of the Rules.

6.2.1 Meet or manage the expected demand for standard control services in 2008-09

The generally accepted interpretation is that Power and Water's 2008-09 capital expenditure forecast, by project, must be sufficient (and no more) to meet or manage the expected demand for standard control services in 2008-09.

Power and Water has taken account of the expected demand growth in its capital expenditure program by identifying specific projects relating to standard control services that will ensure that Power and Water is able to continue to supply a safe, reliable and efficient power supply. Examples of these projects include:

- the construction of Zone Substations including the construction of the Archer Zone Substation, Marrakai Zone Substation, Frances Bay Zone Substation, East Arm Zone Substation and the Anzac Hill (Alice Springs CBD) Zone Substation, which are designed to meet and manage the growing demand in surrounding areas mainly due to population growth; and
- the construction of the Archer to Weddell 66 kV Line. This project is designed to address the load growth in the Palmerston area and support the construction of Weddell Power Station.

6.2.2 Comply with all applicable regulatory obligations or requirements associated with the provision of standard control services

Power and Water interprets this to include any anticipated changes to these obligations.

The costs incurred by Power and Water in complying with its key regulatory obligations are reflected into its capital works program. In particular, the need to undertake certain projects directly relates to meeting its key regulatory obligations. For example:

- voltage control requirements – these requirements are set out in Power and Water's Network Connection Technical Code (section 2.3) and require that Power and Water maintain voltage such that the minimum steady state voltage on the network is 90% of nominal voltage and the maximum steady state voltage is 110% of nominal voltage. Power and Water is undertaking several projects which will ensure its compliance with this requirement including:

the construction of the Marrakai Zone Substation which will address the voltage regulation problem resulting from the increased load growth in the Marrakai area; and

the installation of capacitor banks at all of its CBD Switching Stations in order to provide voltage support and consequently increase the ability of the transmission system to supply loads and reduce power and energy losses in the system.

- security of supply requirements – while Power and Water’s Network Planning Criteria requires it to undertake investments to achieve an N-1 deterministic standard, there is flexibility in how prescriptive this standard should be. The N-1 contingency means that the loss of any one (given) component of the network at a time of peak load will not result in the loss of supply to any customers. Several projects on Power and Water’s capital works relate directly to establishing a N-1 deterministic standard, including for example:

the construction of the Archer Zone Substation – this will eliminate the supply risk associated with an outage at Palmerston by providing a secondary network to the city of Palmerston. This means that the Archer Zone Substation will provide N-1 contingency for the Palmerston Zone Substation;

the construction of the Frances Bay Zone Substation – this will eliminate the supply risk associated with an outage at the City Switching Station by providing an alternative source of electricity to Darwin’s CBD. This means that the Frances Bay Zone Substation will provide N-1 contingency for the City Zone Substation; and

the construction of the East Arm Zone Substation – this will eliminate the supply risk associated with an outage at the Berrimah Zone Substation by providing an alternative source of electricity to Berrimah and East Arm. This means that the East Arm Zone Substation will provide N-1 contingency for the Berrimah Zone Substation;

- reliability of supply requirements – the Commission’s Standard of Service Code sets out the standards of reliability, quality and customer service that Power and Water must satisfy. Several projects on Power and Water’s capital works program relate directly to maintaining the minimum service obligation as established in the Commission’s Standard of Service Code. These include:

replacement of the switchboards at five of Darwin’s CBD Zone Substations. Replacing the existing old technology will allow the incoming express feeders to be increased to 1000 amp capacity thereby increasing the reliability of the network and reducing the likelihood of a system outage as well as the duration of an outage;

the Darwin undergrounding project – the undergrounding of overhead distribution power lines in Darwin’s residential suburbs will increase reliability of supply by reducing the network’s vulnerability to outages resulting from cyclones, overhanging trees, winds, storms and other weather events; and

replacement of the conductor on the Florina Road Feeder – this will increase system reliability by increasing supply capacity and providing a reliable power supply that is within the +/- 10% voltage limits.

Power and Water further notes that there have been changes to its legislative obligations, in particular its occupational health and safety requirements which impose more onerous requirements, including, amongst other things, fencing and traffic management requirements. The changes to these requirements have accordingly increased Power and Water's compliance costs.

6.2.3 Maintain the quality, reliability and security of supply of standard control services; and Maintain the reliability, safety and security of the distribution system through the supply of standard control services

Power and Water interprets this to mean that its 2008-09 capital expenditure forecast must allow it to maintain the quality, reliability and security of supply of its standard control services.

Power and Water is required to maintain the quality, reliability and security of supply in accordance with various planning documents including the:

- Network Technical Code;
- Network Planning Criteria; and
- Standards of Service Code.

Costs incurred by Power and Water in complying with these obligations are implicitly included within the expenditure program as part of good engineering practice and Power and Water's Planning Criteria.

6.3 Capital Expenditure Criteria

Power and Water's capital expenditure forecast for 2008-09 satisfies the capital expenditure criteria in clause 6.5.7(c) of the Rules. Clause 6.5.7(c) provides that the Commission must accept Power and Water's forecast capital expenditure for 2008-09 if it is satisfied that the total of the forecast reasonably reflects the capital expenditure criteria.

6.3.1 The efficient costs of achieving the capital expenditure objectives

Power and Water considers that each of the projects that make up its 2008-09 capital expenditure forecast are efficient given its own circumstances and could not have been undertaken at a lower cost. This is because the 2008-09 expenditure forecast associated with each of the capital projects is calculated on the basis of:

- required materials and equipment – Power and Water will purchase all required materials and equipment through:
 - MM Electrical who supply the bulk of Power and Water's required equipment and materials and was selected through competitive tender; and

- either a standing contract for supply or a new supply contract, for items not supplied by MM Electrical. All standing offer contracts and any new supply contract are awarded based on a competitive tender process consistent with Power and Water's established procurement process. The associated costs are therefore deemed to be efficient;
- contract labour – Power and Water engages contractors required to undertake, amongst other things, civil works (i.e. landscaping, establishing footings and erecting required fencing) and construction works in accordance with its competitive tender procedures. Where actual contracts were not available for inclusion in the 2008-09 expenditure forecast, Power and Water based its expenditure forecast on past contract costs for undertaking similar works; and
- project management and internal resourcing – Power and Water staff will undertake some of the construction associated with various projects on the 2008-09 capital works program and will also oversee the management of some projects. The forecast expenditure associated with Power Networks staff is efficient because it is based on the salary and allowances provisions established in the 2007-2010 UCA.

6.3.2 The costs that a prudent operator in the circumstances of the relevant Distribution Network Service Provider would require to achieve the capital expenditure objectives

Each of the projects comprising its 2008-09 capital expenditure forecast is prudent because the projects:

- could not have been deferred or avoided while satisfying its regulatory and legislative obligations and requirements, including in relation to reliability and security of supply, voltage requirements or occupational health and safety requirements. Further, many of the projects on the 2008-09 works program commenced well before 2008-09 and the expenditure allocated to that year is required to complete the project;
- could not have been substituted for other activities including non-network solutions or operating expenditure solutions. In no case was a non-network solution considered to be a feasible alternative for any of the required projects and in many cases the projects had previously been deferred and deferring the project is no longer consistent with supply reliability, security and safety requirements; and
- are set at their minimum efficient levels (i.e. capacity, security, reliability) while having regard for future changes, in particular demand and resource availability and costs, that will impact on the required capacity, security and reliability levels.

6.3.3 A realistic expectation of the demand forecast and cost input required to achieve the capital expenditure objectives

Each of the projects in the 2008-09 capital expenditure forecast were based on a realistic expectation of demand, and each project was designed to meet and alleviate a network constraint that has been identified by network planners, based

on standard engineering methods of estimating the demand at substations and transformers.

Power and Water has set out in Attachment A its methods of estimating the costs for each project, and the basis for estimating the demand for each project. Some have been based on "like" projects, some have been based on precise tender outcomes with pricing catalogues and some have been built up using estimated prices and expected equipment to be installed. All expectations are realistic, reasonable and have formed the basis for Power and Water's capital expenditure forecasts not just for this Regulatory Proposal, but also within Power and Water's Statement of Corporate Intent.

7 Establishing the 2008-09 Asset Base

Power and Water has not complied with the requirements of paragraphs 2.24 or 5.39 of the Final Decision Paper, as it has not used the rolled forward 2002 asset base valuation of \$350 million in calculating the Po adjustment factor for standard control services. Instead, it has proposed an alternative value for the asset base which is in contravention of paragraph 4.22 of the Draft Determination and with the Final Decision Paper. Power and Water proposes that the SKM asset valuation be used as the basis for determining the regulatory asset value, as proposed in Power and Water's Initial Regulatory Proposal.

This section explains why Power and Water has not complied with the requirements of paragraphs 2.24 or 5.39 of the Final Decision Paper in this Regulatory Proposal, and why the Commission should accept this aspect of its Regulatory Proposal.

7.1 The Commission's Off-Ramp Asset Valuation

The July 2002 asset valuation of \$350 million was determined by the Commission in its Off-Ramp Decision which was released subsequent to the 2004 Final Decision for the second regulatory control period.

Power and Water considers that the SKM report provides a more accurate and reasonable basis for valuing the assets. While Power and Water did not specifically address the issue of the asset base revaluation in its submission to the Commission's Draft Decision, as referred to in paragraph 5.36 of its Final Decision Paper, it has been consistent in communicating its concerns to the Commission since the revaluation was done. A roll-forward of Power and Water's 'initial' regulatory asset value of July 2002 is not a true and correct valuation of Power and Water's current assets in 2008-09 for the purposes of establishing a Po factor for the next regulatory control period.

7.2 SKM Asset Valuation

Power and Water engaged SKM in 2007 to conduct an Optimised Depreciated Replacement Cost (ODRC) valuation of all of its Generation, Networks, Water and Waste Water assets. The asset valuation provided an independently determined cost to replicate the existing network assets with Modern Equivalent Assets (MEAs) of the same current and intended function and service delivery capability. SKM's Report has been attached to this Regulatory Proposal (Appendix C).

SKM determined the value of the regulated assets to be \$562.3 million as at 1 July 2007.

SKM undertook this valuation in accordance with NSW Treasury document, "Valuation of Electricity Network Assets – A Policy Guideline for NSW DNSPs" (May 2003), and based its approach on the following three distinct steps:

- first, to establish the current replacement cost of the modern equivalent of assets in service at the valuation date;

- second, to depreciate the replacement cost to reflect the remaining effective life of the assets in service; and
- third, to adjust the depreciated replacement cost for over-design, over-capacity and redundant assets (optimisation).

7.3 Rolling forward the 2007 Asset Base Valuation

Power and Water has used the Commission's Po Adjustment Model to calculate the Po adjustment factor for standard control services. Power and Water has also amended the Commission's Po adjustment model to take account of the use of the SKM asset values. This is discussed in detail in section 8 of this Regulatory Proposal.

7.4 Why the Commission should accept the SKM Valuation over the \$350 Million Roll-Forward

The Commission dealt with the required asset roll-forward methodology in paragraphs 5.32 to 5.39 of the Final Decision Paper, where it mandated the use of the \$350 million roll-forward. The Commission reinforced this view in paragraph 4.22 of the Draft Determination.

Paragraph 5.33 notes that the Commission would only consider departing from this position in the event that this "...will give rise to financial viability problems for Power and Water during the third regulatory period". The Commission further noted in paragraph 5.34 that its interpretation of "financial viability" was "a high level of certainty that a business will be able to pay its bills as they fall due...".

In a letter to Power and Water in July 2008, the Commission noted that it would consider the issue of the appropriate asset valuation against clause 63 of the NT Code, noting:

For clause 63(aa) purposes, however, expected cashflows relative to expenditure (both capital and operating) are what matter, not (the return on and of) DORC asset values per se. Capital expenditure forecasts are particularly critical. Moreover, increasing regulatory asset values is only one way to address any insufficiency in cashflows (even if the latter can be demonstrated).

Power and Water considers that the Commission cannot maintain this position as it is illogical and arbitrary and will give rise to financial viability issues for Power Networks.

While clause 63(aa) of the NT Code provides some guidance and a great deal of flexibility for the Commission to determine the "long run costs of supply", the Commission must exercise its discretion in this matter in recognition of its obligations under clause 68 of the NT Code.

Clause 68 of the NT Code requires the Commission to take into account, when setting either a price or revenue cap, the revenue requirements of the network provider during the relevant years, having regard to nine factors which are listed in the clause.

Clause 68(d) of the NT Code requires the Commission to take into account the network provider's cost of capital applicable to the relevant network access service, having regard to the risk-adjusted rate of return required by investors in commercial enterprises facing similar business risks to those faced by the network provider in the provision of that service. This is not confined to the establishment of an industry standard WACC. The cost of capital is not a rate – it is an annual cost of capital employed. This requires a determination of the value of the capital base.

To meet the requirements of clause 68(d), the Commission must have regard to a fair and market based value of relevant assets. This can only be made based on a consideration or review of the assets involved.

Further, clause 68(e) of the NT Code requires the Commission to take into account the provision of a return on efficient capital investment undertaken by the network provider in order to maintain network capacity that is commensurate with the commercial and regulatory risks involved. The Commission has stated it will only consider amending the \$350 million roll-forward methodology on the basis of whether Power and Water can afford to meet its bills as they fall due. Such an interpretation is illogical and without any reasonable basis of support when considered against prevailing regulatory precedent interstate which provides for an industry WACC on a DORC assessed asset value. The Commission must not apply an incorrect test or fail to take relevant considerations into account in making a determination of Power and Water's asset base in 2008-09.

A DORC methodology is the valuation methodology most consistent with the Commission's regulatory objectives established under clauses 63 and 68 of the NT Code. Optimised replacement cost (ORC) valuations best replicate the outcomes of a competitive market because they:

- efficiently compensate the investor for investments over the long run;
- replicate the lowest cost that would be incurred by a hypothetical new entrant wishing to enter the market, because the assets are optimised to remove obsolete, poorly sized or poorly located assets; and
- provides the maximum price that a new entrant would be willing to pay the incumbent for existing assets rather than purchasing new assets.

The DORC valuation, as a further refinement of the ORC:

- addresses issues with depreciated actual cost - the non consistency in relating historical values for capital assets and capital costs with current values for other expenses and revenues; and
- establishes asset values that minimise incentives for by-pass of the network.

The SKM asset valuation used by Power and Water in this Regulatory Proposal therefore establishes a current, true and correct value of the assets in a workably competitive market which will result in prices:

- that are efficient;

- meet the efficient long-run costs of providing regulated services, and include a return on investment commensurate with commercial and regulatory risks; and
- that allow Power and Water to replace assets over time.

On this basis the SKM asset valuation meets the regulatory objectives which are established under clause 63 and clause 68 of the NT Code. The SKM Asset Verification and Valuation Report has been included at Appendix C.

Aside from viability issues, Power and Water has an issue with the Commission's Draft Decision in relation to its asset base. Regardless of the Commission's findings in the 2005 Off-Ramp Review, and its stated view in the Draft Determination, the Commission is bound to act in accordance with the NT Act and NT Code. Section 6 of Schedule 7 of the NT Code provides the basis for valuing network assets. The Commission has not taken this section into consideration and it must do so for the purposes of rejecting Power and Water's decision to propose the SKM asset valuation.

Section 6 of Schedule 7 of the NT Code provides that:

"In approving the basis of asset valuation to be used, the regulator must have regard to –

- a) the agreement of the Council of Australian Governments of 19 August 1994 that deprival value should be the preferred approach to valuing network assets;*
- b) any subsequent decisions of the Council of Australian Governments regarding the valuation of public sector assets; and*
- c) generally accepted regulatory practice at the time."*

The Commission had regard to these matters in the 2005 Off-Ramp Decision, in which it:

formed an interpretation of deprival value at that time, finding that there is a basis to write-down an asset if there is a constraint on prices that can be charged; and

formed an interpretation of generally accepted regulatory practice, which was primarily based on gas network decisions at that time.

It is Power and Water's view that the Commission should re-examine its interpretation of deprival value, in particular to take into account the 2007 and 2008 increases in retail tariffs and agreed price paths. A decision by the Commission to maintain the 2005 Off-Ramp Decision, and to ignore the SKM valuation, implies that Power and Water would not be able to recover the increase in network tariffs consequent to the use of the SKM valuation. This is not a valid assumption.

Further, Power and Water considers that the Commission's 2005 Off-Ramp valuation methodology is no longer consistent with generally accepted regulatory practice, in particular the introduction of Chapter 6 of the Rules and the new Gas Rules. This is because:

under a deprival value methodology, the Po is both a determinant of, and consequent to, the return on assets in the building block calculation. It is a determinant of the return on assets because the Commission's 2005 method calculates the value of the assets on the basis of future revenue. It is a consequence of the return on assets because the higher the asset base is, the higher the return on assets is, and therefore increases the Po. Generally accepted regulatory practice is to recognise this circularity, and to use DORC as the "circuit breaker"; and

if Government agrees to increase the non-contestable retail electricity tariffs, and Power and Water Retail is willing to increase the contestable retail electricity tariffs, then the Po consequent to SKM can be recovered. In this case, there is no basis for the 2005 Off-Ramp method to arrive at any other number than the SKM value.

8 Po Adjustment Factor for Standard Control Services

This section explains and justifies the amounts, values and inputs used by Power and Water in the Commission's November 2008 Po Adjustment Model for standard control services. It also details the Po adjustment factor that is produced by the Po Adjustment Model. These matters are addressed by reference to the regulatory requirements for this Regulatory Proposal that are specified in the Final Decision Paper, as discussed in section 3 above.

In particular, this section satisfies the requirements of paragraph 2.8 of the Final Decision Paper that the proposed Po adjustment factor be accompanied by:

details of all amounts, values and inputs relevant to the calculation of the Po adjustment factor;

an explanation of the calculation and the amounts, values and inputs involved in the calculation; and

a demonstration that each calculation, and the resultant amounts, values and inputs on which it is based, comply with the relevant requirements of the Final Decision Paper.

As noted in Section 7, Power and Water has not applied a 2008-09 asset value based on the roll-forward of the \$350 million asset valuation at 1 July 2002 in accordance with paragraph 5.39 of the Final Decision Paper. It has instead used the value determined by SKM in its Asset Verification and Valuation Report.

8.1 Nature of Standard Control Services

In accordance with the Commission's Interim Approval on the classification of Power and Water's distribution services, standard control services include conveyance services and connection services.

Conveyance services involve Power and Water:

- providing electricity transfer capacity for its regulated network in Darwin, Katherine, Tennant Creek and Alice Springs;
- augmenting the shared distribution network through its capital expenditure program;
- controlling and ensuring that the characteristics (e.g. voltage and harmonics) of the electricity being transferred are suitable and within legislative limits; and
- undertaking associated activities to ensure the shared distribution network is fit for purpose, secure from interference, reliable in function and safe in operation.

Connection services relate to building connection assets at the customer's premises as well as connecting those connection assets to the distribution network. Connection services are usually dedicated to the particular customer, and not shared with other customers. The assets that are built and energised through this service include:

Small users (using less than 750 MWh per annum):

- connection assets (service lines, terminations, transformers), including permanent unmetered connections; and
- accumulation metering installations.
- Large users (using in excess of 750 MWh per annum):
- dedicated lines, transformers (within and outside the network user's land);
- connection assets; and
- interval metering installations.

8.2 Establishing the Asset Base for Standard Control Services

Power and Water has amended the Commission's November 2008 Po Model to take account of its decision to use the SKM asset valuation. A copy of Power and Water's completed Po November 2008 Model has been provided to the Commission as Appendix D to this Regulatory Proposal.

8.3 Pre-Tax Rate of Return Parameter Values

Paragraph 2.24 of the Final Decision Paper requires that, when applying the Commission's Po adjustment model, Power and Water must apply any parameters that have been determined by the Commission. Paragraph 2.10 of the Draft Determination provides the various parameter values to be applied.

Paragraph 2.10 of the Draft Determination specifies the following parameters in relation to the weighted average cost of capital:

- equity beta is to be 1.0;
- the market risk premium is to be 6.0%;
- the proportion of debt funding is to be 60%;
- gamma is to be 50%;
- the debt risk premium is to be 2.0%;
- forecast inflation is to be 3.0%;
- the nominal risk free rate is to be 6.0%; and

- the debt raising cost benchmark is to be 0.08%.

In addition, the Commission's Po Adjustment Model specifies the method by which the weighted average cost of capital is to be calculated and applied to the regulatory asset base to determine the rate of return for the purposes of inclusion in the building block calculation of the revenue requirement for 2008-09.

Power and Water confirms that it has applied the parameters specified by the Commission, as well as the approach specified in the Commission's Po Adjustment Model, for the purposes of calculating the weighted average cost of capital and the rate of return.

Pre-Tax Weighted Average Cost of Capital

Power and Water has used the outputs of the Commission's Po Adjustment Model based on the above parameters, culminating in a pre-tax nominal WACC of 10.45% and a pre-tax real WACC of 7.23% percent. As per paragraph 2.12 of the Draft Determination, the Commission will update this based on latest information in its Final Decision.

8.4 Capital Expenditure

As Power and Water has used the asset valuation recommended by SKM for the opening asset value as at 1 July 2007, only capital expenditure for 2007-08 and 2008-09 has been included in the Commission's Po Adjustment Model. Power and Water has used the Commission's Po Adjustment Model to roll forward the asset base from this point, and has therefore complied with the requirements of clause 6.5.1 of the Rules in relation to the roll forward of its capital expenditure in its regulatory asset base.

In rolling forward its regulatory asset base, Power and Water has used:

- actual capital expenditure for 2007-08. The 2007-08 values were recently finalised and reported to the Commission in Power and Water's regulatory accounts. The Commission should note that no prudency review has been undertaken in relation to 2007-08 capital expenditure and no adjustments have been made, for the purposes of including them in the Po Adjustment Model, from what has been, or will be, presented in Power and Water's regulatory accounts. This approach is consistent with:
- the application of Chapter 6 of the Rules to NEM distributors, which does not provide for any prudency reviews being undertaken in determining the opening regulatory asset base for a regulatory control period. Rather, actual capital expenditure is to be used; and
- discussions held between officers from Power and Water and the Commission where the approach of applying actual capital expenditure values was discussed and agreed for use in the third regulatory control period.

Power and Water has, however, set out detailed information on its capital expenditure for 2007-08 for the Commission's information in Appendix B. This information will allow the Commission to consider each of the projects that made up

the 2007-08 capital expenditure, in particular the drivers for the project and the basis for the cost of the projects.

Forecast capital expenditure for 2008-09, which has been determined and further justified based on the requirements of clause 6.5.7 of the Rules. Appendix A of this Regulatory Proposal provides a detailed breakdown and explanation of Power Networks' 2008-09 capital expenditure program.

8.5 Depreciation

Paragraph 2.24 of the Commission's Final Decision Paper requires that Power and Water's annual depreciation expense be prepared to conform to the requirements of clause 6.5.5(b) of the Rules. Further, Amendment 5-3 specifies benchmark depreciation amounts that Power and Water may depart from in this Regulatory Proposal.

Power and Water has used the Commission's November 2008 Po Model to calculate the annual depreciation expense.

Power and Water's approach to determining depreciation meets the requirements of clause 6.5.5(b) of the Rules, and the Final Decision Paper, because depreciation has been calculated by the Commission's November 2008 Po Model.

The depreciation amount for 2008-09 is \$22.2 million.

8.6 Operating Expenditure

Paragraph 2.24 of the Final Decision Paper requires that Power and Water's estimated operating expenditure must be calculated, determined or estimated consistent with:

- the requirements of clause 6.5.6(c) of the Rules;
- the manner used to calculate the X_2 value underlying the X factor as determined by the Commission; and
- Power and Water's approved cost allocation procedures.

Power and Water has provided a detailed breakdown and explanation of its forecast operating expenditure for 2008-09 in section 5 of this Regulatory Proposal.

Amendment 5-4 in the Draft Determination requires that Power and Water either accept the operating and maintenance cost calculations as proposed by the NTUC in paragraph 2.25 or provide alternative values from 2004-05 to 2008-09.

Further, Amendment 5-5 in the Draft Determination requires that Power and Water reduce its 2008-09 operating expenditure by 16.9% in 2008-09 or some other percentage factor as nominated by Power and Water.

Power and Water's updated 2008-09 operating and maintenance expenditure is \$54.9 million. In line with Amendment 5-4, and as set out in section 5.5 of this Regulatory Proposal, Power and Water has not discounted this amount and it is

therefore undiscounted in the Commission's November 2008 Po Model. The operating and maintenance expenditure forecast included in the Po for 2008-09 is \$54.9 million.

Power and Water confirms that this value is consistent with the manner used to calculate the X_2 value underlying the X factor as determined by the Commission, as is required by paragraph 2.24 of the Commission's Final Decision Paper.

8.7 Proposed Required Revenue for 2008-09 (R*)

Power and Water has included the amounts, values and inputs calculated on the basis of the sections above in the Commission's Po Adjustment Model. On this basis, it has calculated the required revenue for 2008-09 for its standard control services using a building block approach. This is the "R*" value for the purposes of the calculation of the Po adjustment factor.

The amounts of each building block component, and the total required revenue for 2008-09, are detailed below.

Table 5: Building Blocks Components - Po Adjustment Model

Cost	2008-09 (\$'000s)
Nominal Return on Opening Capital	62,902
Nominal Return on New Capital	2,860
Return of Capital (Nominal Straight-line Depreciation)	22,197
Holding Gains adjustment	(18,063)
Operating Expenditure	54,919
Total 2008-09 Required Revenue (R*)	124,815

8.8 Estimated 2008-09 Tariff Revenue (R)

Paragraphs 5.58 and 5.64 of the Final Decision Paper require Power and Water to specify the total annual revenue expected from all related network tariffs during 2008-09. This is the "R" value for the purposes of the calculation of the Po adjustment factor.

Amendment 5-6 in the Draft Determination requires Power and Water to accept the Commission's estimates of actual revenue for 2008-09 (\$79.994 million) or propose an alternative amount. Power and Water accepts the value as proposed by the Commission.

8.9 Po Adjustment Factor for 2008-09

Paragraph 2.8 of the Final Decision Paper requires that Power and Water's Regulatory Proposal must include a proposed Po adjustment factor calculated using the Commission's Po Adjustment Model.

Paragraph 5.18 of the Final Decision Paper provides that the Po adjustment factor is to be calculated as follows:

$$Po = (R^* - R) / R$$

Where:

R* is the latest estimate of the total cost (in \$ millions) in 2008-09 of supplying the network access services whose tariffs are to be included in the tariff basket in 2009-10; and

R is the latest estimate of the total revenue (in \$ millions) in 2008-09 derived from the existing tariffs applying to the network access services that are to be included in the tariff basket in 2009-10.

Power and Water's proposed Po adjustment factor, as calculated by the Po Adjustment Model, is 56.0%, as set out in Table 6.

Table 6: Po Calculation for 2008-09 (\$'000)

Required Revenue (R*)	124,815
Estimated Revenue (R)	79,994
Proposed Po	56.0%

Consistent with the requirement in paragraph 5.19 of the Final Decision Paper, a single Po adjustment factor has been calculated.

8.10 X Factors

Paragraph 2.13 of the Draft Determination requires Power and Water to adopt values for X₁, X₂ and X₃ of 0.0%, 0.25% and 1.1% respectively. These values were also contained in the Po Model provided to Power and Water by the Commission.

Power and Water accepts these X factors and has applied them in this Regulatory Proposal and in the Commission's Po Model.

Power and Water has assumed that paragraph 4.87 of the Draft Determination, which requires an X₃ factor of 0.0%, is a typographical error.

9 Treatment of Alternative Control Services

This section explains and justifies the proposed control mechanism to apply to Power and Water's alternative control services and the methodology that is to be used for establishing prices for these services.

9.1 List of Alternative Control Services

Section 2.3 provides the complete list of Power and Water's alternative control services for the upcoming regulatory period. Prices for fixed fee services are set out in Appendix F.

9.2 Nature of Alternative Control Services

In accordance with the Commission's Approval on the classification of distribution services for the third regulatory control period, Power and Water's alternative control services will comprise Power and Water's:

- existing excluded services – also termed “miscellaneous services” – including the maintenance of streetlights; and
- above-standard connection services and other quoted services.

9.3 Proposed Control Mechanisms

Paragraph 2.10 of the Commission's Final Decision Paper requires Power and Water to propose a control mechanism in relation to its alternative control services.

Paragraph 2.20 of the Commission's Final Decision Paper requires that Power and Water's proposed control mechanism meets the requirements of clause 6.2.5 of the Rules.

Power and Water detailed its proposed control mechanism for its alternative control services in the services classification proposal that it submitted to the Commission in June 2008.

Existing Excluded Services

Power and Water's proposed control mechanism for existing excluded services is a build up of costs based on the estimated forward-looking costs of providing these services.

Power and Water's current methodology for establishing the prices for these services is to apply a standard labour rate to an anticipated average time taken to complete the work. Power and Water's methodology for establishing this cost based price is detailed in the Pricing Principles and Methods Statement at Appendix G.

Above-standard connection services and other quoted services

Power and Water's proposed control mechanism for above standard connection services and other quoted services is a formula such that the price is equal to:

- the materials employed for the project multiplied by the cost of those materials; PLUS
- the labour involved for the project (in hours) multiplied by the hourly rate including on-costs for that project.

Power and Water will not charge a profit margin for quoted services, in line with Amendment 6-7 of the Draft Determination.

This control setting method will allow Power and Water to quote an amount that is appropriate for the type of job to be provided. These types of services could vary from moving a meter at a cost of several hundred dollars to removing distribution infrastructure for Government to relocate a highway which could cost several million dollars.

Power and Water's proposed control mechanism for these services involves:

- applying a schedule of fixed prices, which for this purpose would be a quotation provided by Power and Water before the service is provided. This is permitted under 6.2.5(b)(1) of the Rules as one of the six types of control mechanisms that can be applied to alternative control services; and
- a modification to Part C of the Rules, which is permitted under 6.2.6(c) of the Rules.

On this basis, Power and Water considers that its proposed control mechanism for these services is consistent with paragraph 2.20 of the Commission's Final Decision Paper.

9.4 Methodology for Establishing Prices for Alternative Control Services

Power and Water's methodologies for establishing prices for its alternative control services are set out in the Pricing Principles and Methods Statement at Appendix G.

10 Cost Pass Through

This section sets out Power and Water's proposed additional cost pass through events to apply in relation to the provision of standard control services in the third regulatory control period. It also specifically addresses the potential cost pass through in the third regulatory period for capital and operating expenditure related to the failure of Casuarina Zone Substation and the recommendations from the Davies Inquiry, as raised by the Commission in paragraph 5.57 of the Draft Determination.

Paragraph 6.42 of the Final Decision Paper allows Power and Water to propose additional pass through events to those established under clause 6.6.1 of the Rules. Chapter 10 of the Rules defines pass through events, as referred to under clause 6.6.1 as being:

Any of the following is a pass through event:

- (a) a regulatory change event;*
- (b) a service standard event;*
- (c) a tax change event;*
- (d) a terrorism event.*

An insurance event is a pass through event for a transmission determination (in addition to those listed above).

An event nominated in a distribution determination as a pass through event is a pass through event for the determination (in addition to those listed above).

In summary, these events can be defined as follows:

- *Regulatory Change Event:* is a change in a regulatory obligation or requirement that falls within no other category of pass through event and occurs during the course of a regulatory control period. In addition, the change in the regulatory obligation or requirement must substantially affect the manner in which Power and Water provides Direct Control Services. The change must also materially increase or decrease the cost of providing those services.
- *Service Standard Event:* is a legislative or administrative act or decision that has the effect of:
 - substantially varying the manner in which Power and Water is required to provide a Prescribed Transmission Service, or a DNSP is required to provide a Direct Control Service;
 - imposing, removing or varying minimum service standards applicable to Direct Control Services; or
 - altering the nature and scope of the Direct Control Services.

- *Tax Change Event:* is a change in, or removal or imposition of, a relevant tax payable by Power and Water which materially increases or decreases the cost to the service provider of providing Direct Control Services.
- *Terrorism Event:* is an act of any person or group which, from its nature or context is done for, or in connection with, political, religious, ideological, ethnic or similar purposes or reasons, which materially increases the costs of providing Direct Control Services.

As noted, each of the above events could be the subject of a pass through application under paragraph 6.35 of the Final Decision Paper and clause 6.6.1 of the Rules if they occur during the third regulatory control period and result in materially higher or lower costs to Power and Water in providing Direct Control Services.

Power and Water proposes the following pass through mechanisms for the purposes of paragraph 6.42 of the Final Decision Paper:

- force majeure events;
- material variances in cost or connection demand inputs to those assumed at the time of the determination;
- changes to compliance obligations; and
- costs associated with any separation of Power and Water's Retail business or structural reform process.

Acceptance of these pass through events is critical to the continued efficient provision of standard control services in accordance with its regulatory and legislative obligations. The occurrence of any of these events in the absence of a pass through mechanism will have the effect of penalising Power and Water for expenditure which is:

- driven by events over which Power and Water has little or no ability to control; and
- required to incur above the forecast allowance determined by the Commission.

Power and Water proposes that the process for the Commission receiving and processing pass through events should be as set out in clause 6.6.1 of the Rules. It also proposes that the way in which the pass through events should be facilitated, once approved, is through an adjustment to the weighted average price cap constraint, such that the constraint takes the form $(CPI - X) + P$, where P is set such that the pass through amount is recovered.

10.1 Force majeure event

Power and Water proposes an additional pass through provision for weather related and other events such as major storms, earthquakes and fire, which are beyond Power and Water's reasonable control.

A Force Majeure Event is designed to include provision for fire, flood, earthquake, cyclone, storm, or other weather related events or natural disasters. These are events that are not insurable (either because cover is not available commercially or because cover is not available at a price which is worth pursuing).

These events involve risks that have a very low probability of occurrence but potentially a very high impact. The cost impacts of these events are not already being covered by either self insurance risk quantification, or any other regulatory cost pass through mechanism. Given the difficulty in quantifying this class of risk, and the fact that these events are outside Power and Water's control, Power and Water considers that this is a legitimate pass through provision for the upcoming regulatory control period.

In line with Amendment 6-8 in the Draft Determination, Power and Water proposes a materiality provision such that the pass through amount must exceed 1% of the annual revenue from standard control services in the financial year in which the event occurs.

For this to operate, the total cost of the event will be assessed against 1% of the revenue in the year in which the event occurred, regardless of whether or not the expenditure carries across several financial years. For example, if a cyclone occurred on 26 March 2009, and the activities required to restore supply took place between 27 March 2009 and 30 December 2010, then the pass-through cost would be the total cost of the restoration between 27 March 2009 and 30 December 2010, assessed against the total revenue received in 2008-09 (i.e the financial year in which the event occurred).

Power and Water proposes the following additional pass through event (in summary) for the Determination:

Force majeure event: is any fire, flood, earthquake, storm or other weather related event or natural disaster, act of God, riot, civil disorder or rebellion or other similar cause beyond the reasonable control of Power and Water that occurs during a regulatory control period and materially increases the cost to Power and Water of providing Standard Control Services.

10.2 Cost or connection demand input variance event

Power and Water proposes a pass through event to cover unexpected or unforeseeable changes in demand for new connections or cost movements that either trigger new investments or materially alter the costs of current or planned investments.

A cost or connection demand input variance event is designed to allow Power and Water to pass through any changes in input costs or connection demand variances that occur within a regulatory control period.

While Power and Water accepts that it may be able to manage some of these risks through efficient and effective procurement and internal processes, the efficient 2008-09 opex allowance assumes these processes. The TFP base year approach is derived from estimates of Power and Water's 2008-09 operating and capital

expenditure, and the X factor is set to allow for expected increases in overall input costs both in the industry and for the economy as a whole. Any additional increase in unit costs and/or demand which the prudent service provider would not be able to forecast and which the Commission's X factor and operating expenditure Determination did not foresee could therefore be defined as non-controllable.

Power and Water considers that these non-controllable risks are best borne by users of the network and not Power and Water. As the X factors are fixed for the length of the regulatory period, Power and Water would bear the financial risk associated with these events should they occur. The costs associated with unforeseen events may significantly impact on returns to Power and Water and therefore should be allowed to be passed through.

In line with Amendment 6-8 in the Draft Determination, Power and Water proposes a materiality provision such that the pass through amount must exceed 1% of the annual revenue from standard control services in the financial year in which the event occurs.

As with "force majeure" events, the total cost of the event would be assessed against 1% of the revenue in the year in which the event occurred, regardless of whether or not the expenditure carries across several financial years.

Power and Water therefore proposes the following additional pass through clause:

Cost or demand input variance event: is an event involving any change in actual cost movements or demand during the regulatory control period from cost movements or demand forecasts used in Power and Water's expenditure forecasts that materially increases or decreases the cost to Power and Water of providing Standard Control Services.

10.3 Compliance event

Power and Water also proposes an additional pass through provision for any significant changes to the legislative and regulatory obligations that apply to Power and Water in running its business and its network. This would include any possible Carbon Pollution Reduction Scheme introduced by the Federal Government.

A regulatory change event is defined by reference to regulatory obligations or requirements as defined in Section 2D of the *National Electricity Law*. This definition is relatively limited in its application. Similarly, a service standard event does not cover changes in compliance obligations other than those arising from a legislative or administrative act or decision.

To address this gap, Power and Water proposes a pass through event to address changes to its compliance obligations outside the definitions of regulatory change event and service change event. Such an event would be termed a compliance event.

A compliance event pass through covers costs that occur caused by unexpected and extraordinary changes in the regulatory regime, for example the mandated roll-out of interval meters or the connection of Power and Water to the National Electricity

Market (and the commencement of regulatory responsibilities in the Rules) within a regulatory period. These are uninsurable and beyond the control of Power and Water to mitigate ahead of time.

While Power and Water accepts that it may be able to manage some of these risks through active involvement in the processes that might give rise to these events occurring, it remains the case that these events are not within Power and Water's control.

Power and Water considers that these non-controllable risks are best borne by users of the network and not Power and Water. As the X factors are fixed for the length of the regulatory period, Power and Water would bear the financial risk associated with these events should they occur. The costs associated with unforeseen events may significantly impact on returns (both positive and negative) to Power and Water and therefore should be allowed to be passed through.

Power and Water proposes that the total cost of a compliance event should be passed through in the year in which it occurs without any materiality provision.

Power and Water's proposed pass through event (in summary) for inclusion in the Determination is set out below.

Compliance event: is an event other than a service standard event or a regulatory change event involving:

- *A change in a compliance obligation (meaning a general law obligation or a requirement of a non-mandatory code, standard or guideline which represents standards acceptable to the workforce or to the community); or*
- *A change in the way a compliance obligation is interpreted; or*
- *Any new compliance obligation, which materially increases or decreases the cost to Power and Water of providing Standard Control Services.*

10.4 Separation event

Power and Water proposes an additional pass through provision for any separation of its business arms such as its Power Networks business from its Retail business. Power and Water is unable to scope or cost a separation event.

Power and Water has received no indication from the Northern Territory Government that it intends to separate Power and Water Networks from Power and Water Retail.

That said, separation of Power and Water into separate businesses would impose considerable costs on Power and Water Networks given its current joint head office operations and shared service model.

Due to the uncertainties involved, Power and Water considers that any structural separation event needs to be incorporated as a nominated pass through event. Power and Water is of the view that the trigger for a separation event should be at the time when Power and Water has been able to firm up all costs, benefits and

impacts to the point where a full business case can be presented to the Commission.

Power and Water proposes that the total cost of a separation event should be passed through in the year in which it occurs without any materiality provision.

Power and Water proposes the following pass through event (in summary) for inclusion in the Determination:

Separation event: A separation event is any legislative or administrative act or decision to separate any business or function of Power and Water in whole or in part from any other business or function of Power and Water, which materially increases or decreases the costs to Power and Water of providing Standard Control Services.

10.5 Cost implications from the Davies Inquiry

In paragraph 5.57 of the Draft Determination the Commission decided it would not incorporate any expenditure arising from correcting the failure of the Casuarina Zone Substation in September and October 2008 in the Po adjustment factor. Instead, the Commission stated that it would deal with these costs via a pass through mechanism.

The Northern Territory Government established an Independent Inquiry, chaired by Mervyn Davies, to investigate the Casuarina incident. At the time of preparation of this proposal, the Final Report of the Inquiry had not been released. The Inquiry's terms of reference extend beyond reviewing the Casuarina equipment failures and require it to make general recommendations concerning Power and Water's maintenance practices. Power and Water will have a fuller understanding of the future operational and cost ramifications after the recommendations from the Inquiry are available (expected in February 2009).

The broad ranging nature of the Davies Inquiry may lead it to make recommendations which, when implemented, have potentially significant impacts on Power and Water's operating and capital programs. The trigger for the event should therefore be the time when Power and Water has been able to firm up all costs, benefits and impacts to the point where a full business case can be presented to the Commission. Power and Water considers that both the initial expenditure on rectifying and reinforcing supply, as well as future expenditure requirements, should be eligible for incorporation in the nominated pass through event. As such, Power and Water seeks the Commission's endorsement of this position, as well as the way in which the costs will be incorporated into the price control formula, in the Final Determination.

Power and Water proposes a materiality threshold of 1% of revenue from standard control services.

11 Pricing Proposal for Standard and Alternative Control Services

11.1 Requirements in the Final Decision Paper

Paragraphs 2.19 and 7.42 of the Final Decision Paper require Power and Water's Regulatory Proposal to meet conditions relating to network tariffs. Clause 6.18.2(b) also sets out certain requirements that Power and Water must meet.

Paragraph 2.19 requires that the prices proposed in the annual Network Tariff Schedules must "*comply with the price control mechanism as determined by the Commission; and in all other respects be consistent with the approved Network Pricing Principles and Methods Statement*". Power and Water confirms that its prices are consistent with these.

Paragraph 7.42 requires that a Pricing Proposal, must:

- set out Power and Water's proposed Network Tariff Schedules for direct control services, including the tariff classes that are to apply for the relevant year, the proposed tariffs for each tariff class and, for each proposed tariff, the charging parameters (i.e., the constituent elements of a tariff) and the elements of service to which each charging parameter relates. The Draft Determination slightly amended this requirement, instead requiring indicative prices to be prepared. For clarity, and to avoid non-compliance with these requirements, Power and Water has set out its proposed 2009-10 tariff schedules in this section as both the proposed prices and the indicative prices; and
- describe the nature and extent of change in the proposed Network Tariff Schedules from the tariffs applying in previous regulatory year. Power and Water has amended its tariffs between 2008-09 and 2009-10 to commence the process of introducing Northern Territory wide network tariffs. As a first step, Power and Water has converged Tennant Creek Peak and Off-Peak Energy and Demand tariffs for customers consuming greater than 750 MWh per annum with those in Darwin-Katherine. Over time and within the regulatory side constraints, Power and Water will also bring Alice Springs tariffs for customers consuming greater than 750 MWh in line with those in Darwin-Katherine and then gradually introduce Territory wide tariffs for customers consuming below 750 MWh per annum. Additionally, Power and Water has also removed the DKTL charge. This has been subsumed within the first energy step of the new Territory wide network tariff.

Clause 6.18.2(b) requires that a Pricing Proposal must:¹⁶

- set out the tariff classes that are to apply for the relevant regulatory year – these are set out in this section;

¹⁶ Sub-sections not deemed to apply to Power and Water have been omitted, for example how Power and Water passes-through transmission use of system charges.

- set out the proposed tariffs for each tariff class – these are set out in this section;
- set out, for each proposed tariff, the charging parameters and the elements of service to which each charging parameter relates – these are set out in this section;
- set out, for each tariff class related to standard control services, the expected weighted average revenue for the relevant regulatory year and also for the current regulatory year – this is set out below;
- set out the nature of any variation or adjustment to the tariff that could occur during the course of the regulatory year and the basis on which it could occur. Power and Water advises that it will only amend its network tariffs in line with the Commission's Determination when it is issued; and
- describe the nature and extent of change from the previous regulatory year and demonstrate that the changes comply with the Rules and any applicable distribution determination. The proposed changes in network tariffs have been described above and in the Pricing Principles and Methods Statement.

11.2 Further Requirements in the Draft Determination

The Draft Determination set out several further requirements on Power and Water relating to network tariffs:

Amendment 6-1 in the Draft Determination requires that the revised proposal must be accompanied by a stand-alone document capable of being published on Power and Water's website which details the principles and methods that Power and Water proposes to apply when establishing the reference tariffs to apply to individual network access tariffs, consistent with clause 75(5) of the NT Code. This stand-alone document, titled "Power and Water's Pricing Principles And Methods Statement" is set out at Appendix G;

Amendment 6-2 in the Draft Determination requires that the stand-alone network pricing principles and methods document must include or be accompanied by a framework for negotiating discounted network tariffs to replace the Commission's discounting framework. This requirement is contained in Power and Water's Pricing Principles And Methods Statement;

Amendment 6-3 in the Draft Determination requires that the stand-alone network pricing principles and methods document must include or be accompanied by a capital contributions statement, consistent with clause 81(2) of the NT Code. This requirement is contained in Power and Water's Pricing Principles And Methods Statement;

Amendment 6-4 in the Draft Determination requires that the revised proposal must be accompanied by:

- indicative Network Tariff Schedules for the regulatory year commencing 1 July 2009, for direct control services, that are consistent with all other

elements of the regulatory proposal. These are provided in the form of proposed network tariffs for standard control services set out below;

- a statement of expected network price trends giving an indication of how Power and Water expects network prices – both average prices and the structure of prices – to change over the regulatory period and the reasons for the expected changes. These are set out below; and
- a statement, and a supporting spreadsheet, demonstrating the pricing proposal's compliance with the various control mechanisms established by the Commission's Final Decision Paper and Draft Determination. The statement is set out below and the spreadsheet is provided at Appendix E.

The above requirements in both the Final Decision Paper and the Draft Determination are met both by the separate Pricing Principles and Methods Statement, and by this section including:

- the weighted average revenue for each tariff class;
- proposed network tariffs, which are intended to act as indicative network tariffs and thus satisfy both requirements for these;
- a statement of expected price trends over the regulatory period; and
- a statement that the proposed tariffs for standard control services meets the control mechanisms, supported by the spreadsheet at Appendix E.

11.3 Weighted Average Revenue for Tariff Classes

The weighted average revenue for 2008-09 and expected revenue for each tariff class for 2009-10, as required by 6.18.2 of the Rules is set out below.

Table 7: Expected 2008-09 and 2009-10 Tariff Revenue

Tariff Class	Revenue 2008-09 (\$M)	Revenue 2009-10 (\$M)	Expected Change in Revenue
Northern Grid above 750 MWh	13.1	21.3	62.3%
Alice Springs above 750 MWh	2.3	3.7	60.1%
Tennant Creek above 750 MWh	0.3	0.3	22.3%
Northern Grid below 750 MWh - Commercial	43.4	72.3	66.7%
Alice Springs below 750 MWh - Commercial	8.3	13.3	61.0%
Tennant Creek below 750 MWh - Commercial	2.3	3.7	65.1%
Northern Grid below 750 MWh - Domestic	3.5	5.7	63.5%
Alice Springs below 750 MWh - Domestic	0.8	1.3	64.3%
Tennant Creek below 750 MWh - Domestic	0.1	0.1	64.3%
Northern Grid above 750 MWh – DKTL	2.2	N/A	
Northern Grid below 750 MWh - DKTL	3.8	N/A	
Total	80.0	121.8	52.3%

11.4 Proposed Tariffs for Standard Control Services

Power and Water's proposed tariffs for standard control services are set out in Appendix E.

11.5 Proposed Tariffs for Alternative Control (Fixed Fee) Services

Power and Water's proposed tariffs for alternative control (fixed fee) services are set out in Appendix F.

11.6 Expected Price Trends for Standard Control Services

Power and Water does not consider that there will be any material deviation from the CPI-X constraint for its network tariffs, except to the extent that:

- there are any material pass through applications made to and accepted by the Commission during the next regulatory control period. Any successful pass through application would require an adjustment to tariffs in excess of the WAPC and side constraints. In the event of a cost pass through, as indicated by the Commission in paragraph 5.57 of the Draft Determination, Power and Water can only advise on the extent of any change to tariffs after the Commission makes a determination regarding the adjustment to the Price Control Mechanism for the cost pass through;
- there are unexpected variations in volume which require Power and Water to re-balance particular network tariffs more than others in order to protect its revenue position. Any re-balancing will be undertaken within required side constraints and within the overall WAPC constraint; and
- Power and Water intends to introduce, over time and within the allowable side constraints, a Northern Territory wide tariff for customers using above 750MWh and for those using less than 750MWh, respectively. Power and Water expects to be able to achieve this for customers using in excess of 750MWh per annum within the third regulatory period, and will seek to broaden this to include customers using less than 750MWh per annum over several regulatory periods.

11.7 Expected Price Trends for Alternative Control Services

Power and Water intends to increase its prices for alternative control (fixed fee) services by the CPI-X factor allowed as part of the Final Determination. These increases in fixed fee charges would occur each year when network prices are submitted for approval to the Commission.

11.8 Compliance with the Control Mechanism

Power and Water has set all of its prices to comply with the various control mechanisms applied to standard and alternative control services:

- in relation to standard control services, Appendix E and the separate spreadsheet provided to the Commission show that the weighted average price cap constraint has been complied with for 2009-10;
- in relation to alternative control (fixed fee) services, all prices have been established in accordance with the "cost build-up" method outlined in Appendix G; and
- in relation to alternative control (quoted) services, no evidence of compliance is required.

