Record No: D2011/401673

Container No: F2010/6337

Mr Andrew Reeves

Utilities Commissioner

Utilities Commission

GPO Box 915

Darwin NT 0801

Dear Andrew

Re: Review of Electricity System Planning and Market Operation Roles and Structures – Power and Water's Response to Draft Report

Thank you for the opportunity to comment on the Utilities Commission's (Commission) Draft Report of its Review of Electricity System Planning and Market Operation Roles and Structures (Draft Report). Power and Water's response to the Draft Report is at Attachment A, where each of the Commission's recommendations have been individually addressed.

The establishment of an Electricity Industry Code is supported as this will provide the overarching framework necessary to draw together the existing and planned elements of the Northern Territory's electricity market.

Power and Water is of the view that current roles and responsibilities are clear, and the Corporation has invested significant effort in the areas of compliance and reporting. This report appears to deal with perception and hasn't outlined the shortcomings of the current roles and responsibilities.

Power and Water rejects the need for an independent and expert body, and the direct reporting of the System Controller to the Power and Water Board.

If you would like to discuss any issues arising from this response, please contact Ms Djuna Pollard, Manager Regulation, Pricing and Economic Analysis, on (08) 8985 8431.

Yours sincerely

Andrew Macrides

Managing Director

September 2011

REVIEW OF ELECTRICITY SYSTEM PLANNING AND MARKET OPERATION ROLES AND STRUCTURES

SUBMISSION BY POWER AND WATER IN RESPONSE TO DRAFT REPORT BY THE NT UTILITIES COMMISSION

SEPTEMBER 2011

1. INTRODUCTION

The Power and Water Corporation (PWC) is the main electricity business in the Northern Territory (NT) market systems, generating the majority of the electricity used, operating the electricity networks and supplying retail services. PWC is also a major electricity supplier in regional and remote parts of the Territory, and is the water and sewerage service provider throughout the Territory.

PWC is a vertically integrated NT Government owned corporation with generation, network and retail business units. The commercial relationship and transactions between each business unit is subject to oversight and regulation by the Utilities Commission (Commission). PWC is also subject to oversight by a shareholding Minister (currently the Treasurer) and a portfolio Minister (currently the Minister for Essential Services).

This submission covers the overall approach to the review, the major issues that would impact the various business units within PWC and specific responses to the draft recommendations posed by the Commission.

The National Electricity Market (NEM) was established in 1988 and has since been expanded to service the needs of 11 million electricity customers. There is a significant level of both generation and retail competition in the NEM. The associated Rules governing market activities remain a work in progress, currently the 45th version¹.

The Commission's overall approach in the current review of the NT regulatory arrangements has been to take the existing roles, responsibilities and reporting arrangements in the NEM and directly apply them to an organisation and supply system that services around 70,000 customers (ie. 0.6% of the NEM) and in which, at this stage, there is no generation competition and nascent retail competition.

PWC's three regulated networks comprise three 132kV transmission lines with a length of 343 kilometres and a total of 367 kilometres of 66kV sub-transmission circuits. In the Alice Springs network, the highest voltage is 66kV. In the Tennant Creek network, there is no transmission or sub-transmission and the generation is connected directly to the associated distribution network.

PWC's network employs similar voltages, but is much smaller in total demand, than any of the 'distribution' businesses in the NEM. The total generating capacity in the NT is less than half that of one of the larger generating units on the eastern seaboard.

In framing its proposals to revise the regulatory arrangements, the Commission has not adequately considered these dramatic differences between the scale and configuration of the NT supply system and that of the interconnected NEM.

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¹ National Electricity Rules Version 45, as at 14 July 2011.

Furthermore, PWC does not consider that the need for legislative change or substantive change to regulatory institutions has been established by the Commission. The Commission has not considered the effort, costs and time associated with implementing its proposed recommendations.

2. REGULATORY AND INSTITUTIONAL ARRANGEMENTS FOR ELECTRICITY SUPPLY

Draft recommendation - requirements for good governance

- 1.12 The Commission recommends that the Territory's regulatory and institutional framework for electricity supply ensure that responsibility for market and system operation and system planning roles and functions are allocated according to the characteristics and principles of good governance by:
 - providing clarity about which entity is responsible for functions and activities associated with electricity supply. In general, this clarity would be achieved by having appropriately detailed rules established by legislation; and
 - ensuring appropriate oversight of the performance of functions and activities to confirm that the entity responsible for a task is complying with relevant legislation. In general, this oversight would be achieved through monitoring of compliance with the rules by an independent and expert body.

There is no doubt that the detailed and prescriptive nature of the *National Electricity Law* is not replicated in the Northern Territory legislation^{2,3}. Notwithstanding this, the existing legislation does establish in some detail the roles and responsibilities of the system controller, network provider and other system participants, with further detailed requirements included in the System Control Technical Code, Network Connection Technical Code and Network Planning Criteria.

The Commission has recommended the rewriting of the existing System Control Technical Code, the Network Connection Technical Code and the Network Planning Criteria (all required by legislation) and their incorporation into a comprehensive Electricity Industry Code, similar to that which is in place in the NEM and in Western Australia.

PWC would support this development as an initiative to remove any overlap and ambiguity concerning roles and responsibilities, and between the existing documents. In this regard, it must be noted that PWC has already substantially revised and updated the Network Connection Technical Code and the Network Planning Criteria into a combined document. This draft document is close to publication in preparation for public consultation,

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South Australia, National Electricity (South Australia) Act 1996, Version: 1.1.2010.

Northern Territory of Australia, Electricity Networks (Third Party Access) Act, as in force at 29 October 2003.

approval and adoption during 2011. This combined document could form part of the Electricity Industry Code.

PWC does not believe that monitoring of compliance with the legislation and rules by an "independent and expert body" is appropriate. This is a function which in the NEM is carried out by the Australian Energy Regulator (AER) and in the Northern Territory would reasonably be carried out by the Commission along with many other aspects of regulatory compliance. This role should be confined to monitoring that the System Controller undertakes appropriate compliance activities on power system matters.

- 1.13 The Commission recommends that effectiveness of regulatory and institutional arrangements for system and market operation and system planning be tested against the extent:
 - the regulatory and institutional arrangements avoid or minimise actual or perceived risk of a conflict of interest of a particular entity in performing an activity or function;
 - the responsible entity is held accountable for the performance of functions and outcomes against stated requirements; and
 - the regulatory arrangements clearly define the task the entity is required to perform and define the expected outcomes.

PWC considers that the effectiveness of the regulatory and institutional arrangements must also be tested against the efficiency with which they promote service delivery and the resultant compliance costs imposed on electricity consumers.

3. EFFECTIVE GOVERNANCE ARRANGEMENTS FOR THE TERRITORY'S ELECTRICITY SUPPLY INDUSTRY

Draft recommendation – clarity about requirements of roles and functions

- 1.14 The Commission recommends that the Territory's regulatory framework be modified to provide appropriate clarity about the requirements and expectations of system and market operation and system planning roles and functions through:
 - a comprehensive assessment of the purpose and expectations versus
 the documented requirements of the roles and functions established
 through the regulatory framework, and particularly the System
 Control Technical Code and Network Connection Technical Code. The
 objective is to properly document the requirements of a function so as
 to avoid any doubt about what the function involves, and the
 expectations of the entity responsible for that function; and
 - where necessary, revise the regulatory framework to clearly document the requirements of all roles and functions. As this would involve rewriting the technical codes, the opportunity exists to incorporate these technical codes into a comprehensive Electricity Industry Code.

PWC does not believe that the legislative requirements specifying the existing System Control Technical Code, the Network Connection Technical Code and the Network Planning Criteria are in need of change at this stage. Expectations of system and market operation and system planning roles and functions are already clearly defined.

As previously mentioned, PWC has already substantially revised and updated the Network Connection Technical Code and the Network Planning Criteria into a combined document. This draft document is close to publication and has been prepared for public consultation, approval and adoption during 2011.

The next logical step would be consolidating the System Control Technical Code, the Network Connection Technical Code and the Network Planning Criteria into an Electricity Industry Code. This should remove any overlap and ambiguity concerning roles and responsibilities, and between the existing documents. The revised document could also establish the process by which it would be reviewed and the trigger for such review. Amendments to the Electricity Networks (Third Party Access) Code and to the *Electricity Reform Act* will be required to implement these revised arrangements to remove sole responsibility for administering the Network Connection Technical Code and System Control Technical Code from PWC (Power Networks) and the System Controller.

Draft recommendation - responsibility for oversight of compliance

- 1.15 The Commission recommends that responsibility for oversight of compliance with market and system operation and system planning requirements should be allocated as follows:
 - the System Controller (a statutory position responsible for power system control that is undertaken by PWC) should be responsible for monitoring and enforcing compliance by system participants with technical rules, such as those currently contained in the System Control Technical Code and Network Connection Technical Code; and
 - the Commission should be responsible for oversight of compliance by the System Controller with its obligations, firstly that the System Controller performs its functions according to the rules and secondly that the System Controller is maintaining effective oversight of compliance by system participants.
- 1.16 This recommendation is primarily to restate and clarify the roles and responsibilities of the Commission and the System Controller for compliance monitoring and enforcement.

PWC accepts that the System Controller is the appropriate entity to monitor and enforce compliance with the technical rules, insofar as the actions of major generators, major customers and the network provider could potentially affect the stability, security or economic operation of the power system. The System Controller has performed this role in the commissioning of the new Owen Springs and Channel Island generators. The System Controller will

perform similar compliance roles for future large load customer connections and new transmission element connections. However, for logistical reasons, compliance with technical requirements for the connection of smaller generators, including embedded generators, and smaller customers connecting to the distribution network (such as rooftop photo-voltaic installations) will remain the responsibility of the network operator.

System Control has recently increased its engineering capability and hence will be better resourced to undertake monitoring activities. Notwithstanding that the implementation of the recommendations proposed in the Draft Report will entail additional expertise and an increase in costs.

In addition, PWC holds a number of licences, each of which now has a prescriptive compliance clause and annual external audits are undertaken to test that our compliance practices are in accordance with Australian Standard (AS) 3806.

Furthermore, significant investment has been made by PWC in relation to compliance. A Senior Manager Risk and Compliance has been appointed to develop, implement and provide ongoing management of a corporate-wide compliance framework. A Compliance Management Strategy and Compliance Policy have been approved by the Corporation's Board and will be formally communicated and implemented across PWC. The framework incorporates regular updates to the Executive Management Team, half yearly updates to the Board and an annual review. Implementation of a corporate Governance, Risk and Compliance (GRC) System also commenced during 2011. These initiatives will better align PWC's practices with AS 3806 standards.

On the matter of oversight of compliance by the System Controller, it is also acknowledged that it is appropriate that the Commission should have this role, rather than the "independent expert body" recommended in paragraph 1.12 of the Commission's Draft Report.

Draft recommendation — allocating responsibility for rule-making and operation functions

1.17 The Commission recommends that the Territory's regulatory framework separate responsibilities for rule-making and operation functions through establishing a process for amending rules or code provisions that gives system and market participants, the Territory Government, customers (and the Commission under specified circumstances) the ability to request the Commission to assess rule change proposals against the objectives of the regulatory framework. Proposals that meet the criteria would be adopted as a new rule or code provision.

Within the NEM, the hierarchy of governance that has been established, and is widely recognised as appropriate, is as follows:

 the Ministerial Council on Energy (MCE) establishes overall policy and issues instructions concerning the development of Rule changes and investigations;

- the Australian Energy Market Commission (AEMC) develops and approves changes to the Rules in accordance with these policy instructions and carries out related investigations; and
- the AER is responsible for market monitoring and the economic regulation of networks and enforces compliance with the Rules.

These three distinctive activities: Policy; Rule making; and Rule Compliance; have been separated to avoid conflicts of interest within the regulatory entities. The setting of Rules has deliberately been separated from monitoring and enforcing their compliance. This is illustrated in Figure 1, alongside the existing structural arrangements and the Commission's proposed establishment of an "independent and expert body" to monitor rule compliance.

Figure 1 – Market governance and regulatory arrangements

Function	NEM	Northern Territory		
		Existing	UC Proposal	Alternative
Policy direction	COAG – MCE	NT Government		
Rule development and approval, Investigations (with participant advice)	AEMC	UC	UC	Another Entity
Rule compliance, market monitoring	AER	UC	Expert Body	UC
Economic regulation	AER	UC	UC	UC
Regulatory compliance	AER	UC	UC	UC

In the Commission's proposal to establish an "independent and expert body" to monitor compliance with the rules, it appears to be separating out a facet of the AER's role in the NEM, for carriage by a new organisation. This function is closely related to the Commission's existing role of monitoring and enforcing regulatory compliance. In proposing itself as the arbiter of changes to the Rules, the Commission would be assuming the role of the AEMC in the NEM.

PWC's view is that the existing governance arrangements do not need to be changed at this stage. It has not been made clear what problem within the existing regulatory structure the Commission is attempting to address.

Compliance with the technical rules at the system level would be the responsibility of the System Controller under the proposed arrangements, which is considered appropriate. The function of the Regulator should be confined to monitoring that the System Controller does ensure compliance.

However, if a change to the market governance arrangements can really be justified, the alternative arrangement illustrated in the right-hand column would be preferable. In this alternative, regulatory separation would be achieved by allocating the rule development and approval to another entity, such as NT Treasury or the AEMC, and retaining all of the compliance monitoring and enforcement activities within the Commission.

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It would be more appropriate to build on models already in use in Australia. For example, the AEMC use participant panels, such as the Reliability Panel (*National Electricity Law* requirement) to:

- to monitor, review and report on, in accordance with the Rules, the safety, security and reliability of the national electricity system;
- at the request of the AEMC, to provide advice in relation to the safety, security and reliability of the national electricity system; and
- any other functions or powers conferred on it under the Law and the Rules.

PWC accepts that the process for participant-initiated Rule changes has not been established but proposes that such a process could readily be incorporated into the existing Codes (or an Electricity Industry Code), without legislative change.

1.18 This proposal would be best given effect if all rules and codes are incorporated into a comprehensive Electricity Industry Code and were subject to the same rule change process.

PWC supports the development of a comprehensive Electricity Industry Code. Development of the rules within the Electricity Industry Code should be subject to consultation with electricity system participants, and approved by the Commission.

Given the dramatic differences in scale between the Northern Territory and the NEM, and the fact that competition in generation and retail activities is highly unlikely to develop to the same extent as in other jurisdictions, PWC proposes that the modification of the Electricity Industry Code should be the responsibility of the Commission.

Draft recommendation – allocating responsibility for supervisory and for-profit functions

- 1.19 The Commission considers that a pragmatic approach is necessary for allocating responsibility for supervisory and for-profit functions that balances the need for the supervisory functions to be performed independently against the transaction costs of establishing a separate independent entity responsible for the supervisory system and market operation functions. The Commission recommends establishing clear lines of reporting and accountability for supervisory functions by:
 - establishing a detailed set of requirements in the regulatory framework that identify what system and market operation tasks are to be undertaken by the System Controller and what those tasks involve;
 - defining in the regulatory framework the scope of a system planning function, and clearly making the System Controller responsible for system planning;

Historically, the System Control Group was independent of PWC Power Networks and reported directly to PWC's Managing Director. This caused numerous operational issues as the roles and responsibilities performed by the System Control Group are two-fold in that they provide 'network functions' to PWC Power Networks and 'system control functions'. These respective functions are outlined in Figure 2.

To address these operational issues the System Control Group has been established within the PWC Power Networks business unit. It is a ring-fenced business unit, which operates autonomously. System Control functions are effectively separated from other PWC Power Networks activities. This is demonstrated by the execution of Service Level Agreements that specify the respective responsibilities and arrangements for the provision of services between the entities.

PWC is concerned with the Commission's proposal to establish direct reporting arrangements between a PWC business unit and the Commission. Regulatory reporting by a business unit should be subject to review by PWC's Managing Director and Board.

PWC is also concerned with the recommendation that, akin to AEMO, the System Control Group would carry out system planning, which in the NEM context would include the planning of the transmission and subtransmission networks to which the main power stations are connected.

Clause 9(1) of the *Electricity Networks (Third Party Access) Act* specifically makes planning of the network the responsibility of the network provider, rather than the system controller. This remains appropriate. In any case, the segregation of network planning responsibilities into 'transmission' and 'distribution' and between business units is clearly inappropriate for an organisation of PWC's scale and would materially add to the costs that ultimately are borne by electricity consumers.

PWC proposes minimalist change to PWC's structural arrangements and functions to meet some of the requirements of the Commission in a pragmatic way. This is outlined in Figure 2.

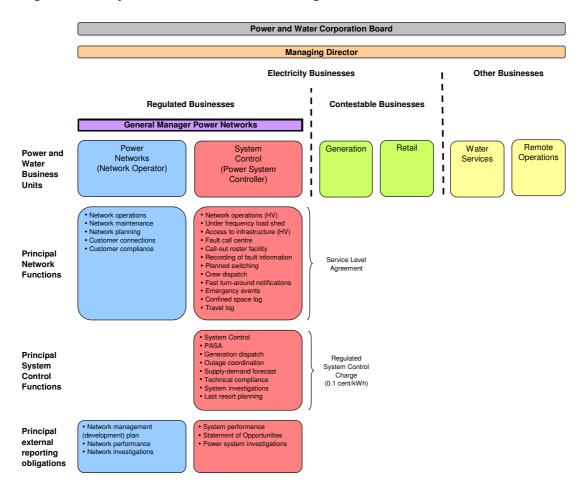


Figure 2 – Proposed PWC structural arrangements and functions

Existing resources and structures within System Control show that a large percentage of the functions performed relate to network control and it is impossible to neatly excise the "System Control" functions. This recommendation will impose additional resources and costs, while the benefits have not been outlined by the Commission.

PWC believes that it is best to leave network planning responsibilities with Power Networks, with the System Controller having an overview role in reviewing the plans. However, in terms of whole-of-system-planning, there would be value in the System Controller having responsibility for the preparation of short, medium and long term adequacy reports that incorporate demand forecasts, transmission plans, generation plans and any significant load connections. The adequacy plans would flag any supply-demand shortfalls, transmission constraints and any other system security and reliability issues. These reports would also provide system participants or new generators with appropriate signals (non-price) on potential impacts on their investments.

Furthermore, a Power Technical Committee (PTC) has been established within PWC to facilitate strategic coordination and planning of technical power matters across the main power system in the NT. The PTC is a sub-committee of the PWC Executive Management Team.

1.19 (continued)

- strengthening ring-fencing arrangements to require that the nature of the relationship and interactions between each of the PWC business units, including the System Control group, PWC Networks, PWC Generation and PWC Retail, are clearly documented and available to system participants and other relevant parties; and
- making the System Controller directly accountable to the PWC Board for the performance of supervisory system and market operation and system planning activities.

PWC's contestable and regulated business units are already effectively ring-fenced, in accordance with the Commission's ring-fencing requirements. The System Control Group, within Power Networks, is also separately ring-fenced in accounting terms, as required by legislation.

In addition, the System Control Group and Power Networks business unit have renegotiated all Service Level Agreements (SLA's) for non-System Control Licence delivery functions. This process provided the opportunity to review activities carried out by the System Control Group, identify whether they were part of the System Control Licence or not and have priced the activities to ensure all System Control costs are recovered. Going forward, if System Control is to determine a budget each year and recover these costs from participants, some of the costs in the SLA's will be required to be reviewed. In addition, all areas of System Control costs need to be identified including service delivery, cost of systems that support System Control activities, cost of ancillary services, cost of incident reviews, etc. A similar agreement has been developed between the System Control and Generation business units.

PWC has provided the Commission with the Service Level Agreements and Related Party Terms between the PWC(Retail)/PWC(Generation) and PWC(Retail)/PWC(Networks) business units as required under the Ring-fencing Code. However, PWC does not agree with the recommendation that these documents should be available to other system participants or other relevant parties as they contain information of a commercial nature.

PWC does not agree with the recommendation that the System Controller should be directly accountable to the PWC Board. The level of independence sought by the Commission is achieved by the System Controller reporting directly to the Managing Director, which is in accordance with standard corporate governance arrangements and the *Government Owned Corporations Act*.

1.20 Depending on the relationship between the market and system operation and system planning functions of the System Controller and the network operation functions of PWC Networks, it may be appropriate to consider whether accountability for these supervisory and monopoly functions should all be separated from the accountability for the for-profit generation and retail functions to ensure a "level-playing-field" that supports the potential emergence of other for-profit electricity businesses in the Territory.

PWC considers that the current level of separation between its monopoly and contestable functions is appropriate, particularly given the present and likely future extent of contestability in the Northern Territory. It is important to differentiate generation from retail in this context. A retail licence was issued to a competing retailer in February 2011 and arrangements, processes and procedures have and will continue to be implemented to ensure there is a "level-playing-field" that supports existing competition and the potential emergence of other for-profit electricity businesses in the NT.

Draft recommendation – financial independence of system controller

- 1.21 The Commission recommends that the System Controller be obliged, on an annual basis, to:
 - consult with system participants on the system control services to be provided in the coming financial year, the estimated cost of those services, and the proposed system control charges required to recover that cost;
 - seek the Commission's approval for the proposed system control charges; and
 - account for expenditure of the revenues received from the system control charge in the previous financial year.

The System Controller already separates its regulated and non-regulated costs. The non-regulated services that System Control provides are documented in various Service Level Agreements with appropriate costs.

PWC supports the annual process whereby the System Controller will determine the following year's regulated budget and costs, consult with system participants and then seek the Commission's approval for the proposed system control charges. The current 0.1 cent/kWh charge under-recovers the total cost of System Control functions and the recommended process should alleviate this shortfall. This exercise would only prove worthwhile if the System Control charge that is determined each year can be passed through to customers by way of the Electricity Pricing Order.

4. IMPLEMENTATION CONSIDERATIONS

- 1.22 Implementation considerations include:
 - options for implementing draft recommendations; and
 - potential future allocation of roles and functions.
- 1.23 Implementation of the draft recommendations would involve development of an implementation program and project plan by a working group comprising representatives of industry, policy and regulatory entities. The draft recommendations involve a significant effort to develop new regulatory requirements. The experience and regulatory arrangements of the national electricity market provide a sound starting point.

PWC does not consider that the need for legislative change or substantive change to regulatory institutions and arrangements has been established by the Commission and, furthermore, the Commission has not considered the effort, costs and time associated with implementing its proposed recommendations. In addition, PWC does not accept that the regulatory arrangements in the NEM are necessarily appropriate for three isolated networks serving 0.6% of the number of NEM customers with no generation competition and two retail competitors.

Some straightforward changes to the present accountabilities and reporting arrangements have been accepted by PWC. These changes could be developed over a much shorter time frame, with significantly less effort and at a reduced cost to electricity customers.