

**REVIEW OF FULL RETAIL
CONTESTABILITY FOR
NORTHERN TERRITORY
ELECTRICITY CUSTOMERS**

ISSUES PAPER

AUGUST 2009



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CHAPTER**1****EXECUTIVE SUMMARY****Introduction**

1.1 In August 2009 the Treasurer approved Terms of Reference (ToR) for the Utilities Commission (Commission) to undertake a review of Full Retail Contestability (FRC) for Northern Territory electricity customers. The purpose of the review is to consider options for the implementation of FRC in the Northern Territory on 1 April 2010 and assess the merits of each.

Scope of Inquiry

1.2 The Commission is to report on the objectives of FRC in the Northern Territory context, the conditions necessary for competition to develop in the Territory, and the prudent actions Government should take to encourage the development of competition. The inquiry is to present the various options for the design and rules of FRC arrangements for electricity in the Northern Territory and make an assessment of the likely costs, benefits, and feasibility of each.

1.3 The Commission is required to make recommendations as to the most efficient option. In making its assessment, the Commission is required by its ToR to consider :

- both the costs of FRC and the likelihood that FRC will confer benefits to consumers;
- the option of further postponement of contestability of some or all remaining tranches;
- the context of the existing market arrangements, potential market structure reforms and efforts to improve consistency between Australian energy markets;
- the Territory's commitments under the Competition Principles Agreement, Australian Energy Markets Agreement, and Council of Australian Governments (CoAG); and
- developments in other jurisdictions and in particular the National Energy Customer Framework being developed by the Ministerial Council on Energy.

1.4 The inquiry is also to report on appropriate terms and conditions for potential standard supply contracts and the contract design most likely to promote an efficient outcome.

1.5 This paper is intended as a means of soliciting comment from relevant parties on options for implementing FRC in the Northern Territory. The consultation process will be directed at testing the assumed outcomes of the options developed in this review and also identifying any further options. Once the views of relevant parties are received and considered in response to this and a Draft Report, this review will provide recommendations.

Objectives of FRC in the Northern Territory context

1.6 FRC was a requirement of the National Competition Council (NCC) for certification of the Territory's third party access regime under the *Trade Practices Act* in 2000. Certification was considered desirable by the Northern Territory Government because it establishes a legal avenue for third parties to access network infrastructure. Thus one objective of introducing FRC in the Northern Territory is retention of a certified third party access regime. Further objectives of FRC include ensuring that the benefits of competition in a wholesale market are transferred to customers, and that customers might receive the benefits of retail competition through improved customer service and the offer of cost-reflective services that better meet customer needs. However, it may not be sufficient to simply make the retail market fully contestable, since the development of competition might require prior and accompanying reform to market arrangements, industry structure and retail tariffs. Even with such reforms there may not be the certainty that the scale of the Territory market is such that effective competition might emerge. There is therefore the question of whether the cost of undertaking such reforms would be justified.

Necessary conditions for development of competition

1.7 Research into contestable retail markets worldwide shows that the major determinants of competitive activity are:

- efficiency and sufficiency of wholesale markets;
- extensive unbundling (i.e. separation) of retail, distribution and generation; and
- sufficient price float, volatility and margins.

1.8 Elsewhere, FRC has been introduced following substantial reform of markets and industry structure. At the time FRC was introduced, such reform had either resulted in some wholesale market competition providing retailers with a number of wholesale electricity procurement options, or with the prospect of such a situation developing over a reasonable timeframe. An objective of FRC in these cases was to provide for the benefits of upstream reform to be passed onto electricity end users.

1.9 In the absence of wholesale market competition, there are still potential benefits associated with FRC but it is an open question as to whether these are sufficient to justify the costs of FRC.

1.10 In the case of the Northern Territory, where there has been limited wholesale market reform, no industry structural reform, and no development of wholesale or retail market competition, an important question is whether to proceed to introduce FRC without first undertaking some additional market, industry structural, and retail tariff reforms.

1.11 Assuming that at the time FRC is introduced in the Territory there is no competition in the supply of wholesale electricity, any retail competition will be on the basis of the cost to serve. However, in view of current regulated retail prices not providing a positive retail margin, it will be problematic for new-entrant retailers to compete on this basis.

1.12 The introduction of FRC in the Territory, albeit in the absence of prior and accompanying market and industry structure reforms, will result in a larger directly contestable market providing the possibility of a competitor developing generation to support its own retail operations. However this possibility will not become a commercial opportunity while the allowance for wholesale energy in retail tariffs remains below the new entrant generation cost.

Encouraging the development of competition

1.13 Considering the necessary conditions for the development of competition, there are a number of actions that Government might consider to encourage the development of competition. Broadly these are :

- while Power and Water remains the sole source of wholesale electricity supply, requiring its generation business to determine and publish 'standing offer' wholesale contract prices subject to Commission oversight;
- retail tariff reform - approving a regulated retail price path that will result in tariffs that are reflective of wholesale electricity costs, network costs, government approved subsidies (irrespective of supplier) and commercial retail margin.
- strengthening the ring-fencing of Power and Water's component businesses, and
- reform of wholesale market arrangements – improving wholesale market transparency which may include, for example, adopting or reflecting the NEM wholesale market arrangements. This would also contribute to a common national approach to energy markets.

1.14 With respect to reform of industry structure it is noted that the retention of Power and Water as a vertically integrated entity has been justified previously based on arguments of economies of scale and scope.

Options for FRC

1.15 The classes of options the Commission proposes to consider relate to timing and preparation for FRC, together with consideration of systems which might be appropriate for each option. They are broadly:

A – Proceed to implement FRC on 1 April 2010 or as soon as practicable thereafter. In the absence of accompanying reforms, the prospect of significant competition is low and it might be appropriate to use existing systems for customer transfer and market settlements until there is further market development. A program of additional reforms to support the development of competition could be developed and initiated after FRC is in place; or

B – Reschedule FRC and adopt a program of additional reforms to support the development of competition. Under this option, Territory-specific systems for market settlements and customer transfers might be appropriate but adoption of NEM systems would be preferable to enable national retailers to operate from established and familiar systems; or

C– Postpone FRC until conditions more favourable to competition develop (without committing to an additional program of reform).

CHAPTER**2****INTRODUCTION****Background**

2.1 The introduction of Full Retail Contestability (FRC) would allow all electricity customers in the Northern Territory to exercise choice with respect to their electricity retailer. Minimally, FRC would remove the legislative barriers to electricity retailers entering the electricity market, namely the legislation that grants Power and Water Corporation (Power and Water) the sole right to provide electricity retail services to franchise customers. However the introduction of FRC by itself would not ensure that effective retail competition will emerge either immediately or any time thereafter. Where FRC has been introduced elsewhere it has been preceded by and accompanied with additional reforms for the purpose of creating an environment favourable to the development of competition. In the case of the Northern Territory, while regulation has been strengthened, prior wholesale electricity market reform has been limited and no industry structure reform has been undertaken.

2.2 In the Eastern Australian states, the introduction of FRC has been preceded with significant restructuring of the electricity supply industry and adoption of the National Electricity Market (NEM) wholesale trading arrangements. Industry structure reforms included the separating of the principal activities of generation, transmission, distribution and retail from integrated supply entities (sometimes referred to as unbundling) and in most cases further disaggregation of generation and retail into a number of competing businesses (some of which were subsequently privatised). These structural and market reforms were designed to ensure that a functioning, transparent and in some cases highly competitive wholesale electricity market had developed prior to the commencement of FRC.

2.3 However it is not suggested that these are necessarily mandatory pre-conditions for the introduction of FRC in the Northern Territory. It is noted that while the vertically-integrated Power and Water is currently the sole supplier of electricity to customers in the Northern Territory, legislative arrangements are in place to allow other generators and/or retailers to apply for a licence to enter the market at any time. While electricity customers only have a 'choice' of Power and Water at the moment, the availability of a customer base which can potentially 'switch' may be sufficient to encourage third-party retailers to enter the market possibly by developing their own generation. That is to say, the mere opening of the retail market fully to others may improve the prospects for the development of retail and wholesale competition to some extent. Clearly these prospects would be improved further by undertaking additional reform prior to and as part of the introduction of FRC.

Purpose of this paper

2.4 This paper is intended to solicit comment from interested parties on options for implementing FRC in the Northern Territory. The consultation process will be directed at

testing the assumed outcomes of the options developed in this review and also identifying any further options. Once the views of interested parties are received and considered in response to this paper and a Draft Report, this review will provide recommendations. The Commission is to provide its final report by 31 December 2009.

2.5 The timetable that will be guiding the Commission's consultation process is set out below:

Due Date	Event
25 September 2009	submissions on the Issues Paper due
mid-October 2009	publication of the Commission's Draft Report
mid-November 2009	submissions on the Draft Report due
31 December 2009	Final Report provided to the Minister

Submissions

Call for submissions

2.6 Submissions are invited from interested parties concerning the issues raised in this Paper and related matters.

2.7 Submissions, comments or inquiries regarding issues raised in this Paper should be directed in the first instance to:

Executive Officer	Telephone: (08) 8999 5480
Utilities Commission	Fax: (08) 8999 6262
GPO Box 915	
DARWIN NT 0801	Email: utilities.commission@nt.gov.au

2.8 The closing date for submissions is **Friday, 25 September 2009**.

Confidentiality

2.9 In the interests of transparency and to promote informed discussion, the Commission intends to make submissions publicly available. However, if a person making a submission does not want their submission to be public, that person should claim confidentiality in respect of the document (or any part of the document). Claims for confidentiality should be clearly noted on the front page of the submission and the relevant sections of the submission should be marked as confidential, so that the remainder of the document can be made publicly available.

Public access to submissions

2.10 Subject to the above, submissions will be made available for public inspection at the office of the Commission and on its website (www.utilicom.nt.gov.au).

2.11 To facilitate publication on the Commission's website, submissions should be made electronically by disk or email. However, if this is not possible, submissions can be made in writing.

2.12 Information about the role and current activities of the Commission, including copies of reports, papers and submissions, can also be found on the Commission's website.

CHAPTER

3

PURPOSE OF THIS REVIEW

Overview of retail contestability in the Northern Territory

3.1 Under National Competition Policy (NCP), all Australian jurisdictions are committed to introducing competition in the electricity generation and retail market sectors. Full retail contestability (FRC) has now been fully implemented in all jurisdictions apart from the Northern Territory, Western Australia and Tasmania.

3.2 The introduction of FRC in stages was a requirement of the National Competition Council (NCC) for certification of the Territory's third party access regime under the *Trade Practices Act* in 2000. Certification was considered desirable by the Northern Territory Government because it establishes a legal avenue for third parties to access network infrastructure and avoids costly legal disputes.

3.3 Table 1 shows the Northern Territory customer tranches by date of introduction of contestability and minimum annual consumption.

Table 1: Introduction Dates for Contestability in the Northern Territory Electricity Market

Tranche	Date of Introduction	Minimum Annual Consumption (MWh)
1	1 April 2000	4,000
2	1 October 2000	3,000
3	1 April 2001	2,000
4	1 April 2002	750
5	1 April 2010 (scheduled)	160
6	1 April 2010 (scheduled)	0

3.4 Since April 2000, tranche 1 to 3 customers (large to medium business, defence and government customers) have progressively become contestable in the Northern Territory and pay tariffs determined by commercial negotiation. Tranche 4 customers are also contestable but most pay retail tariffs capped by the Territory Government.

3.5 Tranches 5 and 6 (typically small businesses and households) are currently non-contestable. Such customers can only be supplied by the Power and Water Corporation (Power and Water) and pay subsidised retail electricity tariffs that are uniform regardless of location and cost of supply.

3.6 Tranche 5 and 6 customers were originally to become contestable in 2003 and 2005 respectively. However in February 2003 the Government postponed contestability

for these customer tranches for 5 years, due to the lack of competition. In October 2007, the Government further deferred contestability for tranche 5 customers to April 2010 and approved the introduction of standard supply contracts for tranche 4, 5 and 6 customers from April 2010.

3.7 At the present time, despite the fact that the larger customers have been contestable for a number of years, Power and Water is the sole retailer to Northern Territory customers and the sole wholesale supplier to the regulated networks.

Scope of Inquiry

3.8 In August 2009 the Treasurer approved Terms of Reference (ToR) for the Utilities Commission (Commission) to undertake a review of Full Retail Contestability (FRC) for Northern Territory electricity customers. The purpose of the review is to consider options for the implementation of FRC in the Northern Territory on 1 April 2010 and assess the merits of each.

3.9 The Commission is to report on the objectives of FRC in the Northern Territory context, the conditions necessary for competition to develop in the Territory, and the prudent actions Government should take to encourage the development of competition. The inquiry is to present the various options for the design and rules of FRC arrangements for electricity in the Northern Territory and make an assessment of the likely costs, benefits, and feasibility of each.

3.10 The Commission is required to make recommendations as to the most efficient option. In making its assessment, the Commission is required by its ToR to consider:

- both the costs of FRC and the likelihood that FRC will confer benefits to consumers;
- the option of further postponement of contestability of some or all remaining tranches;
- the context of the existing market arrangements, potential market structure reforms and efforts to improve consistency between Australian energy markets;
- the Territory's commitments under the Competition Principles Agreement, Australian Energy Markets Agreement, and Council of Australian Governments (CoAG); and
- developments in other jurisdictions and in particular the National Energy Customer Framework being developed by the Ministerial Council on Energy.

3.11 The inquiry is also to report on appropriate terms and conditions for potential standard supply contracts and the contract design most likely to promote an efficient outcome.

CHAPTER

4

BACKGROUND

4.1 This section considers the context within which the proposal to introduce FRC is being made. It takes account of:

- commitments by the Northern Territory Government and the history of reform in the Territory;
- the experience of other Australian jurisdictions in implementing FRC and the prior prospects for FRC to be beneficial; and
- the Territory's experience to date with retail competition for larger customers.

4.2 A discussion of electricity market reform in Australia and the Northern Territory electricity market is provided as background.

Electricity market reform in Australia

4.3 During the early 1990s, the Australian, State and Territory governments recognised there were significant economic benefits available from restructuring and reforming electricity markets. There have since been a number of intergovernmental agreements related to the development and implementation of industry and market reforms.

National Competition Policy

4.4 In 1994, CoAG agreed to objectives and principles that provided the basis for the gradual implementation of consistent governance, institutional and structural reforms to the electricity markets in Queensland, New South Wales and the Australian Capital Territory, Victoria, South Australia and Tasmania. The Northern Territory and Western Australia were not party to this agreement primarily on the basis that they were not connected to the national electricity grid. However, this intergovernmental agreement is the basis for all subsequent energy market reforms, including those undertaken in the Northern Territory and Western Australia. The main objectives of the agreement were:

- the ability for customers to choose which supplier they will deal with;
- non discriminatory access to interconnected transmission and distribution networks;
- no regulatory barriers to entry to new participants in competitive wholesale (generation) or retail supply markets; and
- no discriminatory legislative or regulatory barriers to interstate and/or intrastate trade.

4.5 The principles underlying these objectives are based on the premise that nationally integrated, competitive energy markets were an important means of ensuring the efficient provision of services, the responsible development of resources and the

alleviation of environmental concerns. The expected outcome is increased economic growth and improved customer welfare.

4.6 The 1995 commitment by all Australian governments to the National Competition Policy (NCP) required a number of reforms intended to support higher economic growth on a sustainable basis.¹ In part, NCP requires:

- competitive neutrality to ensure that publicly owned businesses do not enjoy any net competitive advantage arising from their public ownership;
- structural reform of public monopolies by adopting a corporatisation model with the imposition on the business of full taxes and the application of business regulations normally applying to private sector businesses;
- the removal of legislative provisions that restrict competition; and
- the establishment of third party access regimes for infrastructure with natural monopoly (subject to a public benefits test) recognising that third parties have legal rights for access to energy infrastructure services on reasonable terms and conditions.

4.7 The key principles of NCP are consistent with the reforms of the electricity industry resulting from the 1994 CoAG agreements, but there is no requirement for electricity industry specific reforms to be introduced.²

Ministerial Council on Energy (MCE)

4.8 In June 2001 CoAG established a national energy policy body, determined a set of core national energy policy objectives and principles, and agreed to an independent review of energy market directions and options for future development.³

4.9 The Ministerial Council on Energy (MCE) was given the responsibility of providing oversight and coordination of energy policy development and leadership so that broader convergence issues and environmental impacts are effectively integrated into energy sector decision making.⁴

Parer Report and Australian Energy Market Agreement (AEMA)

4.10 The independent review of the energy market (known as the Parer Report) was published in December 2002. The MCE considered the findings and recommendations of the Parer Report and other policy development work and reported with recommendations to CoAG in December 2003. The MCE recommendations were considered a substantial response to the Parer Report and provided the basis for development of a truly national and efficient energy market.⁵

4.11 Subsequently, all Australian governments entered into the Australian Energy Market Agreement (AEMA) in June 2004 to give effect to the MCE recommendations to CoAG. The AEMA makes explicit the principles and objectives of the energy market reform program. These include promoting the long term interests of customers with

¹ The intergovernmental agreements that underpin the National Competition Policy are the Competition Principles Agreement, the Conduct Code Agreement and the Agreements to implement the National Competition Policy and Related Reforms (Implementation Agreement) dated April 1995.

² National Competition Council, April 2002, Submission of the National Competition Council to the CoAG Energy Market Review, page 22, and sourced from www.ncc.gov.au, on 23 September 2005.

³ Ministerial Council on Energy, December 2003, Report to CoAG on Reform of Energy Markets, page 3.

⁴ Sourced from www.mce.gov.au, on 10 October 2005.

⁵ Ministerial Council on Energy, December 2003, Ministerial Council on Energy Report to CoAG on Reform of Energy Markets, page 3 and Ministerial Council on Energy Communiqué, 11 December 2003.

regard to the price, quality and reliability of electricity and gas services and establishing a framework that will result in timely and appropriate investment.⁶

4.12 The AEMA also details the institutional arrangements of the national electricity market, including:

- the legislative framework that establishes the functions and powers of regulatory bodies and arrangements for market operation;
- the functions and roles of the MCE, Australian Competition and Consumer Commission (ACCC), the Australian Energy Market Commission (AEMC) and the Australian Energy Regulator (AER) and the Australian Energy Market Operator (AEMO); and
- the timeframe for individual jurisdictions to transfer functions and powers related to electricity transmission, distribution and retail (excluding retail pricing) to the AEMC and the AER.

Exemptions

4.13 The Northern Territory and Western Australia are exempted from introducing most obligations imposed by the AEMA for electricity, but retain the option to fully adopt the arrangements at their discretion. Specifically, the Northern Territory and Western Australia are both exempted from the obligations imposed by the AEMA for electricity, while Western Australia is partly exempted from the obligations imposed for gas.⁷

4.14 On 16 June 2005, the Australian Government MCE representative wrote to State and Territory counterparts proposing to renegotiate the AEMA to expedite and expand the reform program. The Prime Minister wrote in similar terms to all First Ministers. The proposal was in response to potential delays in the implementation of the reforms agreed in the AEMA in June 2004. The changes to the AEMA involved:

- agreement that the Australian government will fund the AER while the states and territories will fund the AEMC;
- developing a nationally consistent approach to third party access arrangements, including exemptions from obligations;
- establishing a timeframe for the transfer of certain distribution and retail regulatory functions currently undertaken by jurisdictional regulators to the AER and the AEMC; and
- establishing a timeframe for the phase out of retail price controls, subject to effective competition.

4.15 The Northern Territory and Western Australia retain their exemptions from the current and proposed obligations imposed by the AEMA, with the exception of the requirement to phase out retail price controls. The requirement to phase out retail price controls means that jurisdictions will only be able to apply retail price controls (i.e. regulate retail electricity tariffs) where it is in the public interest and it has been established by an independent authority according to explicit criteria that competition does not exist.⁸

4.16 Under the AEMA, the AEMC is responsible for assessing the effectiveness of competition, in accordance with criteria contained in Schedule Three to the amended AEMA. To date the AEMC has concluded reviews of South Australia and Victoria, determining competition to be effective in both jurisdictions. At its meeting in Darwin in

⁶ Australian Energy Market Agreement, section 2.1.

⁷ Council of Australian Governments, Australian Energy Market Agreement, 30 June 2004.

⁸ The independent authority will be the AEMC in all jurisdictions except Western Australia, which will use its Economic Regulatory Authority (ERA).

July 2009, the MCE directed the AEMC to review the effectiveness of retail competition in the ACT in 2010, New South Wales in 2011, Queensland in 2012 and Tasmania in 2013.⁹

National Energy Customer Framework (NECF)

4.17 The Retail Policy Working Group has been tasked by the MCE to implement reform under Clause 14 of the Australian Energy Market Agreement in relation to the non-economic regulation of energy distributors and for regulation (excluding price regulation) of energy retailers. This reform encompasses the transfer of current state and territory responsibilities to the National Electricity Law, National Gas Law and other regulatory arrangements.

4.18 The main objectives for the creation of the NECF are to:

- streamline the regulation of energy distribution and retail regulation functions in a national framework; and
- develop an efficient national retail energy market including appropriate consumer protection.

4.19 The NECF will cover a range of subject matters, including:

- the governance model, including a contractual model that forms the basis of the framework;
- supply of energy to retail customers including a regulatory obligation to offer supply to small customers;
- provision of customer distribution services to customers;
- arrangements between distributors and retailers in provision of energy services to customers;
- authorisations; and
- enhancements to the enforcement and compliance regime.

4.20 In July 2009, the MCE agreed to a revised timing for the NECF with introduction of legislation to the South Australian Parliament in the 2010 Spring Session.¹⁰

National Smart Metering Program (NSMP)

4.21 In April 2007 CoAG committed to a national mandated roll-out of electricity smart meters (SM) to areas where benefits outweigh costs, as indicated by the results of a cost-benefit analysis taking account of different market circumstances in each state and territory and the circumstances of different groups of consumers.¹¹ The cited paper explains that MCE will review the progress of pilots and business cases which are established under the program annually, starting in June 2009. A review of findings, including any resulting revision in the cost and benefits for each jurisdiction or specific businesses, will occur by June 2012, at which point MCE will further review jurisdictional deployment plans and any requirement for further analysis. In the interim, jurisdictions may choose to consider implications for a range of existing jurisdictional policies, such as new and replacement interval metering and existing direct load control arrangements, to optimise the transition to smart metering.

4.22 On 13 June 2008, the MCE decided it would further develop with stakeholders a consistent national framework for smart metering in the NEM recognising that consistency between NEM and non NEM jurisdictions will also be sought where beneficial given different market arrangements. Objectives of the NSMP include:

⁹ MCE Communique, Darwin, 10 July 2009.

¹⁰ MCE Communique, Darwin, 10 July 2009.

¹¹ Smart Meter Decision Paper, MCE, 13 June 2008.

- defining a regulatory framework for the NEM to underpin SM, and consideration of arrangements in Western Australia and the Northern Territory;
- developing specifications and proposals for changes to NEM and other jurisdictional rules and procedures (including consideration of arrangements in the Western Australian market), and to establish and implement other elements of the framework; and
- coordinating and reporting on SM pilots as part of an overall plan for the potential deployment of SM services in the NEM, and considering arrangements for SM pilots and deployments in other jurisdictions (including in Western Australia).

4.23 Stakeholder leadership to the NSMP is provided by the National Stakeholder Steering Committee (NSSC), with secretariat and project support from the AEMO.

4.24 The regulatory framework¹² is intended to cater for the provision of SM in the following circumstances –

- by distributors directed by a jurisdictional Minister to roll-out a defined minimum functionality of SM infrastructure (mandated roll-out); and
- by a party other than pursuant to a direction by a jurisdictional Minister (discretionary rollout).

4.25 A discretionary roll-out may be -

- for a smaller or more targeted customer base than a mandated roll-out and parties may wish to include functionality beyond the minimum requirements; and
- by parties after the end of a mandated roll-out, including the possibility of contestable provision of SM (post mandated roll-out period).

4.26 A number of smart metering trials and pilots are being conducted under the program with the intent of informing the development of recommendations on the technical and operating regulatory framework to support the implementation of smart meters for small customers and validating business cases for rollouts. A rollout of smart meters (450 sites – 150 with photovoltaics) is underway in Alice Springs as part of the Solar Cities trials.¹³

4.27 The 3 July 2009 Exposure Draft of the National Electricity (South Australia) (Smart Meters) Amendment Bill 2009 sets out proposed requirements for Ministerial metering determinations (pilot and smart meter rollout).

Northern Territory electricity market

4.28 The Northern Territory electricity market currently consists of three separate regulated networks centred on the Darwin/Katherine region, Alice Springs and Tennant Creek, and a large number of small stand alone systems supplying remote indigenous communities and non-gazetted tourist and mining townships. A 132 kV transmission line connects Darwin and Katherine. No other systems are interconnected. The competitive electricity market regime is in force for those customers deemed contestable (i.e. consuming over 750 MWh per annum) in the regulated Darwin/Katherine, Alice Springs and Tennant Creek systems and elsewhere.

4.29 Power in the regulated systems is provided by gas-fired generators which are owned and operated by Power and Water or purchased by Power and Water from private

¹² SM NEM Regulatory Architecture Paper, 19 June 2009, Regulation Work Stream, National Smart Metering Program.

¹³ Pilots and Trials 2008 Status Report to the Ministerial Council on Energy, National Stakeholder Steering Committee, National Smart Meter Program, 12 June 2009.

operators under power purchase agreements. Gas for power generation is purchased under contract by Power and Water.

4.30 Electricity for 72 remote indigenous communities is provided by a Government appointed service provider (presently the Power and Water subsidiary company Indigenous Essential Services (IES)) through the Budget funded Indigenous Essential Services program. Remote tourist and mining townships are provided electricity either on a contractual basis by a Government appointed service provider or by the associated mining firm.¹⁴ Power generation in these communities is fuelled largely by distillate.

4.31 With 2008-09 electricity demand of nearly 1,900 GWh p.a. and 82,889 customers, the market for electricity in the Northern Territory is small compared to other Australian jurisdictions. For example the smallest NEM jurisdiction in terms of customer numbers and demand is Tasmania where there are some 273,000 small businesses and domestic customers consuming 2,680 GWh per annum.¹⁵ Relevant statistics pertaining to the Northern Territory electricity market are published annually by the Commission. Table 2 below shows information on electricity market demand from the publication for the year ending 30 June 2009. From the viewpoint of introducing full retail competition, a small market presents two major issues. The first is the smaller number of customers over which the fixed costs of FRC systems can be recovered resulting potentially in higher per customer FRC costs, the second is the lower appeal of a small market to intending new-entrant retailers as they too have the issue of recovering fixed costs of market entry over lower customer numbers and sales volume.

Table 2: Northern Territory Electricity Demand (regulated and non-regulated networks)

	Regulated networks	Non-regulated networks	Total
Contestable			
Energy Usage (GWH pa)	515	143	658
No. Customers	174	4	178
Non-contestable			
Energy Usage (GWH pa)	1,069	144	1,213
No. Customers	71,963	10,748	82,711
Total			
Energy Usage (GWH pa)	1,584	287	1,871
No. Customers	72,137	10,752	82,889

Government commitments and history of reform in the Territory

4.32 In April 2000, the Northern Territory Government introduced electricity market reforms as part of National Competition Policy commitments. The main reform initiatives included:

- abolition of the statutory monopoly over electricity supply held by the Territory Government owned Power and Water Authority;
- implementation of a third party access regime for specified electricity networks, certified for the purposes of the *Trade Practices Act*;

¹⁴ The Power and Water Corporation is currently the Government appointed service provider for the IES program.

¹⁵ Public Benefit Assessment for Electricity Retail Competition in Tasmania, Office of the Tasmanian Energy Regulator, May 2008.

- instigation of a timetable for phased introduction of full retail competition; and
- establishment of an independent economic regulator, the Utilities Commission, to regulate monopoly electricity services, licence market participants and enforce regulatory standards for market conduct and service quality.

4.33 However, since that time no new market entry has occurred and the Territory electricity supply industry continues to operate under a monopoly market structure.

4.34 In 2006 and 2007, Northern Territory Treasury conducted a review of the electricity market regulatory framework to identify impediments to the associated policy objectives of efficient and reliable electricity supply.

4.35 The review concluded that the small and fragmented Territory market combined with deficiencies in market and regulatory arrangements pose a significant barrier to these policy objectives. The review also found that moving to the national regulatory regime for electricity could ameliorate the deficiencies identified in the Territory framework.

4.36 On 13 April 2007, the Council of Australian Governments (CoAG) requested the Northern Territory to consider the merit of adopting the institutional framework established through the Australian Energy Market Agreement for the local electricity industry, with the timing at the Territory's discretion.

4.37 The Northern Territory Government subsequently undertook a comprehensive analysis of the merits of, and options for, adopting the national electricity laws and rules, including transitional arrangements necessary to take into account local circumstances.

4.38 In May 2008, the Northern Territory Government released a draft policy paper outlining the regulatory options to promote efficient and reliable electricity supply in the Territory. The overarching finding of the draft policy paper was that the national electricity framework would best achieve these objectives, with the following derogations:

- system and operating standards relevant to local market conditions;
- retaining Power and Water as a vertically integrated electricity generation, networks and retail business; and
- provision for the Territory Government to introduce market monitoring and conduct rules that would complement the national electricity framework.

4.39 Submissions made to the draft policy paper were generally supportive of the paper's findings and Northern Territory Treasury commenced preparation of a final policy paper for consideration by the Northern Territory Government.

4.40 The preparation of the Power and Water's 2008 Statement of Corporate Intent raised concerns with the Corporation's underlying financial viability. This issue, combined with the outcomes of the Davies enquiry into power outages that occurred in September and October 2008, prompted Government to commission an independent review of the financial sustainability of Power and Water in February 2009.

4.41 The review, which was conducted by Mr Andrew Reeves and finalised in April 2009, found that:

- on current projections revenue from tariffs and Community Service Obligation funding will not be sufficient to sustain viability and fund infrastructure investment over the five year SCI period; and
- the significant capital expenditure planned by the Power and Water Corporation would lead to substantial increases to interest charges such that by 2010-11 it would be necessary to borrow to fund interest payments.

4.42 As a result, the review recommended substantial increases in revenues from tariffs and a more detailed review of the Power and Water's capital investment program.

4.43 In response, Government announced the following tariff increases in regulated retail electricity, water and sewerage tariffs, from 2009-10:

Table 3: Increases in regulated retail electricity, water and sewerage tariffs

Tariff Increase	2009-10	2010-11	2011-12	2012-13
Electricity	18%	5%	CPI	CPI
Water	20%	20%	20%	CPI
Sewerage	20%	20%	20%	CPI

4.44 The Northern Territory Government also announced a reform program to strengthen regulatory oversight of the Territory electricity market and improve system reliability and performance. The main elements of the reform program are as follows:

- expanding the Utilities Commission from one to three members, including a Commissioner and two Associate Commissioners;
- a review of options for the implementation of full retail contestability in the Territory from 1 April 2010, including standard service contracts for small customers;
- review of options for retail prices oversight;
- review of the existing customer standards of service, including options for the introduction of a standards of service incentive scheme;
- review of system planning, performance monitoring and market operation arrangements; and
- review of the efficiency of Power and Water's capital and maintenance program, including options for greater independent oversight of asset management and planning.

4.45 The Commission has been commissioned to undertake the work program outlined above, and to recommend to Government options for reform.

Experience of other Australian jurisdictions

4.46 In Australia and elsewhere, the introduction of FRC in electricity has been preceded generally with significant restructuring of the electricity supply industry and adoption of wholesale trading arrangements. In the case of the Eastern Australian states, this has included the separation or unbundling of the principal activities of generation, transmission, distribution and retail and in most cases further disaggregation of generation and retail into a number of competing businesses (some of which were subsequently privatised) and adopting the Rules of the National Electricity Market (NEM) by becoming member jurisdictions. These structural and market reforms ensured that a functioning, transparent and in some cases highly competitive wholesale electricity market had developed prior to the commencement of FRC.

4.47 The NEM commenced in December 1998 with New South Wales, Victoria, Queensland and South Australia as participating jurisdictions. With physical connection in prospect, Tasmania joined in 2005. FRC commenced in New South Wales and Victoria in January 2002, in South Australia in January 2003 and in Queensland in July 2007. The introduction of full retail competition resulted in high numbers of customers switching to a different retailer (known as "churn") in Victoria and South Australia and moderate churn in New South Wales and Queensland. Churn levels in these jurisdictions can be related readily to the macro determinants of efficient wholesale market, prior structural reform, and adequate retail margins. In the cases of Victoria and South Australia, reviews of the effectiveness of retail competition have resulted in

recommendations for the removal of retail price caps. However the AEMC has recommended that the obligation of retailers to offer to supply and sell energy to residential customers be maintained and that retailers subject to this obligation be required to determine and publish the prices at which they will offer to supply and sell energy.

4.48 In Tasmania, FRC had been scheduled for introduction in July 2010. However this was subject to the findings of a public benefit assessment¹⁶ which proposed, in a Draft Report that “*competition should be extended to all small business and residential customers at such a time as the Government is confident that the structural and market arrangements in the electricity supply industry are able to support high levels of activity in mass market electricity retailing.*” Specific conditions were identified as being access to competitively priced wholesale energy, a wholesale energy market that would be responsive to upstream competitive pressures arising from retail competition, and the cost of the systems required to support retail contestability not imposing an unreasonable burden on electricity consumers. The assessment found that “*current circumstances and experience to date suggest that these conditions are not likely to be satisfied by 1 July 2010.*” Tasmania has not yet confirmed a date for the implementation of FRC.

4.49 In Western Australia the retail electricity market has been progressively opened to competition since 1999. From 1 January 2005, all electricity customers consuming more than 50MWh per annum have been eligible to choose an electricity retailer. Section 55 of the *Electricity Corporations Act 2005*, requires the Western Australian Government to conduct a review to ascertain the benefits associated with full retail competition in electricity. It is a requirement that this review be initiated after April 2009. However FRC was considered as part of a wider electricity retail market review process. At the present time final recommendations have been made in respect of electricity tariff arrangements only. The report found that current electricity tariffs are not cost reflective and recommended that Government select a glide path for the residential and small customer electricity tariffs to reach forecast cost reflective levels. In relation to FRC, the point was made that:

“Cost reflective retail tariffs are essential for the development of a competitive electricity retail market. If retail tariffs do not reflect the cost of supplying electricity, including an appropriate margin, then retailing electricity will not be a viable business activity. New entrants will be unlikely to enter the market, and existing retailers may exit.”¹⁷

Experience in the Northern Territory to date

4.50 Only one firm has entered the Northern Territory electricity market to compete with Power and Water. NT Power Generation Pty Ltd (NT Power) entered the market after April 2000 to provide electricity generation and retail services to customers on a commercial basis. NT Power succeeded in contracting two large customers that represented approximately 8% of total annual consumption (and 20% of the contestable market). Citing difficulties in obtaining gas supplies NT Power ceased electricity generation on 1 August 2001 while continuing with its retail business until it also ceased operating at the end of August 2002. The firm surrendered its generation and retail licences and totally withdrew from the market in November 2002.¹⁸

4.51 In 2004, the Commission received an application from a firm seeking an electricity retailer’s licence. Owing to the applicant’s failure to provide assurances

¹⁶ Public Benefit Assessment for Electricity Retail Competition in Tasmania, Office of the Tasmanian Energy Regulator, Draft Report, May 2008.

¹⁷ Government of Western Australia, Office of Energy, Electricity Retail Market Review, Final Recommendations Report, Review of Electricity Tariff Arrangements, January 2009.

¹⁸ Utilities Commission, July 2003, An update on energy policy and regulation in the Northern Territory, page 2, and Utilities Commission, December 2002, 2002 Annual Power System Review, page 8.

regarding its financial capacity the licence was not granted. There have been no other applications since NT Power exited the market.

CHAPTER

5

MARKET ARRANGEMENTS

5.1 The purpose of this section is to describe the current arrangements in the Northern Territory for the trading of wholesale electricity and provision of retail contestability. An overview of the corresponding NEM arrangements is provided for comparison and will be useful subsequently when the systems to support FRC are discussed.

Wholesale market arrangements***National Electricity Market (NEM)***

5.2 The centrepiece of the NEM design is a mandatory gross power pool. With minor exceptions, generators are required to submit offers to the market operator, the AEMO, to dispatch their energy into the pool. On the basis of dispatch offers, the AEMO determines a regional reference price (spot price) for each of the NEM regions. For each half-hourly market trading interval, generators receive from the market operator a payment equal to the product of their sent out energy and the regional reference price (adjusted by a site specific marginal loss factor). Similarly Market Customers (mainly retailers) are required to make a payment to the market operator equal to the product of the energy they supply to their customers from the pool and the regional reference price (adjusted by a site specific marginal loss factor). Generators and retailers typically hedge their exposure to the electricity spot price by entering into financial contracts for which they are natural counterparties.

Northern Territory – Regulated systems

5.3 Third-party access to the services provided by prescribed electricity networks in the Northern Territory is currently governed by the Network Access Code which is a schedule to the *Electricity Networks (Third Party Access) Act*. Part 2 of the Code establishes the terms and conditions under which access to an electricity network is to be granted to third parties and lays down the processes to be followed in negotiating and implementing access agreements and resolving access disputes.

5.4 When retail competition was introduced in the Territory in April 2000, it was not considered feasible to establish a wholesale electricity pool.¹⁹ In lieu of a wholesale electricity market, new-entrants were required to follow a “bilateral contracting model” by which they would arrange to supply directly contestable end-use customers and supply all the power needs of individual contracted customers (under normal circumstances). Consistent with this, the System Control Technical Code provides that a generator shall follow the load of its customers plus network losses plus transfer commitments to other generators, and specifies Power and Water Generation as the “last resort” source of provision of energy in the power system. It obliges the network user to ensure that its input to the power system is equal to the quantity of electrical energy used plus expected

¹⁹ “Implementing Economic Dispatch, Background Paper”, Utilities Commission, January 2002.

network losses between entry and exit points for each energy usage period. System Control is required to establish a methodology to determine “out of balance energy” for each energy usage period and undertake the settlement of resultant charges between generators. Out of balance energy prices are determined by System Control on the basis of generator buy and sell bids.

5.5 These arrangements primarily envisaged retail competition being enabled by competitive new-entrant generation i.e. being driven by access to a lower wholesale cost of electricity. The alternative would be for a new-entrant retailer to approach Power and Water Generation and obtain a wholesale contract on the same terms as Power and Water Retail.

Northern Territory - Non-regulated systems

5.6 Electricity for the 72 remote indigenous communities is provided by a Government appointed service provider through the Budget funded Indigenous Essential Services program. There is a formal agreement between Power and Water’s subsidiary company Indigenous Essential Services Pty Ltd and the Department of Local Government, Housing and Sport which sets out the terms and conditions of supply (including price), effectively over-riding the provisions of the *Electricity Reform Act*.

5.7 The non-gazetted remote tourist and mining townships are provided electricity either by Power and Water or by the associated mining firm.

5.8 For those townships serviced by Power and Water, electricity is supplied under Power and Water’s standard customer contract at the gazetted uniform retail tariffs set by Government.

5.9 For those townships serviced by an associated mining firm, the terms and conditions of supply are a matter for negotiation between that mining firm and electricity users (usually employees of that mining firm).

5.10 In some instances, Power and Water will source supply of electricity from the mining firm for on-supply to government users in the township or for on-supply to nearby indigenous communities. Such agreements are commercially negotiated between the mining firm and Power and Water, with Power and Water on-supplying to government customers under its standard contract or to indigenous communities under its contractual arrangements.

Retail contestability arrangements

National Electricity Market (NEM)

5.11 Retail contestability arrangements in NEM jurisdictions consist of the NEM FRC systems and customer transfer processes and local jurisdictional requirements largely concerned with customer protection (protection against unfair practices, dispute resolution, and monitoring and enforcement). For instance among NEM jurisdictions different approaches have been taken to the regulation of off-business premises sales including the terms and permissibility of door to door sales, telephone marketing agreements and non-contact sales agreements. With respect to customer protection, the National Energy Customer Framework aims at achieving consistency at a national level.

5.12 In general, the introduction of FRC in the NEM jurisdictions has been accompanied by local customer protection measures including the establishment of an ombudsman’s office, the requirement that incumbent retailers continue to supply customers in the event that they choose not to go onto a market contract with their current or another retailer, and the requirement that they act as a retailer of last resort in the event that other retailers discontinue serving the customer.

5.13 For example in Victoria, electricity retail contestability has been governed by three major codes – Energy Retail Code (ERC), Code of Conduct for Marketing Retail Energy (marketing code), and Electricity Customer Transfer Code (ECTC). Other consumer protection measures include Guideline on Explicit Informed Consent, Guidelines on Credit Assessment, Guideline on Product Disclosure, and under the *Electricity Industry Act*, wrongful disconnection payment legislation, and hardship policies legislation.

5.14 The ERC provides that retailers must bill customers for electricity at least every three months, that bills must include information including whether the bill is based on actual or estimated use and that meters must be read at least once every twelve months. The ERC also provides for retailer obligations in respect of payment difficulties including instalment plans and stipulates that disconnection must be preceded by the issue of a reminder notice and disconnection warning.

5.15 The marketing code addresses the training, product and code knowledge of marketing representatives and personal and telephone contact with consumers. Specifically it requires marketers to give customers a date from which the retailer will be responsible for the electricity service to the address and advice that the transfer will take some time.

5.16 The ECTC operates in conjunction with the retail transfer processes performed by the AEMO. It sets out Victoria's NMI (National Meter Identifier) standing data requirements and the process for customer transfer. It is also concerned with cooling off protections providing that proposed transfers must be initiated as soon as practicable after the expiry of the cooling off period.

5.17 Within the NEM, the AEMO provides the systems and processes to support competition and choice for end users in the retail electricity market. These systems enable the transfer of customers between registered NEM retailers and perform wholesale market settlements between the AEMO and retailers based on the actual and deemed time-of-use consumption of customers for each retailer at each transmission connection point (TNI). To support these functions the AEMO also maintains metering installation level standing data together with a reference NMI.

5.18 As suggested by its name, MSATS (Market Settlements and Transfer Solution), the AEMO's FRC system is integrated with the NEM's wholesale market settlement function. Indeed its end objective can be considered to be the calculation of the wholesale cost of energy for a retailer at each TNI where it has customers. Accordingly, essential information associated with each NMI would be the financially responsible retailer, the TNI (to which the relevant regional reference price is referred for calculating the cost of energy), billed consumption, and the type of meter indicating, where consumption is not metered on an interval basis, which load profile to apply to the billing period consumption. With this information, MSATS performs NEM billing producing aggregated half-hourly data at each TNI for each retailer.

5.19 A principal issue for a jurisdiction introducing FRC is the population of the AEMO's CATS (Customers Administration and Transfer System) with standing data and MDM (Meter Data Management System) with historical meter reads. This is an activity for the distribution businesses as they have this data initially. The most important part is the association of street addresses with NMIs. In going about to build a customer base organically, a new-entrant retailer will usually start with a street address and then require the NMI in order to obtain additional information including consumption data. This process is called "NMI discovery". An important consideration for implementation of FRC is whether to fully populate CATS prior to the commencement of FRC so as to provide for fully automated NMI discovery, or opt for a less automated discovery and populate as interested retailers request information. This was part of the "Minimalist Transitioning Approach" adopted by Ergon Energy in agreement with the Queensland Government as part of Queensland's FRC arrangements. The "Minimalist Transitioning Approach" was developed on the basis of an expectation of low churn in the Ergon

distribution supply area, where, as a result of Queensland's uniform tariff policy, it would not be profitable for new-entrant retailers to supply customers.

Northern Territory

5.20 Part 3 of the Electricity Reform (Administration) Regulations sets out the basis on which a customer is classified as contestable. Customers are classified as contestable solely on the basis of their electricity consumption. The Regulations make no distinction between customers located on regulated networks and customers on non-regulated networks. In theory, any customer anywhere in the NT could be contestable if they satisfy the electricity usage benchmark, even those in indigenous communities.

5.21 Power and Water is currently the only electricity supplier holding a retail licence authorising the sale of electricity to non-contestable customers. Power and Water's non-contestable (franchise) retail business is ring-fenced from its contestable retail business.

5.22 Power and Water Franchise Retail is required by licence conditions to:

- take reasonable steps to identify when its non-contestable customers will or could become contestable customers and to give those customers at least 28 days notice of that fact and specifying the manner in which the notice is to be given; and
- request these non-contestable customers to give written consent to the electricity entity providing their names, addresses and other contact details from time to time to the Utilities Commission and the Utilities Commission providing that information to other electricity entities holding licences authorising the selling of electricity;
- to offer to sell electricity to contestable customers on the same terms and conditions including same tariff schedule that applied to those customers immediately before becoming contestable customers for a period specified in the Regulations after they become contestable customers – the period specified in regulations is 2 years and referred to as the 'grace period';
- requiring the electricity entity to take reasonable steps to give the customers at least 28 days notice of the date on which the specified period will expire.

5.23 At the commencement of the current regime, in the interests of ensuring a level playing field, Power and Water's contestable retail business agreed that it would not approach contestable customers to negotiate supply arrangements until it was formally notified of their contestability status by the Commission at the same time as other third-party retailers.

5.24 Contestable customers must negotiate with a licensed retailer for supply of electricity. Terms and conditions of supply, including price, are a matter for commercial negotiation between the customer and the retailer. (If a customer has not negotiated contestable supply arrangements by the end of their 2 year grace period, Power and Water Franchise will continue to supply them as a 'default customer' but generally at a higher tariff than the gazetted tariff. Default terms and conditions are required under its licence to be 'fair and reasonable in the circumstances' and are published on Power and Water's website.)

5.25 The Northern Territory currently has a 'straight line' supply chain, with the retailer contracting with the network provider on its customers' behalf, rather than the 'triangular' relationship where a customer has a direct contract with the network provider.

5.26 Currently, licensed generators in the Northern Territory are only authorised to sell wholesale electricity to electricity entities holding a retail licence or a generation licence. Thus an end-use customer cannot buy directly from a generator and make its own arrangements with the network provider for transport of electricity through the system. (NT Power had separate generation and retail licences, as does Power and Water).

5.27 Owing to the relatively small number of contestable customers, Power and Water's systems for contestable customers are rudimentary and largely manual. Further, since there are currently no active or even licensed retailers other than Power and Water, these systems are not used.

CHAPTER

6

OBJECTIVES AND PROSPECTIVE BENEFITS OF FRC

6.1 The Commission is required to report on the objectives of FRC in the Northern Territory context, the conditions necessary for competition to develop in the Territory and the prudent actions Government should take to encourage the development of competition.

6.2 In considering the objectives of FRC in the Northern Territory, it is noted that FRC was a requirement of the National Competition Council (NCC) for certification of the Territory's third party access regime under the *Trade Practices Act* in 2000. Certification was considered desirable by the Northern Territory Government because it establishes a legal avenue for third parties to access network infrastructure. Presumably then, one objective of introducing FRC in the Northern Territory is retention of a certified third party access regime. It remains to consider whether simply by making the retail market fully contestable, retail competition has any prospect of emerging.

6.3 As noted already, FRC has been introduced elsewhere following substantial reform of markets and industry structure. At the time of introducing FRC, such reform had either resulted in some wholesale market competition providing retailers with a number of wholesale electricity procurement options, or with the prospect of such a situation developing over a reasonable timeframe. An objective of FRC in these cases was to provide for the benefits of upstream reform to be passed onto electricity end users.

6.4 In the case of the Northern Territory, where there has been limited wholesale market reform and no industry structural reform, an important question will be whether to proceed to introduce FRC without first undertaking some additional market, industry structural, and retail tariff reforms. In the absence of wholesale market competition, there are still potential benefits associated with FRC but it is an open question as to whether these are sufficient to justify the costs of FRC.

6.5 Assuming that at the time FRC is introduced in the Territory there is no competition in the supply of wholesale electricity, any retail competition will be on the basis of the cost to serve. However, current regulated retail prices do not provide a positive retail margin (that is to say current retail prices do not fully cover Power and Water generation and network costs). Further retention of the vertically integrated structure of Power and Water, which provides some flexibility in transferring profits and losses between the various arms of the total business, will make it problematic for new-entrant retailers to compete unless subsidies are applied in a consistent and transparent manner.

6.6 The existence of a larger directly contestable market provides the possibility of a competitor developing generation to support its own retail operations rather than looking to Power and Water as an off-taker. However without cost reflective retail tariffs, this possibility falls short of being a commercial opportunity for a new entrant.

6.7 The principal objective of FRC is to provide choice of retailer to all electricity retail customers. As the cost of establishing and continuing to support FRC will be

recovered from customers, FRC systems should be designed to facilitate retail competition i.e. facilitate a 'level-playing-field' that allows all retailers to compete on an equal basis to provide for the exercise of this choice at least cost. The principal benefit of FRC in the NT context would be the potential for lower retail prices as a result of competition in the retail market and the possibility for retail competition to increase the prospects for competition in the wholesale market by encouraging new-entrant generation. Other potential benefits of FRC include better service for customers from a more responsive, innovative and focused retail market, tariffs that better reflect the cost of supply and reduced reliance on regulation of the retail electricity market.

6.8 It is noted that the realisation of these prospective benefits will depend on the conditions of the particular electricity market into which retail competition is being introduced. These conditions are explored in the next section.

CHAPTER**7****CONDITIONS FOR RETAIL COMPETITION****Overview**

7.1 The conditions for retail competition have been reviewed in a number of jurisdictional issues papers and public benefit assessments concerned with the introduction of FRC as well as papers reporting research into customer switching. The Utility Customer Switching Research Project²⁰ monitors customer switch rates and trends in over 50 competitive energy retail markets worldwide. In its 2007 year world ranking, it reports Australia as the most active region in the world rating Victoria and South Australia as “Hot” (highest ranking with annual switching 15% or higher) and New South Wales and Queensland as “Warm Active” (second highest ranking with annual switching between 9.5% and 15%). This research identified the following as the top ten macro determinants of switching :

- efficiency and sufficiency in wholesale markets;
- extensive unbundling of retail, distribution and generation;
- sufficient price float, volatility and margins;
- new market entrants (gen-retailers if necessary);
- powerful autonomous competition oriented regulators;
- depleted incumbent advantages;
- switching desensitisation;
- switching momentum;
- political devolvement; and
- time.

7.2 Of these, the first three are considered the most important and are discussed further here.

Efficiency and sufficiency in wholesale markets

7.3 Arguably this condition can be considered to have been achieved in the NEM regions of Victoria, South Australia, New South Wales and Queensland where wholesale electricity contracts are actively traded and contract prices quoted by brokers and on exchanges. There is relatively less activity in the Tasmanian region (which does not have full retail competition) where despite being physically connected to the NEM, there are

²⁰ Utility Customer Switching Research Project, World Energy Retail Market Ranking, Fourth Edition, October 2008.

few if any providers of wholesale contracts other than the dominant generator Hydro Tasmania. However the Tasmanian regional reference price does serve to provide some transparency as its relativity to the Victorian regional reference price is a potential basis for the pricing of wholesale contracts. In Western Australia, where a wholesale market has been established and is operating in the South-West, the issue is whether there are a sufficient number of players to support competition and the need to ensure development of market mechanisms that facilitate short and longer term trading and contracting.²¹ Price transparency in this market is provided by STEM (Short Term Energy Market) and reserve capacity prices published by the Independent Market Operator (IMO).

7.4 In the Northern Territory there is an absence of transparency in the wholesale electricity market with no public disclosure of either spot or contract wholesale electricity prices. As a consequence of the vertically integrated structure of Power and Water, wholesale electricity prices exist only internally to Power and Water as transfer prices between business units. Prior to introducing FRC, greater transparency of wholesale electricity pricing could be provided by establishing and publishing spot prices (either by creating a spot market as a component of wholesale market reform or requiring System Control to output spot prices (ex-ante or ex-post) as part of their dispatch process) and/or by having Power and Water regularly publish prices for wholesale electricity contracts for different terms and durations (which could be imposed by amending the Ring-fencing Code).

7.5 The Northern Territory Ring-fencing Code (Third version, 1 January 2009) specifies that at a minimum, an electricity entity carrying on a prescribed business²² in the Northern Territory must establish and maintain a separate set of financial accounts and reports in respect of each prescribed business and the electricity business as a whole and allocate any costs that are shared between a prescribed business and a related contestable business in a manner that complies with applicable cost allocation procedures or is otherwise fair and reasonable.

7.6 The issue in the Territory of wholesale price transparency concerns the relationship between two of Power and Water's contestable businesses (generation and retail) and is therefore not addressed by these minimum requirements. However the stated objectives of the Ring-fencing Code are wider and include the prevention of the misuse of monopoly power, and simulation of the behaviour and outcomes likely to exist in a competitive market in addition to ensuring that an entity's "related contestable businesses" are not treated by its prescribed businesses in a manner that confers a non-commercial discriminatory price or non-price advantage on the related contestable business as compared to an arm's length third party in the same commercial circumstances.

For comment:

(1) Is the current lack of wholesale price transparency an impediment to FRC and if so, what should be done, if anything to provide greater wholesale price transparency in the Northern Territory prior to introducing FRC ?

Extensive unbundling of retail, distribution and generation

7.7 Separation of generation and retail occurred in all existing NEM jurisdictions prior to market entry and the introduction of retail competition. Where retail and generation businesses have remained in government ownership, separation of retail and

²¹ Government of Western Australia, Office of Energy, Electricity Market Review Issues Paper, December 2007, p.39.

²² Defined in the Code as operating an electricity network or network access business or selling electricity to non-contestable customers.

distribution has been effected by means of ring-fencing. Outside of government ownership, the preference has been to separate retail and distribution largely as a result of the different funding requirements and investor appeal of the two types of businesses – merchant and regulated respectively. However outside of government ownership there has been a tendency to pursue vertical integration of generation and retail as a business strategy. Victoria and South Australia have previously disaggregated and privatised the state-owned generation and retail businesses prior to introducing full retail competition. New South Wales undertook a more limited dis-aggregation of generation into three large portfolio businesses and has retained generation and retail under government ownership. Queensland disaggregated and divested its government-owned retail business in south-east Queensland prior to introducing full retail competition. Tasmania separated retail from generation but retained the generation sector as one entity. In Western Australia, separation of business functions was also effected with Western Power responsible for distribution and transmission, Synergy responsible for retail, and Verve Energy for generation. Verve Energy faces competition from Alinta, Griffin Power and New Gen.²³

7.8 Higher activity in fully contestable retail markets in Victoria and South Australia compared to New South and Queensland might be explained in part by the fact that disaggregation of the generation sector in the former jurisdictions was more extensive than the latter and was followed by privatisation. In the latter jurisdictions, generation was retained under common government ownership. In the case of New South Wales, an arrangement called ETEF (Electricity Tariff Equalisation Fund) has also been considered to be an impediment to retail competition as it has served to provide the government-owned retail businesses in that state with a more effective form of wholesale price hedging than new-entrant retailers could obtain from the hedge market at a competitive price.

7.9 In Queensland, prior to the introduction of FRC, the prospects for active retail competition were considered to be high in the South-East where retail tariffs provided positive margins after deducting wholesale energy and networks costs. Consequently the Queensland Government opted to restructure its retail businesses and divest the two entities with customer bases located in the South-East by trade sale. The effect was to remove the risk to these businesses of potentially large losses of customers to competitors with experience gained in other NEM jurisdictions. This approach also had the effect of providing new entrant retailers with blocks of load sufficiently large to influence hedge negotiations with generators and support the introduction of physical hedges by means of generation and potentially load management.

7.10 New South Wales is the only NEM jurisdiction to have introduced FRC without first removing the exposure of Government to the fully contestable retail market. However the sale of the three government-owned electricity retail businesses (and the trading rights to the generators) are part of its Energy Reform Strategy.²⁴ According to the NSW Government, *“the exit of Government from energy trading activities and a strong market presence by the private sector are essential pre-conditions to those same companies delivering investment in new power stations.”*²⁵

7.11 Outright divestment of retail businesses has not been the only approach. In the case of the Australian Capital Territory, the ACT Government acted early to reduce its exposure to the risk of competitive wholesale and retail electricity markets. This was achieved in October 2000 by having ACTEW Corporation enter a utility joint venture with energy retailer AGL.

7.12 Separation of business functions has not been attempted in the Northern Territory with Power and Water continuing to provide network, retail and generation

²³ Independent Market Operator, Statement of Opportunities, July 2009.

²⁴ Energy Reform Strategy : Defining an Industry Framework, New South Wales Government, March 2009.

²⁵ www.nsw.gov.au/energy/

services to the Territory's customers. A number of small independent power producers sell their production to Power and Water by means of power purchase agreements. However as discussed in the previous section, prescribed and contestable businesses are subject to requirements specified in the Ring-fencing Code.

7.13 In reviews undertaken by Treasury in 2005 and 2006, the retention of Power and Water as a vertically integrated entity was considered to be justified on the basis of arguments of economies of scale and scope. In particular it has been noted that significant economies of scope are captured through the sharing of resources across common areas such as information technology, billing systems, corporate overheads, field operations and call centres.

For comment:

(2) Is the current structure of Power and Water an impediment to FRC and if so, what further changes if any should be made to the structure of Power and Water prior to introduction of FRC ?

Sufficient price float, volatility and margins

7.14 Retailers are drawn to participate in a market when, having in view a target market²⁶ (characterised for example by annual consumption and consumption profile) a comparison between the existing retail price and the cost at which they are able to procure wholesale electricity suggests they are able to offer a discount to customers on their existing prices while exceeding a profitability threshold. The term "headroom" is frequently used to refer to the extent to which the retail price exceeds the total cost to serve. Full retail competition in New South Wales was initially characterised by low switching rates. Subsequent retail price determination in that jurisdiction by IPART was guided by the desirability of creating headroom to facilitate retail competition. In Victoria and South Australia, headroom has been created by falling wholesale prices as a result of competition in the generation sector.

7.15 In Western Australia, it has been recognised that "*cost reflectivity of tariffs will be a major driver in development of a competitive retail electricity market.*" The December 2007 Electricity Retail Market Review Issues Paper stated the view that "*it would be inappropriate to implement FRC whilst tariff levels are not fully reflective of supply costs.*"²⁷ While final recommendations are yet to be made to the Western Australian Government on FRC, it seems likely that the timing of FRC will be made contingent on tariffs achieving full cost reflectivity.

7.16 In the Northern Territory retail prices have been set by and subsidised by government and are therefore at the present time not fully cost reflective. For retail competition to be beneficial to customers, the presence of adequate retail margins (headroom) in initial retail tariffs is a prerequisite for effective retail competition. Government might consider the removal of subsidies prior to the introduction of FRC, the postponement of FRC until retail prices become cost reflective, or the retention of subsidies but provided through lower network tariffs or other means, so that all eligible customers would receive the appropriate subsidy independent of their choice of retailer.

7.17 In 2009, the Northern Territory Government commissioned a review to address concerns regarding the financial and commercial sustainability of the Power and Water Corporation.²⁸ The review identified a shortfall in the revenue requirements of the

²⁶ Of course the target market (assessed as the product of the total number of customers and the proportion who might be induced to switch) will need to be sufficiently large to cover set up costs.

²⁷ Government of Western Australia Office of Energy, Electricity Retail Market Review, Issues Paper, December 2007, p.39

²⁸ Review of Power and Water Corporation Financial Sustainability, Andrew Reeves, March 2009.

electricity business, estimating that average prices would need to increase by 35 per cent and tariff prices for tariff customers would need to increase by some 55 per cent for Power and Water to reach 'financial sustainability'. Further increases would be required to allow tariffs to reach levels that reflect full economic costs, including a commercial return on assets. These conclusions were subject to considerable caveats, but nevertheless indicate the substantial gap between 2008-09 tariffs and cost-reflective levels.²⁹

7.18 Acting on the findings of this review, the Northern Territory Government raised prices for tariff customers (Tranche 4,5 and 6 customers) from July 2009. The Order made by the Northern Territory Government runs until 30 June 2013 and provides a nominal price increase over the period of less than 30 per cent. The annual price increases established by the Order are shown in Table 4.

Table 4: Electricity Tariff price path – tranche 4 and non-contestable customers

Tariff Increase	2009-10	2010-11	2011-12	2012-13
Electricity	18%	5%	CPI	CPI

7.19 Although tranche 4 electricity customers are contestable, the tariff increases for these customers are largely regulated by pricing orders.

For comment:

(3) What actions might Government take to provide the retail margins required to improve the prospects for competition ?

²⁹ Financial sustainability means generating sufficient revenues to meet operating and debt servicing costs and depreciation of assets without a return on capital. Commercial sustainability is defined as earning sufficient revenues to meet operating and debt servicing costs with a return of and on capital (source above report).

CHAPTER

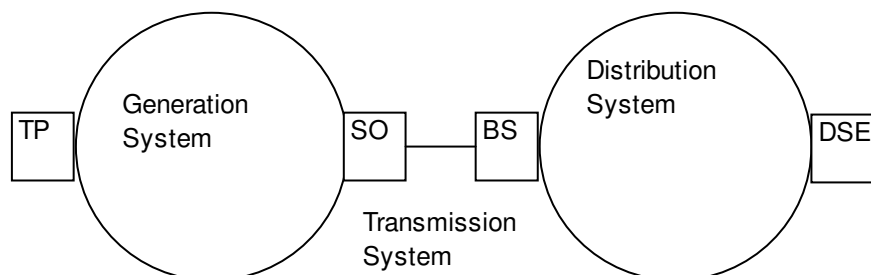
8

SYSTEMS REQUIRED TO SUPPORT FRC

Overview

8.1 An electricity retailer is essentially a wholesale purchaser of electricity and bundler of services. In general the retailer bills its retail customers for the electricity supplied to them, makes payments to its energy wholesalers for electricity purchased on their behalf, and pays regulated network charges in respect of its customer load. In practice the payments a retailer makes depends on the market arrangements. Figure 1 represents a stylised power system.

Figure 7 1: Stylised power system showing principal metering points



8.2 The high voltage transmission system connects generators to bulk supply points. The low voltage distribution system distributes the power received at bulk supply points to the individual customers located in the distribution system. Over any defined period of time, the total energy consumed by customers within the distribution system referred to here as distribution system energy (DSE) is less than the total production (TP) of generators in the generation system. This is largely the result of losses in transmission and distribution and the use of power by generating plant. The energy that enters the transmission system is called sent out (SO) energy. It is equal to total production less energy used in the stations. The energy received at the bulk supply point of a distribution system (BS) is the sent out energy less transmission losses. The energy consumed by customers within the distribution system is the energy received at the bulk supply point less distribution system losses.

8.3 Within any defined time period, to account accurately for energy use within the power system, it is necessary to measure using suitable meters the sent out energy from generators, the energy received at bulk supply points and the energy used by all customers within the distribution system.

8.4 The distribution of power is recognised as a natural monopoly business. The revenue the owners of distribution systems or networks are entitled to earn is subject to regulation. The responsibilities of distribution businesses include the maintenance of the network to meet service standards and the augmentation of the network to accommodate demand growth. These businesses are also responsible for connecting customers and

metering their electricity use. On the other hand, the retailing of power which includes assuming responsibility for purchasing electricity on behalf of the customer and billing the customer for the electricity used, is an activity which can be subject to competition.

8.5 Historically, distribution and retail were performed by the same entities. The introduction of retail competition necessitates the separation of these activities either by ring fencing or divestment.

8.6 The foregoing discussion enables a broad survey of the system requirements for retail competition. Simply, a retailer needs to:

- be able to assume the functions of a retailer for a particular customer on the basis of customer choice (customer transfer);
- access customer standing data and consumption data required for retail billing (business to business data transfer); and
- determine the quantum and profile of wholesale electricity purchased or deemed to be purchased on behalf of the customer to enable settlement with wholesale suppliers and/or the power pool (metrology / load profiling).

8.7 Consideration must also be given to protecting the customer from being induced improperly to enter market contracts and ensuring they are provided for in the event that they do not wish to enter a market contract (customer protection).

Customer Transfer System

8.8 Retail competition presupposes a system to enable the transfer of customers from one retailer to another. The system must maintain standing data associating a unique meter number (NMI) with a residential or commercial premises. The system must be able to respond to requests from retailers to obtain data to complete customer transfer requests and to inform the customer's new retailer and previous retailer of the status of transfer requests. The system must also initiate processes associated with transfer including meter reading for final billing.

8.9 The system manages the customer transfer through prescribed business to business processes. In the NEM the system is based upon NMI standing data which identifies premise details, metering installation information, network information and key market participants i.e. meter provider, metering data providers and network service provider. In selecting a new retailer the customer provides informed consent to the change, which allows that retailer to contact the distribution network service provider (DNSP). On an agreed date, the DNSP will ensure final meter read data is sent to both retailers and subsequent metering consumption data is sent to the new retailer. Receipt of this metering data enables the termination and commencement of customer billing activity for the old retailer and new retailer respectively. On the agreed transfer date the DNSP will switch the billing of network usage charges from the old to new retailer.

Business to Business Data Transfer Systems

8.10 Distribution businesses will generally have a central repository or database for storing meter reads and associated systems (automatic or manual) for transferring data from meters to the database. To meet the needs of retail competition, additional protocols and systems need to be developed to allow communication between the meter database and the billing systems of retailers.

8.11 Business to business (B2B) communications facilitates the customer transfer and subsequent customer billing processes. The transfer date whereby the old retailer relinquishes commercial responsibility to the new retailer for the customer must be mutually agreed between the two retailers and the DNSP. Additionally any specific factors

relating to the supply of electricity are also made known by the new retailer to the DNSP, for example the need for life support equipment.

8.12 The B2B processes also serve to manage the service requests between retailer and DNSP regarding supply termination, supply commencement; meter re-reads and meter installation management. The DNSP is responsible for B2B systems for meter data management including the management of the metering installation information, collection of meter consumption data, veracity of the consumption data and integrity of meter data transmission to retailers.

Metrology / Load Profiling Systems

8.13 It might be thought that if the retailer has the energy consumption required for retail billing, it would have the information required for settling for its wholesale purchases of electricity in respect of that customer. This is not necessarily the case. In the NEM, the retailer purchases energy from the pool on a half-hourly basis. However most customer meters are accumulation meters which are read quarterly and the energy consumption between meter reads is calculated by differencing. In the NEM, wholesale electricity market settlements for non-interval metered loads are calculated using net system load profiles defined for regions corresponding to distribution area networks. Broadly, in the NEM, a net system load is calculated ex-post as the difference between the metered load at the distribution area network boundary and the sum of the interval metered loads within the distribution boundary adjusted for losses. Depending on wholesale market arrangements, metrology procedures need to be developed on the basis of selected load profiling methodologies to allow retailers to settle for wholesale electricity purchases made in respect of customers.

Customer Protection Systems

8.14 Within Australia customer protection has been a jurisdictional issue however similar measures have been developed in the different jurisdictions and local regulators have sought to develop common approaches. The National Energy Customer Framework aims at delivering a national approach to customer protection.

8.15 Where FRC has been introduced, regulators have generally strengthened customer protection by amending the relevant electricity supply act and its associated regulations. For example retailers in New South Wales are subject to the following requirements:³⁰

- a requirement to supply all customers who are connected to the grid with power;
- compliance with the Marketing Code of Conduct,
- membership of an approved Ombudsman scheme – the Energy and Water Ombudsman, NSW (EWON) – and abiding by the Ombudsman's rulings;
- allowing customers experiencing financial difficulties to pay by instalments; and
- very strong disconnection procedures, including preventing disconnection when a matter is before the Ombudsman, or of customers on life support equipment.

8.16 Further protection is provided by requiring certain retailers (generally incumbents) to provide standard supply contracts to customers who, for whatever reason, are not offered or do not enter a market contract.

³⁰ Source – NSW Government, Department of Water and Energy – Energy, Customer Protection Framework

CHAPTER

9

IMPLEMENTATION OPTIONS FOR THE NORTHERN TERRITORY

Scope of FRC

Regional Scope

9.1 Table 5 shows electricity use and number of customers for each of the three regulated networks – Darwin-Katherine, Alice Springs, and Tennant Creek, the non-regulated networks, and the Northern Territory as a whole.³¹

Table 5: Electricity use and customer numbers by region 2008-2009.

	Electricity use (GWh)	Number of customers
Darwin-Katherine	1,341	58,319
Alice Springs	216	12,109
Tennant Creek	26	1,709
Regulated	1,583	72,137
Non-regulated	286	10,752
Total	1,869	82,889

9.2 The question arises as to whether contestability would be extended to all electricity customers in:

- the Northern Territory;
- the three regulated networks; or
- the Darwin-Katherine Interconnected System (DKIS)

9.3 The question occurs in anticipation of the likely differences in results if a cost-benefit analysis were applied to each of the three regional options. The prospect of wholesale electricity competition would appear to be greater in the DKIS than the other regulated systems. Furthermore assuming the continuation of uniform tariff policy, cost reflective tariffs would be likely to be achieved earlier in the DKIS where the cost of generation is lower than elsewhere.

9.4 With respect to FRC systems, it is envisaged that these would be developed for the regulated networks only. If FRC is applied to all Northern Territory electricity

³¹ Utilities Commission, Northern Territory Electricity Market, Year ending 30 June 2009.

customers, customers in the non-regulated networks would be contestable without processes being in place to effect their transfer among retailers. It would be necessary for any retailer intending to supply customers in these networks to seek access on a case by case basis.

Unmetered loads

9.5 Another scope related issue concerns the contestability of unmetered loads (principally street lighting and traffic lights). The issue in the NEM was that special arrangements had to be developed for each class of unmetered load in order that interval data (half-hourly data) would be available for market settlement. For this purpose it was considered necessary to develop load and inventory tables which would be subject to the approval of the jurisdictional metrology coordinator. The methodology applied in the NEM for the calculation of energy volumes at unmetered connection points is described in the NEM Metrology Procedure (Type 7 Metering Installation). Load Tables are published by the AEMO under Schedule 12 of the NEM Metrology Procedure.

9.6 With respect to unmetered loads the options are to i) exclude them from contestability, ii) make them contestable and proceed to develop load and inventory tables for each class as new-entrant retailers express interest in supplying them or iii) make them contestable and develop load and inventory tables prior to the introduction of FRC.

For comment:

- (4) Should the introduction of FRC be staged on a regional basis ?
Should unmetered loads be contestable as part of FRC ?**

Requirement for Smart Metering

9.7 Prior to introducing FRC, other Australian jurisdictions have considered the question of whether interval metering should be mandated for all contestable customers or only for those contestable customers with annual consumptions exceeding a specified threshold. While in the interests of promoting demand-side response through innovative tariff design, there has been jurisdictional and national support for programs to roll out interval (and otherwise “smart”) metering, the requirement that a customer have interval metering as a precondition for being contestable has been recognised as an impediment to competition. The practical issue of deeming a non-interval metered customer’s consumption profile for the purpose of wholesale settlement has been dealt with by load profiling.

9.8 It is suggested that in the Northern Territory there be no mandatory requirement for interval metering associated with contestability. While there may be substantial benefits of smart metering for managing network peak loads, the relative lack of volatility of the NT system load compared to the highly temperature sensitive system load of some NEM regions suggests there is less prospect for innovative tariff design aimed at encouraging customers to alter profiles on the basis of wholesale price signals. Further, the NEM provides half-hourly price signals to which retailers and other market customers (some large industrial customers) are potentially exposed. In the Northern Territory, current contestable customers with appropriate metering face peak/off-peak pricing but for residential and commercial customers, prices are not time of use. Arguably in the Northern Territory, owing to the composition of the generation system based largely on the use of natural gas, there is relatively little difference in the variable cost of generation between peak and off-peak times. The difference in peak and off-peak generation transfer prices is largely the result of the allocation of capital costs.

9.9 As part of the NSMP, the Northern Territory should consider opportunities for SM rollout. However SM rollout is not considered necessary in order to implement FRC or ensure the implementation is beneficial.

For comment:

(5) Should mandatory interval metering be a precondition of retail contestability ? Is there any need to defer FRC until NSMP requirements and any implementation in the Territory have been considered?

Management of FRC

9.10 The function of the FRC manager is to manage the customer transfer process and the transfer of information between businesses. In the NEM, the AEMO provides the FRC management role. In the Northern Territory, prior to NEM-entry, the FRC management role would need to be provided by either a specially constituted local body, or a suitably ring-fenced part of Power and Water (presumably the Metering Services Unit of Power Networks). Alternatively, the AEMO could be retained to provide these services prior to or irrespective of whether the Northern Territory ultimately joins the NEM.

Customer Transfer System

9.11 Retailers will seek to acquire customers by inducing them, typically by offering a discount to their current tariff rate, to enter a market contract.

9.12 Upon signing a customer, a retailer will need to contact the FRC Manager and advise a transfer date. The FRC Manager will record the details of the transfer, arrange a final meter reading and contact the existing retailer (Power and Water Retail) to prepare and issue a final bill.

9.13 In the NEM, the AEMO operates a customer transfer system as part of its FRC management role. The retention of the AEMO as FRC Manager for the Northern Territory retail electricity market would obviate the need to design and develop a similar system locally.

Business to Business Data Transfer Systems

9.14 In the NEM, retailers are required to purchase electricity from the pool. The retailer settles with the market manager, the AEMO, in respect of electricity purchased by the retailer on behalf of the customer. However the current wholesale market arrangement in the Northern Territory is based on bilateral contracting between generators and retailers. For this reason, if FRC is introduced in the Northern Territory without changing financial settlement processes for wholesale energy purchases, generators will also need to be advised of details of customer transfers and subsequently deemed or actual customer consumption.

9.15 When the meter is read, the retailer is advised of the metered quantity and bills the customer. As explained, the generator also needs to be advised of the metered quantity in order to bill the retailer unless a NEM style of settlement process is established.

9.16 Based on initial discussions with the AEMO, it would appear feasible for the AEMO to perform the settlement calculations between NT generation businesses (initially Power and Water) and retailers using either regulated spot prices or Power and Water Generation's contract prices in lieu of the spot prices that under NEM would originate from NEMDE (National Electricity Market Dispatch Engine).

For comment:

(6) Is the current bilateral contract market an impediment to FRC and should reform of this market be considered prior to introducing FRC ?

Metrology / Load Profiling Systems

9.17 In the current pre-NEM Northern Territory, where there is no power pool and no wholesale electricity market competition, the retailer will need to obtain wholesale electricity prices from Power and Water Generation for each region (i.e Darwin-Katherine, Tennant Creek, and Alice Springs). Retailers could seek to obtain prices by negotiation however, while Power and Water Generation remains the only supplier, there is a case for some oversight of Power and Water Generation's wholesale pricing to ensure that pricing is fair and non-discriminatory. The Treasurer has recently requested the Commission to develop a detailed work program to review and report to the Treasurer on an effective retail price oversight framework for contestable customers and associated reporting and disclosure arrangements.

For comment:

(7) Should Power and Water Generation's wholesale pricing be subject to oversight and what form should this oversight take ?

9.18 It can be assumed that the prices offered by Power and Water Generation would be the generation transfer prices (peak and off-peak) applicable to the current franchise load in each of the regions. These prices could be determined on an annual basis and be fixed for a year. Should Power and Water Generation decide not to commit to prices for future years, the duration of market contracts for retail customers would not be expected to exceed one year.

For comment:

(8) Should Power and Water Generation be required to publish firm prices for specified terms and products ?

9.19 In the NEM, wholesale electricity market settlements for non-interval metered loads are calculated using regional net system load profiles. These regions correspond to distribution area networks. Broadly, in the NEM, a net system load is calculated ex-post as the difference between the metered load at the distribution area network boundary and the sum of the interval metered loads within the distribution boundary adjusted for losses.

9.20 Some jurisdictions have metrology procedures that provide for "peeling off" certain separately metered loads from the net system load profile. This is done through the provision of controlled load profiles for South Australia, each distribution network area in New South Wales and two for the Energex distribution area in Queensland.

9.21 At present, generation transfer pricing within Power and Water distinguishes between peak and off-peak usage. It is understood that out of 58,000 franchise meters in the Darwin-Katherine system, there are 2,000 meters which can be configured to record peak and off-peak usage separately. This is a small proportion of the total.

9.22 For customers with meters capable of recording the cumulative energy use over the billing period only, it will be necessary to "deem" their peak/off-peak usage. This could be done on the basis of the "net system load" either ex-ante using forecasts or ex-post using metered load data. The latter is obviously more data intensive and requires additional data processing.

9.23 Further, in the NEM, regional reference prices (spot prices) are adjusted according to site specific loss factors. In the current pre-NEM Northern Territory, the generator would price presumably on a “total production at the generator basis”. The retail customer’s metered or billed energy will need to be converted to energy produced at the generator according to a loss factor. Again the loss factor can be determined on an ex-ante or ex-post basis.

9.24 It is suggested that the load profiling regime to support retail competition in the Northern Territory be based on simple net system load profiles (i.e. with no provision for separately metered loads) defined for each of the regulated networks.

For comment:

(9) Do you have any comments on the load profiling regime proposed for use in the Northern Territory – i.e. simple net system load profiles defined for each regulated network ?

Customer Protection Systems

Standard Supply Contract

9.25 At the time FRC is introduced, it is usual for customers who decide not to enter a market contract with their existing or another retailer to be supplied with electricity by their existing retailer under a Standard Form Customer Supply Contract (standard contract). Under the standard contract, customers are charged for the electricity they consume at regulated prices.

9.26 In jurisdictions where FRC has been introduced, maximum prices have been specified by the jurisdictional regulator or by Government following independent inquiry, until it has been considered that there is effective competition.

9.27 The standard contract sets out the terms on which the standard retailer will supply electricity and other services to the customer. The contract does not cover network services which are provided by the customer’s distribution network service provider with whom the customer will have a separate customer connection contract.

9.28 The current EnergyAustralia Standard Form Customer Supply Contract (Amendment No.4 June 2009) details the services provided under the contract as i) arranging for customer connection services to be separately provided, ii) arranging the provision of metering services, and iii) supplying electricity to the customer’s premises.

9.29 Provision for payment of a security deposit is included as a precondition to supply of electricity. The contract refers to the published regulated prices as the basis for charges for services provided, and in an attachment sets out how consumption will be metered and estimated. The contract also specifies the standard retailer’s rights to disconnect or discontinue supply and the customer’s rights to terminate the contract in both cases, together with associated notice and other requirements.

9.30 Under this contract the standard retailer communicates customer advice of supply disruption to the distribution network service provider for remedy. The contract provides for any dispute or complaint to be referred to the Energy and Water Ombudsman (EWON) with contact details included. The contract deals with disclosure of customer information and provides the standard retailer’s privacy statement as an attachment. The contract provides for green energy offers as part of the standard supply contract (with the customer electing to make additional payments for a number of proportional green energy mixes).

9.31 In 2002, the Commission started to develop a Contestable Customer Supply Code. It sought to codify the obligations of the franchise retailer, the ‘default’ retailer and contestable retailers (with these obligations currently imposed via licence conditions) and

to set out customer transfer procedures. A draft Code was released for discussion in June 2002, but was not proceeded with due to NT Power leaving the market and some doubt as to the power of the Commission to promulgate such a Code.

9.32 Power and Water provides a Customer Contract (applying to urban centres and surrounding services rural areas) setting out the customer's rights and obligations and details of Power and Water's standards of service (included as a schedule). The key points of this contract are summarised in a Customer Charter. The contract contains Power and Water's commitment to comply with its legal obligations with respect to the *Electricity Reform Act* (under which it holds an electricity retailer's licence) and the *Utilities Commission Act* (under which its quality of service is subject to monitoring and review). As stated in the contract, customers have the right to refer complaints to the Ombudsman of the Northern Territory. There is broad correspondence between the contents of the Customer Contract and the standard supply contracts in use in the NEM.

For comment:

(10) Are there any Territory specific terms you think should be included in the standard contract ?

Ombudsman

9.33 It is noted that the Ombudsman is appointed pursuant to the *Ombudsman (Northern Territory) Act* to receive complaints from members of the public who feel they have been treated unfairly or inappropriately by Northern Territory Government departments, statutory authorities or local government or community councils, Northern Territory Police or Correctional Services. To fulfil the requirements of customer protection created by FRC, the role would need to be generalised to deal with complaints about licenced electricity retailers or alternatively consideration given to setting up an ombudsman's office to deal specifically with the electricity industry. In Tasmania, the Tasmanian Ombudsman which was established under the *Ombudsman Act 1978* to deal with complaints in relation to the actions of public authorities, is also required to investigate complaints under the *Energy Ombudsman Act 1998*. A benefit of establishing an industry funded ombudsman such as the Energy and Water Ombudsman Victoria (EWOV) is that by charging fees when customers make complaints, businesses are incentivised to comply with consumer protection.³² Membership of the ombudsman scheme is a condition of the licence to retail electricity.

For comment:

(11) Should an electricity ombudsman's office be established at the time FRC is introduced ?

Options

9.34 The purpose of this review is to generate options for the implementation of FRC for electricity in the Northern Territory on 1 April 2010 and assess the merits of each. The classes of options the Commission proposes to consider relate to timing and preparation for FRC, together with consideration of systems which might be appropriate for each option. They are broadly

A – Proceed to implement FRC on 1 April 2010 or as soon as practicable thereafter;
or

³² Consumer Protections in the National Electricity Market – The Need for Comprehensive Energy-Specific Consumer Protections, Consumer Action Law Centre, November 2006.

B – Reschedule FRC and adopt a program of additional reforms to support the development of competition; or

C – Postpone FRC until conditions more favourable to competition develop (without committing to an additional program of reform).

A - Implementation of FRC on 1 April 2010 or as soon as practicable thereafter

9.35 This option is concerned solely with the removal of the legislative barrier to retail market contestability. It is not intended to address the existing impediments to competition or tackle the issues of wholesale price transparency and the level of retail prices. As a result it is very unlikely that there will be any activity following introduction of FRC on 1 April 2010 or soon after. On the basis of this expectation, FRC could be implemented by developing rules and procedures but not proceeding to develop the systems required to support an active retail market. Assuming that contestability without competition is a worthwhile objective, this option might possibly be achieved at low cost. However it has the associated risks that procedures and systems may prove inadequate should the market subsequently become more active, and that intending new-entrants may lack confidence in what has been put in place.

9.36 Since with this option the expectation is of little or no activity, it is somewhat problematic to specify minimum requirements to support it. Clearly however detailed procedures will need to be developed to enable customer transfer and wholesale energy billing (or at least the metrology procedure that supports it) in the event that some activity occurs. So at a minimum, procedures are required for customer transfer and metrology. Customer transfer procedures would be developed largely on the basis of those in use in the NEM.

9.37 With respect to customer protection, again it is problematic to specify minimum requirements where the expectation is of little or no activity. A standing offer contract is required however it does not appear that the terms of this would need to differ substantially from Power and Water's existing customer contract. Based on experience elsewhere it would be appropriate to adopt an energy retail code, an energy marketing code, and set up an ombudsman scheme. These codes could be based largely on Power and Water's existing commitments to customers and the codes in use in the NEM.

9.38 Again based on the expectation of little or no activity, under this option, it would seem to be lower cost and therefore more appropriate for FRC to be managed within Power and Water rather than by an external service provider namely the AEMO.

B – Reschedule FRC and adopt a program of additional reforms to support the development of competition.

9.39 Under this option, FRC is rescheduled and a specific program of additional reforms committed to with the aim of improving the prospects for active retail competition from the time FRC is introduced. Apart from the particular nature of the reform program committed to, this option differs materially from the previous one in that it requires systems to be developed on the basis of an expectation of an active retail market. Furthermore, since it will take time to complete the reform program, time will also be available to develop fully functional and robust systems.

9.40 These systems could be designed, built and operated locally or the AEMO could be engaged to provide the required services using the FRC systems it operates and maintains in the NEM. The advantage of using the NEM systems is that they are proven and retailers in other jurisdictions trust and are familiar with them. Even if the market turns out to be reasonably active, its small size would limit the number of requested transfers and hence the transactions to be processed. It seems reasonable to suppose that standing data would be set up progressively after FRC is in operation and generally in response to retailer requests reducing set up costs. The cost of using the AEMO's FRC systems is subject to discussion with the AEMO. However it is noted that if the Territory were part of the NEM, on the basis of the AEMO's Scheduled Participant Fees for

2009-2010, active retailers in the Territory would pay to the AEMO around \$160,000 per annum.³³ The use of the AEMO's FRC systems results in a customer transfer process identical to that used in the NEM and notwithstanding the different wholesale electricity market arrangements of the Territory, the market settlement system (MSATS) appears capable of assisting with wholesale energy billing.

C - Postpone FRC until conditions more favourable to competition develop

9.41 Previously retail contestability has been delayed on the grounds of a lack of competition. Arguably the situation has not improved. Other impediments could be cited in support of the decision including the fact that retail prices do not reflect the full cost of electricity. Under this option FRC is postponed without committing to an additional program of reform.

Possible additional reforms

9.42 There is a range of reforms that could be undertaken to improve the prospects for retail competition some of which are able to be implemented more easily and quickly than others.

9.43 In the absence of competition at the wholesale level, prospects for competition would benefit from enhanced wholesale price transparency. For instance the Ring-fencing Code could be strengthened to require Power and Water Generation to offer contracts to new-entrant retailers on the same terms as to Power and Water Retail and to publish these contract prices in advance. This could be implemented relatively quickly whereas adopting the NEM wholesale trading arrangements would be a lengthy process and probably not justified solely in terms of enhanced wholesale price transparency.

9.44 Without fully cost-reflective retail tariffs, new-entrant retailers lack a commercial incentive to develop generation to supply retail customers. To improve the prospects of competition in generation, retail tariff reform could be undertaken with the objective of introducing FRC at the time tariff prices become fully cost reflective. This presupposes a commitment by Government to transition prices to cost reflective levels over a specified timeframe.

9.45 In the absence of cost reflective tariffs, subsidies to bridge the gap between regulated standing offer prices and cost-reflective prices could be provided on a non-discriminatory basis through subsidised network charges for eligible tranche customers. Thus customers would continue to receive subsidised prices, irrespective of their choice of supplier. While this of itself would do nothing to directly improve the prospects of competition in generation, it would provide for retail competition on the basis of the cost to serve.

9.46 More far reaching reforms that might be considered include structural reform of the industry and wholesale market reform, for example by the adoption of the NEM wholesale trading arrangements.

For comment:

(12) Do you have comments on these options and are there other options this review should consider ?

³³ This estimate assumes 1,869GWh of retail customers load and a total FRC fee (establishment and operating) of \$0.08775/MWh.

APPENDIX**A****LIST OF ISSUES**

The following is a list of the issues raised in this paper:

For comment:

(1) Is the current lack of wholesale price transparency an impediment to FRC and if so, what should be done, if anything to provide greater wholesale price transparency in the Northern Territory prior to introducing FRC ?

For comment:

(2) Is the current structure of Power and Water an impediment to FRC and if so, what further changes if any should be made to the structure of Power and Water prior to introduction of FRC ?

For comment:

(3) What actions might Government take to provide the retail margins required to improve the prospects for competition ?

For comment:

(4) Should the introduction of FRC be staged on a regional basis ? Should unmetered loads be contestable as part of FRC ?.

For comment:

(5) Should mandatory interval metering be a precondition of retail contestability ? Is there any need to defer FRC until NSMP requirements and any implementation in the Territory have been considered?

For comment:

(6) Is the current bilateral contract market an impediment to FRC and should reform of this market be considered prior to introducing FRC ?

For comment:

(7) Should Power and Water Generation's wholesale pricing be subject to oversight and what form should this oversight take ?

For comment:

(8) Should Power and Water Generation be required to publish firm prices for specified terms and products ?

For comment:

(9) Do you have any comments on the load profiling regime proposed for use in the Northern Territory – i.e. simple net system load profiles defined for each regulated network ?

For comment:

(10) Are there any Territory specific terms you think should be included in the standard contract ?

For comment:

(11) Should an electricity ombudsman's office be established at the time FRC is introduced ?

For comment:

(12) Do you have comments on these options and are there other options this review should consider ?