

Introduction

Thank you for the invitation to address this Electric Energy Society of Australia Conference 2005.

I note that the theme of this year's conference is "demanding reliability" with a particular emphasis on network reliability. You have correctly identified this as one of the "hot topics" in the energy sector at the moment. I will be saying something on this matter in the context of the AER shortly.

I also note that the EESA is a technical body which is apparent from the subject matter of the papers to be delivered. Some of the best "economists" that I have encountered in the industry have come from an engineering or technical background. Put a bunch of economists and policy makers in room without a smattering of good old fashioned technical know-how and you're often in trouble.

In my talk this morning I will be focussing on the AER and its regulatory role.

AER's Role and Functions

The key principle behind the establishment of the Australian Energy Regulator was that a national energy market needs regulation undertaken on a national basis. Despite the fact that gas and electricity has been traded across mainland borders for some time now, giving rise to a developing national market for both sectors, there are still a dozen or so state and territory energy regulators.

Different approaches to regulating utilities across jurisdictions distort investment decisions and create unnecessary costs and barriers for utilities operating across jurisdictional boundaries.

The AER is to replace the various jurisdictional regulators and become a “one stop shop” regulator for the energy sector on a national basis.

A single and independent national regulator will reduce regulatory costs and uncertainty to business and allow both the gas and electricity markets to develop, as much as possible, within a consistent regulatory framework.

Of course the AER is not the only regulatory body. The new regulatory framework gives equally important roles to the Australian Energy Market Commission (AEMC) and the Australian Competition and Consumer Commission (ACCC). The AEMC is a new body with responsibility for market development, in particular electricity and gas market rule making. The ACCC will continue its role as competition regulator with responsibility for consumer protection and anti-competitive conduct as well as mergers and acquisitions under Part IV of the Trade practices Act.

The AER is in fact a constituent part of the ACCC but is also an independent legal entity in its own right. Apart from myself, the members of the AER are Ed Willett and Geoff Swier. The AER is will be funded by the Commonwealth Government.

Following COAG endorsement of the energy market reform process in 2003, amendments to the Australian Energy Market Agreement were made in 2004 to, amongst other things, recognise the AER’s new role and set timelines for taking on its new responsibilities. These timelines reflect that the AER will assume its regulatory functions on a staged basis over the next few years.

As of today the AER has responsibility for –

- Economic regulation for electricity transmission in National Electricity Market jurisdictions
- Monitoring of the NEM wholesale electricity market and
- Enforcing the National Electricity Law, Regulations and Rules.

Currently, the AER has no responsibilities for gas. Rather, gas transmission regulation for all jurisdictions except WA will pass from the ACCC to the AER by January 2007, following the passage of necessary legislation in the various States and Territories.

Importantly, under the Australian Energy Market Agreement jurisdictions have also agreed to pass responsibility for regulation of energy distribution to the AER in January 2007. This means that by early 2007 the AER will have assumed responsibility for economic regulation of energy networks on a national basis. It is also envisaged that the AER will subsequently be given responsibility for certain aspects of non-price retail regulation but this is subject to further consideration by jurisdictions on a national framework.

I am pleased to say that following its formal establishment on 1 July the AER is well and truly up and running. We have announced our organisational structure, are advanced in developing internal processes (which will be so important given our challenging regulatory role), have already met with industry associations and many industry participants, and AER members are meeting regularly on a range of regulatory matters currently within our charter. In particular, we have commenced early work on the very challenging transition process from jurisdiction to national energy regulation.

Across gas and electricity transmission and distribution, the AER will eventually have around forty businesses to regulate which amounts to about 8 major regulatory resets each year.

In 2004 terms, the total value of regulated assets at the commencement of respective businesses' current regulatory period is \$44 billion. Interestingly, total forecast capital expenditure for this period is around \$19.6 billion, over 40 percent of this opening asset base; which means that by the end of this regulatory cycle assets will have a regulatory value of around \$65 billion less, of course, depreciation. Opex of \$13.5 billion over this cycle has also been approved by regulators.

Nationally we are in a period of unprecedented energy demand growth, which coupled with aging network assets and high expectations regarding reliability, is posing peak load stress on the supply system. These capex and opex figures are certainly evidence of that.

Policy Review

The establishment of the new national regulatory arrangements coincides with considerable ongoing policy review relating to the AER's regulatory role. In fact, the framework in which the AER will operate will be uncertain for some time yet pending completion of this work and development of the consequent rule changes and legislation. The major work being undertaken includes:

- The AEMC's review of Chapter 6 of the National Electricity Rules relating to the setting of maximum allowable revenue for transmission businesses and transmission pricing,
- The Ministerial Council on Energy's review of the regulatory framework for distribution and non-price retail with a view to establishing a consistent national framework, and
- The MCE's response to the Productivity Commission's report on the National Gas Access Code.

The AER welcomes this work as a basis for promoting national consistency in the regulation of energy services.

AER's Approach to Regulation

There has been considerable debate recently about regulation of national infrastructure being too heavy handed. We now have a ten year history of regulation in the energy sector and it is perhaps timely that we give some reflection to the strengths and weaknesses of the current regulatory approach. The establishment of a new national regulator presents a further opportunity for this to occur.

I fully acknowledge that improvements can be made to enhance the quality of regulation. Regulation is imprecise; an art not a science. Regulators need to be conscious that they can't precisely replicate competitive outcomes; so there's no point in trying to finesse to achieve economic optimality. Regulation is also there to support the market and to facilitate timely investment in energy infrastructure.

On the other hand, the reality is that electricity networks and gas distribution networks are natural monopolies and that a comprehensive regulatory framework is warranted. The central issue going forward is what form should that regulation take and to what extent is a shift away from the status quo approach justified.

The AER will certainly be looking at ways to make regulation more efficient and we are keen to engage with industry on this issue. Initiatives we are pursuing include clearly defining and locking in the regulatory process and parameters well ahead so that the NSP and stakeholders have certainty regarding the framework well before lodgement of the revenue application; developing standard information templates; and adopting wherever possible a less intrusive approach.

In this respect, the framework already adopted by the AER for transmission revenue regulation (as outlined in the AER's Compendium of Electricity Transmission Regulatory Guidelines) includes a number of initiatives:

- locking in asset values and not subjecting assets once in the RAB to revaluation or optimisation;
- defining up front and standardizing the parameters of the WACC;
- adopting an ex ante or "up front" approach to approval of capital expenditure;
- enhancing the incentive arrangements for NSPs to reduce costs by providing certainty regarding cost sharing; and
- committing to set timelines for consultation and decisions.

I perceive fairly strong support for this framework from a number of transmission and distribution businesses. These businesses see the traditional CPI – X building block approach implemented on this basis as a good model for moving forward.

However, other sectors of the industry appear to be advocating a material change of approach to the form of regulation. Clearly the AEMC and the Ministerial Council of Energy will be the ultimate decision makers on the regulatory framework for electricity transmission and gas pipelines respectively. In the meantime, the AER will be participating in this debate and is open to discussions with market participants on operational issues associated with the regulatory framework. The AEMC review of transmission revenue regulation is to culminate in new rules by mid 2006.

One area of particular emphasis by the AER will be engagement with local industry. The AER proposes to be a very visible regulator at the various jurisdictional levels. I can assure participants and stakeholders that they will have very open access to the AER on regulatory matters. In particular, we will be developing strong communications with the regulated businesses.

With respect to distribution, the AER needs to be ready to undertake handover of the distribution regulation role from jurisdiction regulators. The AER is also proposing a proactive approach to taking on distribution regulation and intends to engage with stakeholders to facilitate a successful transition. As I mentioned, the MCE has commenced a process to develop a national distribution regulatory framework and the AEMC is currently undertaking a review of transmission regulation. Clearly these reviews will significantly influence the regulatory process for distribution to be adopted by the AER.

In the meantime, the AER needs to form a view about how it will carry out its price/revenue reviews. In developing these views the AER has three main objectives:

1. The first is to minimise price shocks, provide regulatory stability and provide investment certainty. For instance, with regard to asset base valuations my preference is not to revisit the valuations established by state regulators.
2. The second is to maintain consistency in terms of the regulatory objectives, principles and arrangements for transmission and distribution regulation across gas and electricity.

3. The third is to streamline processes as much as possible. This may involve providing greater clarity about, and locking in up front, the regulatory methodology used by the regulator and greater clarity about information requirements.

The AER is currently undertaking a review and analysis of the current arrangements in gas and electricity distribution regulation. This review involves discussions with jurisdictional regulators and distribution companies.

Following this review the AER will develop an issues paper on the regulation of gas and electricity distribution and will undergo consultation with industry and, of course, users. The intention is to release the issues paper around the second quarter of next year by which time there should be more clarity from the policy makers on the form of regulation to apply to this sector of the industry.

Our thinking on this matter needs to take account of the outcomes of the recent MCE meeting regarding distribution handover, on which we still need to be briefed. Specifically, our proposed approach will be significantly influenced by the eventual outputs from the MCE high level work programme on the framework for regulation of energy distribution, but at this stage we intend to be as proactive as possible whilst, along the way, being consistent with the MCE's policy as it develops.

Network Reliability

I'd like to turn now to two aspects of the AER's regulatory role which are related to the theme of this Conference; network reliability and generation technical standards.

The AER sees network reliability as a core part of its regulatory framework.

Indeed, the market objective which has been inserted into the National Electricity Law as the overriding principle governing policy and regulation in the NEM, clarifies long term efficiency and reliability and security of supply as a key factor in decisions.

The AER determines currently TNSP's revenue caps based on forecast efficient costs. TNSPs are then able to maximise profits by reducing actual costs below the forecast levels. While such cost reductions could occur because of improved efficiency, it could also be a sign of reduced service quality. Hence, this approach can create a perverse incentive at the expense of service quality and reliability.

In order to address this perverse incentive each TNSP's revenue cap is linked to their performance, or service standards, to ensure that a TNSP:

- is rewarded when performance standards increase and penalised when performance standards decline - providing incentives for continued performance improvement; and
- considers how their operations are valued by the national electricity market (NEM).

In November 2003, the ACCC published transmission network service standards guidelines, which formed part of its Statement of Regulatory Principles (SRP). The service standards guidelines outlined the Commission's approach to setting service standards within the revenue cap framework set out in the National Electricity Rules (NER).

In July 2005 the AER assumed responsibility for the regulation of electricity transmission and shortly afterwards released a compendium of regulatory guidelines for electricity transmission. This compendium, which is available on our website and has been forwarded to industry participants, is intended as a user-friendly compilation of the AER's guidelines. It is largely based on approaches developed by the ACCC, but draws all of the material together as a complete set of reference documents. These guidelines will be changed over time pursuant to development of best regulatory practice and following stakeholder consultation. The service standards guidelines form part of the compendium.

The service standards guidelines, articulated in the AER compendium, provide TNSPs with an economic incentive to improve transmission network service quality. The compendium articulates five core performance measures, these are:

- Transmission circuit availability
- Average outage duration
- Frequency of 'off supply' events
- Inter-regional constraints
- Intra-regional constraints

The service standards guidelines cap the financial incentive available from achieving performance targets to ± 1 per cent of the TNSPs revenue cap.

Although the service standards guidelines include inter and intra-regional constraints as a performance measure these two elements are not currently utilised. This is a result of the fact that a clearly defined indicator of service quality related to these two elements, which reflects the financial impact of constraints at a particular point in time, is not currently available.

In order to resolve this issue ACCC staff with the assistance of NEM participants developed, and released in July 2004, a draft Market Impact Transparency Report (MITR).

The MITR highlights that transmission constraints can have an adverse affect on the dispatch and pricing in the NEM. When transmission constraints exist, generators can be dispatched out-of-merit order, which in turn results in a higher dispatch cost of generation, which ultimately impacts settlement costs.

The AER is continuing work on the MITR. The aim is to implement a framework which will:

- identify the market impact of constraints;
- focus on the root causes that affect the extent and severity of transmission constraints;

- develop and publish information on the nature and market impact of transmission constraints particularly the Marginal Cost of Constraints (MCC) and Total Cost of Constraints (TCC) data;
- promote efficient market participant behaviour; and
- inform debate about the design of a possible economic incentive.

Since assuming responsibility for the MITR from the ACCC the AER has made significant progress having:

- further researched and analysed the construct and methodology supporting the derivation of both the MCC and TCC;
- conducted an independent audit on the MCC methodology and data generated;
- conducted an independent audit of the TCC methodology and data generated; and
- formed a working group with staff and consultants from the AER and NEMMCO to address issues associated with the calculation of the TCC.

We aim to publish the final MITR in early 2006 which will contain the marginal transmission constraints. Following this, the AER will continue to investigate opportunities that increased transparency provides including investigating the introduction of an economic incentive mechanism.

The AER considers that this report will be invaluable in providing a clearer picture of the impacts and causal elements of transmission constraints on the market.

Generation Technical Standards

As I mentioned, the AER also has the role of monitoring compliance and enforcing the Electricity Market rules.

The AER's approach to enforcement is, in the first instance, about comprehensive observation of and reporting on the market. I believe a light handed regime, that emphasises a voluntary

compliance approach is reasonable given the track record of the industry with respect to compliance management to date. I would like to see the culture of corporate compliance continue. For this regime to work effectively, however, it needs to be complimented by detailed monitoring of participant conduct and effective enforcement arrangements.

Having said that, the AER has been given considerable powers to enforce the law, regulations and rules, and the policy intent is for the AER not hesitate to respond quickly and firmly if a compliance matter arises.

The AER has been signalling that one area of focus will be generator compliance with technical performance standards.

The introduction of the generation technical standards regime in December 2004 has led to a requirement for compliance monitoring programmes to be established by each generator in the NEM.

Those programmes, which ensure compliance with performance standards, were required to be in place by mid 2005. The investigation into the events of 14 March this year, highlighted the importance of these arrangements.

The AER, as a first step, is working with NEMMCO, Network Service Providers and generators to establish a common understanding prior to completing negotiation of those compliance monitoring programmes. These programmes should include an agreed method for each generating unit to confirm, and test, ongoing compliance with the applicable technical requirements of the National Electricity Rules.

The AER will be reviewing generator performance compliance programs as part of its compliance monitoring strategy in early 2006 to ensure the arrangements are effective.

In addition the AER's compliance monitoring programme will focus on:

- assessing the compliance with, and effectiveness of the additional reporting requirements placed on transmission network service providers in relation to planned network outages that will, or are likely to, have

- a material effect on interconnector transfer capabilities;
and
- the extent to which network service providers have developed compliance programs in accordance with the Rules to ensure that its facilities operate reliably and in accordance with their performance requirements of schedule 5.1

This work will relate closely with the transmission service standards work through the MITR.

Market monitoring

The AER is currently enhancing the market reporting arrangements previously developed by NECA to ensure that the information and analysis provided in such reports continues to improve, consistent with our monitoring functions and objectives. We are working towards making our reports more user-friendly and accessible.

We propose to continue to publish weekly reports on compliance and operational issues as they arise in the wholesale market. The weekly market analysis reports are also the mechanism for reporting on pricing events above \$5,000/MWh and significant variations between actual and forecast prices. The AER website will also continue to be used as a platform to publish a broader set of metrics and indices that monitor the many seasonal factors that influence market outcomes.

An annual report on the market will provide an assessment of the state of the market. This report will, in a user friendly way, present a 'bird's eye' review of the market, analysing what is working, what isn't and will cover all aspects of the energy market arrangements in Australia monitored by the AER.

Conclusion

In conclusion, the AER is looking forward to assuming its full powers and functions and working with industry to deliver a national and consistent regulatory framework.

In undertaking our role, the AER will also be tuned in to particular business issues. The AER is especially mindful of the reliability pressures on the sector and the need for revenue and pricing

arrangements to facilitate efficient and timely capital expenditure and operations and maintenance expenditure to deliver service standards.
