10th Anniversary Queensland State Energy Outlook

Novotel, Brisbane

'National Regulation and the Queensland Energy Market'

Tuesday 24 July 2006

Thank you for inviting me to speak to you today on some of the important issues facing the Queensland energy market.

I would like start by outlining the AER's perspective of the Queensland energy market before discussing the Roma to Brisbane pipeline access arrangement and the Powerlink revenue reset which are currently being considered by the AER. Finally, I would like to discuss progress on the national energy reform agenda.

1. The AER's perspective of the Queensland energy market

The Queensland energy market is one of the most dynamic in the country. Consider the rapid development that has occurred during the past decade.

- Electricity export capacity to NSW ten years ago was zero. Today the combined capability through QNI and Directlink is approximately 1300 MW.[1]
- Gas consumption has increased from 46PJ in 1996 to 120PJ+ in 2006. [2]
- In the past eight years generation capacity has expanded from 7085 MW in 1998-99 to 9137 MW in 2005-06. New generation in the past five years has included Milmerran, Oakey, Braemer (which started generating this

[1] NEMMCO. Interconnector Limits Forecast for MTPASA, 1 June 2006, p. 9. QNI limit flows from Queensland to NSW is around 1078MW. AER. Directlink Joint Venturers' Application for Conversion and Revenue CapDecision, 3 March 2006, p. 1. Directlink's has a regulated nominal capacity of 180MW.

[2] John Mickel, MP Minister for Energy Queensland Energy Forum 5 April 2006 Novotel Brisbane.

winter) and Kogan Creek is expected to come on line in the summer of 2007-08.[3]

- Summer maximum electricity demand for the State has grown by 31 per cent over the past five years. In South East Queensland the increase was 42 per cent.[4]
- Over the past five years Powerlink has spent approximately $1.3 billion on its transmission network. Energex and Ergon also spent about $1.3 billion each for the previous regulatory period.[5]
- Coal seam methane production has expanded from 2PJ in 2000 to over 50 PJ in 2005-06.[6] That is an increase from 3% of total gas consumption to 40%.
- New gas pipelines have been construction from Moranbah to Townsville (2004) and Ballera to Mt Isa (1998).
- The Roma to Brisbane Pipeline (RBP) roughly doubled capacity between 1982 and 1998 (that is 16 years). It then doubled its capacity again since 1998 (that is 8 years) to its current nominal 180TJ/day.

Present indicators suggest that the next decade will be just as dynamic. There appears to be no let up in population growth, air conditioning growth and industrial development which were the key energy demand drivers in the past decade.

- Population in Queensland is forecast to grow from approximately 4 million in 2006 to 4.8 million over the next decade. [7]
- In the next decade, Queeensland's Gross State Product is forecast to average 3.9 per cent per annum, that is, 1 per cent above Australia's projected GDP growth.[8]

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3 Figures from AER Markets Branch, Long term analysis: Queensland generation capacity.

4 Powerlink, Queensland. Annual Planning Report 2006, p. 1.

5 Energex's regulatory period was from 1 July 2001 to 30 June 2005. Ergon's regulatory period was from 1 July 2001 to 30 June 2005.

6 John Mickel, MP Minister for Energy Queensland Energy Forum 5 April 2006 Novotel Brisbane

7 http://www.oesr.qld.gov.au/queensland_by_theme/demography/population/tables/2006/2006_projections_comparison.shtml

- The average summer maximum electricity demand is forecast to increase at an average annual rate of 3.9 per cent per annum, that is, an increase from 7 687MW in 2005-06 to 11 267 MW in 2015-16. NEMMCO's forecast electricity demand growth over the next decade is 3.6 % per annum compared to 2.7 % for NSW.[9]
- At forecast growth rates, peak electricity demand will exceed Queensland's available generation capacity within 4 years (2010-11).[10]
- Major expansions in gas supply are expected with the construction of the PNG gas pipeline and ongoing expansion of coal seam methane.
- Powerlink is proposing to spend $2.4b in the next regulatory period. Energex and Ergon are expected to spend $3.4b and $3.2b, respectively, in the next 5 years.[11]
- Full retail contestability will be introduced along with the sale of the Ergon and Energex retail businesses.

2. Current Queensland matters before the AER

The AER is currently considering two substantive Queensland regulatory decisions:

- the Powerlink revenue reset and
- the Roma to Brisbane pipeline access arrangements.

These decisions are both major undertakings and are requiring the commitment of substantial resources by both the AER Board and its staff.

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8 Powerlink, Queensland. Annual Planning Report 2006, p. 20. Based on medium growth scenarios developed by NIEIR over the ten year period 2005/06 – 20015/16.

9 Powerlink, Queensland. Annual Planning Report 2006, p. 20. Based on medium growth scenarios developed by NIEIR over the ten year period 2005/06 – 20015/16. NEMMCO. 2006 Energy and Demand Projections: Summary Report, July 2006, p. 2.

10 NEMMCO. Statement of Opportunities, 2005, Chapter 2, p. 9. Forecast is based on a 50 per cent PoE maximum demand, however at a 10 per cent PoE maximum demand would exceed forecast available generation capacity in 2 years (2008/09).

11 Powerlink, Queensland. Queensland Transmission Network Revenue Proposal, 1 July 2007 to 30 June 2012, p. 56. QCA. Regulation of Electricity Distribution: Final Distribution, April 2005, p. i.

The AER is not coming to these matters cold. As part of the ACCC, the AER is able to draw on an extensive experience with the Queensland energy market. This experience includes:

- Making Powerlink's 2001 revenue cap decision.
- Approval of the conversion of Directlink to a regulated interconnector.
- The authorisation of the joint marketing of PNG producers' gas.
- Consideration of recent mergers of coal seam methane producers.
- Approval of access arrangements for the Queensland, south west Queensland, Roma to Brisbane and Carpentaria and gas pipelines.

Powerlink revenue reset

Powerlink is the sole electricity transmission operator in Queensland with a network extending from the NSW border to Cairns. It is a State owned business and has current network assets of approximately $3.1 billion.

AER process

The Powerlink decision is the first electricity transmission revenue cap decision that the AER will make. Its current revenue cap was set by the ACCC on 1 November 2001 for the period 1 January 2002 to 30 June 2007.

The AER received Powerlink's revenue cap application in April 2006. We are currently reviewing the application and submissions on it. Both the application and submissions can be found on the AER's website.

The draft decision and the AER's consultants report are planned to be released in September 2006, with the final decision being released in December this year.

Issues arising from the application

There are a number of key issues raised in the application which I would like to briefly discuss.

- **Forecast capex.** Powerlink's proposed forecast capex program is substantial. In 2002 the ACCC approved capex of $1.05 billion. In the current application a capex program of $2.45 billion is proposed. The application includes significant increases in replacement capex.
- **Historic capex.** Powerlink will overspend its previous capex allow by approximately 21 per cent. The current review will assess whether prudent investments have been undertaken in the current regulatory period.
- **Forecast opex.** Powerlink has proposed a substantial increase in its opex allowance. The total opex allowance in the current regulatory period is $483m compared to proposed opex of $787m in its application. This proposal will be assessed.

We understand that Powerlink is operating in a high demand growth environment. Understanding this is one thing. Being satisfied that allocated funding will be spent soundly is something else.

The AER has a duty to generators, energy retailers, distributors and other network users to ensure that Powerlink has an efficient and well managed investment program. Fortunately, however, Powerlink has a reputation within the industry for being a well managed business.

New process innovations

As the first revenue cap to be considered by the AER, we have taken the opportunity to review the usual process and have introduced a number of innovations.

- **Timeframes.** As part of our commitment to timely decision making and streamlined regulatory processes, we are aiming to complete the final decision by the end of 2006 (that is, a 9 month time frame).

- **Consultation with Powerlink.** There has been early and regular consultation with Powerlink. This has included pre-application meetings since mid 2005. This approach has allowed issues to be identified and discussed prior to the lodgement of the application.
- **Public forum.** A public forum was held a few weeks after the application was lodged. This provided interested parties with the opportunity to comment on the application and to ask questions of both Powerlink and the AER.
- **Information templates.** To ensure the timely provision of relevant data we have, in consultation with Powerlink, developed information templates. Depending on the final form of Chapter 6 of the electricity rules, it is intended that the Powerlink templates will be further developed in consultation with all TNSPs.

Key challenges

As the first revenue reset undertaken by the AER, the Powerlink decision is presenting a number of challenges.

First, the Powerlink application is being undertaken at a time when the national electricity law and rules are under review. In particular, the AEMC is currently reviewing chapter 6 of the electricity transmission rules.

To help alleviate the regulatory uncertainty created by this review, the AER and Powerlink have jointly developed transitional arrangements for consideration by the AEMC.

Second, the AER is working hard on its processes to ensure that it is open and transparent while producing a robust and timely decision.

Third, the energy market environment in Queensland is throwing up some unique challenges. In particular, the strong demand growth in Queensland is placing pressure on Powerlink's network and driving the need for additional investment.

This in turn has the potential to result in higher retail prices. Queensland energy businesses are also making us very aware of the need for higher reliability.

Roma to Brisbane gas pipeline access arrangement

The Roma to Brisbane Pipeline (RBP) is one of the oldest gas transmission pipelines in Australia. Although considered as a single pipeline, the RBP actually consists of two physical pipelines due to extensive looping undertaken over the years.
The RBP originally supplied the Brisbane area with gas from the Surat Basin fields close to Roma and later with gas from Ballera. More recently the development of coal seam methane fields closer to Brisbane has resulted in gas injections at a number of points on the pipeline.

Just as the number of gas sources supplying the pipeline has increased, the location and type of customers requiring the pipeline's services has also changed. In particular the growth of gas fired power generation along the pipeline's length will impact on the way the pipeline operates going forward.

The pipeline is has a licensed capacity of 180TJ/day and in 2004-05 it transported around 48 PJ of gas. This is expected to increase to about 56.5 PJ of gas in 2006-07.

AER process

Responsibility for administration of the Gas Code remains with the ACCC and will remain with the ACCC until the new National Gas Law is enacted. In the meantime the AER will assist the ACCC in its consideration of gas matters.

The proposed access arrangement for the RBP was lodged by Australian Pipeline Trust Petroleum Pipelines Limited on 31 January 2006. The application however did not contain all of the information the ACCC needed to assess the proposal.

Further information was provided and the ACCC released an issues paper on 18 April 2006 and sought submissions from interested parties.

The ACCC is now considering the proposed access arrangement and is aiming to release a draft decision in August followed by a final decision in October.

The initial delay in providing a complete set of information with the access arrangement has meant that the six month time frame for reaching a decision on the access arrangement will not be met.

Issues arising from the application

- **Setting the ICB.** This is the main challenge for any pipeline that is having its reference tariffs set for the first time. In determining this value consideration has to be given to the cost of the current pipeline and the efficient replacement cost.
- **Reference services.** While firm forward haul is the service most users require, there is also a demand for a backhaul service as well as an interruptible service and other services. Whether these services can be accommodated needs to be assessed.
- **Extensions and expansions.** The pipeline is operating at close to full capacity. The service provider has proposed that an expansion will only occur where additional capacity is fully contracted and on negotiated terms. The AER will examine this approach. Requiring that capacity be fully contracted prior to expansion is not a code requirement but negotiated terms are however provided for under the code.

New process innovations

In order to better understand trading and queuing arrangements on the pipeline a roundtable involving the pipeline operator and users was arranged. This was a useful means of exchanging views on the operation of the pipeline and the arrangements for expanding the pipeline.

Key challenges

The ACCC is committed to timely and informed decisions. This is a challenge where relevant information is contained in commercial contracts and can only be accessed through formal legal processes.

Confidentiality requirements will also limit the explanation that can be provided on certain aspects of the decision.

3. National Reform Agenda

I would now like to say a few words about reform of the energy sector.

Micro-economic reform program

During the mid 1980s Australia undertook a series of major economic reforms. These were designed to improve our productivity and our standard of living and there is broad agreement that they have been successful.

Hilmer Inquiry

The Hilmer Inquiry which took place in 1993 was a major catalyst of energy reform in Australia. The Inquiry recommended extending the reach of competition law and policies to sectors of the economy that were not directly exposed to international competition such as energy.

First Phase of Energy Reform

The first phase of energy market reform resulted in the creation of a National Electricity Market (NEM) in the southern and eastern states, structural separation of generation, transmission and distribution activities and retail contestability.

This first phase of reform is now considered to have been relatively successful.

Refinements and Review of the First Phase

Refinement and review of the first phase was structured around a new Ministerial Council on Energy (MCE) which was established by the Council of Australian Governments (COAG) on 8 June 2001.

COAG also agreed to an independent review (the Parer review) of energy market directions in Australia.

Some of the key recommendations to come out of the report related to governance and institutions. The panel observed that there were too many regulators and this had caused an overlap between the ACCC, state and territory regulators and NECA in important areas. With this in mind, the panel recommended the creation of a national energy regulator to encompass the energy-specific roles of the ACCC, state and territory regulatory bodies and some of the roles of the National Electricity Code Administrator (NECA).

In response to the Parer review, the MCE announced in December 2003 a comprehensive set of policy decisions for its major energy market reform program. These policy decisions were given effect by COAG though the Australian Energy Market Agreement (AEMA) on 30 June 2004.

Second Phase of Energy Reforms

The AEMA provided for three institutions to oversee the operation of Australia's energy market:

1. the Australian Energy Market Commission (AEMC), which was responsible for rule making and energy market development at a national level;
2. the Australian Energy Regulator (AER), which was responsible for economics regulation and compliance with the codes of the electricity and natural gas industries at a national level; and

3. the National Electricity Market Management Company (NEMMCO), which continued to be responsible for the day-to-day operation and administration of both the power system and electricity wholesale spot market in the NEM.

A new national legislative framework has been provided for by the AEMA including the establishment of acts for the new institutions and consequential amendments to the electricity and the gas legislation.

The South Australian Parliament passed the new National Electricity Law (NEL) on 14 April 2005 and new National Electricity Rules (NER) commenced on 1 July 2005.

Where are we at now?

Recent amendments have been made to the AEMA. The transfer of retail and distribution regulation (other than retail pricing) to a national framework in an agreed timeframe has been an important amendment as well as the agreement to implement new national rules for National Distribution and Retail functions by 1 January 2008. A process for providing advice to jurisdictions on the effectiveness of competition in retail markets has been installed and arrangements for the certification of energy access regimes on a nationally consistent basis has been made.

The amended AEMA provides for a new National Gas Law (NGL) and Rules and amendments to the National Electricity Law (NEL) and Rules. The AEMA also provides for the transfer of regulation of distribution to the AER on 1 January 2007.

Is energy reform progressing as planned?

In my view, we have seen considerable successes from the reforms undertaken to date. The NEM is one of the most effective electricity markets in the world. We are seeing substantial investment and the delivery of energy which is largely efficient.

However, the establishment of new institutions, the review of legislation, regulations and rules and the transfer or roles and functions from State and Territory bodies to the new institutions is an ambitious task. Slippage from the original timeframe has occurred. The task of reform remains a work in progress, but the foundations for the future are set in place and the detail will be settled in the next couple of years.
So where does the AER fit in amongst all this reform?

4. The transition to national regulation

What has happened to date?

The AER was established as Australia's independent national energy market regulator on 1 July 2005 with the role of assuming the national energy market's regulatory functions. As such the AER is assuming these functions on a staged basis over the next few years.

Transfer of electricity transmission functions

Electricity transmission functions came across to the AER and AEMC on 1 July 2005. Currently the AER is responsible for regulating electricity transmission businesses which includes:

- regulating the revenues of transmission network service providers by establishing revenue caps
- monitoring of the electricity wholesale market
- monitoring compliance with the national electricity law, national electricity rules and national electricity regulations
- investigating breaches or possible breaches of provisions of the national electricity law, rules and regulations
- instituting and conducting enforcement proceedings against relevant market participants
- establishing service standards for electricity transmission network service providers

- establishing ring-fencing guidelines for business operations with respect to regulated transmission services
- exempting network service providers from registration

Transfer of gas functions

Gas transmission regulatory responsibilities for all jurisdictions except WA will pass from the ACCC to the AER from January 2007, after the new gas legislation is passed. In the interim, the AER is assisting the ACCC. The new National Gas Law is currently being drafted and will take into account the MCE's response to the Productivity Commission Report and the Expert Panel.

Transfer of distribution and retail functions

The amended AEMA provides for the transfer of economic regulation of distribution from jurisdictional regulators to the AER and AEMC on 1 January 2007. It also provides for the transfer of distribution and retail consumer protection functions to the AER and AEMC by 1 January 2008.

It is expected that retail energy price controls will be retained by the relevant jurisdictions but can be transferred to the AER and AEMC at the discretion of each jurisdiction.

AER preparation for transfer of functions

One of the AER's key priorities is the seamless roll-in of electricity and gas distribution functions over the next two years. At this point in time our focus is on preparing for the increase in our work program as a result of taking on distribution functions. Following the transition, the AER will be responsible for approximately 40 gas and electricity businesses. Given the magnitude of this task we have already started preparations to ensure the successful transition. The AER recently published its strategic plan and work program for the coming few years.

One of the critical outputs will be the development of clear guidelines for distribution businesses. We recognise and are committed to consultation with stakeholders in the development of these guidelines and understand that it is an essential part of our process.

The AER will continue to enhance its market reporting arrangements to ensure that the information and analysis provided continues to improve and is consistent with our monitoring functions and objectives. The AER already publishes weekly and quarterly reports on the activity of the NEM. To enhance these reports from 2006 we will supplement this information with a new annual report on the state of the energy market.

Unfortunately, I do not have time to outline the AER's entire work program, however if you are interested the information is available on our website. In all the work the AER undertakes we will seek to take into consideration the work already undertaken by state regulators as well as the interests of regulated businesses and other relevant stakeholders.

AER goals

The AER has a number of key priorities. Our main priority is to provide quality regulation which provides a clear, consistent and timely approach to decision making. We are committed to taking a consultative and co-operative approach to stakeholders and policy makers to help inform good policy outcomes and provide relevant information. It is expected that a national regulator will reduce regulatory costs and uncertainty to businesses.

Technical performance standards in the NEM

One matter I would like to give special attention is the issue of technical performance standards in the NEM. It is crucial to the efficiency, and indeed ultimately the security, of the market that there is compliance with the rules.

The AER has the role of monitoring the NEM and undertaking enforcement where there has been a breach of the rules. The AER is taking this role very seriously and is giving this function a high priority.

In the first place, the AER is working closely with industry to ensure that all participants understand their obligations and responsibilities. We provide regular bulletins to the industry highlighting key areas of the rules. In addition, we have frequent informal discussion with participants to discuss the ongoing operation of the market.

Second, we monitor behaviour in the market closely. We employ sophisticated analytical tools to assess behaviour in the market and identify problems.

Third, we will not hesitate to employ the enforcement powers contained in the NEL. Our first preference is to achieve a culture of compliance through education and working with the industry. However, where this cannot be achieved and there is behaviour that threatens the integrity of the NEM we will employ the enforcement tools at our disposal.

5. Conclusion

These are exciting times in the Queensland energy industry. Not only do we have all the challenges of a dynamic, rapidly growing market – we also have a new regulatory framework to bed down with new institutions.

My view is that the energy reform process to date has been an outstanding success. The initial design of the framework appears to be sound and has avoided many of the problems encountered overseas. However, this does exclude the scope for improvements. The current phase of reform is an opportunity to improve a number of aspects of the regime.

The AER is looking forward to the transfer of its full set of functions. Our ambition is to provide a clear and consistent approach to regulation across the

energy sector. We want to be responsive to the needs of the industry while promoting the long term interests of end users.

Thank you