PowerWater

POWER AND WATER CORPORATION

Response to Issues Paper

Networks Pricing: 2004 Regulatory Reset

August 2003

This report contains 25 pages

Contents

1 Executive summary

The Northern Territory Utilities Commission ("the Commission") has released its Issues Paper[1] on the 2004 Regulatory Reset Process ("Reset process") for electricity network services over the period 2004 – 2009. This document is Power and Water Corporation's (Power and Water's) response to the Issues Paper.

Power and Water's key concerns with the price Reset process are to ensure that the regulatory regime recognises:

- The size of the Northern Territory electricity network system and the importance of weighing relative costs and benefits when considering the most appropriate forms of regulation;
- The important role Power and Water can play in facilitating the development of the Northern Territory and the opportunities that this perspective brings (eg. a greater focus on encouraging investment);
- Power and Water's obligations to its shareholder; and
- The importance of providing Power and Water with operational flexibility, and the role that regulatory certainty plays in providing this flexibility.

This provides the context for our response to the Issues Paper.

Power and Water:

- Is concerned with the haste of the Reset process because:
  - In other Australian States, Issues Papers on the Form of Regulation in the electricity and gas industries have been released well over 12 months prior to the date the pricing submission is due[2]. The five week timeframe to respond to the Issues Paper means that Power and Water has been unable to assess fully the implications associated with the options set out in the Issues Paper; and
  - The Draft Methodology Report is due to be released only 5 weeks before the pricing submission is due on 30 December 2003. This is unlikely to provide the relevant stakeholders to the process with the time they need to assess the report. For example, this is unlikely to provide sufficient time for Power and Water to undertake detailed financial modelling to support its price submission.
- Notes that while a more light handed regulatory approach will be desirable once the market is mature, Power and Water has a preference for a cost based building block approach to determine Maximum Revenue in the second regulatory period, because this:

[1] Northern Territory Utilities Commission, *Networks Pricing: 2004 Regulatory Reset Issues Paper*, July 2003

[2] The 2005 Queensland Electricity Price Review and the 2004 NSW Distribution Price Review. See also Attachment A to this report

- Allows transparency in the way in which Maximum Revenue is determined, for Government, customers and the Commission. This is important because the second regulatory period may involve significant changes in capital and operational expenditures if Timor Sea gas is brought on-shore, which might involve changes in tariffs or revenues during the regulatory period. Power and Water notes that this relies on an assumption that it will be able to make within-period adjustments to Maximum Revenue for unforseen capital expenditure, driven by increases in demand. This approach has precedent in the Electranet SA revenue submission lodged with the Australian Competition and Consumer Commission ("ACCC")[3] in 2002; and
- Does not require Power and Water and its shareholder to bear the risk of not forecasting demand or costs accurately in an environment of potentially significant change.

- Would like to signal its preferred treatment on a number of other key issues set out in the Issues Paper, being:
  - A preference to classify some services as Excluded Services under the Network Access Code, as discussed in section 3.2;
  - A preference to retain the number and structure of tariffs in the first regulatory period, in the second regulatory period, as discussed in section 3.3;
  - A preference for a real pre-tax weighted average cost of capital ("WACC") to determine the rate of return on capital, as discussed in section 3.4; and
  - A preference to use the 2001 asset valuation conducted by Sinclair Knight Mertz, indexed to 30 June 2004, as the opening asset base, as discussed in section 3.5.

[3] Electranet SA, Transmission Network Revenue Cap Submission, 2003 – 2007/8, 16 April 2002

2 Context for the Issues Paper response

2.1 Background

This section sets out Power and Water's concerns with the:

- Commission's proposed process for the Reset; and
- Issues Paper.

2.2 Summary of Concerns

Power and Water has concerns about the Reset process proposed in the Issues Paper. This is because:

- The timetable is too short, which limits the prospect of good regulatory outcomes for Power and Water, its customers and the NT electricity market;
- The Reset will need to be consistent with the requirements of the Network Access Code ("the Code"), which is currently part way through a review process. Therefore it is currently very difficult for Power and Water or any stakeholder, to pass views on the appropriate treatment of issues, when the framework for their resolution is uncertain; and
- The Issues Paper does not contain sufficient information for Power and Water to adequately prepare its submission.

The above matters are discussed in more detail below.

2.2.1 The timetable

Power and Water considers that the timetable foreshadowed for the Reset process is unrealistically short. The risk is that this will limit the opportunity for good regulatory outcomes. This is because:

- There is insufficient time to take into account any changes in the form of regulation that may arise, and to make an informed judgement of the potential impacts on Power and Water's customers.
  - Under the timeframe proposed by the Commission, Power and Water has just three months to consider alternative forms of regulation and then just 5 weeks from notification of the new form of regulation to develop their quantitative Reset submission. The table at Appendix A shows the time taken for similar processes elsewhere in Australia, further illustrating the haste of the NT process by comparison;
  - Furthermore, it is expected that any change in the form of regulation will be notified (in the Final Methodology Report) just seven months before the new framework is to be operational. In contrast, the National Electricity Code requires regulators to give

two years prior notice to the distribution network owner of a change in the form of regulation.[4]

- The process makes no allowance for a Draft Decision. Every Reset conducted in Australia has allowed for a Draft Decision, subject to public consultation, prior to a Final Decision being released. This is important because it:
  - Allows Power and Water to model any changes proposed by the Commission that were unexpected, and to advise the Commission whether these changes have any adverse consequences on other aspects of the pricing package;
  - Provides customers with the opportunity to debate the merits of the Draft Decision, prior to it being implemented and having an impact on prices paid for electricity; and
  - Would help the Commission ensure that regulatory decisions take account of 'the network provider's legitimate business interests and investment in the electricity network', which is a requirement set out in clause 2(2) of the Code.

2.2.2 The review of the Network Access Code

Power and Water's pricing submission to the Commission will need to be in accordance with the Code. The Code is currently part way under review and is not expected to be finalised until early 2004. Hence Power and Water will not know the final form of the Code prior to putting forward its pricing submission to the Commission. It is therefore requested that the Commission work with Government to provide greater certainty with regard to the precise amendments to the Code that will, and will not, come into effect in the second regulatory period, by agreeing a framework to incorporate changes in the regime into the Maximum Revenue and tariffs, where that is appropriate.

This is important because prices and revenues put forward in the submission will need to make assumptions as to the final amendments to the Code:

- The introduction of a class of excluded services is not yet resolved (recommendation 49). Power and Water proposes to classify certain services as excluded services in calculating the Maximum Revenue cap and associated tariffs. If this change does not occur, the pricing submission will need to be recalculated and the tariffs reformulated before the submission is lodged;
- The Commission's recommendations relating to Power and Water's liability for certain matters are not yet resolved. The Final Report made recommendations (in particular recommendations 17[5] and 38[6]) that will impose additional costs on Power and Water if adopted. Power and Water did not support these recommendations. As the Commission

[4] National Electricity Code, clause 6.10.3(d).

[5] Recommendation 17 was for the Minister to give consideration to amendments aimed at capping, rather than excluding, liability for acts or omissions by Power and Water under the Code

[6] Recommendation 38 was for the Minister to give consideration to amending the Act to include a direct right to claim compensation for a contravention of the Code

did not take a view as to whether these changes should be made (merely noted them for further Ministerial consideration), these costs have not been considered as operational costs for the purposes of assessing Maximum Revenue. If these Code changes are made, and these potential costs become actual costs, a short-fall will arise. This will impact on dividends paid to the Northern Territory Government, as shareholder; and

- Power and Water needs to make assumptions about proposed changes to the Code when forecasting operational costs. Recommendations which foreshadow increased regulatory scrutiny (for example, recommendation 59A relating to capital contributions) will impose additional legal or other costs as Power and Water staff are redirected from other work.

In clause 1.11 of the Issues Paper, the Commission notes that it intends to undertake its deliberations for the current review on the basis that amendments to the Code will be undertaken consistent with the Commission's recommendations to the Minister. The Commission further notes that the Minister will *be in a position to* amend the Code prior to the publication of the Draft Methodology Paper, five weeks before Power and Water's submission is made to the Commission.

It will be extremely difficult for Power and Water to make judgements on forecast costs and service levels in the absence of the final form of the Code. This is because the proposed changes to the Code (for example the absence of regulatory certainty as to whether a new investment will or will not be regulated) have significant implications on investment decisions and the ability to forecast costs.

3 Preliminary views on key issues

Power and Water notes that detailed methodological issues will be dealt with in the Draft Methodology Paper due for public consultation in mid September 2003.

That said, the extremely compressed timetable between the issuance of that paper, the consultation period (4 weeks) and the issuance of the Final Methodology Paper (a further 2 weeks) suggests that the opportunity to influence the recommendations made in the Draft Methodology Paper will be limited.

Moreover, if the Commission intends to adhere to the timelines proposed, it will be necessary for it to make major decisions on key regulatory issues sooner rather than later.

Power and Water therefore sees benefit in making its preliminary views known to the Commission on a number of key issues, in order that these views can be considered and factored into the Draft Methodology Report. These issues and views are:

- The appropriate form of regulation to apply in the second regulatory period. The Commission, in the Issues Paper, explicitly seeks views on this issue. Power and Water supports a continuation of the cost based building block formula, albeit one that reflects the appropriate level of detail relative to consequent benefits in the context of the Territory's electricity supply needs;
- How the Commission intends to deal with Prescribed and Excluded Services (what is 'in' and what is 'out' of the Maximum Revenue Cap). Power and Water will be identifying certain prescribed and excluded services in its pricing submission;
- The Commission's preferred treatment of network tariffs, in particular whether there is merit in developing additional network tariffs. Power and Water does not support further separation of network tariffs, as we believe that the costs of doing so are likely to exceed the benefits that more cost reflective tariffs could be expected to provide;
- The Commission's preferred treatment of return on capital. Power and Water supports the use of pre-tax real calculations of WACC, as this has precedent in other States and has a sound theoretical base; and
- The Commission's preferred method of determining the opening capital base. Power and Water intends to use the 30 June 2001 asset valuation as the opening asset base for the second regulatory period, and indexing that valuation forward to 30 June 2004. A new valuation study will not benefit the process significantly, will take up to six months to complete, and will cost in excess of $200,000.

3.1 Form of regulation

Power and Water favours the continuation of the cost based building block method for setting a Maximum Revenue cap, as opposed to a price cap, because it should:

- Provide Power and Water with the operational flexibility it needs to meet its service objectives. Power and Water will continue to work with the Commission to ensure that compliance mechanisms are appropriate and do not constrain the actual delivery of the service;
- Recognise the small scale of the NT market. Power and Water is the only network business and currently the only retail business. A method of setting revenue that is simple, well understood and well implemented will send the best signals to new entrant retailers; and
- Only expose Power and Water to risks it can control. It has not been confirmed that Timor Sea Gas other than Bayu Undan will come onshore. The building block model can be applied with sufficient flexibility to allow for any necessary changes in tariffs to be shown as consequent outcomes of new investment required in the system to support unexpected events such as on-shore gas.

3.2 Prescribed and excluded services

Power and Water notes the need for detailed information to be provided in the Draft Methodology Paper to allow prescribed and excluded services to be defined appropriately. The need for this detailed information stems from the current uncertainty on this issue in the Code.

Power and Water notes that there is no clear description in the Code as to whether a service or asset is:

- Regulated and subject to the form of price control;
- Subject to regulation, but excluded from the form of price control; or
- Non-regulated.

This information is fundamental to any calculation or forecast of cost of services and hence revenue requirements under the revenue cap. While the Commission, in the Final Report on the Code review[7], recommended[8] that clause 72(b) of the Code should be amended to include a new class of services that *do not lend themselves to being regulated via the general price control mechanisms set out in chapters 6 and 7 of the Code*, this change has not yet been effected.

There are good reasons for defining some services as excluded services. The Commission noted in the Final Report:

> *The Commission acknowledged that there has been a great deal of confusion in the NEM in relation to which network services are prescribed services as compared to excluded*

[7] Inquiry into the NT Electricity Network Access Code, Final Report April 2003

[8] recommendation 49

services. This lack of clarity is critical to access seekers because the classification of network access services as prescribed or excluded determines the form of price regulation applying to those services.

The same confusion exists in Clauses 67 and 72 of the Code.

The implications of not having certainty as to which services are prescribed and which are excluded, are that:

- Power and Water must make a judgement as to which services are excluded services in the absence of clear guidelines. This may result in disagreements over those judgements once the submission is lodged with the Commission; and
- Power and Water must separate the costs and revenues associated with the provision of excluded services from those associated with prescribed services. This involves allocating costs, assets and overheads to prescribed services and to excluded services. This can take considerable, detailed work to identify appropriate causality and efficiency in costing.

Resolving this uncertainty is made more difficult by the absence of a Draft Decision stage. There is therefore no opportunity for customers or access seekers to comment on the interpretations made by the Commission in assessing Power and Water's list of prescribed and excluded services.

While there has been debate over the services defined as excluded services interstate, most network businesses in Australia have greater certainty than exists in the NT on this issue:

- The National Electricity Code (in Schedule 6.6) provides a list of services and activities that may be classified as excluded services by jurisdictional regulators;
- In NSW, the regulator is currently reviewing its existing list of excluded services[9] and has released an Issues Paper followed by a Draft Decision on the proposed list;
- In Victoria, excluded services are listed in the Electricity Distribution Price Determination 2001-2005 - Volume II Price Controls;
- In Queensland, all services are Prescribed Services unless the services satisfy a contestability test by the regulator; and
- In South Australia, a list of excluded services is set out[10] in the South Australian Electricity Pricing Order, although these definitions are in the process of being debated and possibly reviewed as part of the current distribution price reset.

[9] Independent Pricing and Regulatory Tribunal, *Review of Prescribed and Excluded Distribution Services, Draft Decision*, February 2003

[10] *South Australian Electricity Pricing Order 1999*- List of Excluded Distribution Services by Category

3.3 Network tariffs

Power and Water is mindful of the need for access prices to send appropriate signals to retailers looking to enter the market, and to ensure that cross subsidisation is kept to a minimum[11]. The Commission has sought to examine whether there should be additional new network tariffs to reduce the potential for cross subsidies.

Power and Water strongly advocates retaining the existing level of tariff disaggregation. This is because:

- There are already three geographical tariff classes, which are then further split into two consumption based tariff classes (for customers consuming above and below 750MWh per annum) in each geographical area. Given that the tariffs are then subject to a declining block methodology, it is unlikely that there are currently material levels of cross subsidy[12]; and
- There is a need to make a judgement to balance the appropriate level of cross subsidisation given the size of the NT market. While there is cross subsidisation inherent in any system, there is also a cost (both social and economic) in removing it.

Power and Water accepts that defining the appropriate level of cross subsidisation is difficult. On this issue, the Queensland Competition Authority ("QCA")[13] has stated:

To be economically efficient, this allocation process should result in prices that reflect:

- *At least the incremental costs associated with the provision of a service (or other users of the network would be better off if that customer was not supplied); and*
- *No more than the stand-alone cost of providing the service (or the user could potentially by-pass the network and achieve a lower price, to the detriment of other users in the network).*

Where prices do not fall within these broad boundaries, a cross-subsidy may exist.

At this stage, Power and Water cannot guarantee that access prices to large and small customers within each geographical region lie within the range of incremental and stand-alone costs of supply. However, the charges for particular groups of customers are unlikely to be below marginal costs because the tariffs are based on an average cost methodology. Moreover, the charges are unlikely to be above stand-alone costs for particular groups of customers simply because there is no evidence of customers leaving the system and choosing to supply themselves.

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[11] In the context of this paper, we are referring to cross subsidies in an accounting sense rather than an economic sense

[12] Power and Water designed the energy and demand components of the tariffs to avoid cross subsidies that had been apparent in other jurisdictions. .

[13] Queensland Competition Authority, *Draft Decision on Proposed Access Arrangements for Queensland Gas Distribution Networks*, October 2001

It is unlikely, however, that any further analysis would be in the best interests of customers because:

- The coincidence of theory and practice would be fleeting. There are only 179 customers consuming in excess of 750Wh per annum in the Darwin/Katherine region. Even if a tariff could be established that reflected a more theoretically efficient structure (such that all customers within a tariff were priced between the incremental and stand-alone costs of supply), the exit of one customer from such a small system would trigger a need to have the entire tariff structure reset; and
- Disaggregating tariffs will have shareholder and political implications for Government, and it is unlikely to provide significant economic benefits because it is most likely to involve the reallocation of sunk costs rather than the removal of any cross subsidies. Removing any cross subsidisation is likely to increase the costs of supply to customers located further away from Channel Island Power Station.

While Power and Water has no objection to a study by the Commission to determine whether there is cross subsidisation in the existing tariff structures, such a study is not likely to yield substantial benefits to consumers.

3.4 WACC

Power and Water has a preference for the use of a pre-tax real WACC, incorporating a statutory corporate tax rate. This is for the following reasons:

- Compared to the pre-tax real framework, the post-tax nominal framework is mechanically complex, highly information-intensive and intrusive;
- Under a pre-tax framework, an allowance for tax is included in the rate of return. In contrast, the post-tax framework requires the cost of tax to be explicitly modelled as a separate cost in the building blocks. This potentially leads to inefficient behaviour as it provides the regulated entity with the perverse incentive to maximise (rather than minimise) tax costs;
- The use of a statutory tax rate is consistent with the objective of light-handed regulation and is easier to apply (than an effective tax rate). It is therefore more consistent with the stated objectives of both Power and Water and the Commission during the Code Review process; and
- The use of the post-tax approach would seem to be designed to thwart the Commonwealth Government's objective to introduce accelerated depreciation allowances, which is not the regulator's role.

Power and Water notes that the Independent Pricing and Regulatory Tribunal has indicated its inclination towards a real, pre-tax WACC in its current pricing review for distribution entities in New South Wales.[14] There is therefore precedent for such an approach.

3.5 Establishment of the initial capital base

In determining the regulatory asset base for the Reset process, Power and Water intends to index to 30 June 2004, using the 30 June 2001 replacement cost valuations conducted by Sinclair Knight Merz ("SKM"). This is because an updated independent asset revaluation would not provide any significant benefit to consumers, enhance regulatory outcomes, or improve signals sent to consumers through tariffs.

This view is supported by the ACCC which has stated[15] that the long term nature of network assets and associated markets makes it unlikely that rapid change would unexpectedly strand common assets in less than a 5 year timeframe. The potential triggers for a revaluation of the regulatory asset base include:

- A major advance in technology such as the development of new materials – this has not occurred;
- Mergers or changes of ownership of assets – the most significant transaction was the purchase of the Darwin Katherine Transmission Line ("DKTL") which was approved by the Commission to be included in the regulatory asset base;
- Major expansions or contractions of a network such as may arise due to the development of a by-pass option – this has not occurred;
- Evidence that the network owner is unable or unwilling to recover the full cost of service calculated for some subsystem – this has not occurred; and
- A request from the network owner facing by-pass for a significant economic write-down of part of its asset base – this has not occurred.

Moreover, Power and Water does not see any practical purpose for a revaluation. This is because:

- The SKM valuation was undertaken at significant cost to Power and Water, and there is no accounting need for a new valuation to take place at this point in time. Power and Water proposes to used indexed valuations for accounting purposes over the next few years;
- The SKM valuation was undertaken on a depreciated replacement cost basis, which is the same basis as approved by the Commission for the first regulatory period. The proposed asset base methodology is therefore consistent with the previous regulatory period and will reduce the likelihood of asset base driven tariff shocks; and

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[14] Independent Pricing and Regulatory Tribunal, *Regulatory Arrangements for the NSW DNSPs from 1 July 2004, Issues Paper*, November 2002.

[15] ACCC *Draft Statement of Principles for the Regulation of Transmission Revenues*, section 4.4

- There is insufficient time to conduct a new valuation exercise prior to Power and Water's pricing submission to the Commission. A new independent valuation is expected to take around 6 months to complete.

4 Response to specific issues

In this section we respond to the specific issues raised in the Commission's Issues Paper on the Reset process. Each of the issues is replicated from the Issues Paper, followed by Power and Water's response to that specific issue.

4.1 Scope of the Reset

Is there any disagreement with the Commission's views regarding the scope of the price regulation framework that is outside its discretion (and so not addressed in this reset)?

Power and Water has no objection to the Commission's interpretation of the scope of the Reset.

Is there any disagreement with the Commission's interpretation of its role and discretions as they relate to the second regulatory control period (and so the matters that fall within the scope of this reset)?

Power and Water agrees that the Commission has discretion over the matters listed in the Issues Paper.

4.2 Objectives of the Reset

What criteria should be used to assess options and alternatives for the form of regulation? What should be the relative importance attached to the various criteria? How should the assessment criteria be amended or qualified to reflect the circumstances expected in the NT electricity market during the second regulatory control period?

Power and Water has no objection to the criteria set out by the Commission.

In terms of amending or qualifying the criteria, Power and Water agrees with the Commission's intention to be mindful of the changing character of the NT electricity market.

In terms of attaching relative importance to the criteria, Power and Water cautions the Commission against excessive prescription and mechanical approaches to determining the most appropriate form of regulation. It is recommended that the Commission also be mindful of the recent significant changes in the Australian regulatory environment:

- The CoAG Energy Market Review Panel report[16], which found that there is excessive regulation, and supported the ongoing debate towards regulation being less intrusive. This is important in the NT because the small size of the market, and the high scale costs,

[16] Towards a Truly National and Efficient Energy Market, 2002

means that the regulatory cost/benefit trade-off is more significant here than in any other system.

- The Productivity Commission's final report[17] on its inquiry into the national access regime. This recommended some important changes to the way in which access rules are applied, particularly noting the impacts on investment of undue precision in the application of regulation. The Productivity Commission's views are particularly relevant in the NT because the market is small, there are limited numbers of customers and therefore the costs of regulation need to be carefully weighed against the benefits; and, most importantly

- The Western Australian Supreme Court, in the matter *Dr Ken Michael AM; Ex parte Epic Energy (WA) Nominees & Anor* [2002] WACSA 231 ("the DBNGP decision"), ruled in favour of Epic Energy in its dispute with the West Australian gas regulator over the Dampier to Bunbury Natural Gas Pipeline draft regulatory decision on Epic Energy's proposed access arrangement for the pipeline. This decision found that regulation should replicate the outcomes of a workably competitive (rather than a perfectly competitive) market. This principle is important given the small scale of the NT market, and the need for regulatory compliance costs to be carefully weighed against outcomes for consumers.

Power and Water recommends that the Commission consider the principles of workable competition in interpreting the criteria and selecting the appropriate form of regulation rather than focussing solely on the elimination of monopoly rents. As Professor Littlechild noted[18]:

> *Unlike the precision of the neoclassical approach, where allowable rates of return are calculated by regulators to several decimal places, workable or effective competition is imprecise, even ambiguous. It will require judgement by regulators in their determinations about what is feasible and reasonable and whether consumer preferences are being satisfied. Nonetheless, it is a hard taskmaster. Rather than focusing on prices and costs, the focus will be on non-price behaviour and beating ever harder targets in service delivery, as occurs in a workably competitive market.*

4.3 Lessons from the first regulatory period

What are the main deficiencies revealed by experience with the application of annual revenue caps in the first regulatory control period, particularly the pattern of over-recoveries of network revenue relative to those caps?

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[17] Productivity Commission, *Report into the National Access Regime*, 2002

[18] Energex Submission to the Queensland Competition Authority: *Discussion Paper On The Review Of The Form Of Regulation Of Electricity Distribution*, December 2002, Attachment 4

Power and Water does not share the Commission's concern with the matters raised in the Issues Paper. We have addressed each matter in turn below.

The Pattern Of Over-Recoveries Relative To Revenue Caps

Power and Water believes that the scale of Chart 4.1 in the Issues Paper, which begins at $50 million and ends at $80 million, conveys a misleading impression of the extent of over-forecasting and hence over-recovery.

The actual extent of over-forecasting is shown in the table below, which sets out the numbers used by the Commission for Chart 4.1.

Analysis of Chart 4.1 – Forecast Versus Actual Demand			
Energy	**2000-01**	**2001-02**	**2002-03**
Forecast (GWh)	1309.6	1337.9	1367.0
Actual (GWh)	1334.4	1391.2	1415.6
Variance (GWh)	24.8	53.3	48.6
% Variance	**1.9%**	**4.0%**	**3.6%**

It can be seen that the variance between forecast and actual electricity consumption has been between 1.9% in 2000/01 and 4.0% in 2001/02, reducing to 3.6% between forecast and actual in 2002/03. Further, the over-recovery of revenue has ranged from 3.1% to 5.0% of forecast revenue over this period.

Power and Water notes that it has discussed the detailed reasons for annual variances with the Commission as part of the existing regulatory process for under-and-overs. The details of those variances support the thrust of Power and Water's argument against undue precision on the basis of the small size of the NT, and the large proportional impacts of changes in electricity consumption.

The principle of over precision is relevant to this issue. The Productivity Commission noted that[19] *a sensible goal should be to improve significantly on unregulated outcomes, while recognising that precision is not possible*. Power and Water submits that forecasting errors of between 3% and 5% are not material.

A small system means that the impact of particular customers entering and exiting the system can be significant. These changes are difficult to forecast and are therefore not signalled to Power and Water until shortly before the investment is required. As a consequence, Power and Water does not believe that variances of 4% between actual and forecast sales foreshadow a need to amend the regulatory regime.

[19] PC Inquiry Report

The Relatively High Costs Of Implementing The Building Block Approach In The Small System Context

Power and Water has submitted to the Commission on numerous occasions the high costs associated with regulatory compliance under the building block model. Power and Water agrees with the Commission's concern on this issue. At this stage of market and regime development, however, the building block model appears to be the most appropriate form of regulation.

Variation of asset values and operating costs between the estimates used in the building blocks approach prior to the commencement of the first regulatory control period and as subsequently reported in the regulatory accounts annually provided by Power and Water to the Commission.

Power and Water agrees that the forecast components of the Maximum Revenue calculation have not been consistent with the regulatory accounts provided each year to the Commission. We look forward to working with the Commission to ensure that variances are minimised in the second regulatory period.

Are there matters additional to those listed by the Commission arising from experience with the revenue cap arrangements during the first regulatory control period that should be considered during this reset?

Power and Water notes that regulatory attention could be paid to the following additional areas:

- Implementing a transparent and useable system for over and under recoveries within the regulatory period. This is important in ensuring that incentives operate more effectively within the cost of service model, and that Power and Water has sufficient time to make consequential amendments to tariffs from the process;
- Rolling new investment, which was not originally forecast during the regulatory period, into the regulatory asset base in a manner that is transparent. This is important for investment decisions which involve regulatory assets and price certainty which comes from inclusion in the regulatory asset base[20]; and
- Establishing a process for determining which services are prescribed services and which are excluded services, and a basis for classifying the services. This is important in considering which future services should be subject to light-handed and which should be subject to cost based regulation.

What are the main deficiencies revealed by experience with the type and structure of network tariffs in the first regulatory control period? Are there matters additional to those listed by the Commission arising from experience with the type and structure of network

[20] Power and Water notes that a revised DSEP policy would be included in the revenue submission to the Commission in December 2003.

prices during the first regulatory control period that should be considered during this reset?

The Refusal Of Power And Water To Provide Unbundled Network Charge Data To Large Contestable Customers On Request

Power and Water looks forward to discussing this retail issue in more detail with the Commission.

The Absence Of Tariff Categories For Network Services Provided To And By Embedded Generators

Power and Water has a preference for one network access tariff. Disaggregating network tariffs in not justified given the expense involved, and the absence of retailers or embedded generators in the market. This is discussed further in section 3.3.

The Unequal Treatment Of Supply Customers (Generators) And Load Customers (End Users) In The Application Of Network Charges, And The Potential For Unequal Treatment Of New Supply Customers Relative To Existing Supply Customers

Power and Water does not consider that there is potential for uneven treatment of new generators relative to existing generators because:

- New generators have equal access to senior management in Power and Water's network business to discuss technical requirements;
- Prices established for network connection are negotiated between Power and Water and generators, on the same basis for all generators but taking into account specific requirements of those individual generators; and
- The terms and conditions established for new network connections are negotiated to ensure that system integrity is not compromised, subject to standard engineering principles.

Power and Water accepts that the Commission may seek to approve standard connection agreements, and a more 'public' process for new generators seeking to connect to the system.

The Relevance Of Tariff Component Weights To Economic Cost Drivers In Each Of The Three Price Regions

Disaggregating the network tariffs further is not justified given the complexity involved, and the absence of any retailers or embedded generators currently using or intending to use the tariffs. Power and Water notes that the current tariff structure, which separates the energy charge from the demand charge, was designed to align with economic cost drivers for customers and to send signals in relation to efficient consumption.

The Absence Of A Pricing Policy Governing Capital Contributions By Customers To Connection Costs

Power and Water does not agree that this is a concern.

Clause 80 of the Code allows Power and Water to require an access applicant to "make a capital contribution in respect to the capital investment associated with designing, constructing, installing and commissioning the connection". The means of providing

guidance as to capital contributions policies and processes is through the capital contributions framework currently under review by Power and Water.

Power and Water notes that a revised capital contributions policy will be included in the revenue submission to the Commission.

Power and Water notes that this issue was raised in the Code Review. At that time, the Commission agreed that Clause 80 of the Code did not require amendment.

The Basis For Maintaining A Separate Energy-Based Usage Charge For The DKTL

Power and Water reserves its position on this issue until the Draft Methodology Paper has been released.

The Commission and Power and Water considered this issue in detail when the DKTL was purchased by Power and Water in late 2000. At that time, Power and Water continued to support the DKTL surcharge being incorporated (bundled) into the distribution tariffs, but reserved its position on this issue for the purposes of the second regulatory period.

The Absence Of Documented Standards Of Service As A Basis For Determining Whether Customers Are Receiving The Service They Have Paid For, Whether In Relation To Reference Tariffs Or Negotiated Tariffs.

Power and Water supports the application of service standards for prescribed services regulated under the maximum revenue cap. Power and Water awaits the Commission's foreshadowed paper on Service Standards, and looks forward to factoring these into the operational and capital expenditure forecasts required for the Reset.

4.4 Network price levels - implications of best practice

Should the Commission's reliance on the building block approach be relaxed, and if so in what way? Should year 1 prices or revenues be based on a building block cost analysis, irrespective of the approach taken in years 2 to 5?

If a cost-based revenue cap is to be used, what is the most appropriate form of that cap in the NT context?

Power and Water favours the continuation of the cost based building block method of setting Maximum Revenue as this method should:

- Provide Power and Water with the operational flexibility it needs to meet its service objectives. Power and Water will continue to work with the Commission to ensure that compliance mechanisms are appropriate and do not constrain efficient delivery of network services;

- Recognise the small scale of the NT market. Power and Water is the only network business and currently the only retail business in the NT. A method of setting revenue that is simple, well understood and well implemented will send the best signals to new entrants; and
- Only expose Power and Water to risks it can control. Power and Water does not know whether Timor Sea Gas will come onshore during the next regulatory period. The building block model can be applied with sufficient flexibility to allow for any necessary changes in tariffs to incorporate new investment required in the network to support unplanned events such as on-shore gas. Power and Water will seek to limit the risk of unforseen significant Territory developments. Possible mechanisms to do this could include a trigger to reopen the Maximum Revenue cap mid-period to include unforseen capital expenditure requirements.

In the NT context, where cost and complexity are important considerations, do the benefits of placing greater emphasis on the use of price caps and external productivity-based benchmarks during the second regulatory control period outweigh the costs and risks?

Power and Water does not support the use of productivity benchmarks in the second regulatory period because such measures are not yet widely accepted in the national regulatory environment.

In a June 2002 report for the Utility Regulators Forum, Farrier Swier found that while Total Factor Productivity ("TFP") based approaches appear superior to building block approaches:

> *"the economic incentives effects of the various approaches are affected by details of component instruments and parameters as much as by the approach* per se. *Accordingly, we cannot draw categorical conclusions about the absolute effectiveness of general approaches without considering detailed designs."*[21]

This report also highlighted the practical and implementation issues associated with the use of productivity based approaches and suggested that further preliminary work be undertaken prior to the TFP approach being implemented in the Australian context.

The Utility Regulators Forum also held a workshop on incentive regulation and the implementation of TFP in May 2003. The same issues raised in the June 2002 report were still being raised in presentations made at the workshop almost twelve months later. This suggests that there has been minimal progress in the debate in recent times.

Power and Water does not believe that the NT market should be the first to implement these initiatives.

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[21] Farrier Swier 2002, *Comparison of Building Blocks and Index-Based Approaches*, Report for the Utility Regulators Forum, June 2002, p.84.

Should the X factor used by the Commission in the CPI-X adjustment of the opening year's revenues or prices continue to be based on smoothing of the building block-based annual allowed revenues, or should greater emphasis be given to an external productivity-based approach?

Power and Water believes that the X-factor used in the CPI-X adjustment should be based on smoothing of the annual allowed revenue under the pure revenue cap, with efficiencies to be factored into the determination of operating costs. This is consistent with the approach generally adopted by other regulators in Australia.

There has been considerable interest in the use of TFP, as discussed above, and other index-based approaches to setting the X-factor. However these approaches have not yet been incorporated as part of the regulatory reset process.

In its Final Decision for Transgrid, the ACCC estimated efficiency gains based on a "preliminary" TFP analysis.[22] However, this was only used for comparison purposes and the ACCC chose to use the indirect approach to set the X factor. It had previously noted in its draft decision that anticipated efficiency gains were included in the network operating expenses as:

> *"... the Commission was not in a position to derive a single point estimate of likely efficiency gains (e.g. determining the overall X factor using total factor productivity analysis)".*[23]

Given the timeframe available for this Reset, Power and Water considers it unreasonable to suggest that these issues can be addressed or overcome.

Should there be an efficiency carry-over mechanism at the end of the second regulatory control period, and if so what form should it take?

Power and Water believes that there should be a sharing of the efficiency gains between itself and its customers, and that there should be an efficiency carryover mechanism to facilitate this. This should be a matter for further discussion.

Should regulated networks in the NT be functionally separated into a transmission and distribution component, with separate network prices reflecting the different services provided? To what extent should network prices in the NT be reflective of the economic costs of network use and access? Is one declining block tariff for regulated network services (as applied in the first regulatory control period) sufficient to provide appropriate price signals to the market? Should separate charges be mandated?

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[22] ACCC, *NSW and ACT Transmission Network Revenue Caps 1999/00-2003/04, Final Decision*, January 2000, p.78.

[23] ACCC 1999, *NSW and ACT Transmission Network Revenue Caps 1999/00-2003/04*, *Draft Decision*, May 1999, p.vi.

Power and Water strongly advocates retaining the existing level of tariff disaggregation for the reasons set out in section 3.3:

- There are already three geographical tariff classes, which are then further split into two consumption-based tariff classes (for customers consuming above and below 750MWh per annum) in each geographical area. Given that the tariffs are then subject to a declining block methodology, it is unlikely that there could be material levels of cross subsidy; and
- There is a need to make a judgement to balance the appropriate level of cross subsidisation given the size of the NT market. While there is cross subsidisation inherent in any system, there is also a cost (both social and economic) in removing it.

What approach should be taken to the pricing of network services provided to, and by, embedded generation to ensure that economic projects are not disadvantaged?

Power and Water believes that the existing process for negotiating prices for network services for embedded generators is appropriate because:

- It is in accordance with Power and Water's *Network Pricing Principles*[24], which has been approved by the Commission; and
- It takes into account the small scale and infrastructure driven nature of embedded generation in the NT. This can see generation range in size from under 1MW to over 30MW, and can have significant implications for interaction with the existing network system. There is a need for specific approaches for each embedded generation project in the NT.

Pricing of network services to embedded generators is undertaken in accordance with Power and Water's *Framework for Negotiating Agreements for Network Services For Embedded Generation and Similar Situations*. The Framework has been approved by the Commission and states:

- That negotiations will be on a case by case basis, as each embedded generation project is unique;
- That Power and Water seeks to recover charges that are efficient, equitable and which reflect the usage of and benefit from the network for each embedded generator; and
- That there will be no network charges in cases where there is no connection to the network.

Power and Water would seek to continue using this Framework into the second regulatory period.

Power and Water also notes that the gazetted standard network tariffs deal with arrangements for potential new generators. These were published in May 2003.

[24] Power and Water, *Network Pricing Principles,* established under clause 78(1) of the Code

What changes to network charges and structures are necessary to ensure that customers will benefit from economic opportunities in the provision of energy services that may occur during the second regulatory control period?

In a small network, are there cost effective ways to provide the appropriate signals (price or otherwise) for efficient use and investment (having regard to capacity and location) and to ensure that customers and competing service providers are not unreasonably discriminated against?

The second regulatory period may see significant changes in the NT energy market, particularly if other Timor Sea gas comes on-shore to Darwin. The most significant change could be the connection of large downstream oil and gas industries in the Darwin area, and the transportation of increased volumes of electricity through the network.

Power and Water will work closely with the Commission to ensure that whatever regime is implemented, it does not impact unfavourably on the way in which electricity is provided to customers, and that benefits and costs are transparently reflected in prices and standards of service.

One way of ensuring that this takes place is to allow the Maximum Revenue cap to be adjusted for certain market based triggers, including:

- Significant new unforseen capital expenditure related to off-shore gas;
- Significant new customer demand relating to off-shore gas; or
- Other significant changes in risk which impact on the ability for benefits to be passed through to consumers or future system security.

A Timeframes for other regulatory decisions

	Form of Regulation			Pricing Decision		
Regulatory Periods	Commenced	Final Decision	Duration	Commenced	Final Decision	Duration
Queensland (QCA)						
Electricity Distribution 2005-09	Oct 2002	Jun 2003	9 months	Jul 2003	Mar 2005	23 months
Electricity Distribution 2001-05	Dec 1999	*		Dec 2000	May 2001	18 months
Gas Access Arrangements 2001-05	Oct 2000	Mar 2001	8 months	Oct 2000	Dec 2001	15 months
New South Wales (IPART)						
NSW Electricity Distribution commencing 2005	Aug 2001	Jun 2002	11 months	Jul 2002	Mar 2004	11 months
Voluntary Pricing Principles review for GSE and OE until 2004				May 2001	Dec 2001	
Victoria (ESC)						
Electricity Distribution, 2001	Jun 1998	Apr 1999	11 months	Apr 1999	Sep 2000	18 months
Gas Distribution, 2003-07	May 2001	Apr 2002	13 months	Apr 2002	Oct 2002	
National (ACCC)						
Electricity Network Pricing Code Changes, 1999	Dec 1997	Jul 1999	19 months			
NSW and ACT Transmission Network Revenue Caps 1999/00-03/04				Dec 1998	Jan 2000	14 months
Queensland Transmission Network Revenue Caps 2002-06/07				Feb 2001	Nov 2001	10 months
Victorian Transmission Network Revenue Caps 2003-08				Apr 2002	Dec 2002	
South Australia (ESCOSA)						
Electricity Distribution 2005-10	Mar 2002	Oct 2002	*8 months	April 2004	March 2005	12 months
Electricity Price Distribution (excluded services) 2005-10	Apr 2003	Aug 2003	5 months			

*Note: Form of regulation determination finalised with pricing decision.